

CONNECTING PARTNERSHIPS

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RYCO. THE COMPANY

RYCO Hydraulics started manufacturing hoses, fittings and filters in 1946. As the hydraulics industry evolved, the Company expanded its range and the main product line soon became high-pressure hydraulic hose and fittings. RYCO Hydraulics' simple belief of "Higher Technology Equals Greater Performance" applies throughout the Company.

The Company's research and development centres and testing facilities are dedicated to developing innovative products and pioneering new processes in fluid conveying systems technology. Our specialised equipment and technology enable us to manufacture our large range of products efficiently and cost effectively.

"HIGHER TECHNOLOGY EQUALS GREATER PERFORMANCE"

RYCO. MISSION STATEMENT

Our Mission is to listen to our customers and deliver the highest quality and technologically superior fluid conveying connection products and solutions.

RYCO. COMPANY VISION

Our vision is to be the premier supplier and service provider of choice in every market we participate in.

RYCO. THE QUALITY

RYCO Hydraulics is certified to the current version of ISO 9001 Quality Management System. Company Policy is to supply products and services that meet or exceed our industry standards. These standards include SAE, EN (DIN), AS, ISO, JIS, BS and BCS. The bottom line in Quality Control (QC) and Quality Assurance (QA) is Customer Confidence and Customer Satisfaction.

OUR AIM IS ZERO DEFECTS

RYCO. INDUSTRIAL RANGE

RYCO's introduction of a complete range of Industrial Hose and Fittings, including a specialist lubrication product range, enables us to offer these quality products and services to all our customers.

RYCO. WAREHOUSE AND DISTRIBUTION

At RYCO Hydraulics, we understand that when you need your product, you need it fast. Our network of warehouses and distributors gives the greatest product availability to our customers. Our comprehensive ordering and despatch system ensures that your orders are correct before leaving the warehouse.

WE PRIDE OURSELVES ON SHIPPING CORRECTLY

DISCLAIMER: We reserve the right to alter the design, or discontinue any of the company's products or services without notice. While every effort has been made to ensure the accuracy of the information contained in this publication, our Company Policy of continual research and product development necessitates changes and refinements which may not be reflected in the following pages. If in doubt, please contact your nearest sales office. Illustrations are not to scale, and are indicative only.

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HOW TO USE THIS BOOK

HOW TO USE THE RYCO PRODUCT TECHNICAL MANUAL - INDUSTRIAL

This Product Technical Manual is divided into 7 colour coded sections; Introduction, Hose, Couplings, Adaptors, Clamps, Accessories and Technical.

A colour coded indicator tab on the edge of every right hand page aids finding and identifying each section.

On pages 6 to 7 is an **Alphanumeric Index** if you know the Part Number you're looking for, and pages 4 to 5 provide a Contents by Section that lists the product ranges each section contains.

In addition, each section contains a **Contents** and/or **Pictorial Index** as relevant to further aid you in finding the exact information you require.

IMPORTANT - DO NOT MIX AND MATCH PRODUCT

It is the responsibility of the hose assembly fabricator to consult the manufacturer's written assembly instructions or the manufacturers directly before intermixing hose and fittings from various manufacturers. It is the responsibility of the hose assembly fabricator to consult the manufacturer's written instructions or the manufacturers directly for the proper assembly equipment. Always follow the manufacturer's instructions for proper preparation and fabrication of hose assemblies.



SAFETY GUIDE FOR THE SELECTION AND USE OF HOSE, FITTINGS AND RELATED ACCESSORIES

Failure or improper selection or improper use of hose, fittings, or related accessories can cause death, personal injury and property damage. Possible consequences of failure or improper selection or improper use of hose, fittings, or related accessories include, but are not limited to:

- Fittings blown off at high speed.
- High velocity medium discharge.
- Explosion, or burning, of the conveyed medium.
- Electrocution from high voltage electric power lines or other sources of electricity.
- Contact with suddenly moving, or falling, objects that are held in position, or moved, by conveyed medium.
- Injections by high-pressure fluid or air discharge.
- Dangerously whipping hose.
- Contact with conveyed fluids that may be hot, cold, toxic or otherwise injurious.
- Sparking or explosion caused by static electricity build-up.
- Sparking, or explosion, while spraying paint or other flammable liquid.

HOSE

COUPLINGS

ABOUT RYCO - THE COMPANY AND GLOBAL RESOURCES

THE COMPANY

An Australian-owned company, RYCO has built a strong reputation since it commenced manufacturing of hydraulic hose and fittings in Melbourne, Australia back in 1946.

RYCO has now incorporated a complete range of Industrial Hose and Fittings as well as a range of specialist product groups to support our existing markets.

Engineering excellence, customer-focus and highest quality products continue to attract new customers, from varied industries right across the world.

RYCO Research and Development Centres are dedicated to improving product and pioneering new technologies and processes in fluid conveying systems. RYCO quality range of hydraulic and industrial hose and fittings is supported by a network of loyal and committed distributors across the world.

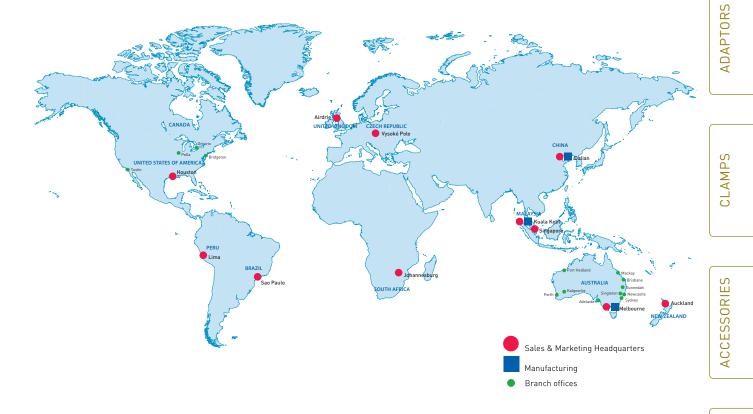
RYCO products are supplied to a wide range of industries including mining, construction, utilities, defence, marine, oil and gas, OEMs and more. RYCO continues to expand its product range to meet the growing needs of the worldwide hydraulic industry.

GLOBAL RESOURCES

In today's competitive international business environment, the requirements for suppliers and customers to work closely together are greater than ever before.

RYCO has expanded its horizons and developed its manufacturing and distribution business on a global scale, working with industries in diverse sectors. RYCO has offices and warehouses strategically placed in Europe, Brazil, Singapore, and South and North America, and fully Quality Accredited manufacturing centres in Australia, China and Malaysia.

With such an extensive global footprint, RYCO can ensure quality product is delivered to our customers; whenever and wherever required.



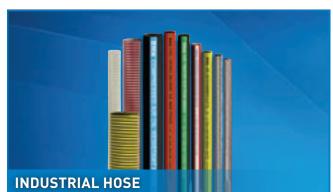
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HIGHER TECHNOLOGY EQUALS GREATER PERFORMANCE

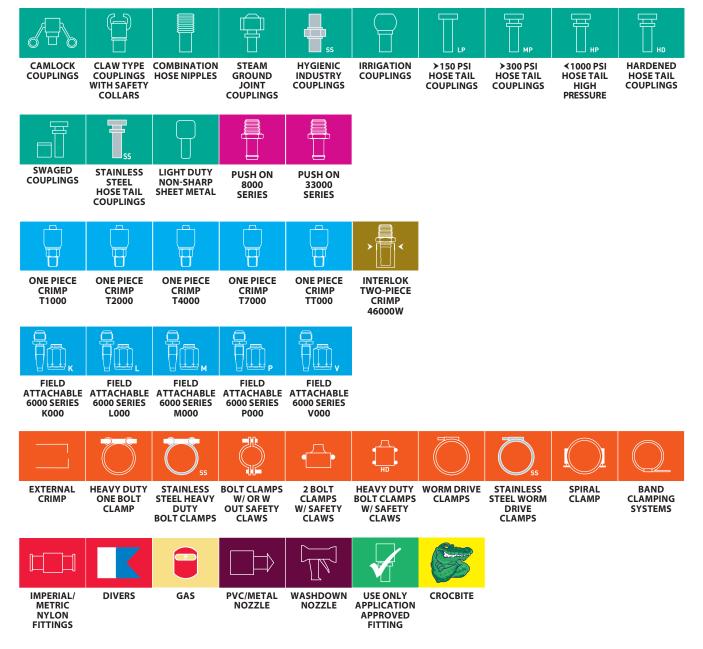
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FITTING ICON INDEX



ACRONYMS

SS - STAINLESS STEEL LP - LOW PRESSURE MP - MEDIUM PRESSURE HP - HIGH PRESSURE HD - HARDENED STEEL

ABOUT RYCO - INNOVATION

INNOVATION

RYCO's commitment to Innovation and Continuous Improvement ensure that we can deliver tomorrow's solutions today. We believe that our global strength in Engineering, Innovation and Product Development provide our customers a high level of service and solutions unparalleled in the industry.

RYCO's Global Research and Development Test Facilities give our design teams the platform they require to continually improve our products to surpass the performance requirements as demanded by our customers and industry standards.

RYCO's product range is continually expanding and evolving, providing improved efficiency, higher working pressures and increased safety standards.

We design our product for tomorrow's requirements, today.

RYCO's Technology makes us a leader in our industry. Our policy of high investment in technology ensures that we not only maintain our position in the industry, but also continually improve and develop products that surpass industry standards.

We continually enhance our Hose Specifications as we introduce new technical developments.

RYCO's Hydraulic Coupling technology and higher performing ISOBARIC hose families make our matched assemblies a world leader in performance, efficiency and safety.

RYCO's extensive testing process of hose, fittings and assemblies is crucial to deliver accredited and proven product quality.

WE DESIGN OUR PRODUCT FOR TOMORROW'S REQUIREMENT, TODAY.



CONNECTING PARTNERSHIPS

9

ABOUT RYCO - POLICIES



RYCO QUALITY, SAFETY AND ENVIRONMENTAL POLICIES

RYCO's mission is to exceed our customers', shareholders, stakeholders' and employee expectations through Continuous Improvement.

We are driven by innovation, teamwork and the integrity of our people whilst embracing community, cultural and Quality, Environmental and Health and Safety (QEHS) awareness. RYCO achieve this objective through the integration of the QEHS Management System into the day-to-day operations of all of the company's facilities.

QUALITY POLICY

RYCO specialises in the design, manufacture, distribution and sales of a comprehensive range of high pressure hydraulic hoses and fittings as well as a comprehensive range of industrial hoses and fittings and specialist lubrication products and services. The Company operates on a global scale and its products service a wide range of industrial applications.

Since 1946 RYCO has established an enviable reputation for expertise, service, quality and delivery.

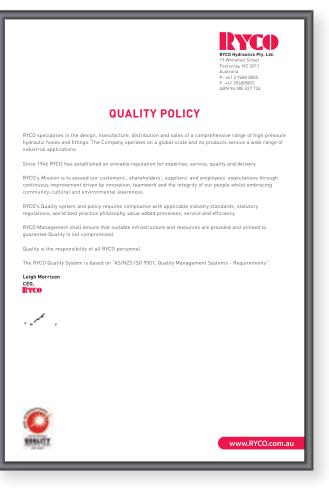
RYCO's Mission is to exceed our customers', shareholders', suppliers' and employees' expectations through continuous improvement driven by innovation, teamwork and the integrity of our people whilst embracing community, cultural and environmental awareness.

RYCO's Quality system and policy requires compliance with applicable industry standards, statutory regulations, world best practice philosophy, value added processes, service and efficiency.

RYCO Management shall ensure that suitable infrastructure and resources are provided and utilised to guarantee Quality is not compromised.

Quality is the responsibility of all RYCO personnel.

RYCO is ISO 9001 certified.



QUALITY IS THE RESPONSIBILITY OF ALL RYCO PERSONNEL.

ABOUT RYCO - POLICIES

OCCUPATIONAL HEALTH AND SAFETY POLICY

RYCO specialises in the design, manufacture and sales of a comprehensive range of high pressure hydraulic hoses and fittings. The Company operates on a global scale and its products service a wide range of industrial applications.

RYCO is committed to protecting the health and safety of employees, contractors, visitors and the general public in the workplace. RYCO shall fulfil this commitment through a health and safety management system that is integrated with RYCO's business activities related to products, services and people.

RYCO employees, contractors and visitors have a duty of care to take reasonable care for their own health and safety and for the health and safety of persons who may be affected by their actions and inactions in the workplace.

RYCO will take reasonably practical steps to improve workplace health and safety conditions and to prevent injury and illness to its employees, contractors, visitors and the general public.

This Policy applies to RYCO fixed and mobile workplaces and persons attending those workplaces. This Policy will be reviewed from time to time for Continuous Improvement, changes to legislation, industry best practices and policy directions within RYCO.

RYCO is OHSAS 18001 certified.

ENVIRONMENTAL POLICY

RYCO specialises in the design, manufacture and sales of a comprehensive range of high pressure hydraulic hoses and fittings. The Company operates on a global scale and its products service a wide range of industrial applications.

RYCO is committed to compliance with applicable environmental legislation, regulations and any other requirements to which RYCO subscribes.

RYCO operates a program of continual improvement in environmental performance and pollution prevention, aiming to minimise the environmental impacts resulting from relevant activities.

This Policy applies to RYCO fixed and mobile workplaces and persons attending those workplaces. This Policy will be reviewed from time to time for Continuous Improvement, changes to legislation, industry best practices and policy directions within RYCO.

RYCO ISO 14001 certification is under development.



Occupational Health and Safety Policy

RTG2 specializes in the design, manufacture and sales of a computerment large of high pressure fundance investment filtings. The Company specializes on a point same and the products anyone a web region of manufactures.

RYGD is currentised to persecting the results and pathty of engineeries, contraction, volume and the general plans in the economics. RYGD shall full this connectives through a health and calling impragment system that is integrated with RYGD's business admittes makes to produce. Anyways and page.

RTGD employees, contractives and values have a data of care to take researching care for their each need, and carbin and to the heads, and carbin of persons and may be obtained by their address and carbine in the workshold.

R100 will be unsertably produce along to reprint workpace health and addy soundaries and to prevent report and means to its ensurement, contracting, various and the persons public.

- Comply with Lagel Distigations and offer DHE registerients: to structing that the RYDD between a conductor in acculators will the retreast acculators leads and early registeries, inter acculator DHE recomments age Colors of Practice, Research and Obel requirements and RYDD Practice and Early Practices
- Manage Risk to identifying workprove hadwards, performing hazard researchering and basing meansuring practical actions to prevent repry late or density and certain explanate to researchering.
- Provide appropriate instruction, Training and Experiments to ensite 2752 employees, contraction and volters to entry and same and train scheme and responsed from the advertisement.
- Involve and Drazer meaningful and effective Consultation with the employment and contractors in matters potentially meaning annulases headth and safety.
- Communicate clearly and sparty PTCD's compilational health and safety conversioners and partnerses

Establish clear Objectives and Targets to improve health and adds in the workplane.
 The Policy applies to HYCC2 fased and zeroles workplanes and persons effecting these workplanes. The Policy will be revealed from these to belies for characterize improvement.



Environmental Polis

HYCO feed and mobile workplaces and and be revewed have time to time for

ABOUT RYCO - QUALITY ACCREDITATION

RYCO QUALITY ACCREDITATION

RYCO Hydraulics is certified to the current version of ISO 9001 - Quality Management System. Company Policy is to supply products and services that meet or exceed our industry standards.

These standards include SAE, EN (DIN), AS, ISO, JIS, BS and BCS.

The bottom line in Quality Control (QC) and Quality Assurance (QA) is Customer Confidence and Customer Satisfaction.



COMMITTED TO CONTINUAL IMPROVEMENT

ABOUT RYCO - QUALITY ACCREDITATION

RYCO QUALITY ACCREDITATION

RYCO Hydraulics is committed to the objective of zero defects.

As a manufacturer of quality hydraulic hose and fittings, and now a major supplier for a comprehensive range of industrial hoses, fittings and lubrication products, RYCO Hydraulics ensures that our products are accredited by independent third party organisations.

Some of the third party accreditations that RYCO Hydraulics manufactured product have achieved include:



RYCO Hydraulics recommends SAE J1273 as a guide to the selection, manufacture, installation and servicing of hydraulic hose assemblies. RYCO Hydraulics complies with and exceeds third party accreditations as well as international ISO and EN (DIN) standards.

RYCO Hydraulics specifically design and manufacture hydraulic hose and fittings to "match" each other for greater performance and safety. Use only hose assemblies that consist of RYCO "matched" hydraulic hose with RYCO "matched" fittings.

RYCO Hydraulics testing and evaluation processes guarantee the performance and guality required to meet the demands of today's applications to safely convey fluids at high pressure.

RYCO Hydraulics are proud members of, and contribute to, the world's main industry groups including:

ABS American Bureau of Shipping AGA Australian Gas Association BSI **British Standards Institution DNV-GL Det Norske Veritas** KR Korean Register LR Lloyd's Register MED Marine Equipment Directive **MSHA** U.S. Department of Labor, Mine Safety and Health Administration NAHAD National Association of Hose and Accessories Distributors (USA) NFPA National Fluid Power Association (USA) **COMPLIES WITH SAE J343** RMA **Rubber Manufacturers Association** AND SAE AS3791 STANDARDS, AND WITH SAE SAE International USCG US Coast Guard THE RELEVANT ISO, EN AND DIN STANDARDS



NAHAD

SAF









RYCO HYDRAULICS



FECHNICAL

INTRODUCTION ABOUT RYCO - OEM

OEM SUPPORT

We understand that our success is dependent upon our clients' success.

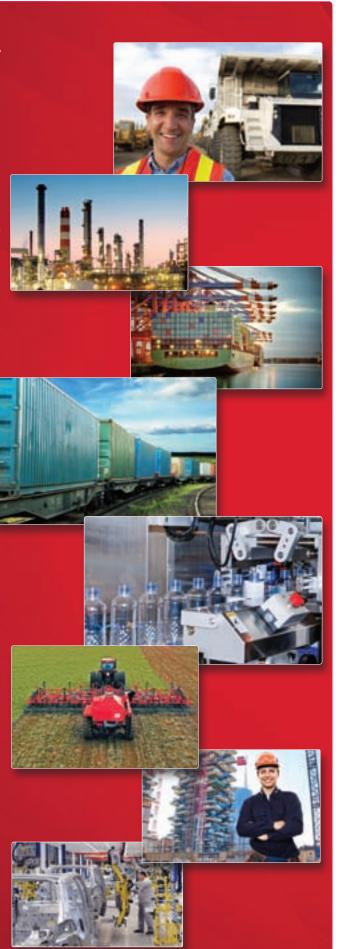
- ☑ Comprehensive engineering solutions
- ✓ Hose management systems
- ☑ Vendor managed stock
- \blacksquare Cost reduction programs
- ☑ Kanban supply
- ☑ JIT deliveries
- ☑ Reliable despatch

In today's competitive international business environment, the requirements for suppliers and clients to work closely together is greater than ever before. At RYCO we do more than simply supply our product; we listen to our clients as we understand that our success is dependent upon our clients' success.

We actively work with our clients; connecting partnerships across our broad range of services. In partnership we implement and support cost reduction programs, comprehensive engineering solutions, hose management systems, vendor managed stock, Kanban supply, JIT deliveries, and reliable despatch; all of which combine to give higher technology and greater performance to our clients.

Our hydraulics technology and professional expertise is regularly required to solve problems arising from the often unique applications of our clients. The experience and knowledge gained from involvement in these special applications increase our service levels so we can provide a superior service to our clients.

Whether you are a manufacturer involved in the worldwide export market, a mining operation in a remote location, or a local distributor, talk to RYCO about "Connecting Partnerships" to enhance your business.







PRODUCTION

RYCO owns and operates manufacturing facilities in Australia, Malaysia and China, producing a complete range of hydraulic hose and fittings for the world market.

Due to our continuous improvement and investment program, and our specialised equipment and technology, we are able to manufacture a large range of hose and fittings efficiently and cost effectively. Our focus on production development and flexible manufacturing systems guarantee that we continually increase production levels and standards.

QUALITY

Improved safety and risk management are of prime concern in today's industries. RYCO design hydraulic hose and fittings that MATCH, enabling RYCO hose assemblies to exceed SAE or EN/DIN performance requirements.

RYCO is certified to ISO 9001 Quality Management System and ISO 9002 Quality Systems for Production and Installation by the Department of Defence (Australia).





INNOVATION

RYCO's commitment to Innovation and Continuous Improvement ensures that we can deliver tomorrow's solutions today. We believe that our global strength in Engineering, Innovation and Product Development provide our customers a higher level of service and solutions that are unparalleled in the industry.

SERVICE

A key service to our Original Equipment Manufacturers (OEM) customers is the onsite pre-production fluid routing service provided by RYCO 24•7 Mobile Connector Specialists.

RYCO 24•7 has extensive coverage specialising in mobile hydraulic hose, fittings, service and replacement 24 hours a day, 7 days a week.

RYCO 24•7 actively supports and services national contracts and OEMs in industries covering the mining, agriculture, marine, construction, defence and industrial market sectors.



ABOUT RYCO - INDUSTRIAL

RYCO IS A SPECIALIST SUPPLIER OF INDUSTRIAL AND HYDRAULIC HOSE AND FITTINGS WITH OVER 65 YEARS EXPERIENCE.







RYCO KNOW HOW

RYCO is a specialist supplier of hydraulic hose and fittings to the mining industry with over 65 years experience. Whether it is for heavy off-road mining vehicles, underground mining equipment at the coal face, lifting buckets of ore, or shifting mountains of overburden, you will find RYCO products hard at work.

RYCO has offices around the world and is committed to long term support of the resource industry on a global scale. "**Our People Are Our Greatest Asset**". Dynamic and dedicated our teams bring together the best and most experienced people in the industry.

The focus is to continually improve on our current business activities and ensure we offer quality, technology and service to the resource industry, with safety being our prime objective.

MINING

In today's competitive international business environment the requirement for suppliers and clients to work closely together is greater than ever before; particularly in the resource industry. At RYCO we do more than simply supply a product; we understand that our success is dependent on our client's success, safety and quality.

Our teams of field engineers proactively work with our clients "**Connecting Partnerships**" across a broad scope of services to provide complete port-to-port solutions. The resulting fluid connection systems are designed to work; they are reliable, safe and can operate at their maximum potential.

RYCO is a solution-based supplier providing our clients with a complete range of services including on-time delivery, solving difficult engineering problems, cost reduction activities, on-site hose management systems and asset management. Many mining operations around the globe rely on RYCO's extensive knowledge of the mining industry and RYCO's large range of services to deliver them substantial cost reduction benefits.

ABOUT RYCO - MDG-41 AND MDG-15 SAFE



MDG 41

MDG 41 is a document which was created in response to an increasing number of incidents involving high-pressure fluid injection injuries on mine sites. In response to this, the NSW Department of Primary Industries (DPI) established a joint committee with involvement from the Mining Industry, Equipment Manufacturers, Repairers, and Suppliers of Fluid Power components in order to formulate a 'best practice' document. The result is Mechanical Design Guideline Number 41 (MDG 41).

The Mechanical Design Guidelines are a series of tools to assist companies in achieving compliance with the OH&S Act and Regulations through implementing industry best practices. We all have a duty of care to assess the hazards in the workplace and to implement systems and programs in order to eliminate or minimise the risk they present.

These documents prompt the review of many areas in fluid power systems that may present a risk and set out guidelines on how they should be addressed using 'best industry practice'.

RYCO have a commitment to OH&S and the MDGs, and as such have developed products and strategies to assist our customers in understanding the requirements of the guidelines. We can assist you to adopt the recommended practices outlined in MDG 41 and MDG 15.

MDG 15

MDG15 is a guideline for all mobile or transportable plant used at mines, and refers to MDG41 for fluid power systems. It has further requirements in relation to the routing of hosing.

MATCHED SYSTEM MDG 41 - CLAUSE 1.6.13

Where the hose and fittings (insert/ferrule) are from the same manufacturer and are assembled and crimped using the method as specified by that manufacturer.

MATCHED SOLUTIONS

Today's hydraulic systems are required to withstand tremendous pressures. This means that the attachment of a fitting to the end of a hose becomes more critical. This may be a simple operation, but it is a complex engineering solution.

International Hose standards specify a set of materials and tolerances, such as internal and external dimensions and reinforcement types and patterns. The reality is that while these standards are adhered to by all manufacturers, the tolerances themselves are so broad that if the entire allowable tolerance was used in manufacturing, users would encounter a high failure rate due to hose and fitting tolerance mismatching. High quality hose manufacturers have to adopt their own tolerance limits which are often at least half of the allowed range.

This is where "Mixing and Matching" becomes an issue: Component manufacturer 'A' could produce parts on the lower limits of the tolerance, and manufacturer 'B' is on the upper end of the tolerance. If a fitting from 'B' was put on a hose from 'A' at the specified crimp diameter of 'B', there would be little chance of adequate fitting retention, which would most likely result in failure. Similarly if a fitting from 'A' was assembled to a hose from 'B' the likelihood is that the inner tube of the hose would be over-compressed or the hose reinforcement could be cut; again resulting in premature failure.



ABOUT RYCO - MDG-41 AND MDG-15 SAFE



MDG 41 stipulates hose assemblies shall only be carried out using "Matched Hose and Fittings" (MDG 41 Clause 3.7.6.1k). MDG 41 defines a "Matched System" as "where the hose and fittings (insert/ferrule) are from the same manufacturer and are assembled and crimped using the method as specified by that manufacturer" (MDG 41 Clause 1.6.13).

Suppliers of manufactured hydraulic hose assemblies must be able to guarantee that the hose and fittings used are matched. RYCO products provide our customers with a matched system. Our design teams create and stringently test the hoses and fittings together to ensure optimum performance and reliability. All this is achieved using RYCO's assembly methods which are reliable and easy to follow.

COMPETENCE MDG 41 CLAUSE - 3.7.6.6

Persons fabricating hose assemblies shall be competent and trained in the proper use of equipment, materials, assembly procedures and testing. People should be assessed in their competence for hose assembly and the assessment should be recorded.

SAFETY SOLUTIONS

Our team of experienced engineering personnel can provide an engineering solution to suit your needs. Whether it's a simple question of product application, or the supply contract to multiple mine sites, we have the knowledge, experience and products to give you the most complete solution to your needs.

Experience is a very important quality in a supplier. The experience that RYCO has gained in many industries is a tangible asset, and one that keeps customers coming back to us, because, like you, we've been out there working. The chances are that we've already supplied to someone who had exactly the same need for a solution as you, and that we've already helped someone else find that solution. **"That's experience"**.

RYCO is aware of its responsibility to you the customer. We understand that the supply of our product does not finish with the goods being shipped.

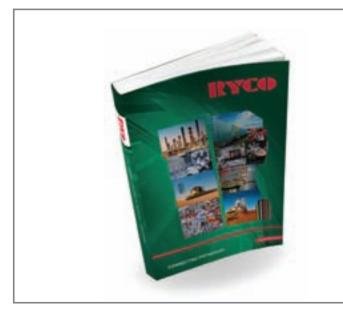
Hydraulic and industrial hose assemblies can present a very real danger if misapplied. We understand this, and can provide you with the competence-based training to ensure that you have the methods, products and knowledge to manufacture a matched hose assembly each and every time.

RESEARCH

RYCO is a specialist supplier of hydraulic and industrial hose and fittings to the mining industry. Heavy-duty mining requires heavy-duty product. RYCO is constantly working together with the mining industry to research and develop new technologies and solutions to your specific requirements.

ABOUT RYCO - SERVICES AND SUPPORT - TRAINING

RYCO KNOW HOW - PRODUCT TECHNICAL MANUAL - INDUSTRIAL









RYCO Know How is a broad range of modular training solutions created to meet the needs of the hydraulic industry.

Designed, developed and delivered by RYCO; RYCO Know How embodies the expertise of a specialist manufacturer and supplier of hose and fittings with over 65 years experience In the Industry.

With safety a priority RYCO training equips you with the knowledge and confidence you need.

RYCO Know How is suitable for RYCO Employees, Franchise Operators, Distributors, Customers and end users.

Delivery methods include:

- Hosted face-to-face training sessions online.
- Interactive self-paced modules.

Hosted sessions are conducted at RYCO's Melbourne, branch or customer/OEM facilities.

Contact your RYCO Representative for access to **www.RYCOknowhow.com**.

RYCO is committed to a program of continued improvement and further development of our Know How training products and services to meet the varied needs of the Australian and New Zealand Industrial hose and fittings industry.

Training titles will include:

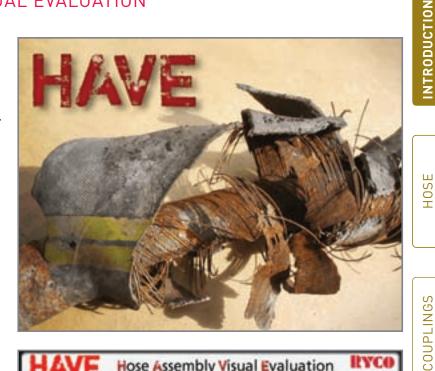
- Product Technical Manual-Industrial
- Industrial Hose, Introduction
- Types, Construction, Applications
- Industrial hose, Specifications and Selecting
- STAMPED, Questionnaire, Industry Types
- Industrial Couplings Selection and Assembly
- Hose Assembly Visual Evaluation

ABOUT RYCO - SERVICES AND SUPPORT - HAVE

HAVE - HOSE ASSEMBLY VISUAL EVALUATION

HAVE is a training presentation with three purposes:

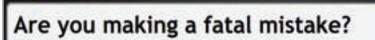
- $\mathbf{\Lambda}$ To highlight the dangers inherent with the use of damaged hoses.
- $\mathbf{\nabla}$ To demonstrate signs of potential failure.
- $\mathbf{\nabla}$ To explain best practices for hose installation.



Hydraulic hoses are designed and built to work in high pressure systems.

Therefore a failing hose presents great potential for harm.

The RYCO HAVE training program conveys a message demonstrating ways of reducing risks.



Hose Assembly Visual Evaluation



In the past, many companies and personnel have viewed hydraulic hose and fittings as low tech, consumable product that should be fixed only when it fails.

RYCO

The attitude is often: 'She'll be right - We'll eplace the hose when it's busted!

Tragically, this could have dire consequences, and it could even be a FATAL

Here are some newspaper articles, reports and statistics detailing some of the p equences of such a decision

CLAMPS

ADAPTORS

RYCO HAVE is a computer-based program that can be presented formally to a group, or run individually as a self-paced learning program.

Risk reduction is a 4-part process:

- . Stop and identify the hazards.
- Assess the risks. •
- Manage the risks.
- . Take action to make it safe.



HIGHER TECHNOLOGY EQUALS GREATER PERFORMANCE 21

INTRODUCTION ABOUT RYCO - SERVICES AND SUPPORT - RYCO 24•7





RYCO 24•7 - MOBILE HOSE AND FITTING SERVICE - HYDRAULIC AND INDUSTRIAL

During 65 years of business, RYCO has increased its market coverage by establishing RYCO 24•7 Service Centres, Mobile Connector Specialists and Onsite Container Workshops in several countries around the world.

Today RYCO 24•7 has extensive coverage specialising in mobile hose, fittings, service and replacement 24 hours a day, 7 days a week. RYCO 24•7 actively supports and services national contracts and Original Equipment Manufacturers (OEM) in industries covering mining, agriculture, marine, construction, defence and industrial markets.

With the continued support of RYCO Hydraulics, Australia's leading manufacturer of hydraulic hose and fittings, we offer a network of RYCO 24-7 Service Centres, Mobile Connector Specialists and Onsite Container Workshops for the emergency breakdown, programmed maintenance, OEM support, installation and aftermarket businesses.

RYCO 24•7 MISSION STATEMENT

Our Mission is to listen to our customers and deliver the highest quality and technologically superior fluid conveying connection products and solutions.



ABOUT RYCO - SERVICES AND SUPPORT - RYCO 24•7



Increases productivity and profitability.

Onsite container workshop and inventory



Extensive training and support.

Set-up to suit specific site requirements.

Ideal for remote locations, fully relocatable.

storage.

Ensures minimal downtime.

RYC0 24•7 SERVICES

 \mathbf{V}

RYCO 24•7 offers a comprehensive service to many industries with emergency break down, programmed maintenance, Original Equipment Manufacturer (OEM) support, installation and aftermarket businesses. Our professionally trained and dedicated teams are on call 24 hours a day, 7 days a week offering expert technical support for all types of hydraulic and industrial systems.

M

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Whether it is mining, marine, agriculture, defence, construction, industrial or utilities, the team at RYCO 24-7 will be on hand; anywhere, anytime, to offer you professional assistance.

RYCO 24•7 Service Centres, Mobile Connector Specialists and Onsite Container Workshops offer extensive national contract and OEM support through the development of hose assembly design, configuration, installation and aftersales service.

Quite often hose assembly plumbing can be an afterthought when designing complex hydraulic systems. With RYCO 24•7 support, our technical teams have the knowledge to assist with efficient and effective port-to-port solutions in the early stages of system design.

With comprehensive product and system knowledge, RYCO 24.7 technicians can be an integral partner in developing a market leading product including efficiency in system performance, warranty reduction and aftersales service.

ONSITE HOSE CONTAINERS

As part of the ongoing focus on customer service, RYCO 24•7 has developed a new range of onsite hose assembly workshops and product storage containers. The RYCO 24•7 containers are an ideal solution for remote mining locations as well as construction, offshore and large manufacturing sites.







By combining RFID technology with ease of use, RYCO Asset Management brings greater safety and productivity direct to your work site.



INCREASED PRODUCTIVITY

The RYCO Asset Management Program, RAM, incorporates an SQL database and HALP, a RYCO Know How technology.

Hose assemblies can be designed using HALP, RYCO's Hose Assembly Life Prediction system, to maximise lifespan. The HALP system creates a preventative schedule of maintenance and testing for each hose assembly or groups of hose assemblies.

RAM is accessed via the internet, giving you the ability to manage your assets globally. RAM can be customised to suit your requirements, no matter their scale or complexity.



SCAN AND GO

Track and trace your hose assemblies providing you with maximum availability. RYCO RAM works with existing barcode hose tags, and can now use RFID (radio frequency identification) tags on hose assemblies, to speed up and simplify identification.

RFID tags, in conjunction with RAM, give operators instant access to essential hose assembly information for maintenance and testing.

RYCO RFID hose tags are 'Passive' allowing you to work without any electrical interference to your items. Rugged and built to last, the RAM Mobile Device is designed to CE Electrical approvals.





ACCESSORIES

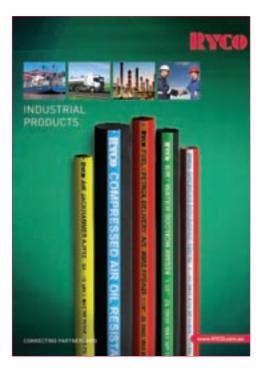
MAXIMISE OPERATIONAL EFFICIENCY

GREATER EQUIPMENT UTILISATION



PROACTIVE MAINTENANCE MANAGEMENT

INTRODUCTION RYCO TIMELINE



INDUSTRIAL PRODUCTS

RYCO's Industrial Rubber, PVC and Thermoplastic hoses are designed to suit your demanding requirements. Whether your requirement is for Low, Medium or High Pressure systems, RYCO is here for you.

RYCO understands today's exacting requirements and brings to you expert engineering solutions, fluid transfer asset management and onsite support.

- > AGRICULTURE AND PUMPING
- > BULK ROAD AND RAIL TRANSPORT
- > CHEMICAL
- > CONSTRUCTION AND MINERAL
- > FOOD AND BEVERAGE PROCESSING
- > MANUFACTURING
- > MARINE AND WHARF
- > MINING
- > PETROLEUM
- > WASTE AND RECYCLING









PEED U

1950's Production of high pressure 5/8" one wire hose field attachable couplings, adaptors and assemblies begins. 1962 Our first RYCO Catalogue "RYCO – FLEX" is published.









DASH SIZE PART NUMBERING

QUICK REFERENCE CHART OF DASH SIZE EQUIVALENT

EXAMPLE: Find Dash Size for 1.5/16" JIC thread. Read down JIC & UNO column until 1.5/16" is reached. Read off Dash Size in far left column (-21).

DASH SIZE	* INCH	BSP INCH-TPI	NPT INCH-TPI	JSEAL™ INCH-TPI	JIC& UNO INCH-TPI	SAE FLARE INCH-TPI	ORFS INCH-TPI	DASH SIZE	** MM	METRIC MM X PITCH
-02	1/8	1/8 - 28	1/8 - 27					-02	2	
-03	3/16							-03	3	
-04	1/4	1/4 - 19	1/4 - 18					-04	4	
-05	5/16			5/16 - 24	5/16 - 24	5/16 - 24		-05	5	
-06	3/8	3/8 - 19	3/8 - 18	3/8 - 24	3/8 - 24	3/8 - 24		-06	6	
-07	7/16			7/16 - 20	7/16 - 20	7/16 - 20		-07	7	
-08	1/2	1/2 - 14	1/2 - 14	1/2 - 20	1/2 - 20	1/2 - 20		-08	8	
-09	9/16			9/16 - 18	9/16 - 18		9/16 - 18	-09	9	
-10	5/8	5/8 - 14				5/8 - 18		-10	10	
-11	11/16						11/16 - 16	-11	11	
-12	3/4	3/4 - 14	3/4 - 14	3/4 - 16	3/4 - 16	3/4 - 16		-12	12	
-13	13/16						13/16 - 16	-13	13	
-14	7/8			7/8 - 14	7/8 - 14	7/8 - 14		-14	14	14 x 1,5 (-1415)
-15	15/16							-15	15	
-16	1	1 - 11	1 - 11.1/2				1 - 14	-16	16	16 x 1,5 (-1615)
-17	1.1/16			1.1/16 - 12	1.1/16 - 12	1.1/16 - 14		-17	17	
-18	1.1/8							-18	18	18 x 1,5 (-1815)
-19	1.3/16						1.3/16 - 12	-19	19	
-20	1.1/4	1.1/4 - 11	1.1/4 - 11.1/2					-20	20	20 x 1,5 (-2015)
-21	1.5/16			1.5/16 - 12	1.5/16 - 12			-21	21	
-22	1.3/8							-22	22	22 x 1,5 (-2215)
-23	1.7/16						1.7/16 - 12	-23	23	
-24	1.1/2	1.1/2 - 11	1.1/2 - 11.1/2					-24	24	24 x 1,5 (-2415)
-25	1.9/16							-25	25	
-26	1.5/8			1.5/8 - 12	1.5/8 - 12			-26	26	26 x 1,5 (-2615)
-27	1.11/16						1.11/16 - 12	-27	27	
-28	1.3/4							-28	28	
-29	1.13/16							-29	29	
-30	1.7/8			1.7/8 - 12	1.7/8 - 12			-30	30	30 x 1,5 (-3015) 30 x 2,0 (-3020)
-31	1.15/16							-31	31	
-32	2	2 - 11	2 - 11.1/2				2 - 12	-32	32	
-33	2.1/16							-33	33	33 x 1,5 (-3315)
-36	2.1/4							-36	36	36 x 1,5 (-3615) 36 x 2,0 (-3620)
-40	2.1/2	2.1/2 - 11	2.1/2 - 8	2.1/2 - 12	2.1/2 - 12			-40	40	
-42	2.5/8							-42	42	42 x 1,5 (-4215) 42 x 2,0 (-4220)
-48	3	3 - 11		3 - 8	3 - 8			-48	48	
-50	3.1/8							-50	50	50 x 2,0 (-5020)
-52	3.1/4							-52	52	52 x 2,0 (-5220)
-60	3.3/4							-60	60	60 x 2,0 (-6020)
-63	3.15/16							-63	63	
-75	4.11/16							-75	75	

***INCH COLUMN IS USED FOR:**

Hose ID. Imperial Tube OD. FS1072 FIRE SLEEVE ID. Nominal size of SAE FLANGE. Nominal size of Quick Release Coupling.

****MM COLUMN IS USED FOR:** Metric Tube OD. Nominal size of CROCBITE, RKV, STAPLELOK and SUPERLOK Couplings.







HOSE PICTORIAL INDEX

	HOSE SER	IES	INSIDE DIAMETER	RECOMMENDED	CONSTRUCTION	MAXIMUM TEMPERATURE	MAXIMUM WORKING PRESSURE			
RUBBER - AIR										
38	AJY DELIVERY	RTED AIY	-12 to -16 3/4" to 1"	Compressor and jackhammer applications. Suited for construction, industrial, and agricultural applications.	Black, smooth synthetic rubber tube with oil mist resistance. High tensile synthetic yarn reinforcement. Yellow smooth extruded synthetic rubber cover with good ozone and abrasion resistance.	+80°C (+176°F).	20 bar/300 psi.			
39	ASY	- ama Alty	-16 to -48 1″ to 3″	Heavy Duty, High Pressure compressed air; widely used in mining and quarries.	Black SBR/NBR tube - oil mist resistant. High tensile steel cord reinforcement. Yellow SBR cover - abrasion and ozone resistant, pin pricked.	+85°C (+185°F).	40 bar/600 psi up to -32.			
40	ATB	- EYOS ÁIE	-04 to -16 1/4″ to 1″	Air and water delivery.	Black SBR/NBR tube. High tensile synthetic yarn reinforcement. Black EPDM/ SBR cover - abrasion and ozone resistant.	+80°C (+176°F).	20 bar/300 psi.			
41	ATO DELIVERY	- Ever Alto	-20 to -64 1.1/4" to 4"	Heavy Duty compressed air for construction, quarry and mining applications.	Black, smooth synthetic rubber tube with oil mist resistance. (Blended SBR), High tensile synthetic yan reinforcement. Black wrapped cover with good ozone and abrasion resistance (Blended EPDM).	+80°C (+176°F).	20 bar/300 psi.			
RUBBER - AIR/WATER										
42	MS1000 DELIVERY	- RYCH MINESPRAY M51800 M	-08 to -32 1/2″ to 2″	Ideal for use on High Pressure continuous mining equipment in both longwall coal or hardrock mining, or as a general hot water service hose.	Black, oil resistant synthetic rubber tube. One braid of high tensile steel wire reinforcement. Vellow, oil resistant and abrasion resistant synthetic rubber cover.	+100°C (+212°F).	70 bar/1000 psi.			
43	CS1000 DELIVERY	HTTE COALSPRAY CS1002 FR	-08 to -32 1/2" to 2"	Ideal for use on High Pressure continuous mining equipment in both longwall coal or hardrock mining, or as a general hot water service hose.	Black, oil resistant synthetic rubber tube. One braid of high tensile steel wire reinforcement. Black and yellow, oil resistant and abrasion resistant synthetic rubber cover.	+100°C (+212°F).	70 bar/1000 psi.			
44	AWD	THE AND DELIVERY	-12 to -64 3/4" to 4"	Air or water delivery hose. Suited to be used in industrial, earthwork construction, mining, and agriculture applications.	Black, smooth synthetic rubber tube. (Blended NR/SBR). High tensile synthetic yarn reinforcement. Black wrapped cover with good ozone and abrasion resistance (Blended SBR/EPDM).	+80°C (+176°F).	10 bar/150 psi.			
45	RST	THE HET FRAS DELIVERY	-08 to -64 1/2" to 4"	Heavy Duty FRAS air/ water and stone or rock dust delivery hose. Especially for use in underground coal mines.	NBR/SBR blend tube, anti- static compound. 4 Plies of high tensile synthetic cord reinforcement. NBR / EPDM blend cover, anti-static compound, abrasion, ozone and fire resistant.	+80°C (+176°F).	20 bar/300 psi.			
46	AWS SUCTION/DELIVERY	THE AVS SUCTION	-16 to -64 1″ to 4″	High quality water suction and delivery Hose. Suited for industrial, earthwork construction, mining, agriculture applications.	Black, smooth synthetic rubber tube. (Blended NR/SBR). High tensile synthetic cord and a quality steel helix wire reinforcement. Black wrapped cover with good ozone and abrasion resistance.	+80°C (+176°F).	15 bar/225 psi.			
47	RSTS	WHEN BETS FRAS SUCTION	-24 to -64 1.1/2" to 4"	Heavy Duty FRAS water suction or air, stone or rock dust transfer. Suits use in underground coal mines.	NBR/SBR blend tube, anti- static compound. 4 plies spiral wire helix reinforcement, embedded into the wall of the hose. NBR/EPDM blend cover, anti-static compound, abrasion, ozone and fire resistant.	+70°C (+158°F).	10 bar/150 psi.			
48	MEH	A STATE AND A STATE OF STATE	-12 to -192 3/4" to 12"	Suitable for water cooled diesel engine exhaust gas systems installed on a small craft less than 24m in length or pleasure yachts.	Black, smooth, synthetic rubber tube. High strength synthetic cord and helix wire reinforcement. Black, corrugated (wrapped finish), synthetic rubber cover, weathering and abrasion resistant.	+100°C (+212°F).	3 bar/45 psi.			
49	PCT	BYYS PCT RYCO PRAS PRO	-08 to -32 1/2" to 2"	Ideal for underground and surface mining hose protection.	Anti-static NBR/SBR blend tube. 2 ply textile reinforcement. Black, smooth (wrapped finish), resistant rubber and weathering resistant cover.	+75°C (+167°F).	5 bar/75 psi.			



	HOSE SERIES	INSIDE DIAMETER	RECOMMENDED	CONSTRUCTION	MAXIMUM TEMPERATURE	MAXIMUM WORKING PRESSURE	INTRODUCTION
RU	IBBER - CHEMICAL/ACID						ODL
50	CSX SUCTION/DELIVERY	-16 to -48 1" to 3"	Suction and delivery of acid and chemicals.	Transparent XPLE (Cross Linked Polyethylene) tube. High tensile textile cords with embedded steel helical wire reinforcement. Green EPDM cover - abrasion and ozone resistant.	+90°C (+194°F).	16 bar/235 psi.	INTR
51	UHMW SUCTION/DELIVERY	-16 to -64 1" to 4"	Suitable for many different chemicals used in a very wide range of applications.	Smooth, ultra high molecular weight polyethylene impervious tube. High strength synthetic cords encasing a steel wire helix. Blue, corrugated EPDM cover with excellent chemical resistance.	-+65°C (+149°F)	10 bar/150 psi.	HOSE
RU	IBBER - FOOD/BEVERAGE						1
52	RBD BELIVERY	-12 to -64 3/4" to 4"	Suitable for oil and non-oil based foods and beverages, including liquid food, edible oils, alcoholic and non- alcoholic beverages.	Smooth non-porous white EPDM tube. 4 Plies of high tensile synthetic cord with embedded steel helical wire reinforcement. EPDM/ SBR blend cover - excellent abrasion, ozone resistance.	+100°C (+212°F).	10 bar/150 psi.	ېن ۱
53	RBS SUCTION/DELIVERY	-16 to -64 1″ to 4″	Suitable for oil and non-oil based foods and beverages, including liquid food, edible oils, alcoholic and non- alcoholic beverages.	Smooth non-porous white EPDM tube. 4 Plies of high tensile synthetic cord with helical steel wire reinforcement. EPDM/NR blend cover has excellent abrasion, ozone resistance.	+95°C (+203°F).	12 bar/175 psi up to -40.	COUPLING
RUBBER - FUEL/OIL							
54	FDHA DELIVERY	-20 to -32 1.1/4" to 2"	Delivery of oil and fuel up to 50% aromatic content.	Black, oil resistant NBR tube. High tensile textile cords with anti-static wire reinforcement. Red EPDM/NBR cover - abrasion, ozone and hydrocarbon resistant.	+80°C (176°F).	10 bar/150 psi.	TORS
55	FPDA CERTIFICATION INTERVIEW	-20 to -64 1.1/4" to 4"	Delivery of oil and fuel up to 50% aromatic content.	Black, oil resistant NBR tube. High tensile textile cord with anti-static wire reinforcement. Red EPDM/NBR cover - abrasion, ozone and hydrocarbon resistant.	+80°C (176°F).	20 bar/300 psi.	ADAPTOR
56	SR SUCTION/DELIVERY	-12 to -48 3/4" to 3"	Petroleum and water-based hydraulic fluids in suction lines or in Low Pressure return lines.	Oil resistant synthetic rubber tube. Textile reinforcement with spiral wire to prevent collapsing. Oil resistant and abrasion resistant synthetic rubber cover.	+100°C (+212°F).	21 bar/300 psi at -12.	IPS
57	SRF SUCTION/DELIVERY	-12 to -32 3/4" to 2"	Petroleum and water base hydraulic fluids in suction lines or in Low Pressure return lines.	Oil resistant synthetic rubber tube. Textile reinforcement with spiral wire to prevent collapsing. Oil resistant and abrasion resistant synthetic rubber cover.	+100°C (+212°F).	21 bar/300 psi at -12.	CLAMPS
58	M1	-04 to -06 1/4" to 3/8"	Multi-purpose hose for use on fuel lines, PCV and EEC systems, and fuel return hose connections on diesel fuel injection systems.	Oil resistant synthetic rubber tube. One textile braid reinforcement. Oil resistant synthetic rubber cover.	+125°C (+257°F).	3,5 bar/50 psi.	ORIES
59	M2	-04 to -12 1/4" to 3/4"	Medium Pressure hydraulic oil lines, antifreeze solutions, and water.	Oil resistant synthetic rubber tube. Two textile braids reinforcement. Oil resistant and abrasion resistant synthetic rubber cover.	+100°C (+212°F).	88 bar/1250 psi at -4.	ACCESSO

HOSE PICTORIAL INDEX

	HOSE SERIES		INSIDE DIAMETER	IDE ETER RECOMMENDED CONSTRUCTION		MAXIMUM TEMPERATURE	MAXIMUM WORKING PRESSURE			
RUBBER - MATERIAL HANDLING										
60	CSD DELIVERY	RYCH CSD DELIVERY	-32 to -96 2" to 6"	Placement of concrete to the casting location.	Black conductive NR and CBR tube - very high abrasion resistant. High tensile steel wire cord reinforcement. Synthetic rubber cover - abrasion, ozone and weather resistant.	70°C (+158°F).	85 bar/1233 psi.			
61	MHD	RYCH MHD DELIVERY	-48 to -80 3″ to 5″	Delivery of dry powder material and cement.	Black conductive NR tube - high abrasion resistant. High tensile textile cord reinforcement. Black conductive EPDM/NR cover - high abrasion resistant.	+80°C (+176°F).	10 bar/150 psi.			
62	SF2	RYCH SF2 SECDER	-20 to -48 1.1/4″ to 3″	Suitable for a range of applications including: air seeder, grains, granular and liquid fertilisers, light slurries or water.	Black NR Tube. Textile reinforced with twin spiral wire helix reinforcement. Black SBR/ EPDM blend cover.	+70°C (+158°F).	12 bar/175 psi.			
RUBBER - MULTI PURPOSE										
63	MP1	- RYCH MP1 MULTI-B	-04 to -20 1/4" to 1.1/4"	Air, water, petroleum oils, kerosene and fuel oils.	Oil resistant synthetic rubber tube. One textile braid reinforcement. Oil resistant and abrasion resistant synthetic rubber cover.	+93°C (+200°F). +49°C (+120°F). Dependent on material.	13,8 bar/200 psi.			
64	MP2	- ETCH MP2 MULTI-A	-04 to -16 1/4″ to 1″	Air, water, petroleum oils, kerosene and fuel oils.	Black, oil resistant synthetic rubber tube. High oil resistance. One textile braid reinforcement. Red, oil resistant and abrasion resistant synthetic rubber (Modified Nitrile) cover.	+93°C (199°F).	20 bar/300 psi.			
65	MPX	RICO MPX	-20 to -32 1.1/4" to 2"	Delivery of fuel, oil, compressed air and water.	Black NBR tube. High tensile textile cord reinforcement. Red EPDM/NBR cover - abrasion and ozone resistant.	+80°C (176°F).	20 bar/300 psi.			
66	PL1 DELIVERY	EVCS PL1	-04 to -12 1/4" to 3/4"	Petroleum-based hydraulic oils, glycol antifreeze solutions, water, diesel fuels, and air.	Oil resistant synthetic rubber tube. One textile braid reinforcement. Oil and abrasion resistant synthetic rubber cover.	+95°C (+203°F).	28 bar/410 psi up to -08.			
RL	JBBER - SPEC	CIALITY - SHO	CKWAV	E AND JE	TSTORM					
68	SW SHOCKWAVE	RYCH SHOCKWAVE	-06 to -16 3/8" to 1"	Cleaning and preparation of marine surfaces, runway and swimming pool cleaning, and paint removal.	Oil and water resistant synthetic rubber tube. Four high tensile steel spirals reinforcement. Oil, water and ozone resistant synthetic rubber cover.	+80°C (+176°F) with intermittent service to +100°C (+212°F).	1250 bar/18125 psi at -06.			
71	JS4000 Jetstorm	RYCH JETSTONN JSION	-04 to -08 1/4" to 1/2"	Hot Water Pressure Washer Machines.	Black, heat resistant synthetic rubber tube. One braid of high tensile steel wire reinforcement. Black oil resistant and abrasion resistant synthetic rubber cover. Embossed layline in 3 colours.	+121°C (+250°F), with intermittent service to +135°C (+275°F).	280 bar/4100 psi.			
72	JS6000 Jetstorm	RYCH JETSTORY JANCON	-04 to -08 1/4" to 1/2"	Hot Water Pressure Washer Machines. High Pressure.	Black, heat resistant synthetic rubber tube. Two braids of high tensile steel wire reinforcement. Black oil resistant and abrasion resistant synthetic rubber cover. Embossed layline in 3 colours.	+121°C (+250°F), with intermittent service to +135°C (+275°F).	420 bar/6100 psi.			



	HOSE SERIES	INSIDE DIAMETER	RECOMMENDED	CONSTRUCTION	MAXIMUM TEMPERATURE	MAXIMUM WORKING PRESSURE	INTRODUCTION	
RUBBER - SPECIALITY								
73	DELIVERY-STEAM	-08 to -24 1/2" to 1.1/2"	Widely used in refineries, shipyards and petrochemical plants.	Black EPDM tube. High tensile steel cord reinforcement. Red EPDM cover - heat, abrasion and ozone resistant, pin pricked.	+210°C (+410°F).	17 bar/250 psi.	INTR	
74	M2G DELIVERY-GAS	-04 to -12 1/4" to 3/4"	Liquified Petroleum Gas and Natural Gas.	Oil resistant synthetic rubber tube. Two textile braids reinforcement. Abrasion resistant synthetic rubber perforated cover.	+65°C (+149°F).	26 bar/375 psi.	HOSE	
75		-04 to -16 1/4" to 1"	High Pressure hydraulic oil applications, or where resistance to phosphate ester fluid is required.	Synthetic rubber tube, compounded for temperature resistance and multi-fluid resistance. One braid of high tensile steel wire reinforcement. Oil resistant and abrasion resistant synthetic rubber cover.	+150°C (+302°F).	225 bar/3250 psi at -04.		
76	RQP2	-04 to -32 1/4" to 2"	High Pressure hydraulic oil applications, or where resistance to phosphate ester fluid is required.	Synthetic rubber tube. Two braids of high tensile steel wire reinforcement. Oil resistant and abrasion resistant synthetic rubber cover.	+150°C (+302°F).	400 bar/5800 psi at -04.	COUPLINGS	
77	RQP5	-04 to -32 1/4″ to 2″	Medium to High Pressure hydraulic oil applications, or where resistance to phosphate ester fluid is required.	Oil resistant synthetic rubber tube. Polyester inner braid covered with one braid of high tensile steel wire reinforcement. Polyester braid cover.	+150°C (+302°F).	210 bar/3050 psi up to -05.	cou	
78	RQP6	-04 to -12 1/4″ to 3/4″	Hydraulic oil lines, transmission oil cooler lines, glycol antifreeze solutions, water, diesel fuels and air.	Oil resistant synthetic rubber tube. One textile braid reinforcement. Oil resistant and abrasion resistant synthetic rubber cover.	+135°C (+275°F) +150°C (+302°F) +100°C (+212°F) +71°C (+160°F). Dependent on material and operating time.	28 bar/410 psi up to -08.	ADAPTORS	
79	WGP DELIVERY-HOT WASH	-08 to -16 1/2″ to 1″	Suitable for use in most food processing plants ie dairy, meat, poultry, confectionery etc.	White NBR tube. Textile reinforced. Fat resistant White NBR cover.	+90°C (194°F).	21 bar/300 psi.	ADA	
80		-03 to -16 3/16" to 1"	Fire Suppression Systems of off- road vehicles, mining equipment, stationary engines, etc.	Oil resistant synthetic rubber tube. One braid of high tensile steel wire reinforcement. Red, heat resistant, abrasion resistant and oil resistant rubber cover.	+100°C (+212°F).	250 bar/3600 psi at -03.	CLAMPS	
81	WT DELIVERY-WELDING	-03 3/16″	Welding purposes.	Black SBR/NBR tube. High tensile synthetic yarn reinforcement. Red/blue EPDM/SBR cover - abrasion and ozone resistant.	+80°C (176°F).	20 bar/300 psi.	CLA	

RYCO'S INDUSTRIAL RUBBER AND PVC HOSE -CUT LENGTH POLICY.

Please note that RYCO has a Cut Length Policy in place, which includes both "Cutting Charges" and/or a "Minimium Length Criteria" for all of our Industrial Hoses and Tubing. Please refer to our Industrial Price List, or contact our Customer Service Department for the specific details.

If specific cut lengths are required, these "charges and criteria" must be clearly specified and accepted when placing orders.

Goods manufactured to Order/Cut or Modified to meet the customer's specifications "cannot be returned for credit or exchange".

HOSE PICTORIAL INDEX

	HOSE SER	RIES	INSIDE DIAMETER	RECOMMENDED	CONSTRUCTION	MAXIMUM TEMPERATURE	MAXIMUM WORKING PRESSURE
P٧	C - AIR/WATE	R					
82	PFAW	BYCO PFAW FILAS ARRWATE	-06 to -32 3/8" to 2"	Underground mining hose. Fire resistant and anti-static.	Black flexible FRAS PVC tube. High strength synthetic braid reinforcement. Yellow flexible PVC cover with two black FRAS strips.	+50°C (122°F).	21 bar/305 psi
82	PFAWT DELIVERY TWIN	Rea Prairt Frai Administra Rea Prairt Frai Administra	-08 & -16 1/2" & 1"	Underground mining hose. Fire resistant and anti static. RYCO PFAWT is also ideal for rockbolting.	Black flexible FRAS PVC tube. High strength synthetic braid reinforcement. Yellow flexible PVC cover with two black FRAS strips.	+50°C (122°F).	21 bar/305 psi
83 84 85	PAW	RYCH PAW AIRWATER	-04 to -32 1/4" to 2"	Suitable for general purpose supply. Also suitable for the conveyance of liquids, gases and many chemicals.	Black PVC tube. Textile braid reinforcement. Yellow/blue PVC cover.	+50°C (122°F)	20 bar/290 psi up to -08.
86	PCW	RIVE POW COLD WASHDO	-08 to -24 1/2″ to 1.1/2″	Commercial parks, gardens and turf watering applications. Ideal for cattle yards and dairies.	Black PVC tube. Textile braid reinforcement. White PVC cover.	+55°C (+131°F).	10 bar/145 psi.
87	MDW LAYFLAT/DELIVERY		-24 to -128 1.1/2" to 8"	High Pressure Heavy Duty mine dewatering.	Polyurethane tube. Polyester woven jacket reinforcement. Polyurethane cover.	+70°C (178°F).	22 bar/320 psi at -32.
87	MDWH		-32 to -128 2" to 8"	High Pressure Heavy Duty mine dewatering.	Polyurethane tube. Polyester woven jacket reinforcement. Polyurethane cover.	+70°C (178°F).	27 bar/390 psi up to -48.
88	PLB		- 16 to -256 1" to 16"	Suitable for irrigation or drainage, washdown, water supply for construction sites or general dewatering.	PVC compound tube. High strength yarn reinforcement. Blue PVC compound cover	+55°C (+131°F).	7 bar/100 psi up to -20.
89	PLR		-24 to -128 1.1/2" to 8"	Dewatering pits, building sites, dams, mines and quarries. Also suitable for pumping more abrasive slurries.	PVC compound tube. High strength yarn reinforcement. Red PVC compound cover.	+55°C (+131°F).	10 bar/152 psi up to -40.
90	PFR	Evcs PTR FIRE REEL	-12 to -16 3/4" to 1"	Stationary or mobile hose reels in fire control systems located in commercial or public buildings.	Smooth black PVC tube. Textile reinforcement. Ribbed black PVC cover.	+50°C (+122°F).	10 bar/145 psi.
91	PGPW	BYCH PGPW GENERAL PUR	-08 to -16 1/2″ to 1″	General domestic and commercial use.	Smooth clear flexible PVC tube. Textile braid reinforcement. Smooth clear flexible PVC cover.	+55°C (+131°F).	8 bar/120 psi.
92	PSG SUCTION/DELIVERY	Rece PSG	-16 to -96 1″ to 6″	For the transfer of water.	PVC tube. Rigid PVC spiral reinforcement.	+60°C (+140°F).	7 bar/100 psi up to -20.
P٧	C - CHEMICA	L/ACID					
93	PAS	EVCS PAS AGRI CHEM SPRA	-06 to -16 1/4″ to 1″	Transferring chemicals in general agricultural and horticultural applications.	PVC Nitrile tube. Textile braid reinforcement. PVC Nitrile cover.	+50°C (+122°F).	21 bar/297 psi.



	HOSE SER	RIES	INSIDE DIAMETER	RECOMMENDED	CONSTRUCTION	MAXIMUM TEMPERATURE	MAXIMUM WORKING PRESSURE	INTRODUCTION
PV	C - FOOD/BE	VERAGE						
94	PSR SUCTION/DELIVERY		-16 to -96 1″ to 6″	Heavy Duty flexible food quality PVC suction/discharge hose reinforced with a rigid spiral.	Clear flexiable PVC tube. Rigid red PVC spiral reinforcement. Clear flexible PVC cover	+60°C (+140°F).	7 bar/100 psi up to -20.	INTR
95	PSP SUCTION/DELIVERY		-16 to -48 1" to 3"	Any liquid or semi liquid that requires a food grade hose. Included are wineries, milk processing plants or tankers.	Flexible clear PVC tube. Rigid Clear PVC spiral and textile braid reinforcement. Flexible clear PVC cover.	+60°C (+140°F)	12 bar/175 psi up to -24.	HOSE
96	PSW SUCTION/DELIVERY		-16 to -64 1" to 4"	The tanker delivery of milk, other dairy products, drinking water, wine and other food products.	Clear flexible PVC tube. Rigid white PVC spiral reinforcement. Clear flexible PVC cover.	+60°C (+140°F).	7 bar/100 psi up to -20.	
PV	C - FUEL/OIL							ر ا
97	PSB SUCTION/DELIVERY	EYCH PSII PETROL & OIL SU	-12 to -48 3/4" to 3"	Waste collection on environmental waste trucks, pumping grease pits, sewage collection, pumping of fuels, lubricants and most chemicals.	Blue flexible PVC tube. Rigid PVC spiral reinforcement. Blue flexible PVC cover.	+60°C (+140°F).	10 bar/145 psi at -12.	COUPLINGS
98	PDP	- BYCO POP DRUM PUMP	-12 to -16 3/4" to 1"	Dispensing fuels from overhead tanks and drums.	Black PVC Nitrile tube. Textile braid with twin anti-static copper wires reinforcement. Black PVC cover.	+50°C (+122°F).	10 bar/145 psi.	
99	PPA PRESSURE	Ется ррд	-16 to -24 1" to 1.1/2"	Dispensing oil, and home heating fuel. Ideal as a tanker delivery hose.	Black PVC Nitrile tube. Textile braid with twin anti-static copper wires reinforcement. Black PVC cover.	+50°C (+122°F).	13 bar/193 psi at -16.	ADAPTORS
PV	<mark>C - MATERIA</mark>	L HANDLING		1		1		
100	PSAR SUCTION/DELIVERY		-20 to -128 1.1/4" to 8"	Pumping industrial/ commercial vacuum cleaning.	PVC Nitrile blend tube. Rigid PVC spiral reinforcement. Green corrugated spiral cover.	+60°C (+140°F).	3 bar/43 psi.	1PS
101	USAR SUCTION/DELIVERY		-20 to -128 1.1/4" to 8"	Equipment on vacuum diggers and street sweepers and any particulate collection in extreme environments.	Urethane tube. Rigid PVC spiral reinforcement. Urethane cover.	+60°C (+140°F).	3 bar/43 psi.	CLAMPS
102	PCAS SUCTION/DELIVERY		-16 to -48 1″ to 3″	Airseeder suitable for primary, secondary and tertiary lines.	Clear flexible PVC tube. Black rigid PVC spiral reinforcement. Clear flexible PVC cover.	+60°C (+140°F).	8 bar/116 psi at -16.	ORIES
103	TMH SUCTION/DELIVERY		-20 to -160 1.1/4″ to 10″	Metals, plastic pellets, fertilizers, rock salts and slurries.	Thermoplastic blend of polyurethane and PVC tube (static dissipating/ static conductive). PVC helix reinforcement. Thermoplastic blend of nitrile, polyurethane and PVC cover (non-conductive).	+70°C (+158°F).	3 bar/45 psi at -20.	ACCESSC

CONNECTING PARTNERSHIPS

HOSE PICTORIAL INDEX

	HOSE SER	RIES	INSIDE DIAMETER	RECOMMENDED	CONSTRUCTION	MAXIMUM TEMPERATURE	MAXIMUM WORKING PRESSURE
ΡV	'C - MULTI PU	IRPOSE					
104	PSMF SUCTION/DELIVERY		-28 to -128 1.3/4" to 8"	Environmental waste trucks, pumping the contents of grease pits, sewage collection, pumping of fuels, lubricants and most chemicals.	PVC Tube. Rigid PVC spiral reinforcement. PVC cover. Yellow corrugated.	+60°C (+140°F).	3 bar/43 psi.
105	PCM	Even Pour Air/Watest ///	-04 to -32 1/4" to 2"	Suitable for air, water, food and beverage liquids and semi liquids and petroleum based products.	Clear multi-pupose PVC tube. Textile braid reinforcement with red fuel tracer. Clear flexible PVC cover.	+50°C (+122°F).	14 bar/200 psi up to -16.
106	PSS SUCTION		-12 to -64 3/4" to 4"	Secondary and tertiary lines on air seeder machines. Suitable for water conveyance, ventilation duct on business machines.	Flexible Medium Duty PVC spiral extrusion profile tube.	+30°C (+86°F).	_
106	PSSG SUCTION		-08 to -10 1/2″ to 5/8″	Secondary and tertiary lines on air seeder machines. Suitable for water conveyance, ventilation duct on business machines.	Flexible Medium Duty PVC spiral extrusion profile tube.	+30°C (+86°F).	_
107	PSSH SUCTION		-20 to -128 1.1/4" to 8"	Collection of dust, sawdust, fumes. Transport of small particulates.	Flexible PVC Heavy Duty spiral extrusion profile tube.	+30°C (+86°F).	-
108	PABD	BYCH PVC AIR BREATHER P	-05 to -06 5/16″ to 3/8″	Diving, air breathing applications.	Food grade white PVC tube. Textile braid reinforcement. Bright yellow flexible PVC cover.	+50°C (+122°F)	25 bar/365 psi at -06.
ΡV	C - SPECIALI	ТУ					
IV	5 JI LUIALI	11					
109	PHW	EYCS PVC HOT WASHDOW	-08 to -12 1/2" to 3/4"	All food preparation and retail areas, where milk, fats and other food products are present.	White flexible PVC tube. Textile braid reinforcement. White smooth thermoplastic cover.	+85°C (+185°F).	20 bar/290 psi at -08.
110	ANFF TUBING FLEXIBLE	EYCD ANTE	-12 to -16 3/4" to 1"	For the transfer of ANFO explosives.	Flexible thermoplastic extruded tube.	+40°C (+104°F)	-
110		BYCE ANTR	-12 to -16 3/4" to 1"	For the transfer of ANFO explosives.	Rigid thermoplastic extruded tube.	+40°C (+104°F)	-
111	TUBING RIGID		-04 to -08 1/4" to 1/2"	Pneumatic and hydraulic control systems, fuel tubing, air and gas tubing. Also ideal for handling weed killing solutions.	High quality nylon extruded and formed tubing.	+60°C (140°F)	12 bar/174 psi.
112	NTIB TUBING-IMPERIAL	RYCE NTID	-02 to -08 1/8″ to 1/2″	Pneumatic and hydraulic control systems, fuel tubing, air and gas tubing. Also ideal for handling weed killing solutions.	High quality nylon black, thermoplastic extruded tube.	+90°C (194°F)	17 bar/250 psi.
112	NTIN TUBING-IMPERIAL	RYCe NTIN	-02 to -08 1/8" to 1/2"	Pneumatic and hydraulic control systems, fuel tubing, air and gas tubing. Also ideal for handling weed killing solutions.	Natural (translucent), high quality nylon extruded tube.	+90°C (194°F)	17 bar/250 psi.



	HOSE SEF	RIES	INSIDE DIAMETER	RECOMMENDED	CONSTRUCTION	MAXIMUM TEMPERATURE	MAXIMUM WORKING PRESSURE	INTRODUCTION
PV	C - SPECIALI	TY Cont						
113	NTMB	Bycs NTMB	4mm to 12mm	Pneumatic and hydraulic control systems, fuel tubing, air and gas tubing. Also ideal for handling weed killing solutions.	High quality nylon black, thermoplastic extruded tube.	+90°C (194°F).	20 bar/290 psi.	INTR
113	NTMN TUBING-METRIC	RYCO NTIN	4mm to 12mm	Pneumatic and hydraulic control systems, fuel tubing, air and gas tubing. Also ideal for handling weed killing solutions.	Natural (translucent), high quality nylon extruded tube.	+90°C (194°F).	20 bar/290 psi.	HOSE
114	PCVTM TUBING		-02 to -32 1/8" to 2"	Suitable for food and beverage fluids, medical drainage and Low Pressure general delivery lines.	Clear extruded vinyl tube.	+50°C (+122°F).	9 bar/125 psi at -02.	
114	PCVTMH TUBING		-06 3/8″	Suitable for food and beverage fluids, medical drainage and Low Pressure general delivery lines.	Clear extruded vinyl tube. Heavy wall.	+50°C (+122°F).	6 bar/90 psi.	COUPLINGS
ΤE	FLON® - SP	ECIALITY						
115	RTH1 THERMOPLASTIC	Januar and a state of the state	-04 to -16 1/4″ to 1″	High Pressure hydraulic oil lines. Fluids at extremes of pressure and temperature.	PTFE tube (TEFLON*). One braid of high tensile Grade 304 stainless steel wire reinforcement. *DuPont Reg. TM	+260°C (+500°F). (Varies according to application).	170 bar/2450 psi at -14. SAE100R14 MWP 103 bar/1500 psi up to -16.	
FL	EXIBLE DUCT	TING - SPECIA	LITY					rors
116	DPV PVC DUCTING		-32 to -192 2" to 12"	Grain handling, agricultural equipment, chemical processing, construction and mining, woodworking and timber etc.	An extruded PVC tube. Spiral helix steel wire reinforcement. An extruded PVC cover.	+50°C (+122°F).	_	ADAPTOR
117	DTP TPR DUCTING		-24 to -192 1.1/2″ to 12″	General purpose ducting with excellent temperature, UV, chemical and abrasion resistance.	Thermoplastic rubber tube. Spiral helix steel wire reinforcement. Thermoplastic rubber cover.	+120°C (+248°F).	_	BS
118	DPUA PU A/STATIC DUCTING	3	-24 to -160 1.1/2" to 10"	Suitable for heavier duty use in applications relevant for DTP above.	HD polyurethane anti-static tube. Spiral helix copper wire reinforcement. HD polyurethane anti-static cover.	+90°C (+194°F).	_	CLAMPS

RYCO'S INDUSTRIAL RUBBER AND PVC HOSE -CUT LENGTH POLICY.

Please note that RYCO has a Cut Length Policy in place, which includes both "Cutting Charges" and/or a "Minimium Length Criteria" for all of our Industrial Hoses and Tubing. Please refer to our Industrial Price List, or contact our Customer Service Department for the specific details.

If specific cut lengths are required, these "charges and criteria" must be clearly specified and accepted when placing orders.

Goods manufactured to Order/Cut or Modified to meet the customer's specifications "cannot be returned for credit or exchange".

HOSE RUBBER - AIR

AJY

AIR

RYCO AIR JACKHAMMER

RECOMMENDED FOR:

AJY AIR JACKHAMMER YELLOW is an economical pneumatic air and water hose ideally suited for construction, industrial, and agricultural applications.

RYCO JACKHAMMER is an extruded hose that has a smooth yellow non-marking cover. It can be easily seen on all work sites and has good weather and abrasion resistant characteristics. RYCO AJY is a quality designed, durable and long lasting service hose with the safety levels demanded in most Heavy Duty or Medium Duty applications.

Ideal for Heavy Duty Air Compressor use, and most pneumatic equipment applications: portable compressor equipment, jackhammers, breakers, hammers, stampers etc.

TUBE:

Black, smooth synthetic rubber with oil mist resistance. (Blended SBR).

REINFORCEMENT:

High tensile synthetic yarn.

COVER:

Yellow smooth extruded synthetic rubber with good ozone and abrasion resistance (Blended SBR).

FEATURES:

Oil mist resistant tube and abrasion resistant cover.

TEMPERATURE RANGE:

From -30°C to +80°C (-22°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on a 3:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

- ILYCO AJY -

20, 30 and 100 metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:



AJY - AI RYCO AIR J	R/WATER ACKHAM		IO				\bigcirc	Q		Ø				Ŵ	
PART NO	HOSE	SIZE		NOMINAL HOSE ID		NOMINAL HOSE OD		MUM KING SURE	MINIMUM BURST PRESSURE		MINIMUM BEND RADIUS		AVERAGE WEIGHT		
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	
AJY8	12	-08	12,7	1/2	23	0.90	20	300	60	900	107	4	0,44	0.29	
AJY12	19	-12	19,1	3/4	30	1.18	20	300	60	900	155	6	0,64	0.43	
AJY16	25	-16	25,4	1	37	1.46	20	300	60	900	203	8	0,88	0.59	

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit **www.RYCO.com.au**.



INTRODUCTION

ASY

AIR

INCO ASY -

RYCO STEEL AIR

RECOMMENDED FOR:

Heavy Duty, High Pressure compressed air; widely used in mining and quarries.

TUBE:

Black SBR/NBR - oil mist resistant.

REINFORCEMENT:

High tensile steel cords.

COVER:

Yellow SBR - abrasion and ozone resistant, pin pricked.

FEATURES:

Heavy Duty air hose for rugged applications where a 4:1 safety factor hose is required.

TEMPERATURE RANGE:

From -30°C to +85°C (-22°F to +185°F).

WORKING PRESSURE:

Maximum working pressures are based on a 4:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20 or 60 Metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:

E 	Ĥ	
≺1000 PSI	CLAW TYPE	HEAVY DUTY
HOSE TAIL	COUPLINGS	BOLT CLAMPS
HIGH	WITH SAFETY	W/ SAFETY
PRESSURE	COLLARS	CLAWS

	ASY TEEL AIR	2				\bigcirc	Ć	2		Ì	ſ	\mathcal{Y}	ر ۷	V
PART NO	HOSE	SIZE		INAL E ID	NOM Hos	INAL E OD	MAXI WOR PRES	KING	BU	MUM RST SURE	BE	MUM ND DIUS	AVEF WEI	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft
ASY16	25	-16	25,4	1	36	1.42	40	600	160	2400	305	12	0,88	0.59
ASY20	31	-20	31,8	1.1/4	45	1.77	40	600	160	2400	384	15	1,14	0.76
ASY24	38	-24	38,1	1.1/2	56	2.20	40	600	160	2400	456	18	1,60	1.07
ASY32	51	-32	50,8	2	67	2.64	40	600	160	2400	612	24	2,45	1.64
ASY48	76	-48	76,2	3	95	3.74	30	450	120	1800	915	36	4,74	3.18

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

HOSE rubber - air

ATB

AIR

RYCO AIR TEXTILE

RECOMMENDED FOR:

Delivery of air and water.

TUBE: Black SBR/NBR.

REINFORCEMENT:

High tensile synthetic yarn.

COVER:

Black EPDM/SBR - abrasion and ozone resistant.

FEATURES:

General purpose low cost air hose where oil resistance of the tube **is not required**.

TEMPERATURE RANGE:

From -30°C to +80°C (-22°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on a 3:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

ITYCO ATB

20 or 60 Metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:



	TB R TEXTIL HOSE	E SIZE		NOMINAL HOSE ID		NOMINAL HOSE OD		MAXIMUM WORKING PRESSURE		MINIMUM BURST PRESSURE		MINIMUM BEND RADIUS		V V RAGE GHT
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft
ATB4	6	-04	6,4	1/4	14	0.55	20	300	60	900	51	2.0	0,19	0.13
ATB6	10	-06	9,5	3/8	20	0.78	20	300	60	900	83	3.4	0,31	0.21
ATB8	12	-08	12,7	1/2	23	0.90	20	300	60	900	107	4.2	0,44	0.29
ATB12	19	-12	19,1	3/4	30	1.18	20	300	60	900	155	6.1	0,64	0.43
ATB16	25	-16	25,4	1	37	1.46	20	300	60	900	203	8.0	0,88	0.59

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.



ATO

INCO ATO ----

AIR

RYCO COMPRESSED AIR OIL MIST RESISTANT

RECOMMENDED FOR:

A premium Heavy Duty mandrel-built hose for compressed air in industrial, infrastructure or earthworks construction, quarry and mining applications. The inner tube is a smooth oil mist resistant compound and is reinforced with high strength synthetic yarn and has a very versatile cover to ensure good resistance to ozone, weather and aging effects.

TUBE:

Black, smooth synthetic rubber with oil mist resistance. (Blended SBR).

REINFORCEMENT:

High tensile synthetic yarn.

COVER:

Black wrapped cover with good ozone and abrasion resistance (Blended EPDM).

FEATURES:

Heavy Duty oil mist resistant tube. Abrasion resistant cover.

TEMPERATURE RANGE:

From -30°C to +80°C (-22°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on a 3:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20 or 60 Metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:

		\bigcirc	\bigcirc	\bigcirc
>300 PSI HOSE TAIL COUPLINGS	CLAW TYPE COUPLINGS WITH SAFETY COLLARS	WORM DRIVE CLAMPS	BOLT CLAMPS W/ OR W/ OUT SAFETY CLAWS	BAND CLAMPING SYSTEMS



INTRODUCTION

HOSE

COUPLINGS

ATO RYCO COMP	- AIR RESSED	AIR			\bigcirc		\bigcirc		Ø				Ŵ				
PART NO	HOSE	SIZE		NOMINAL HOSE ID				INAL E OD	MAXI WOR PRES	KING BURS		RST	BE	MUM ND DIUS	AVERAGE WEIGHT		Ċ
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft			
ATO20	31	-20	31,8	1.1/4	46	1.81	20	300	60	900	295	11.6	1,00	0.67			
ATO24	38	-24	38,1	1.1/2	52	2.05	20	300	60	900	350	13.8	1,40	0.94			
ATO32	51	-32	50,8	2	66	2.60	20	300	60	900	495	19.5	1,78	1.19			
ATO40	63	-40	63,5	2.1/2	79	3.11	20	300	60	900	605	23.8	2,51	1.69			
ATO48	76	-48	76,2	3	93	3.66	20	300	60	900	732	28.8	3,03	2.04			
ATO64	102	-64	101,6	4	120	4.72	20	300	60	900	1016	40.0	4,15	2.80			

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

RUBBER HOSE

RUBBER - AIR/WATER

MS1000

AIR/WATER **RYCO MINESPRAY** YELLOW MSHA

ILYCO MINESPRAY MS1000 MSHA

RECOMMENDED FOR:

MS1000 MINESPRAY is a specifically designed water spray hose suited for dust control and washdown applications in mining, industrial, and processing operations. MS1000 MINESPRAY is especially suited for use in underground coal mines where MSHA Flame Resistance properties are required.

MS1000 MINESPRAY has a high visual yellow and nonmarking perforated cover with oil, weather and abrasive resistant characteristics. The result is a quality designed, durable, long lasting service hose with the safety levels demanded in Heavy Duty or Medium Duty applications.

MS1000 MINESPRAY is ideal for use on High Pressure continuous mining equipment in both longwall coal or hardrock mining, or as a general hot water service hose.

STANDARDS MET OR EXCEEDED:

MSHA Flame Resistance.

TUBE:

Black, oil resistant synthetic rubber.

REINFORCEMENT:

MS1000 -

MINESPRAY HOSE

One braid of high tensile steel wire.

COVER:

Yellow, oil resistant and abrasion resistant synthetic rubber. No skiving required with T2000 Series BITELOK Crimp Couplings.

MSHA - FLAME RESISTANCE:

Complies with Flame Resistant requirements of Australian Standard AS 2660 and Method of Test AS 1180.10B. Meets Flame Resistant Designation "U.S. MSHA" of the US Department of Labor, Mine Safety and Health Administration.

TEMPERATURE RANGE:

From -40°C to +100°C (-40°F to +212°F). For emulsions etc, contact RYCO.

WORKING PRESSURE:

Maximum working pressures are based on a 4:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

60 and 100 metre.

TOLERANCES:

RYCO specification.

COUPLINGS:



T2000 Series (sizes -08 to -32)



For coupling specifications and assembly instructions see the RYCO Product Technical Manual - Hydraulics and the latest Crimp Chart on our website www.RYCO.com.au.



Z W MAXIMUM MINIMUM MINIMUM **COUPLING SERIES** NOMINAL AVERAGE NOMINAL BEND WORKING BURST T2000 DECCIIE

PARTNU	PART NO HOSE SIZE HOSE ID HOSE OD PRESSORE PRESS		SSURE RADIUS			VVEI	опт	ONE PIECE							
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
MS1008	12	-08	12,7	1/2	18,5	0.73	70	1000	280	4000	90	3.6	0,29	0.19	T2000
MS1010	16	-10	15,9	5/8	22,1	0.87	70	1000	280	4000	100	3.9	0,35	0.24	T2000
MS1012	19	-12	19,1	3/4	25,6	1.01	70	1000	280	4000	120	4.7	0,40	0.27	T2000
MS1016	25	-16	25,4	1	33,7	1.33	70	1000	280	4000	150	5.9	0,62	0.42	T2000
MS1020	31	-20	31,8	1.1/4	41,1	1.62	70	1000	280	4000	210	8.3	0,75	0.50	T2000
MS1024	38	-24	38,1	1.1/2	47,4	1.87	70	1000	280	4000	250	9.9	1,00	0.67	T2000
MS1032	51	-32	50,8	2	60,6	2.39	70	1000	280	4000	300	11.8	1,42	0.95	T2000
Cutting and Asse	mbly Cha	arges app	ly to all I	RYCO ind	ustrial ho	oses, and	vary by l	nose type	es and siz	zes. Conta	act RYCO	for addi	tional inf	ormation	or visit www.RYCO.com.au



CS1000

AIR/WATER **RYCO COALSPRAY BLACK/YELLOW FRAS**

- ILYCO COALSPRAY CS1000 FRAS

HOSE

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RECOMMENDED FOR:

CS1000 COALSPRAY is a specifically designed water spray hose suited for dust control and washdown applications in mining, industrial, and processing operations. CS1000 COALSPRAY is especially suited for use in underground coal mines where FRAS Flame Resistance and Electrical Resistance properties are required.

CS1000 COALSPRAY has a non-marking perforated black cover with a high visual yellow stripe that has oil, weather and abrasive resistant characteristics. The result is a quality designed, durable, long lasting service hose with the safety levels demanded in Heavy Duty or Medium Duty applications.

CS1000 COALSPRAY is ideal for use on High Pressure continuous mining equipment in both longwall coal or hardrock mining, or as a general hot water service hose.

STANDARDS MET OR EXCEEDED:

FRAS - AS 2660 Flame Resistance and Electrical Resistance. MSHA Flame Resistance.

TUBE:

Black, oil resistant synthetic rubber.

REINFORCEMENT:

One braid of high tensile steel wire.

COVER:

Black, oil resistant and abrasion resistant synthetic rubber. No skiving required with T2000 Series BITELOK Crimp Couplings.

FRAS - FLAME RESISTANCE AND ANTI-STATIC:

Complies with Flame Resistant and Electrical Resistance (Anti-Static) requirements of Australian Standard AS 2660 and Methods of Test AS 1180.10B and 13A. Meets Flame Resistant Designation "U.S. MSHA" of the US Department of Labor, Mine Safety and Health Administration.

TEMPERATURE RANGE:

From -40°C to +100°C (-40°F to +212°F). For emulsions etc, contact RYCO.

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS: 60 and 100 metre.

TOLERANCES:

RYCO specification.

COUPLINGS:



CROCBITE

BITELOK NON-SKIVE ONE-PIECE CRIMP T2000 Series (sizes -08 to -32)

For coupling specifications and assembly instructions see the RYCO Product Technical Manual - Hydraulics and the latest Crimp Chart on our website www.RYCO.com.au.

CS10 COALSPR PART NO	AY HOS	E SIZE				INAL E OD	WOR		BU		BE		AVEI	V V RAGE GHT	COUPLING SERIES T2000 ONE PIECE	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE	
CS1008	12	-08	12,7	1/2	18,5	0.73	70	1000	280	4000	90	3.6	0,29	0.19	T2000	
CS1010	16	-10	15,9	5/8	22,1	0.87	70	1000	280	4000	100	3.9	0,35	0.24		
CS1012	19	-12	19,1	3/4	25,6	1.01	70	1000	280	4000	120	4.7	0,40	0.27	T2000	
CS1016	25	-16	25,4	1	33,7	1.33	70	1000	280	4000	150	5.9	0,62	0.42	T2000	
CS1020	31	-20	31,8	1.1/4	41,1	1.62	70	1000	280	4000	210	8.3	0,75	0.50	T2000	
CS1024	38	-24	38,1	1.1/2	47,4	1.87	70	1000	280	4000	250	9.9	1,00	0.67	T2000	
CS1032	51	-32	50,8	2	60,6	2.39	70	1000	280	4000	300	11.8	1,42	0.95	T2000	

HOSE RUBBER - AIR/WATER

AWD

AIR/WATER RYCO AIR / WATER DELIVERY HOSE

INCO AWD DELIVERY

RECOMMENDED FOR:

A very versatile air or water delivery hose to maximum pressures of 150 psi and is suited to be used in various applications including industrial, earthwork construction, mining, agriculture etc; wherever air or water needs to be transferred in external or internal applications.

It has a smooth general purpose tube, high strength yarn reinforcement and a long lasting cover with good ozone and abrasion resistance capabilities, for harsh environmental conditions.

NOTE: This is not a hot air hose. **The transfer of hot air above 60°C is not recommended for this hose** and a specific hot air hose with a temperature of +100°C should be used. Hot air is very damaging to many rubbers.

TUBE:

Black, smooth synthetic rubber. (Blended NR/SBR).

REINFORCEMENT:

High tensile synthetic yarn.

COVER:

Black wrapped cover with good ozone and abrasion resistance (Blended SBR/EPDM, wrapped impression finish).

FEATURES:

Heavy Duty tube and good abrasion resistant cover.

TEMPERATURE RANGE:

From -30°C to +80°C (-22°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on a 3:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20 or 60 Metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:



AIR OR	AWD - AIR/WATER AIR OR WATER DELIVERY HOSE			\bigcirc	\mathbb{I}	\bigcirc	Ç	\bigcirc	Ç	Ĭ	ſ	N.	ĺ	V
PART NO	HOSE	SIZE		INAL E ID		INAL E OD	WOR	MUM KING SURE	BU	MUM RST SURE	BE	MUM ND DIUS		RAGE GHT
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft
AWD12	19	-12	19,1	3/4	29	1.14	10	150	30	450	228	9.0	0,65	0.44
AWD16	25	-16	25,4	1	35	1.38	10	150	30	450	300	11.8	0,97	0.65
AWD20	31	-20	31,8	1.1/4	42	1.65	10	150	30	450	384	15.1	1,20	0.80
AWD24	38	-24	38,1	1.1/2	48	1.90	10	150	30	450	456	17.9	1,37	0.92
AWD32	51	-32	50,8	2	63	2.48	10	150	30	450	612	24.1	1,85	1.24
AWD 40	63	-40	63,5	2.1/2	79	3.11	10	150	30	450	756	29.7	2,25	1.51
AWD48	76	-48	76,2	3	92	3.62	10	150	30	450	912	35.9	3,60	2.42
AWD64	102	-64	101,6	4	116	4.57	10	150	30	450	1224	48.2	4,75	3.19

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.



RST

AIR/WATER **RYCO STREAM** FRAS **AIR/WATER DELIVERY**

RECOMMENDED FOR:

INCO RST FRAS DELIVERY

	IR/WATEI AM FRAS R DELIVE		IĆ	\bigcirc		\bigcirc	Ç	\mathbf{O}	Ç	Ž	<u> </u>	Ŋ	Ń	∨	AMPS
PART NO	HOSE	E SIZE		INAL SE ID		INAL E OD	WOR	MUM KING SURE	BU	IMUM RST SURE	BE	MUM ND DIUS		RAGE GHT	CL
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	
RST8	12	-08	12,7	1/2	23	0.90	20	300	80	1200	192	7.5	0,76	0.51	
RST12	19	-12	19,1	3/4	32	1.27	20	300	80	1200	228	9.0	1,05	0.70	ES
RST16	25	-16	25,4	1	38	1.50	20	300	80	1200	228	9.0	1,20	0.80	ORI
RST20	31	-20	31,8	1.1/4	46	1.81	20	300	80	1200	300	11.8	1,40	0.94	SS
RST24	38	-24	38,1	1.1/2	54	2.13	20	300	80	1200	300	11.8	1,50	1.05	U U U
RST32	51	-32	50,8	2	67	2.64	20	300	80	1200	355	14.0	1,93	1.29	AC
RST40	63	-40	63,5	2.1/2	80	3.15	20	300	80	1200	430	16.9	2,39	1.60	
RST48	76	-48	76,2	3	93	3.66	20	300	80	1200	510	20.1	2,87	1.93	
RST64	102	-64	101,6	4	120	4.72	20	300	80	1200	912	35.9	5,45	3.66	

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

HIGHER TECHNOLOGY EQUALS GREATER PERFORMANCE 45

resistance to ensure it is one of the most durable and long lasting hoses that the mining industry requires to minimise any unnecessary production down-times.

STANDARDS MET OR EXCEEDED:

FRAS - AS 2660 (Hose and Hose Assemblies air/water - for underground coal mines).

RYCO RST is a versatile, robust Heavy Duty FRAS air or

water and stone or rock dust delivery hose, designed

to suit a broad range of applications specially for use in

underground coal mines and any other critical or severe

RST has been especially designed as a softwall hose with a very good abrasion and weather resistant cover and

applications, where a conductive or anti-static hose is

a smooth non-pourous tube with the level of oil mist

TUBE:

required.

NBR/SBR blend, anti-static compound.

REINFORCEMENT:

4 Plies of high tensile synthetic cord.

COVER:

NBR/EPDM blend, anti-static compound, abrasion, ozone and fire resistant, black smooth (wrapped impression finish).

FEATURES:

FRAS, AS 2660.

TEMPERATURE RANGE:

From -30°C to + 80°C (-22°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on a 4:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20 or 60 Metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:

			ب ۳
LAW TYPE DUPLINGS TH SAFETY	>300 PSI HOSE TAIL COUPLINGS	SWAGED COUPLINGS	HEAVY DUTY BOLT CLAMP W/ SAFETY
		COOPEINGS	

мр		db HD	V	(D)
PSI TAIL INGS	SWAGED COUPLINGS	HEAVY DUTY BOLT CLAMPS W/ SAFETY CLAWS	USE ONLY APPLICATION APPROVED FITTING	CROCBIT

SWAGED COUPLINGS	HEAVY DUTY BOLT CLAMPS W/ SAFETY CLAWS	USE ONLY APPLICATION APPROVED FITTING	CROCBITE



Colona a

HOSE RUBBER - AIR/WATER

AWS

AIR/WATER RYCO AIR/WATER

SUCTION AND DELIVERY

RECOMMENDED FOR:

For use in demanding applications which require water or very light slurries to be pumped or gravity transferred. It has a smooth general purpose tube, with two layers of high strength cord reinforcement and a quality steel wire helix embedded into the hose wall resulting in excellent flexibility. The hose cover is especially blended to ensure the best combination of ozone and abrasion resistance capabilities necessary for most harsh environmental conditions.

NOTE: This is not a hot air hose. **The transfer of hot air above 60°C is not recommended for this hose** and a specific hot air hose with a temperature of +100°C should be used. Hot air is very damaging to many rubbers.

TUBE:

Black, smooth synthetic rubber. (Blended NR/SBR).

REINFORCEMENT:

High tensile synthetic cord and a quality steel helix wire.

COVER:

Black wrapped cover with good ozone and abrasion resistance (Blended SBR/EPDM).

FEATURES:

Heavy Duty tube and good abrasion resistant cover.

TEMPERATURE RANGE:

From -30°C to + 80°C (-22°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on a 3:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20 or 60 Metre.

INCO AWS SUCTION

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:



RYCO W	AWS - AIR/WATER RYCO WATER SUCTION AND DELIVERY		Ĩ	\bigcirc		\bigcirc	Ç	\mathbf{O}	Ç	Ì	ſ.			(Нд	V	∨
PART NO	PART NO HOSE SIZE		NOM HOS	INAL E ID		INAL E OD	MAXI WOR PRES	KING	BUI	MUM RST SURE	BE	MUM ND DIUS	VACI Rat		AVEF WEI	RAGE GHT
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	mmHg	inHg	kg/m	lb/ft
AWS16	25	-16	25,4	1	36	1.42	15	225	45	675	133	5.2	880	34.7	0,76	0.51
AWS20	32	-20	31,8	1.1/4	43	1.69	15	225	45	675	172	6.8	880	34.7	0,91	0.61
AWS24	38	-24	38,1	1.1/2	49	1.93	15	225	45	675	208	8.2	880	34.7	1,06	0.71
AWS32	51	-32	50,8	2	63	2.48	15	225	45	675	286	11.3	880	34.7	1,39	0.93
AWS40	63	-40	63,5	2.1/2	77	3.03	15	225	45	675	361	14.2	880	34.7	2,00	1.34
AWS48	76	-48	76,2	3	90	3.54	15	225	45	675	438	17.2	880	34.7	2,63	1.77
AWS64	102	64	101,6	4	119	4.68	15	225	45	675	590	23.2	880	34.7	3,76	2.53

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.



RSTS

AIR/WATER **RYCO STREAM**

FRAS SUCTION AND DELIVERY

RECOMMENDED FOR:

RYCO RSTS is a versatile, robust Heavy Duty FRAS water suction or air, stone or rock dust transfer hose. RYCO RSTS is designed to suit a broad range of applications especially for use in underground coal mines and any other critical or severe applications, where a conductive or an anti-static hose is required.

RYCO RSTS has been especially designed as a Hardwall Hose with a very good abrasion and weather resistant cover and a smooth non-porous tube with the level of oil mist resistance to ensure it is one of the most durable and long lasting hoses that the mining industry requires to minimise any unnecessary production downtimes.

RYCO RSTS has been designed with a spiral wire helix embedded between the wall of the hose to minimise kinking but maximise the flexibility which allows the hose to maintain it's shape and while ensuring the flow of product is not affected.

STANDARDS MET OR EXCEEDED:

FRAS - AS 2660 - 1991 (Hose and Hose Assemblies air/water - for underground coal mines).

TUBE:

NBR/SBR BLEND, Anti-static Compound.

REINFORCEMENT:

4 Plies Spiral Wire Helix, embedded into the wall of the hose.

COVER:

INCO RSTS FRAS SUCTION

NBR/EPDM blend, anti-static compound, abrasion, ozone and fire resistant, black smooth (wrapped finish).

FEATURES:

FRAS, AS 2660 - 1991

TEMPERATURE RANGE:

From -20°C to +70°C (-4°F to +158°F).

WORKING PRESSURE:

Maximum working pressures are based on a 4:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20 or 60 Metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:

CLAW TYPE COUPLINGS WITH SAFETY COLLARS	>300 PSI HOSE TAIL COUPLINGS	SWAGED ENDS	HEAVY DUTY BOLT CLAMPS W/ SAFETY CLAWS	USE ONLY APPLICATION APPROVED FITTING	CROCBITE

RSTS - AI Strea Suction An	MFRAS		Ĩ	\bigcirc		\bigcirc	Ç	\bigcirc	Ç	Ž	ſ	Ŋ		(Hg	Ŵ		AMPS
PART NO	HOSE	SIZE		INAL SE ID		INAL E OD	WOR	IMUM KING SURE	BU	MUM RST SURE	BE	MUM ND DIUS	VACI RAT		AVEF WEI	RAGE GHT	Ū
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	mmHg	inHg	kg/m	lb/ft]
RSTS24	38	-24	38,1	1.1/2	48	1.88	10	150	40	600	285	11.2	880	34.7	1,06	0.71	
RSTS32	51	-32	50,8	2	67	2.64	10	150	40	600	355	14.0	880	34.7	1,63	1.09	L S L
RSTS40	63	-40	63,5	2.1/2	80	3.15	10	150	40	600	430	16.9	880	34.7	2,36	1.58	L R
RSTS48	76	-48	76,2	3	93	3.66	10	150	40	600	510	20.1	880	34.7	2,93	1.96	SS(
RSTS64	102	-64	101,6	4	122	4.80	10	150	40	600	545	21.5	880	34.7	3,46	2.32	
Cutting and Assen	nbly Char	ges apply	to all RYC	:O industr	ial hoses,	and vary	by hose t	ypes and	sizes. Con	tact RYCC) for addi	tional info	ormation o	r visit wv	vw.RYCO.	com.au.	

CONNECTING PARTNERSHIPS

HOSE

COUPLINGS

HOSE RUBBER - AIR/WATER

MEH

AIR/WATER

RYCO MARINE WET EXHAUST SUCTION AND DELIVERY

RECOMMENDED FOR:

Light weight, flexible, hardwall hose for water cooled diesel engine exhaust gas systems installed on a small craft less than 24m in length or pleasure yachts.

TUBE:

Black, smooth, synthetic rubber.

REINFORCEMENT:

High strength synthetic cord, helix wire.

COVER:

Black, corrugated (wrapped finish), synthetic rubber, weathering and abrasion resistant.

FEATURES:

Lightweight, 2 or 3 ply textile reinforced incorporating a flexible spiral wire helix construction.

MEH is a Multi-Purpose hose because of its corrugated flexible construction and the extensive range of I.D. sizes to fit over both pipe and tubing.

TEMPERATURE RANGE:

From -30°C to +100°C (-22°F to +212°F).

ILYCO MEH MARINE WET EXHAUST SUCTION

WORKING PRESSURE:

Maximum working pressures are based on a 3:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

3/4" to 2.1/2" hose: 20 or 60 Metre. 2.3/4" to 4" hose: 20 or 40 Metre. 4.1/2" to 8" hose: 15 or 30 Metre. 10" to 12" hose: 6 or 12 Metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:



ME RYCO WET EXH		JCTION	IC	\bigcirc		\bigcirc	Ç	\mathbf{O}	Ç	Ĭ	ſ.	Ý)	(Hg	د ۷	ک ∨
PART NO	HOSE	SIZE	NOM Hos			INAL E OD	MAXI WOR PRES	KING		MUM RST SURE	MINI BE RAD	ND	VAC RAT		AVEF WEI	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	mmHg	inHg	kg/m	lb/ft
MEH12	19	-12	19,1	3/4	26	1.02	3	45	9	135	55	2.2	760	30	0,55	0.37
MEH16	25	-16	25,4	1	33.5	1.32	3	45	9	135	75	2.9	760	30	0,62	0.42
MEH20	31	-20	31,8	1.1/4	40	1.57	3	45	9	135	90	3.5	760	30	0,69	0.46
MEH22	35	-22	34,9	1.3/8	43	1.69	3	45	9	135	95	3.7	760	30	0,77	0.52
MEH24	38	-24	38,1	1.1/2	46	1.81	3	45	9	135	105	4.1	760	30	0,81	0.54
MEH28	44	-28	44,5	1.3/4	53	2.09	3	45	9	135	120	4.7	760	30	0,99	0.66
MEH32	51	-32	50,8	2	59	2.32	3	45	9	135	165	6.5	760	30	1,17	0.78
MEH36	57	-36	57,2	2.1/4	67	2.64	3	45	9	135	185	7.3	760	30	1,35	0.91
MEH40	63	-40	63,5	2.1/2	72	2.83	3	45	9	135	205	8.1	760	30	1,43	0.96
MEH44	70	-44	69,9	2.3/4	78	3.07	3	45	9	135	220	8.7	760	30	1,88	1.26
MEH48	76	-48	76,2	3	85	3.35	3	45	9	135	240	9.4	760	30	1,99	1.34
MEH56	89	-56	88,9	3.1/2	99	4.00	3	45	9	135	280	11.0	760	30	2,22	1.50
MEH64	102	-64	101,6	4	111	4.37	3	45	9	135	320	12.6	760	30	2,61	1.75
MEH72	114	-72	114,3	4.1/2	126	4.96	3	45	9	135	480	18.9	760	30	3,67	2.47
MEH80	127	-80	127,0	5	137	5.39	3	45	9	135	530	20.9	760	30	4,07	2.73
MEH96	152	-96	152,4	6	163	6.42	3	45	9	135	630	24.8	760	30	5,04	3.39
MEH128	203	-128	203,2	8	214	8.42	3	45	9	135	1045	41.1	760	30	8,74	5.87
MEH160	254	-160	254,0	10	264	10.39	3	45	9	135	1295	51.0	760	30	10,36	6.96
MEH192	305	-192	304,8	12	316	12.44	3	45	9	135	1550	61.0	760	30	14,77	9.92

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.



PCT

AIR/WATER

ILYCO PCT RYCO FRAS PROTECTIVE COV

RECOMMENDED FOR:

PCT is manufactured with FRAS rubber compounds making it ideal for underground and surface mining hose protection. This is not a hose, but a protective cover for Hoses.

STANDARDS MET OR EXCEEDED:

RYCO FRAS PROTECTIVE COVER

AS 2660 (Non compliance to O.D. and Pressure).

TUBE:

Anti-static NBR/SBR blend.

REINFORCEMENT:

2 ply textile reinforcement.

COVER:

Black, smooth (wrapped finish), resistant rubber and weathering resistant. FRAS fire resistant and anti-static NBR/EPDM blend (wrapped impression finish).

FEATURES:

FRAS Lightweight protective and abrasion resistant cover protection tube, this is ideal to be placed over electrical cables or over general air and water hoses.

TEMPERATURE RANGE:

From -25°C to +75°C (-13°F to +167°F).

WORKING PRESSURE:

Maximum working pressures are based on a 3:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20 or 40 Metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:

LIGHT DUTY NON-SHARP SHEET METAL





PRC	PCT RYCO FRAS DTECTIVE CO		Ĩ	\bigcirc		\bigcirc	Ç	\mathbf{O}	Ç	Ž
PART NO	HOSI	E SIZE		INAL E ID		INAL E OD	WOR	IMUM KING SURE	BU	MUM RST SURE
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi
РСТ8	12	-08	12,7	1/2	21	0.83	5	75	15	225
PCT12	19	-12	19,1	3/4	29	1.14	5	75	15	225
PCT16	25	-16	25,4	1	35	1.38	5	75	15	225
PCT20	31	-20	31,8	1.1/4	42	1.65	5	75	15	225
PCT24	38	-24	38,1	1.1/2	48	1.89	5	75	15	225
PCT28	44	-28	44,5	1.3/4	55	2.16	5	75	15	225
PCT32	51	-32	50,8	2	61	2.40	5	75	15	225

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit **www.RYCO.com.au**.

HOSE RUBBER - CHEMICAL/ACID

CSX

CHEMICAL/ACID RYCO XLPE CHEMICAL

SUCTION AND DELIVERY

RECOMMENDED FOR:

Suction and delivery of acid and chemicals; for range of acid and chemicals - see Chemical Compatibility Chart on page 254.

TUBE:

Transparent XPLE (Cross Linked Polyethylene).

REINFORCEMENT:

High tensile textile cords with embedded steel helical wire.

COVER:

Green EPDM - abrasion and ozone resistant (wrapped impression finish).

FEATURES:

A Heavy Duty chemical hose for most plant applications. Excellent chemical resistance due to its XLPE tube.

TEMPERATURE RANGE:

From -30°C to +90°C (-22°F to +194°F).

WORKING PRESSURE:

Maximum working pressures are based on a 3:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

INCO CSX SUCTION

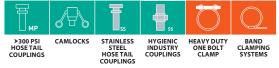
20 or 60 Metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:

NOTE: Any assemblies manufactured would be rated to the lesser working pressure of either the Hose, Fittings and Clamping method used.



RYCO	CSX RYCO XLPE CHEMICAL SUCTION		I	\bigcirc		\bigcirc	Ç	\mathbf{O}	Ç	Ì	ſ.	Z)		(Hg	Í	V
PART NO				INAL E ID		INAL E OD		MUM KING SURE	BU	MUM RST SURE	BE	MUM ND DIUS	VACI RAT		AVEF WEI	RAGE GHT
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	mmHg	inHg	kg/m	lb/ft
CSX16	25	-16	25,4	1	39	1.53	16	235	48	705	150	5.9	880	34.7	0,99	0.66
CSX20	31	-20	31,8	1.1/4	47	1.85	16	235	48	705	175	6.9	880	34.7	1,33	0.89
CSX24	38	-24	38,1	1.1/2	53	2.09	16	235	48	705	225	8.8	880	34.7	1,56	1.05
CSX32	51	-32	50,8	2	67	2.64	16	235	48	705	275	10.8	880	34.7	1,92	1.29
CSX40	63	-40	63,5	2.1/2	81	3.20	16	235	48	705	300	11.8	880	34.7	2,79	1.87
CSX48	76	-48	76,2	3	95	3.74	16	235	48	705	380	15.0	880	34.7	3,26	2.19

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

RUBBER - CHEMICAL/ACID

UHMW

CHEMICAL/ACID **RYCO CHEMICAL** SUCTION AND DELIVERY

RECOMMENDED FOR:

oil products.

impervious tube.

REINFORCEMENT:

chemical and weathering resistance.

plant or transport applications.

TUBE:

COVER:

FEATURES:

A quality chemical suction and delivery hose suitable

for many different chemicals used in a very wide range

of applications. The corrugated construction ensures a

A smooth, ultra high molecular weight polyethylene

High strength synthetic cords encasing a steel wire helix.

A very robust blue, corrugated EPDM cover with excellent

A flexible multi-purpose chemical hose for Heavy Duty

Excellent chemical resistance due to its UHMW tube.

flexible multi-purpose hose also suitable for petroleum and

INCO UHMW SUCTION

TEMPERATURE RANGE:

WORKING PRESSURE:

COIL LENGTHS:

20 or 60 Metre.

TOLERANCES:

COUPLINGS:

>300 PSI HOSE TAIL COUPLINGS

Clamping method used.

9 A.A.

CAMLOCKS

From -30°C to +65°C (-22°F to +149°F).

in the Technical Section on page 253.

STAINLESS STEEL HOSE TAIL COUPLINGS

Maximum working pressures are based on a 3:1 safety factor

(maximum working pressure to minimum burst pressure).

Refer to the Rubber Hose Manufacturing Tolerances listed

NOTE: Any assemblies manufactured would be rated to

the lesser working pressure of either the Hose, Fittings and

HYGIENIC INDUSTRY COUPLINGS

HEAVY DUTY ONE BOLT CLAMP

INTRODUCTION

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UPI
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BAND CLAMPING SYSTEMS

UHI CHEMICAL PART NO	. SUCTIO	DN SIZE					WOR		MINI BU	MUM RST SURE	BE) VAC			V RAGE GHT	CLAMPS
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	mmHg	inHg	kg/m	lb/ft	
UHMW16	25	-16	25,4	1	37	1.46	10	150	40	600	110	4.3	880	34.7	0,97	0.64	
UHMW20	31	-20	31,8	1.1/4	44	1.73	10	150	40	600	135	5.3	880	34.7	1,29	0.86	ES
UHMW24	38	-24	38,1	1.1/2	51	2.01	10	150	40	600	155	6.1	880	34.7	1,51	1.02	0RI
UHMW32	51	-32	50,8	2	67	2.64	10	150	40	600	235	9.2	880	34.7	1,86	1.25	SS(
UHMW48	76	-48	76,2	3	79	3.11	10	150	40	600	335	13.2	880	34.7	2,70	1.81	Ш С
UHMW64	102	-64	101,6	4	92	3.62	10	150	40	600	440	17.3	880	34.7	3,16	2.12	AC

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

CONNECTING PARTNERSHIPS

HOSE RUBBER - FOOD/BEVERAGE

RBD

FOOD/BEVERAGE RYCO BREWERS DELIVERY

Ityco RBD DELIVERY

RECOMMENDED FOR:

Suitable for delivery of oil and non-oil based foods and beverages, including liquid food, edible oils, alcoholic beverages - wine/beer and non-alcoholic beverages such as milk, fruit juices, and soft drinks.

Developed to be used for in-plant production processing, tank-to-tank transfer or transport applications in the smallest of boutique breweries and wineries to the largest national brewers and wineries.

STANDARDS MET OR EXCEEDED:

Complies with F.D.A. Title 21, 177.2600.

TUBE:

Smooth non-porous white EPDM - FDA Approved Title 21, 177.2600.

REINFORCEMENT:

4 Plies of high tensile synthetic cord.

COVER:

EPDM/SBR Blend - Red cover is non-marking and has excellent abrasion, ozone and mild chemical resistance (wrapped impression finish).

FEATURES:

A top quality hose that is flexible, durable and lightweight. The hose construction and polymers, were developed to withstand the recommended cleaning procedures used in most Wine, Beverage and Food Processing Industries.

TEMPERATURE RANGE:

From -30°C to +100°C (-22°F to +212°F).

WORKING PRESSURE:

Maximum working pressures are based on a 3:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20 or 60 Metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:

NOTE: Any assemblies manufactured would be rated to the lesser working pressure of either the Hose, Fittings and Clamping method used.

	ss	ss	O_{ss}	\bigcirc	
SWAGED COUPLINGS	HYGIENIC INDUSTRY COUPLINGS	STAINLESS STEEL HOSE TAIL COUPLINGS	STAINLESS STEEL HEAVY DUTY BOLT CLAMPS	BAND CLAMPING SYSTEMS	USE ONLY APPLICATION APPROVED FITTING

RBD - FOOD AND BEVERAGE BREWERS DELIVERY HOSE			IO		\bigcirc		\bigcirc		Ø				Ŵ	
PART NO			NOMINAL HOSE ID		NOMINAL HOSE OD		MAXIMUM WORKING PRESSURE		MINIMUM BURST PRESSURE		MINIMUM BEND RADIUS			RAGE GHT
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft
RBD12	19	-12	19,1	3/4	32	1.27	12	175	36	525	115	4.5	0,60	0.40
RBD16	25	-16	25,4	1	38	1.50	12	175	36	525	145	5.7	0,88	0.59
RBD20	31	-20	31,8	1.1/4	44	1.73	12	175	36	525	180	7.1	1,20	0.80
RBD24	38	-24	38,1	1.1/2	50	1.97	12	175	36	525	210	8.3	1,38	0.93
RBD32	51	-32	50,8	2	66	2.60	12	175	36	525	320	12.7	2,14	1.44
RBD40	63	-40	63,5	2.1/2	78	3.07	10	150	30	450	340	13.4	2,44	1.64
RBD48	76	-48	76,2	3	92	3.62	10	150	30	450	420	16.5	2,96	1.99
RBD64	102	-64	101,6	4	119	4.68	10	150	30	450	605	23.8	4,33	2.91

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

RUBBER - FOOD/BEVERAGE

RBS

FOOD/BEVERAGE RYCO BREWERS

SUCTION AND DELIVERY

ILYCO RBS SUCTION

HOSE

NGS

RECON	MENC	DED F	OR:
			• • • • •

Suitable for suction and delivery of oil and non-oil based foods and beverages, including liquid food, edible oils, alcoholic beverages - wine/beer and non-alcoholic beverages such as milk, fruit juices and soft drinks.

Developed to be used for in-plant production processing, tank-to-tank transfer or transport applications in the smallest of boutique breweries and wineries to the largest national brewers and wineries.

STANDARDS MET OR EXCEEDED:

Complies with F.D.A. Title 21, 177.2600.

TUBE:

Smooth non-porous white EPDM - FDA Approved Title 21, 177.2600.

REINFORCEMENT:

4 Plies of high tensile synthetic cord with helical steel wire.

COVER:

EPDM/NR Blend - Red cover is non-marking and has excellent abrasion, ozone and mild chemical resistance (wrapped impression finish).

FEATURES:

A top quality hose that is flexible, durable and lightweight. The hose construction and polymers were developed to withstand the recommended cleaning procedures used, in most wine, beverage and food processing industries.

TEMPERATURE RANGE:

From -25°C to +95°C (-13°F to +203°F).

WORKING PRESSURE:

Maximum working pressures are based on a 3:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20 or 60 Metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:

NOTE: Any assemblies manufactured would be rated to the lesser working pressure of either the Hose, Fittings and Clamping method used.

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SWAGED COUPLINGS	HYGIENIC INDUSTRY COUPLINGS	STAINLESS STEEL HOSE TAIL COUPLINGS	STAINLESS STEEL HEAVY DUTY BOLT CLAMPS	BAND CLAMPING SYSTEMS	USE ONLY APPLICATION APPROVED FITTING

BREWERS S	- FOOD AND BEVERAGE REWERS SUCTION AND DELIVERY HOSE		\bigcirc			\bigcirc		Ø) (Hg		Ŵ		
PART NO	HOSE	SIZE		INAL E ID		INAL E OD	WOR	MUM KING SURE	BUI	MUM RST SURE	BE	MUM ND DIUS	VACI RAT		AVE WEI	RAGE GHT
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	mmHg	inHg	kg/m	lb/ft
RBS16	25	-16	25,4	1	39	1.52	12	175	36	525	110	4.3	880	34.7	0,97	0.68
RBS20	31	-20	31,8	1.1/4	45	1.77	12	175	36	525	165	6.5	880	34.7	1,32	0.86
RBS24	38	-24	38,1	1.1/2	52	2.05	12	175	36	525	180	7.1	880	34.7	1,59	1.07
RBS32	51	-32	50,8	2	66	2.60	12	175	36	525	290	11.4	880	34.7	2,30	1.54
RBS40	63	-40	63,5	2.1/2	82	3.23	12	175	36	525	380	15.0	880	34.7	2,68	1.75
RBS48	76	-48	76,2	3	93	3.66	10	150	30	450	425	16.7	880	34.7	3,84	2.58
RBS64	102	-64	101,6	4	120	4.72	10	150	30	450	560	22.1	880	34.7	6,00	4.03

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

HOSE RUBBER - FUEL/OIL

FDHA

FUEL/0IL

RYCO HD FUEL DELIVERY

RYCO FDHA DELIVERY ==============

RECOMMENDED FOR:

Delivery of oil and fuel up to 50% aromatic content.

TUBE:

Black, oil resistant NBR.

REINFORCEMENT:

High tensile textile cords with anti-static wire.

COVER:

Black EPDM/NBR - abrasion, ozone and hydrocarbon resistant (wrapped impression finish).

FEATURES:

A Heavy Duty petroleum delivery hose which incorporates an anti-static wire to connect to end fittings as required.

TEMPERATURE RANGE:

From -30°C to +80°C (-22°F to 176°F).

WORKING PRESSURE:

Maximum working pressures are based on a 3:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20 or 60 Metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:

NOTE: Any assemblies manufactured would be rated to the lesser working pressure of either the Hose, Fittings and Clamping method used.



FDHA RYCO HD FUEL DELIVERY PART NO HOSE SIZE					NOMINAL HOSE OD		MAXIMUM WORKING PRESSURE						AVERAGE	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft
FDHA20	31	-20	31,8	1.1/4	44	1.73	20	300	60	900	175	6.9	1,03	0.70
FDHA24	38	-24	38,1	1.1/2	54	2.13	20	300	60	900	210	8.3	1,17	0.79
FDHA32	51	32	50,8	2	64	2.52	20	300	60	900	290	11.4	1,97	1.32

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.



FPDA

RYCO FUEL DELIVERY WITH ANTI-STATIC WIRE

FUEL/OIL

RYCO FPDA FUEL / PETROL DELIVERY ==

HOSE

	PDA L DELIVE	RY	Ĩ	\bigcirc		\bigcirc	Ç	\bigcirc	Ç	Ý	ſ.	ЭĴ	V	ک ۷
)	HOSE	SIZE		INAL E ID		INAL E OD	WOR	MUM KING SURE	MINI BUI PRES	RST	MINI Be Rad	ND	AVEF WEI	RAGE GHT
	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft

10

10

10

10

10

10

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

150

150

150

150

150

150

30

30

30

30

30

30

450

450

450

450

450

450

295

350

495

605

732

1016

11.6

13.9

19.5

23.8

28.8

40.0

RECOMMENDED FOR:

Delivery of oil and fuel up to 50% aromatic content.

TUBE:

Black, oil resistant NBR.

REINFORCEMENT:

High tensile textile cords with anti-static wire.

COVER:

Red EPDM/NBR - abrasion, ozone and hydrocarbon resistant (wrapped impression finish).

FEATURES:

RYCO

PART NO Hose

FPDA20

FPDA24

FPDA32

FPDA40

FPDA48

FPDA64

31

38

51

63

76

102

-20

-24

-32

-40

-48

-64

31,8

38,1

50,8

63,5

76,2

101,6

1.1/4

1.1/2

2

2.1/2

3

4

45

52

64

78

92

119

1.77

2.05

2.52

3.07

3.62

4.68

A Medium Duty petroleum delivery hose which incorporates an anti-static wire to connect to end fittings as required.

TEMPERATURE RANGE:

From -30°C to +80°C (-22°F to 176°F).

WORKING PRESSURE:

Maximum working pressures are based on a 4:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20 or 60 Metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:

NOTE: Any assemblies manufactured would be rated to the lesser working pressure of either the Hose, Fittings and Clamping method used.

		8 8 8	\bigcirc	Ç
>150 PSI HOSE TAIL COUPLINGS	COMBINATION HOSE NIPPLES		WORM DRIVE CLAMPS	BOLT CL W/ OF OUT SA

CAMLOCK WORM DRIVE BOLT CLAMPS BAND U: COUPLINGS CLAMPS W/ORW/ CLAMPING APP OUT SAFETY SYSTEMS AP CLAWS F

USE ONLY NG APPLICATION IS APPROVED FITTING

0,99

1,30

1,47

2,08

2,85

3,82

0.66

0.87

0.98

1.40

1.91

2.57

CLAMPS

CONNECTING PARTNERSHIPS

HOSE RUBBER - FUEL/OIL

SR

FUEL/OIL

SUCTION AND RETURN HOSE

RECOMMENDED FOR:

Petroleum and water-based hydraulic fluids in suction lines or in Low Pressure return lines.

PERFORMANCE:

Meets or Exceeds the Performance Requirements of: AS 3791 100R4 (except SR48), SAE 100R4.

TUBE:

Black, oil resistant synthetic rubber.

REINFORCEMENT:

Textile reinforcement with spiral wire to prevent collapsing.

COVER:

Black, oil resistant and abrasion resistant synthetic rubber (wrapped impression finish).

TEMPERATURE RANGE:

From -40°C to +100°C (-40°F to +212°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

THIRD PARTY APPROVALS:

ABS, DNV, GL, LR, MED and USCG.

COUPLINGS:

ITYCO SR ---

Working pressure shown is for hose performance capabilities. Performance of a hose assembly depends on couplings used.

1. For Suction Applications, and Low Pressure Delivery (up to 25% of Maximum Working Pressure).



33000 SERIES COUPLINGS WITH RSC CLAMP 33000 Series (sizes -12 to -48). 33000 Series Couplings require a suitable clamp around the outside of the hose. Refer to RYCO

2. For Suction Applications, and High Pressure Delivery (up to 100% of Maximum Working Pressure).

RSC Clamps shown below.



BITELOK NON-SKIVE ONE-PIECE CRIMP T4000 Series (sizes -12 and -16)

ONE PIECE CRIMP T4000 T4000 Technical Manual - Hydraulics and the latest Crimp Chart on our website **www.RYCO.com.au**.

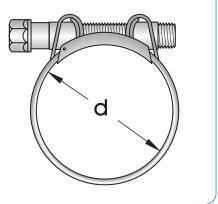


	SR - SUCTION AND RETURN HOSE		Ĩ	\bigcirc			\bigcirc		Ø) (Hg		Í	v
PART NO HOSE SIZE		SIZE		INAL E ID	NOM HOS	INAL E OD	MAXI WOR PRES	KING	MINIMUM BURST PRESSURE		MINIMUM BEND RADIUS		VACUUM Rating		AVEF WEI	RAGE GHT
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	mmHg	inHg	kg/m	lb/ft
SR12	19	-12	19,1	3/4	31,5	1.24	21	300	84	1200	125	4.9	635	25	0,82	0.55
SR16	25	-16	25,4	1	40,0	1.57	17	250	68	1000	150	5.9	635	25	1,00	0.67
SR40	63	-40	63,5	2.1/2	78,5	3.09	4,3	62	17	250	350	13.8	635	25	2,37	1.59
SR48	76	-48	76,2	3	90,7	3.57	3,9	56	16	225	450	17.7	635	25	2,45	1.65

HOSE PART NO	CLAMP Part No	CLAMP Adjustment Range		MENDED Ening Que
		d mm	N.m	ft.lbf
SR12	RSC-3134	31 to 34	20	15
SR16	RSC-3740*	37 to 40	20	15
5610	RSC-4043*	40 to 43	20	15
SR40	RSC-7379	73 to 79	25	18
SR48	RSC-8591	85 to 91	25	18
NOTE: Far diana 20 2		CDE U.S.		

NOTE: For sizes -20, -24 and -32, use RYCO SRF Hose.

*Due to the manufacturing tolerance on the outside diameter of the hose and the range of adjustment of the clamp, it is necessary to confirm correct clamp at time of assembly.





SRF

ILYCO DEFIANT SRF

FUEL/OIL COMPACT

SUCTION AND RETURN HOSE

RECOMMENDED FOR:

Petroleum and water-based hydraulic fluids in suction lines or in Low Pressure return lines. Small bend radius is an advantage in installations where space is minimal. (Tighter Bend Radius than SAE 100R4)

PERFORMANCE:

Meets or Exceeds the Performance Requirements of: AS 3791 100R4, SAE 100R4.

TUBE:

Black, oil resistant synthetic rubber.

REINFORCEMENT:

Textile reinforcement with spiral wire to prevent collapsing.

COVER:

Black, oil resistant and abrasion resistant synthetic rubber (wrapped impression finish).

TEMPERATURE RANGE:

From -40°C to +100°C (-40°F to +212°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

Working pressure shown is for hose performance capabilities. Performance of a hose assembly depends on couplings used.

1. For Suction Applications, and Low Pressure Delivery (up to 25% of Maximum Working Pressure).

> 33000 SERIES COUPLINGS WITH RSC CLAMP 33000 Series (sizes -12 to -32)

> > WORM DRIVE CLAMPS W/ OR W/ OUT SAFETY CLAWS

33000 Series Couplings require a suitable

PUSH ON 33000 SERIES clamp around the outside of the hose. Refer to RYCO RSC Clamps shown below.

2. For Suction Applications, and High Pressure Delivery (up to 100% of Maximum Working Pressure).



>300 PSI HOSE TAIL COUPLINGS

đ

CAMLOCK COUPLINGS

BITELOK NON-SKIVE ONE-PIECE CRIMP T4000 Series (sizes -12 to -32)

For coupling specifications and assembly ONE PIECE CRIMP T4000

instructions see the latest RYCO Product Technical Manual - Hydraulics and the latest Crimp Chart on our website www.RYCO.com.

BAND CLAMPING SYSTEMS



USE ONLY APPLICATION APPROVED FITTING

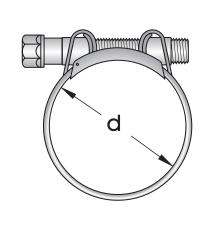
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SRF - DEFIA SUCTION AND			I	\bigcirc		\bigcirc	Ç	\bigcirc	Ç	Ž	ſ.	Ŋ		(Нд	Ń	∑ V
PART NO	HOSE	SIZE	NOM HOS	INAL E ID	NOM Hos	INAL E OD	WOR	IMUM KING SURE	BU	MUM RST SURE	BE	MUM ND DIUS	VACI RAT		AVEF WEI	RAGE GHT
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	mmHg	inHg	kg/m	lb/ft
SRF12	19	-12	19,1	3/4	31,5	1.24	21	300	84	1200	63	2.5	635	25	0,82	0.55
SRF16	25	-16	25,4	1	40,0	1.57	17	250	68	1000	75	2.9	635	25	1,00	0.67
SRF20	31	-20	31,8	1.1/4	46,5	1.83	14	200	56	800	100	3.9	635	25	1,19	0.80
SRF24	38	-24	38,1	1.1/2	53,1	2.09	10	150	40	600	125	4.9	635	25	1,39	0.93
SRF32	51	-32	50,8	2	65,5	2.58	7	100	28	400	150	5.9	635	25	1,94	1.30

HOSE PART NO	CLAMP Part No	CLAMP Adjustment Range	RECOMN TIGHT TOR	ENING
		d mm	N.m	ft.lbf
SRF12	RSC-3134	31 to 34	20	15
SRF16	RSC-3740*	37 to 40	20	15
SKEIO	RSC-4043*	40 to 43	20	15
SRF20	RSC-4347*	43 to 47	20	15
JNF20	RSC-4751*	47 to 51	20	15
SRF24	RSC-5155	51 to 55	20	15
SRF32	RSC-6368	63 to 68	25	18

NOTE: For sizes -20, -24 and -32, use RYCO SRF Hose.

*Due to the manufacturing tolerance on the outside diameter of the hose and the range of adjustment of the clamp, it is necessary to confirm correct clamp at time of assembly.



HOSE

COUPLINGS

CLAMPS

ACCESSORIES

HOSE RUBBER - FUEL/OIL

M1

FUEL/OIL

FUEL LINE ONE TEXTILE BRAID HOSE

RECOMMENDED FOR:

Multi-purpose hose for use on fuel lines, PCV and EEC systems, and for fuel-return hose connections on diesel fuel injection systems. For use with leaded and unleaded petrol, oil, diesel and other fuels.

PERFORMANCE:

Meets or Exceeds the Performance Requirements of: SAE 30R7.

TUBE:

Black, oil resistant synthetic rubber.

REINFORCEMENT:

One textile braid.

COVER:

Black, oil resistant synthetic rubber. Resists the effects of high heat and ozone found in engine compartments.

TEMPERATURE RANGE:

From -40°C to +125°C (-40°F to +257°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

TOLERANCES:

RYCO M1

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

NOTE: Any assemblies manufactured would be rated to the lesser working pressure of either the Hose, Fittings and Clamping method used.



M1 - FUEL	LINE HO	SE	Ĩ	\bigcirc	\mathbb{I}	\bigcirc	Ç		Ç	Ì	ſ.			(Нд	Í V	V
PART NO			INAL E ID	NOM HOS		MAXI WOR PRES	KING	MINI BUF PRES	RST	MINI BE RAD	ND	VAC RAT		AVEF WEI	RAGE GHT	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	mmHg	inHg	kg/m	lb/ft
M14	6	-04	6,4	1/4	12,7	0.50	3,5	50	14	200	75	3.0	610	24	0,14	0.09
M15	8	-05	7,9	5/16	14,3	0.56	3,5	50	14	200	75	3.0	610	24	0,17	0.11
M16	10	-06	9,5	3/8	15,9	0.63	3,5	50	14	200	100	4.0	610	24	0,18	0.12

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.



М2

RYCO M2

FUEL/OIL TEXTILE

TWO TEXTILE BRAID HOSE



RECOMMENDED FOR:

Medium Pressure hydraulic oil lines, antifreeze solutions, water.

PERFORMANCE:

Meets or Exceeds the Performance Requirements of: AS 3791 100R3, DIN 20021-2TE, ISO 4079 Type R3, SAE 100R3.

TUBE:

Black, oil resistant synthetic rubber.

REINFORCEMENT:

Two textile braids.

COVER:

Black, oil resistant and abrasion resistant synthetic rubber. No skiving required with T4000 Series BITELOK Crimp Couplings and M000 Series Field Attachable Couplings.

MSHA - FLAME RESISTANCE:

Meets Flame Resistant Designation "U.S. MSHA" of the US Department of Labor, Mine Safety and Health Administration. Complies with Flame Resistant requirements of Australian Standard AS 2660 and Method of Test AS 1180.10B.

TEMPERATURE RANGE:

M2 - TEXTILE BRAID

HOSE SIZE

Dash

-04

-06

-08

-12

DN

6

10

12

19

PART NO

Hose

M24

M26

M28

M212

From -40°C to +100°C (-40°F to +212°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

THIRD PARTY APPROVALS:

ABS, DNV, GL, LR, MED and USCG.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:

T4000 Series (sizes -04 to -12)



BITELOK NON-SKIVE ONE-PIECE CRIMP

Ηм FIELD ATTACHABLE 000 SERIES

FIELD ATTACHABLE NON-SKIVE

6000 Series insert (sizes -04 to -12) M000 Series ferrule (sizes -04 to -12)

For coupling specifications and assembly instructions see the latest RYCO Product Technical Manual - Hydraulics and the latest Crimp Chart on our website www.RYCO.com.au.

NOTE: Any assemblies manufactured would be rated to the lesser working pressure of either the Hose, Fittings and Clamping method used.

MINIMUM

BEND

RADIUS

mm

75

100

125

240

inch

3.0

4.0

50

9.5

kg/m

0,16

0,28

0.41

0,65

 $\overline{}$

MINIMUM

BURST

PRESSURE

psi

5000

4500

4000

3000

bar

350

315

280

210



MAXIMUM

WORKING

PRESSURE

bar

88

79

70

52

psi

1250

1125

1000

750

CLAMPS

БS

ACCESSORI

lb/ft

0.11

0.19

0.28

0.44

CONNECTING PARTNERSHIPS

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

 $\left(\bigcirc \right)$

NOMINAL

HOSE OD

mm

14,3

19,0

23,8

31,7

inch

0.56

0.75

0.94

1.25

1(())

NOMINAL

HOSE ID

mm

6,4

9,5

12,7

19,1

inch

1/4

3/8

1/2

3/4

ADAPTORS

HOSE RUBBER - MATERIAL HANDLING

CSD

MATERIAL HANDLING RYCO STEEL CONCRETE DELIVERY

ILYCO CSD DELIVERY

RECOMMENDED FOR:

Used for the placement of concrete to the casting location; its flexible construction allows easy handling and small bending radius; crush and full suction resistant.

TUBE:

Black conductive NR and CBR - very high abrasion resistant.

REINFORCEMENT:

High tensile steel wire cords.

COVER:

Synthetic rubber - abrasion, ozone and weather resistant.

FEATURES:

Ozone Resistance; UV Stabilised; Antistatic. Abrasion Value Max: 70mm

TEMPERATURE RANGE:

From -30° C to $+ 70^{\circ}$ C (-22° F to $+158^{\circ}$ F).

WORKING PRESSURE:

Maximum working pressures are based on an approximate 2:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20 Metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:



C RYCO STEE	SD L CONCR	ETE	I	\bigcirc	\mathbb{I}	\bigcirc	Ç	\bigcirc	Ç	Ť	ſ.		ĺ	V
PART NO	HOSE	SIZE	NOMINAL HOSE ID		NOMINAL HOSE OD				MINIMUM BURST PRESSURE		BE	MUM ND NUS	AVEF WEI	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft
CSD32	51	-32	50,8	2	70	2.76	85	1233	200	2900	508	20	3,41	24.66
CSD40	63	-40	63,5	2.1/2	88	3.46	85	1233	200	2900	635	25	4,97	35.95
CSD48	76	-48	76,2	3	102	4.01	85	1233	200	2900	762	30	6,58	47.59
CSD64	102	-64	101,6	4	130	5.12	85	1233	200	2900	1016	40	9,38	67.84
CSD80	127	-80	127,0	5	155	6.10	85	1233	200	2900	1270	50	10,95	79.20
CSD96	152	-96	152,4	6	184	7.24	85	1233	175	2500	1524	60	12,49	90.34

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.



RUBBER - MATERIAL HANDLING

MHD

ILYCO MHD DELIVERY

HOSE

RECOMMENDED FOR:

MATERIAL HANDLING

TEXTILE DELIVERY

RYCO MATERIAL HANDLING A/R

Delivery of dry powder material and cement.

TUBE:

Black conductive NR - high abrasion resistant.

REINFORCEMENT:

High tensile textile cords.

COVER:

Black conductive EPDM/NR - high abrasion resistant.

FEATURES:

Ozone Resistance; UV Stabilised

TEMPERATURE RANGE:

From -30°C to + 80°C (-22°F to 176°F).

WORKING PRESSURE:

Maximum working pressures are based on a 3:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS: 20 or 60 Metre.

20 or 60 Metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:



M RYCO MATERIA	IHD IL HANDL	ING A/R				\bigcirc	Ç	\bigcirc		Ø		\mathcal{Y}	l V	² ∨
PART NO	HOSE	SIZE	NOM HOS			INAL E OD	WOR	MUM KING SURE	MINI BUI PRES		MINI BE RAD	ND	AVEF WEI	RAGE GHT
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft
MHD48	76	-48	76,2	3	88	3.46	10	150	30	450	742	29.2	2.10	1.41
MHD64	102	-64	101,6	4	116	4.57	10	150	30	450	980	38.6	3.20	2.15
MHD80	127	-80	127,0	5	143	5.63	10	150	30	450	1255	49.4	3.90	2.62

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit **www.RYCO.com.au**.

HOSE RUBBER - MATERIAL HANDLING

SF2

MATERIAL HANDLING RYCO SUPERSEEDER SUCTION AND DELIVERY

ILYCO SF2 SEEDER

RECOMMENDED FOR:

A quality abrasion resistant suction and delivery hose suitable for a very broad range of applications including: air seeder, grains, granular and liquid fertilisers, light slurries or water.

TUBE:

Black NR.

REINFORCEMENT:

Textile reinforced with twin spiral wire helix.

COVER:

Black SBR/EPDM blend (wrapped impression finish).

FEATURES:

An ideal Air Seeder hose for both primary and secondary lines.

Abrasion resistant tube 3mm thick.

Very flexible and strong.

UV and abrasion resistant cover.

Suitable for Medium Duty dry or wet slurry applications.

TEMPERATURE RANGE:

From -30°C to +70°C (-22°F to +158°F).

WORKING PRESSURE:

Maximum working pressures are based on a 3:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20 Metre or 60 Metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:



S RYCO SUF	SF2 PERSEED	ER	Ĩ	\bigcirc	\mathbb{I}	\bigcirc	Ç	\bigcirc	Ç	Ž		\searrow	l V	V
PART NO	HOSE	SIZE	NOM HOS	INAL E ID		INAL E OD	MAXI WOR PRES	KING	BU	MUM RST SURE	BE	MUM ND DIUS	AVEF WEI	RAGE GHT
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft
SF220	31	-20	31,8	1.1/4	42	1.65	12	175	36	525	220	8.7	0,89	0.60
SF228	44	-28	44,5	1.3/4	56	2.20	12	175	36	525	300	11.8	1,43	0.96
SF232	51	-32	50,8	2	63	2.48	12	175	36	525	320	12.6	1,69	1.13
SF240	63	-40	63,5	2.1/2	76	2.99	12	175	36	525	420	16.5	2,05	1.38
SF248	76	-48	76,2	3	91	3.58	12	175	36	525	500	19.7	3,10	2.08

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.



MP1

MULTI-PURPOSE

RECOMMENDED FOR:

PERFORMANCE:

High Oil Resistance.

REINFORCEMENT:

One textile braid.

Crimp Couplings.

affect electrical properties.

TEMPERATURE RANGE:

FEATURES:

TUBE:

COVER:

RYCO RED MULTI PURPOSE ONE TEXTILE BRAID

Air, water, petroleum oils, kerosene and fuel oils.

RMA (USA) Class A High Oil Resistance (tube),

Meets or Exceeds the Performance Requirements of:

Black, oil resistant synthetic rubber. RMA (USA) Class A

Red, oil resistant and abrasion resistant extruded synthetic

rubber (Modified Nitrile). RMA (USA) Class B Medium Oil Resistance. No skiving required with T4000 Series BITELOK

Tube non-conductive at 1000 volts DC. Meets electrical

resistance of one megohm per inch when subjected to

1000 volts DC. Incorrect storage and use may adversely

Air, water, petroleum and lubricating oils: -40° C to $+93^{\circ}$ C (-40°F to $+200^{\circ}$ F). Petrol, kerosene, fuel oils: -40° C to $+49^{\circ}$ C

limit, reduce maximum working pressure by 30%.

(-40°F to +120°F). For continuous service at upper temperature

RMA (USA) Class B Medium Oil Resistance (cover),

RYCO MP1 MULTI-B

WORKING PRESSURE:

temperature simultaneously.

COUPLINGS:

H

ONE PIECE CRIMP T4000



RIVE 'S	BOLT CLAMPS W/ OR W/ OUT SAFETY CLAWS	BAND CLAMPING SYSTEMS

MP1 - MULTI							WOR		MINI BU	мим rst	BE	MUM	AVEF		
PART NO		SIZE	HOS	E ID	HOS	EOD	PRES	SURE	PRES	SURE	RAI	DIUS	WEI	GHT	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	
MP14	6	-04	6,4	1/4	13,5	0.53	13,8	200	55,2	800	50	2.0	0,16	0.11	
MP15	8	-05	7,9	5/16	155	6.1/8	13,8	200	55,2	800	65	2.5	0,20	0.13	
MP16	10	-06	9,5	3/8	17,5	0.69	13,8	200	55,2	800	75	3.0	0,24	0.16	
MP18	12	-08	12,7	1/2	21,4	0.84	13,8	200	55,2	800	85	4.0	0,33	0.22	
MP110	16	-10	15,9	5/8	25,4	1.00	13,8	200	55,2	800	105	5.0	0,43	0.29	
MP112	19	-12	19,1	3/4	28,6	1.13	13,8	200	55,2	800	120	5.0	0,48	0.32	
MP116	25	-16	25,4	1	37,3	1.47	13,8	200	55,2	800	155	8.0	0,82	0.55	
MP120	31	-20	31,8	1.1/4	43,9	1.73	13,8	200	55,2	800	230	10.0	1,00	0.68]

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

CONNECTING PARTNERSHIPS

Crimp Chart on our website **www.RYCO.com.au**. Standard industrial hose barbed tails with hose clamps may also be suitable depending on working pressure required.

Maximum working pressures are based on 4:1 safety

factor (maximum working pressure to minimum burst

pressure), and are for the performance of the hose with

RYCO T4000 Series BITELOK One-Piece couplings only.

Maximum working pressure for a hose assembly with

other couplings depends on the type of coupling and

the type of clamp used. MP1 Hose should not be used

at maximum working pressure and maximum working

T4000 Series (sizes -04 to -20)

BITELOK NON-SKIVE ONE-PIECE CRIMP

For coupling specifications and assembly

instructions see the latest RYCO Product

Technical Manual - Hydraulics and the latest

Not suitable for use with RYCO 8000 Series Push-On couplings.

HOSE RUBBER - MULTI-PURPOSE

MP2

MULTI-PURPOSE

RYCO RED MULTI-PURPOSE TWO TEXTILE BRAID

RECOMMENDED FOR:

Air, water, petroleum oils, kerosene and fuel oils.

PERFORMANCE:

Meets or Exceeds the Performance Requirements of: RMA (USA) Class A High Oil Resistance (tube), RMA (USA) Class A High Oil Resistance (cover),

TUBE:

Black, oil resistant synthetic rubber. RMA (USA) Class A High Oil Resistance.

REINFORCEMENT:

Two textile braids.

COVER:

Red, oil resistant and abrasion resistant extruded synthetic rubber (Modified Nitrile). RMA (USA) Class A High Oil Resistance. No skiving required with T4000 Series BITELOK Crimp Couplings.

FEATURES:

Tube non-conductive at 1000 volts DC. Meets electrical resistance of one megohm per inch when subjected to 1000 volts DC. Incorrect storage and use may adversely affect electrical properties.

A premium High Pressure multi-purpose hose with Class A High oil-resistant tube and cover.

TEMPERATURE RANGE:

From -40°C to +93°C (-40°F to 199°F).

WORKING PRESSURE:

Maximum working pressures are based on a 4:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

RYCO MP2 MULTI-A

20 or 100 Metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:



BITELOK NON-SKIVE ONE-PIECE CRIMP T4000 Series (sizes -04 to -20)

ONE PIECE CRIMP T4000

For coupling specifications and assembly instructions see the latest RYCO Product Technical Manual - Hydraulics and the latest Crimp Chart on our website **www.RYCO.com.au**.

Standard industrial hose barbed tails with hose clamps may also be suitable depending on working pressure required.

Not suitable for use with RYCO 8000 Series Push-On couplings.



RYCO RED M		RPOSE							міліми) M BURST	BE		AVEF	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft
MP24	6	-04	6,4	1/4	14	0.55	20	300	80	1200	40	1.6	0,18	0.12
MP25	8	-05	7,9	5/16	16	0.63	20	300	80	1200	50	2.0	0,22	0.15
MP26	10	-06	9,5	3/8	18	0.71	20	300	80	1200	55	2.2	0,26	0.17
MP28	12	-08	12,7	1/2	23	0.90	20	300	80	1200	70	2.7	0,35	0.23
MP210	16	-10	15,9	5/8	26	1.02	20	300	80	1200	85	3.3	0,53	0.36
MP212	19	-12	19,1	3/4	30	1.18	20	300	80	1200	100	3.9	0,62	0.42
MP216	25	-16	25,4	1	38	1.49	20	300	80	1200	125	4.9	0,99	0.66

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.



HOSE

MULTI-PURPOSE RYCO MULTI-PURPOSE

MPX

RECOMMENDED FOR:

Delivery of fuel, oil, compressed air and water.

TUBE:

Black NBR.

REINFORCEMENT:

High tensile textile cords.

COVER:

Red EPDM/NBR - abrasion and ozone resistant (wrapped impression finish).

FEATURES:

A Heavy Duty multi-purpose fuel, oil, air and water hose. Abrasion and UV resistant cover.

NOTE: This hose does NOT have a non-conductive tube.

TEMPERATURE RANGE:

From -30°C to +80°C (-22°F to 176°F).

WORKING PRESSURE:

Maximum working pressures are based on a 3:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS: 20 Metre.

RYCO MPX

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:

			\bigcirc	¢	\bigcirc
>300 PSI HOSE TAIL COUPLINGS	COMBINATION HOSE NIPPLES	CAMLOCK COUPLINGS	WORM DRIVE CLAMPS	BOLT CLAMPS W/ OR W/ OUT SAFETY	BAND CLAMPING SYSTEMS

 \mathbb{O} MPX Z W RYCO MULTI-PURPOSE MAXIMUM MINIMUM NOMINAL NOMINAL WORKING MINIMUM BURST BEND AVERAGE RADIUS PART NO HOSE SIZE PRESSURE PRESSURE HOSE ID HOSE OD WEIGHT inch Hose DN Dash mm inch mm inch bar psi bar psi mm kg/m lb/ft **MPX20** 31 -20 31,8 1.1/4 42 1.65 20 300 60 900 295 11.6 0.90 0.60 MPX24 38,1 1.1/2 1.97 38 -24 50 20 300 60 900 350 13.8 1.13 0.76 **MPX32** 51 -32 50,8 2 64 2.52 20 300 60 900 495 19.5 1.49 1.00

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au

HOSE RUBBER - MULTI-PURPOSE

PL1

MULTI-PURPOSE

PUSH-ON HOSE ONE TEXTILE BRAID HOSE

RECOMMENDED FOR:

Petroleum-based hydraulic oils, glycol antifreeze solutions, water, diesel fuels, and air.

PERFORMANCE:

Meets or Exceeds the Performance Requirements of: AS 3791 100R6, DIN 20021-1TE, ISO 4079 Type 1, SAE 100R6.

TUBE:

Black, oil resistant synthetic rubber.

REINFORCEMENT:

One textile braid.

COVER:

Black, oil and abrasion resistant synthetic rubber. No skiving required with T4000 Series BITELOK Crimp Couplings.

MSHA - FLAME RESISTANCE:

Meets Flame Resistant Designation "U.S. MSHA" of the US Department of Labor, Mine Safety and Health Administration. Complies with Flame Resistant requirementa of Australian Standard AS 2660 and Method of Test AS 1180.10B.

TEMPERATURE RANGE:

From -40°C to +95°C (-40°F to +203°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure). PL1 Hose, and 800 Series Push-On Fittings, are recommended for use in systems with Static Working Pressures (constant loads without pressure spikes) only. They are not recommended for vibration or pressure surge applications. PL1 Hose should not be used at both maximum working pressure and maximum temperature simultaneously.

COUPLINGS:



RYCO PL1

BITELOK NON-SKIVE ONE-PIECE CRIMP T4000 Series (Sizes -04 to -12)

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PUSH-ON 8000 Series (sizes -04 to -12).

PL1 Hose simply pushes on to 8000 Series Couplings.

For diesel fuel and other potentially dangerous, or critical applications crimp fittings are required.



For coupling specifications and assembly instructions see the latest RYCO Product Technical Manual - Hydraulics and the latest Crimp Chart on our website **www.RYCO.com.au**.

PL1 PUSH ON HOSE		\square				\bigcirc		Ø) (Hg		Ŵ		
PART NO	D HOSE SIZE		NOMINAL HOSE ID		NOMINAL HOSE OD		MAXIMUM WORKING PRESSURE		MINIMUM BURST PRESSURE		MINIMUM BEND RADIUS		VACUUM Rating		AVERAGE WEIGHT	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	mmHg	inHg	kg/m	lb/ft
PL14	6	-04	6,4	1/4	12,3	0.48	28	410	112	1640	65	2.5	710	28	0,12	0.08
PL15	8	-05	8,0	5/16	13,9	0.55	28	410	112	1640	75	3.0	710	28	0,14	0.09
PL16	10	-06	9,5	3/8	15,5	0.61	28	410	112	1640	75	3.0	635	25	0,17	0.11
PL18	12	-08	12,7	1/2	19,0	0.75	28	410	112	1640	100	4.0	460	18	0,22	0.15
PL110	16	-10	16,0	5/8	22,6	0.89	24	350	96	1400	125	5.0	380	15	0,29	0.19
PL112	19	-12	19,1	3/4	25,8	1.02	21	305	84	1220	150	6.0	380	15	0,34	0.23
Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.																



SHOCKWAVE

Heavy Industry Waterblast Hose



CONNECTING PARTNERSHIPS

www.RYCO.com.au

HOSE SHOCKWAVE HIGH PRESSURE WATERBLAST



RECOMMENDED FOR:

Very High Pressure waterblast hose for the cleaning and preparation of marine surfaces, runway and swimming pool cleaning, and paint removal.

Not recommended for Steam.

TUBE:

Oil and water resistant synthetic rubber.

REINFORCEMENT:

Four alternating layers of spiralled high tensile steel wire.

COVER:

Oil, water and ozone resistant synthetic rubber. The cover is formulated to resist marking. Internal and External skiving required with 46000W Series BITELOK Interlok Crimp Couplings.

FEATURES:

Exceeds ISO 7751 performance requirements. Meets specifications EN 1829-2 (impulse) and AS/NZS 4233.2.

Highly abrasion resistant cover.

TEMPERATURE RANGE:

Continuous service from -20°C to +80°C (-4°F to +176°F). Intermittent service to +100°C (+212°F).

WORKING PRESSURE:

Maximum working pressures are based on 2.5:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:



BITELOK INTERLOK SKIVE TWO-PIECE CRIMP 46000W series (sizes -06 to -16).

INTERLOK TWO-PIECE CRIMP 46000W

For coupling specifications and assembly instructions see the latest RYCO Product Technical Manual - Hydraulics and the latest Crimp Chart on our website **www.RYCO.com.au**.

NOTE: Unless otherwise stated, all assemblies manufactured shall be rated to the lesser rated working pressure of either the Hose, Fittings and Clamping method used.

SW SHOCKWAVE - HIGH PRESSURE HOSE		\mathbb{I}		$\boxed{\bigcirc}$		\bigcirc		Ø				Ŵ				
COLOUR CODE	PART NO	HOSI	HOSE SIZE		NOMINAL NOMINAL HOSE ID HOSE OD		MAXIMUM WORKING PRESSURE		MINIMUM BURST PRESSURE		MINIMUM BEND RADIUS		AVERAGE WEIGHT		COUPLING SERIES INTERLOK TWO-PIECE	
	Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	INT/EXT SKIVE
	SW18006	10	-06	9,5	3/8	21,5	0.85	1250	18125	3125	45315	150	5.9	0,56	0.37	46000W
	SW16008	12	-08	12,7	1/2	24,6	0.97	1100	16000	2750	40000	180	7.1	0,83	0.56	46000W
	SW14512	19	-12	19,0	3/4	31,9	1.26	1000	14500	2500	36250	220	8.7	0,92	0.62	46000W
	SW10012	19	-12	19,0	3/4	30,6	1.21	700	10000	1750	25000	220	8.7	1,34	0.90	46000W
	SW10016	25	-16	25,4	1	37,6	1.48	700	10000	1750	25000	250	9.8	1,39	0.93	46000W

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

WJTA-IMCA colour code recommendations:

10K Pressure Range

15K Pressure Range

20K Pressure Range

SHOCKWAVE HIGH PRESSURE WATERBLAST

RYCO SHOCKWAVE HIGH PRESSURE WATERBLAST HOSE ASSEMBLIES

RYCO offers a large range of off-the-shelf High Pressure waterblast hose assemblies for all popular working pressures, up to 1250 bar/18125 psi.

All hose, couplings and hose assemblies have been designed, validated and fabricated by RYCO to ensure safe, and reliable endurance under even the most harshest of conditions.

Each fully certified RYCO SHOCKWAVE waterblast hose assembly supplied by RYCO is tested, quality checked and labelled with:

- Part Number,
- Unique Serial Number for complete traceability and asset management, and
- Expiry Date .

Most hose assemblies are stocked in either one or more of the following lengths, but custom assemblies are also available:

ASSEMBLY LENGTHS:

15,2m / 20m / 30,4m / 40m (50ft / 65ft / 100ft / 130 ft)

The RYCO coupling range comes in a wide variety of connection types, including popular NPTF Male, BSPT Female, Metric DKOS (Heavy), and Type M connections.



RECOMMENDATIONS FOR RYCO SHOCKWAVE WATERBLAST HOSE ASSEMBLIES

- **DO NOT MIX AND MATCH PRODUCT.** Use only matched RYCO products to fabricate waterblast hose assemblies.
- In order to achieve optimum performance, the assembly of RYCO SHOCKWAVE hose and matched 46000W BITELOK Interlok fittings must be performed using RYCO approved assembly procedures and equipment. RYCO production testing procedures should be used to ensure that the hose assembly produced is fit for purpose.
- For guaranteed performance of assemblies, use only RYCO-approved assembly facilities or distribution partners. Contact RYCO for your nearest approved assembler.
- Waterblast hose assemblies must not exceed the rated maximum working pressure. It is highly recommended that waterblast hose assemblies should not be used in pressure impulse applications.
- Waterblast hose assemblies must not operate outside of the operating temperature range specified for RYCO SHOCKWAVE hoses.
- Do not exert any external forces on the hose assembly, such as axial tension, twisting, kinking or crushing, which may reduce the integrity of the hose assembly. Waterblast hose assemblies should be inspected for signs of deterioration on a regular basis and shall be replaced if damaged or worn. Damage includes but is not limited to twisting, kinking, crushing, hose cover cuts or excessive wear, chemical degredation and corrosion.
- When whipchecks or other safety devices are installed to protect against injury or damage as a result of hose and fitting separation, the change in length of hose under pressure should be considered.
- Waterblast hose assemblies should be adequately supported to prevent excessive tensile (or other) stresses at any point along the hose assembly.
- High Pressure water is extremely dangerous. Operators should wear appropriate personal protective equipment at all times, and should observe all related operational and safe working requirements when operating high pressure waterblast equipment.



SAFETY GUIDE FOR THE SELECTION AND USE OF HOSE, FITTINGS AND RELATED ACCESSORIES

Failure or improper selection or improper use of hose, fittings, or related accessories can cause death, personal injury and property damage. Possible consequences of failure or improper selection or improper use of hose, fittings, or related accessories include, but are not limited to:

- Fittings blown off at high speed.
- High velocity medium discharge.
- Explosion, or burning, of the conveyed medium.
- Electrocution from high voltage electric power lines or other sources of electricity.
- Contact with suddenly moving, or falling, objects that are held in position, or moved, by conveyed medium.
- Injections by high-pressure fluid or air discharge.
- Dangerously whipping hose.
- Contact with conveyed fluids that may be hot, cold, toxic or otherwise injurious.
- Sparking or explosion caused by static electricity build-up.
- Sparking, or explosion, while spraying paint or other flammable liquid.

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RYCO

JETSTORM

Pressure Washer Hose

JS4000 and JS6000

RYCO JETSTORM JS6000

JS4000B and JS6000B

ILYCO JETSTORM JS6000

JS4000G and JS6000G

RYCO JETSTORM JS6000

CONNECTING PARTNERSHIPS

www.RYCO.com.au



ES	COUPLING SERIES T2000 ONE PIECE	RAGE	AVEF WEI		MINI BE RAD	MUM RST SURE	MINI BU		MAX						STORN ASHER HOSE
	NON-SKIVE	lb/ft	kg/m	inch	mm	psi	bar	psi	bar	inch	mm	inch	mm	Dash	DN
	T2000	0.11	0,17	2.0	50	12300	840	4100	280	0.45	11,4	1/4	6,3	-04	6
	T2000	0.15	0,23	2.2	55	12300	840	4100	280	0.54	13,7	5/16	7,9	-05	8
	T2000	0.17	0,26	2.6	65	12300	840	4100	280	0.59	14,9	3/8	9,5	-06	10
	T2000	0.24	0,36	3.6	90	12300	840	4100	280	0.76	19,4	1/2	12,7	-08	12
	T2000	0.11	0,17	2.0	50	12300	840	4100	280	0.45	11,4	1/4	6,3	-04	6
	T2000	0.15	0,23	2.2	55	12300	840	4100	280	0.54	13,7	5/16	7,9	-05	8
	T2000	0.17	0,26	2.6	65	12300	840	4100	280	0.59	14,9	3/8	9,5	-06	10
	T2000	0.24	0,36	3.6	90	12300	840	4100	280	0.76	19,4	1/2	12,7	-08	12
	T2000	0.11	0,17	2.0	50	12300	840	4100	280	0.45	11,4	1/4	6,3	-04	6
	T2000	0.15	0,23	2.2	55	12300	840	4100	280	0.54	13,7	5/16	7,9	-05	8
	T2000	0.17	0,26	2.6	65	12300	840	4100	280	0.59	14,9	3/8	9,5	-06	10
	T2000	0.24	0,36	3.6	90	12300	840	4100	280	0.76	19,4	1/2	12,7	-08	12
				6		C 1									

JS4000

JETSTORM PRESSURE WASHER 280 BAR/4100 PSI

RYCO JETSTORM JS4000

RYCO JETSTORM JS4000

RYCO JETSTORM JS4000

RECOMMENDED FOR:

Hot Water Pressure Washer Machines. Not recommended for Steam.

TUBE:

Black, heat resistant synthetic rubber.

REINFORCEMENT:

One braid of high tensile steel wire.

COVER:

JS4000 JETST PRESSURE WASH

PART NO Hose

JS4004 JS4005

JS4006 JS4008

JS4004B JS4005B

JS4006B

JS4008B

JS4004G JS4005G

JS4006G

JS4008G

Black, blue or grey oil resistant and abrasion resistant synthetic rubber. The cover is formulated to resist marking. Blue & grey covers are Animal Fat Resistant (AFR) Embossed layline for positive, permanent identification. No skiving required with T2000 Series BITELOK Crimp Couplings.

TEMPERATURE RANGE:

JS4000 JETSTORM Hose handles hot water up to +135°C (+275°F) with intermittent service to +150°C (+302°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:



BITELOK NON-SKIVE ONE-PIECE CRIMP T2000 series (sizes -04 to -08).

For coupling specifications and assembly instructions see the latest RYCO Product Technical Manual - Hydraulics and the latest Crimp Chart on our website www.RYCO.com.au.

NOTE: Any assemblies manufactured would be rated to the lesser working pressure of either the Hose, Fittings and Clamping method used.

CONNECTING PARTNERSHIPS

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

HOSE JETSTORM PRESSURE WASHER



RECOMMENDED FOR:

Hot Water Pressure Washer Machines operating at High Pressures. Not recommended for Steam.

TUBE:

Black, heat resistant synthetic rubber.

REINFORCEMENT:

Two braids of high tensile steel wire.

COVER:

Black, blue or grey oil resistant and abrasion resistant synthetic rubber. The cover is formulated to resist marking. Embossed layline for positive, permanent identification. No skiving required with T2000 Series BITELOK Crimp Couplings.

TEMPERATURE RANGE:

JS6000 JETSTORM Hose handles hot water up to +135°C (+275°F) with intermittent service to +150°C (+302°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:



BITELOK NON-SKIVE ONE-PIECE CRIMP T2000 series (sizes -04 to -08).

ONE PIECE CRIMP T2000 For coupling specifications and assembly instructions see the latest RYCO Product Technical Manual - Hydraulics and the latest Crimp Chart on our website www.RYCO.com.au.

NOTE: Any assemblies manufactured would be rated to the lesser working pressure of either the Hose, Fittings and Clamping method used.

JS6000 JET PRESSURE WA PART NO	SHER		NOM HOS		NOM HOS		WOR		MINI BU	MUM RST SURE	MINI BE RAD		AVEF WEI		COUPLING SERIES T2000 ONE PIECE				
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m lb/ft		NON-SKIVE				
JS6004	6	-04	6,3	1/4	13,2	0.52	420	6100	1260	18300	50	2.0	0,28	0.19	T2000				
JS6005	8	-05	7,9	5/16	14,6	0.57	420	6100	1260	18300	55	2.2	0,34	0.23	T2000				
JS6006	10	-06	9,5	3/8	16,6	0.65	420	6100	1260	18300	65	2.6	0,41	0.28	T2000				
JS6008	12	-08	12,7	1/2	19,6	0.77	420	6100	1260 18300 90		3.6	0,57	0.38	T2000					
JS6004B	6	-04	6,3	1/4	13,2	0.52	420	6100	1260	18300	50	2.0	0,28	0.19	T2000				
JS6005B	8	-05	7,9	5/16	14,6	0.57	420	6100	1260	18300	55	2.2	0,34	0.23	T2000				
JS6006B	10	-06	9,5	3/8	16,6	0.65	420	6100	1260	18300	65	2.6	0,41	0.28	T2000				
JS6008B	12	-08	12,7	1/2	19,6	0.77	420	6100	1260	18300	90	3.6	0,57	0.38	T2000				
JS6004G	6	-04	6,3	1/4	13,2	0.52	420	6100	1260	18300	50	2.0	0,28	0.19	T2000				
JS6005G	8	-05	7,9	5/16	14,6	0.57	420	6100	1260	18300	55	2.2	0,34	0.23	T2000				
JS6006G	10	-06	9,5	3/8	16,6	0.65	420	6100	1260	18300	65	2.6	0,41 0.28		T2000				
JS6008G	12	-08	12,7	1/2	19,6	0.77	420	6100 1260 18300		1260 18300		1260 18300		60 18300 90		90 3.6		0.38	T2000

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.





ILYCO SSR STEEL STEAM RED

HOSE

)	AVEF		CLAMPS
ch	kg/m	lb/ft	
5.1	0.55	0.37	

RECOMMENDED FOR:

RYCO STEEL STEAM RED

Saturated steam; widely used in refineries, shipyards and petrochemical plants.

STANDARDS MET OR EXCEEDED:

EN ISO 6134/05 Type 2 Class A. (Ω) Also BS5342.

TUBE:

Black EPDM.

REINFORCEMENT:

High tensile steel cords.

SSR RYCO STEEL STEAM RED

HOSE SIZE

PART NO

COVER:

Red EPDM - Heat, abrasion and ozone resistant, pin pricked.

NOMINAL

HOSE ID

FEATURES:

Excellent high temperature saturated steam hose. A flexible hose, with a pin-pricked, abrasion and weathering resistant red cover.

TEMPERATURE RANGE:

From -40°C to +210°C (-40°F to +410°F).

WORKING PRESSURE:

Maximum working pressures are based on a 10:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20 or 60 Metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

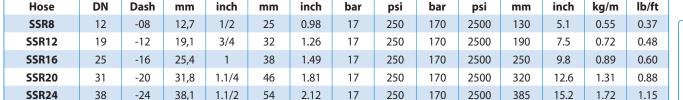
COUPLINGS:

NOTE: Any assemblies manufactured would be rated to the lesser working pressure of either the Hose, Fittings and Clamping method used.



HEAVY DUTY BOLT CLAMPS W/ SAFETY CLAWS APPROVED FITTING

	INAL E OD	WOR			M BURST SURE	BE			V V RAGE GHT
mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/
25	0.98	17	250	170	2500	130	5.1	0.55	0.3
20	1.26	17	250	170	2500	100	75	0.72	0.4



Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

HOSE **RUBBER - SPECIALTY**

M2G

RYCO M2G -

SPECIALTY **TWO TEXTILE BRAID HOSE** LPG (CLASS C)

IMPORTANT INFORMATION

RYCO M2G Series LPG Hose has Australian Gas Association approval (AGA approval No. 4247) only when used with RYCO T4000 Series BITELOK One-Piece Non-Skive Crimp Couplings, or RYCO M000 Series Field Attachables.

AVAILABLE ONLY AS FACTORY FITTED HOSE ASSEMBLIES.

WARNING: Do not use Field Attachable Couplings for domestic applications. (This is a requirement of Australian Standard AS/NZS 1869).

For any queries, please contact RYCO Technical Department.

RECOMMENDED FOR:

Liquified Petroleum Gas and Natural Gas.

PERFORMANCE:

Meets or Exceeds the Performance Requirements of: AS/NZS 1869 Class C (2,6 MPa working pressure, +65°C/+149°F max. temperature).

TUBE:

Black, oil resistant synthetic rubber.

REINFORCEMENT:

Two textile braids.

COVER:

Black, abrasion resistant synthetic rubber. Pin-pricked (perforated). No skiving required with T4000 Series BITELOK Crimp Couplings and M000 Series Field Attachable Couplings.

TEMPERATURE RANGE:

From -20° C to $+65^{\circ}$ C (-4° F to $+149^{\circ}$ F).

THIRD PARTY APPROVALS:

AUSTRALIAN GAS ASSOCIATION Approval No. 4247.

COUPLINGS:



BITELOK NON-SKIVE ONE-PIECE CRIMP T4000 Series (sizes -04 to -12)

14000	

FIELD ATTACHABLE NON-SKIVE



6000 Series insert (sizes -04 to -12) M000 Series ferrule (sizes -04 to -12)



For coupling specifications and assembly instructions see the latest RYCO Product Technical Manual - Hydraulics and the latest Crimp Chart on our website, www.RYCO.com.au.

NOTE: Any assemblies manufactured would be rated to the lesser WP of either the Hose, Fittings and Clamping method used.



M2G - I	M2G - LPG HOSE		Ĩ	\bigcirc		\bigcirc	Ć	\bigcirc	Ç	Ĩ		\mathcal{Y}	V	V
PART NO	PART NO HOSE SIZE		NOMINAL HOSE ID			NOMINAL HOSE OD		MAXIMUM WORKING PRESSURE		M BURST SURE			AVERAGE WEIGHT	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft
M24G	6	-04	6,4	1/4	14,3	0.56	26	375	104	1500	75	3.0	0,16	0.11
M26G	10	-06	9,5	3/8	19,0	0.75	26	375	104	1500	100	4.0	0,28	0.19
M28G	12	-08	12,7	1/2	23,8	0.94	26	375	104	1500	125	5.0	0,41	0.28
M212G	19	-12	19,1 3/4		31,7 1.25		26 375		104 1500		240 9.5		0,65	0.44

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.



RQP1

RYCO ROP1

SPECIALTY **SURVIVOR™ HIGH TEMPERATURE MULTI FLUID ONE WIRE BRAID HOSE**

RECOMMENDED FOR:

High Pressure hydraulic oil applications where pressure or temperature requirements exceed the performance requirements of SAE 100R1AT and DIN 20022-1SN, or where resistance to phosphate ester** fluid is required. May be used with compressed air if cover of hose is perforated (pin-pricked) and additional Safety Devices are used.

PERFORMANCE:

Meets or Exceeds the Performance Requirements of: AS 3791 100R1AT, DIN 20022-1SN, EN 853 Type 1SN, ISO 1436 Types R1AT and 1SN, SAE 100R1AT.

TUBE:

Black, synthetic rubber, specifically compounded for temperature resistance and multi fluid resistance.

REINFORCEMENT:

One braid of high tensile steel wire.

COVFR:

Blue, oil resistant and abrasion resistant synthetic rubber. No skiving required with T2000 and T7000 Series BITELOK Crimp Couplings and K000 Series Field Attachable Couplings*.

MSHA - FLAME RESISTANCE:

Meets Flame Resistant Designation "U.S. MSHA" of the US Department of Labor, Mine Safety and Health Administration. Complies with Flame Resistant requirements of Australian Standard AS 2660 and Method of Test AS 1180.10B.



TEMPERATURE RANGE:

From -40°C to +150°C (-40°F to +302°F).

**Not suitable for use with aerospace type phosphate esters such as Monsanto Skydrol 500B, Stauffer Aero-Safe 2300W and Chevron Hy-jet IV.

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

THIRD PARTY APPROVALS:

ABS, DNV, GL, LR, MED and USCG.

TOLERANCES:

RYCO specification.

COUPLINGS:

BITELOK NON-SKIVE ONE-PIECE CRIMP T2000 Series (sizes -04 to -16)



T7000 Series (sizes -06 to -16)









FIELD ATTACHABLE NON-SKIVE* 6000 Series insert (sizes -04 to -16)

K000 Series ferrule (sizes -04 to -16)

For coupling specifications and assembly instructions see the latest RYCO Product Technical Manual - Hydraulics and the latest Crimp Chart on our website www.RYCO.com.au.

RQP1-S Non-Sk			Ĩ	\bigcirc		\supset	Ç		Ç	Ĭ	ſ	\mathcal{N}	Ŵ		Ŵ				
PART NO	HOSE	SIZE	NOM HOS	INAL E ID	NOM HOS	INAL E OD	WOR	IMUM KING SURE	BU	MUM RST SURE	BE	MUM ND DIUS	AVERAGE WEIGHT			T7000 PIECE PLING	6000 K000 FIELD ATT COUPLING		
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft		NON-	SKIVE		
RQP14	6	-04	6,4	1/4	13,4	0.53	225	3250	900	13000	100	4.0	0,24	0.16	T2000		6000 (K000)		
RQP15	8	-05	7,9	5/16	15,0	0.59	215	3120	860	12500	114	4.5	0,27	0.18	T2000				
RQP16	10	-06	9,5	3/8	17,4	0.69	180	2600	720	10400	127	5.0	0,34	0.23	T2000	T7000	6000 (K000)		
RQP18	12	-08	12,7	1/2	20,5	0.81	160	2300	640	9300	178	7.0	0,44	0.30	T2000	T7000	6000 (K000)		
RQP110	16	-10	15,9	5/8	23,7	0.93	130	1880	520	7540	200	8.0	0,51	0.34	T2000	T7000	6000 (K000)		
RQP112	19	-12	19,1	3/4	27,6	1.09	120	1740	480	7000	240	9.5	0,64	0.43	T2000 T7000		6000 (K000)		
RQP116	25	-16	25,4	1	35,7	1.41	90	1300	360	5200	300	12.0	0,98	0.66	T2000 T7000		6000 (K000)		

Field Attachable Couplings should not be used on RQP1 Hose at maximum working pressure when temperature exceeds 121°C (250°F). Field Attachable Couplings may be used on RQP1 Hose at over 121°C but at reduced working pressure. Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

CONNECTING PARTNERSHIPS

CLAMPS

ACCESSORIES

FECHNICAL

HOSE **RUBBER - SPECIALTY**

RQP2

SPECIALTY SURVIVOR™ HIGH TEMPERATURE MULTI FLUID **TWO WIRE BRAID HOSE**

RECOMMENDED FOR:

High Pressure hydraulic oil applications where pressure or temperature requirements exceed the performance requirements of SAE 100R2AT, DIN 20022-2SN and EN 853 Type 2SN, or where resistance to phosphate ester⁺ fluid is required. May be used with compressed air if cover of hose is perforated (pin-pricked) and additional Safety Devices are used.

PERFORMANCE:

Meets or Exceeds the Performance Requirements of: AS 3791 100R2AT, DIN 20022-2SN, EN 853 Type 2SN, ISO 1436 Types R2AT and 2SN, SAE 100R2AT.

TUBE:

Black, synthetic rubber, specifically compounded for temperature resistance and multi-fluid resistance.

REINFORCEMENT:

Two braids of high tensile steel wire.

COVER:

Blue, oil resistant and abrasion resistant synthetic rubber. No skiving required with T2000 and T7000 Series BITELOK Crimp Couplings and L000 Series Field Attachable Couplings*.

MSHA - FLAME RESISTANCE:

Meets Flame Resistant Designation "U.S. MSHA" of the US Department of Labor, Mine Safety & Health Administration. Complies with Flame Resistant requirements of Australian Standard AS 2660 and Method of Test AS 1180.10B.





TEMPERATURE RANGE:

From -40°C to +150°C (-40°F to +302°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

THIRD PARTY APPROVALS:

ABS, DNV, GL, LR, MED and USCG.

TOLERANCES:

RYCO specification.

COUPLINGS:



RYCO RQP2 =

T2000 Series (sizes -04 to -32)

BITELOK NON-SKIVE ONE-PIECE CRIMP

1	2000	

T7000 Series (sizes -06 to -32)





6000 SERIES L000

FIELD ATTACHABLE NON-SKIVE* 6000 Series insert (sizes -04 to -20) L000 Series ferrule (sizes -04 to -20)

For coupling specifications and assembly instructions see the latest RYCO Product Technical Manual - Hydraulics and the latest Crimp Chart on our website www.RYCO.com.au.

	- SURVIVOR SKIVE HOSE		Ĩ	\bigcirc		\bigcirc	Ć	\mathbf{O}	Ç	Ì	ſ	\mathcal{Y}	ہ ۷	ک V			
PART NO	HOSE SIZE		NOM HOS		NOM HOS	INAL E OD	WOR	MUM KING SURE	MINI BUI PRES	RST	MINI BE RAI		AVEF WEI		T2000 ONE F COUP		6000 L000 FIELD ATT COUPLING
Hose	DN	Dash	h mm inch		mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft		NON-	SKIVE
RQP24	6	-04	6,4	1/4	15,0	0.59	400	5800	1600	23200	100	4.0	0,39	0.26	T2000		6000 (L000)
RQP25	8	-05	7,9	5/16	16,6	0.65	350	5100	1400	20400	114	4.5	0,45	0.30	T2000		
RQP26	10	-06	9,5	3/8	19,0	0.75	350	5100	1400	20400	127	5.0	0,53	0.36	T2000	T7000	6000 (L000)
RQP28	12	-08	12,7	1/2	22,0	0.87	300	4350	1200	17400	178	7.0	0,65	0.44	T2000	T7000	6000 (L000)
RQP210	16	-10	15,9	5/8	25,2	0.99	250	3600	1000	14500	200	8.0	0,77	0.52	T2000	T7000	6000 (L000)
RQP212	19	-12	19,1	3/4	29,1	1.15	215	3100	860	12400	240	9.5	0,93	0.62	T2000	T7000	6000 (L000)
RQP216	25	-16	25,4	1	37,7	1.48	167	2400	670	9600	300	12.0	1,38	0.93	T2000	T7000	6000 (L000)
RQP220	31	-20	31,8	1.1/4	48,0	1.89	150	2175	600	8700	419	16.5	2,03	1.36	T2000	T7000	6000 (L000)
RQP224	38	-24	38,1	1.1/2	54,4	2.14	100	1450	400	5800	500	20.0	2,30	1.55	T2000	T7000	
RQP232			2	67,3	2.65	90	1300	360 5200 600 24.0		600 24.0 3,16 2.12		2.12	T2000	T7000			

Field Attachable Couplings should not be used on RQP2 Hose at maximum working pressure when temperature exceeds 121°C (250°F). Field Attachable Couplings may be used on RQP2 Hose at over 121°C but at reduced working pressure. Contact RYCO for more information.

Not suitable for use with aerospace type phosphate esters such as Monsanto Skydrol 500B, Stauffer Aero-Safe 2300W and Chevron Hy-jet IV. +

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.



RQP5

SPECIALTY

SURVIVOR™

HIGH TEMPERATURE POLYESTER BRAID COVER **ONE WIRE HOSE**



Medium to High Pressure hydraulic oil applications or where resistance to phosphate ester** fluid is required. The small bend radius, temperature resistance and light weight of RYCO RQP5 hose make it suitable for under the bonnet automotive/trucking applications including hydraulic oil, diesel fuel, lubrication oil and transmission oil coolers. Sizes RQP54 to RQP512 also comply with SAE J1402 Type All "Automotive Air Brake Hose" for use in truck "air brake systems including flexible connections from frame to axle, tractor to trailer, trailer to trailer, and other unshielded air lines that are exposed to potential pull or impact". RQP5 may be used with compressed air if maximum working pressure is reduced by 30%. RQP5 hose is normally used where there is minimal abrasion to the outside cover. If abrasion is likely, support the hose away from the source of abrasion using mounting clamps, or protect with RWA Wire Armour or RSG Spiral Guard. RQP5 is a reduced bore hose. It has a similar Inside Diameter to steel or copper tubing of the same nominal (Outside Diameter) size. See page 6 for Branding Information.

PERFORMANCE:

Meets or Exceeds the Performance Requirements of: AS 3791 100R5, SAE 100R5, SAE J1402 Type All (up to -12 size).

TUBE:

PART NO

Hose

RQP54

RQP55

RQP56

ROP58

RQP510

RQP512

RQP516

RQP520

RQP524

RQP532

Black, oil resistant synthetic rubber.

REINFORCEMENT:

RQP5 - SURVIVOR POLYESTER COVER HOSE

HOSE SIZE

Dash

-04

-05

-06

-08

-10

-12

-16

-20

-24

-32

DN

5

6

8

10

12

16

22

28

35

46

Polyester inner braid covered with one braid of high tensile steel wire.

NOMINAL

HOSE OD

inch

0.52

0.58

0.68

0.76

0.92

1.08

1.24

1.50

1.75

2.22

mm

13,2

14,8

17,2

19,4

23,4

27,4

31,4

38,1

44,5

NOMINAL

HOSE ID

3/16

1/4

5/16

1/2

5/8

7/8

1.1/8

45,0 1.13/16 56,3

32,0 1.3/8

10,3 13/32

mm inch

4,8

6,4

7,9

12,7

15,9

22,2

31,0

MAXIMUM

WORKING

PRESSURE

psi

3050

3050

2250

2000

1750

1500

800

625

500

350

bar

210

210

155

138

121

103

55

43

35

24

MINIMUM

BURST

PRESSURE

psi

12200 75

12200

8000

7000 140

6000 165

3200 187

2500

2000 267

1400 337

9000 100

bar

840

840

620

552

484

414

221

172

140

98



RYCO RQP5

Blue polyester braid. Skiving of cover is not required.

Lloyd's Register

MSHA - FLAME RESISTANCE:

GL

DN

Meets Flame Resistant Designation "U.S. MSHA" of the US Department of Labor, Mine Safety and Health Administration and Flame Resistant requirements of Australian Standard AS 2660 and Method of Test AS 1180.10B when used with FS1072 Fire Sleeve.

TEMPERATURE RANGE:

From -40°C to +150°C (-40°F to +302°F).

**Not suitable for use with aerospace type phosphate esters such as Monsanto Skydrol 500B, Stauffer Aero-Safe 2300W and Chevron Hy-jet IV.

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

THIRD PARTY APPROVALS:

VOOD

MINIMUM

BEND R

SAEJ1402

inch

2.0

2.5

3.0

3.5

4.0

4.5

mm

51

64

76

89

102

114

MED and USCG - Hydraulic and Fuel Systems, DoT .

0,23

0,26

0,30

0.36

0,53

0,65

0,63

0.90

1,00

1,48

inHg mmHg kg/m lb/ft

710

710

710

710

710

710

510

510

380

280

0.15

0.17

0.20

0.24

0.36

0.44

0.42

0.60

0.67

0.99

COUPLINGS:

MINIMUM

BEND R

SAE100R5

inch

3.0

3.3

4.0

4.6

5.5

6.5

7.4

9.0

10.5

13.3

mm

85

117

229



BITELOK NON-SKIVE ONE-PIECE CRIMP T4000 Series (Sizes -04 to -20)

FIELD ATTACHABLE NON-SKIVE 6000 Series (Sizes -04 to -32) V000 Seri

28

28

28

28

28

28

20

20

15

11

00 Series	s (sizes -04	to -32)	
) (Hg	Ŵ	đ	
		T4000	6000 VOO
VACUUM RATING	AVERAGE WEIGHT	ONE PC CPLG	FIELD CPLG

N

T4

T4

T4000

T4000

T4000

T4000

T4000

T4000

000	6000 VO
E PC PLG	FIELD CPLG
ION-	SKIVE
ION- 000	SKIVE V000

V000

V000

V000

V000

V000

V000

V000

V000

Б С

*IMPORTANT NOTE: MAXIMUM WORKING PRESSURE and MINIMUM BURST PRESSURE shown above relate to SAE 100R5 specifications and hose used in non-Air Brake applications. For Air Brake applications, SAE J1402 Type All Air Brake Hose specification requires Minimum Burst Pressure 900 psi (62,1 bar) and Proof Pressure of 300 psi (20,7 bar) for all sizes, and reduced Minimum Bend Radii as shown above. RQP54 to RQP512 comply with SAE J1402 Minimum Bend Radius at SAE J1402 pressures, and SAE 100R5 Minimum Bend Radius at SAE 100R5 working pressures.

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

NTRODUCTION

CLAMPS

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HOSE RUBBER - SPECIALTY

RQP6

SPECIALTY

SURVIVOR™ PUSH-ON HIGH TEMPERATURE ONE TEXTILE BRAID HOSE

RECOMMENDED FOR:

Hydraulic oil lines, transmission oil cooler lines, glycol antifreeze solutions, water, diesel fuels and air.

PERFORMANCE:

Meets or Exceeds the Performance Requirements of: AS 3791 100R6, DIN 20021-1TE, ISO 4079 Type 1, SAE 100R6.

TUBE:

Black, oil resistant synthetic rubber.

REINFORCEMENT:

One textile braid.

COVER:

Blue, oil resistant and abrasion resistant synthetic rubber.

MSHA - FLAME RESISTANCE:

Meets Flame Resistance Designation "U.S. MSHA" of the US Department of Labor, Mine Safety and Health Administration. Complies with Flame Resistant requirement of Australian Standard AS 2660 and Method of Test AS 1180.10B.

TEMPERATURE RANGE:

Petroleum base hydraulic oils and transmission oils:

 -40° C to $+135^{\circ}$ C (-40° F to $+275^{\circ}$ F) constant, and up to $+150^{\circ}$ C ($+302^{\circ}$ F) intermittent (up to 10% of operating time).

Air: -40°C to +100°C (-40°F to +212°F) **Diesel fuels:** -40°C to +71°C (-40°F to +160°F).

WORKING PRESSURE:

RAD RODE -

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

RQP6 Hose, and 800 Series Push-On Fittings, are recommended for use in systems with Static Working Pressures (constant loads without pressure spikes) only. They are not recommended for vibration or pressure surge applications. RQP6 Hose should not be used at both maximum working pressure and maximum temperature simultaneously.

TOLERANCES:

RYCO specification.

COUPLINGS:



BITELOK NON-SKIVE ONE-PIECE CRIMP T4000 Series (Sizes -04 to -12)



8000 SERIES PUSH-ON

RQP6 Hose simply pushes on to 800 Series Couplings, and for Static Working Pressures up to 50% of Maximum Static Working Pressures a clamp is not required. For diesel fuel and other potentially dangerous, or critical applications such as transmission oil cooler lines, and for Static Working Pressures above 50% of maximum; a clamp around the hose is required. Do not overtighten the clamp as this will damage the hose. Factory crimped couplings are also available in some sizes.

HIGH T	RQP6 - SURVIVOR HIGH TEMPERATURE PUSH ON HOSE		ATURE DSE				MINI)) Мим	MINI	мим)	(Нд	V	V	T4000	00 0			
PART N	PART NO HOSE SIZI		SIZE		NOMINAL HOSE ID		INAL E OD	WORKING PRESSURE		BURST PRESSUR		BE		VAC Rat		AVER WEI	RAGE GHT	ONE PC CPLG	PUSH ON CPLG
Hose		DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	inHg	mmHg	kg/m	lb/ft	NON-SK	
RQP6	4	6	-04	6,4	1/4	12,3	0.48	28	410	112	1640	65	2.5	710	28	0,12	0.08	T4000	8000
RQP6	5	8	-05	7,9	5/16	13,9	0.55	28	410	112	1640	75	3.0	710	28	0,14	0.09	T4000	8000
RQP6	б	10	-06	9,5	3/8	15,5	0.61	28	410	112	1640	75	3.0	635	25	0,17	0.11	T4000	8000
RQP6	8	12	-08	12,7	1/2	19,0	0.75	28	410	112	1640	100	4.0	460	18	0,22	0.15	T4000	8000
RQP61	0	16	-10	15,9	5/8	22,6	0.89	24	350	96	1400	125	5.0	380	15	0,29	0.19	T4000	8000
RQP61	2 20 -12 19,1 3/4		3/4	25,8	1.02	21	305	84	1220	150	6.0	380	15	0,34	0.23	T4000	8000		
Cutting and	d Assei	nbly Ch	narges ap	oply to a	all RYCO	industr	ial hoses	s, and va	ary by h	ose type	es and si	zes. Cor	ntact RY	CO for a	dditiona	al inform	nation o	r visit www.R	YCO.com.au.



HOSE

COUPLINGS



WGP

SPECIALTY

Ityco WGP

RYCO GREASE PROOF HOTWASH

RECOMMENDED FOR:

An excellent hot washdown hose suitable to be used in most food processing plants ie dairy, meat, poultry, confectionery etc.

TUBE:

White NBR.

REINFORCEMENT:

Textile reinforced.

COVER:

Fat resistant White NBR.

FEATURES:

Heavy Duty multi-purpose hotwash with a fat resistant cover.

TEMPERATURE RANGE:

From -20°C to +90°C (-4°F to 194°F).

WORKING PRESSURE:

Maximum working pressures are based on a 3:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20 or 60 Metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:

NOTE: Any assemblies manufactured would be rated to the lesser working pressure of either the Hose, Fittings and Clamping method used.





	WGP P HOTWAS	я	,C		\square		\bigcirc		Ø				W	
PART NO	HOSE	E SIZE		INAL E ID		INAL E OD	WOR	MUM KING SURE	BU	MUM RST SURE	BE	MUM ND DIUS		RAGE GHT
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft
WGP8	12	-08	12,7	1/2	21.9	0.86	21	300	62	900	75	2.9	0,39	0.26
WGP12	19	-12	19,1	3/4	30.2	1.20	21	300	62	900	114	4.5	0,7	0.47
WGP16	25	-16	25,4	1	38.0	1.49	21	300	62	900	150	5.9	1,2	0.80

HOSE RUBBER - SPECIALTY

T1F

SPECIALTY

FIRE SUPPRESSION ONE WIRE BRAID HOSE

- RYCO T1F FIRE SUPPRESSION



RECOMMENDED FOR:

Use in Fire Suppression Systems of off-road vehicles, mining equipment, stationary engines, etc. The hose is coloured red, for easy identification as part of the Fire Suppression System.

STANDARDS MET OR EXCEEDED:

Meets or Exceeds the Performance Requirements of: AS 3791 100R1AT, DIN 20022-1SN, EN 853 Type 1SN, ISO 1436 Types R1AT and 1SN, SAE 100R1AT.

TUBE:

Black, oil resistant synthetic rubber. Resistant to aqueous film forming foam, dry chemical powder, carbon dioxide, and water-based fire extinguishing agents.

REINFORCEMENT:

One braid of high tensile steel wire.

COVER:

Red, heat resistant, abrasion resistant and oil resistant rubber. Flame Resistant to Australian Standard AS 2660 and U.S. MSHA requirements. Highly visible layline branding for easy and permanent identification. No skiving required with T2000 Series BITELOK Crimp Couplings and K000 Series Field Attachable Couplings.

FRAS - FLAME RESISTANCE AND ANTI-STATIC:

Complies with Flame Resistant requirements of Australian Standard AS 2660 and Method of Test AS 1180.10B Meets Flame Resistant Designation "U.S. MSHA" of the US Department of Labor, Mine Safety and Health Administration.

TEMPERATURE RANGE:

From -40°C to +100°C (-40°F to +212°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20 or 60 Metre.

TOLERANCES:

RYCO specification.

COUPLINGS:



BITELOK NON-SKIVE ONE-PIECE CRIMP

T2000 Series (sizes -03 to -16)

ONE PIECE CRIMP T2000



ATTACHABLE 6000 SERIES K000 FIELD ATTACHABLE NON-SKIVE 6000 Series insert (sizes -03 to -16) K000 Series ferrule (sizes -03 to -16)

For coupling specifications and assembly instructions see the latest RYCO Product Technical Manual - Hydraulics and the latest Crimp Chart on our website **www.RYCO.com.au**.

T1F - FIRE S NON-SK			\square			\bigcirc	Ç	\bigcirc	Ç	Ĭ	ſ	ЭĴ	د ۷	v	æ	
PART NO	HOSE	SIZE		INAL SE ID	NOM HOS	INAL E OD	WOR	MUM KING SURE	BU	MUM RST SURE	BE	MUM ND DIUS	AVEF WEI		T2000 ONE PIECE COUPLING	6000 K000 FIELD ATT COUPLING
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-	SKIVE
T13F	5	-03	4,8	3/16	11,7	0.46	250	3600	1000	14500	89	3.5	0,19	0.13	T2000	6000 (K000)
T14F	6	-04	6,3	1/4	13,3	0.52	225	3250	900	13000	100	3.9	0,22	0.15	T2000	6000 (K000)
T15F	8	-05	7,9	5/16	14,9	0.59	215	3100	860	12400	114	4.5	0,25	0.17	T2000	
T16F	10	-06	9,5	3/8	17,3	0.68	180	2600	720	10400	127	5.0	0,31	0.21	T2000	6000 (K000)
T18F	12	-08	12,7	1/2	20,3	0.80	160	2300	640	9200	178	7.0	0,39	0.26	T2000	6000 (K000)
T110F	16	-10	15,9	5/8	23,6	0.93	130	1900	520	7600	200	7.9	0,49	0.33	T2000	6000 (K000)
T112F	19	-12	19,1	3/4	27,6	1.09	105	1500	420	6000	240	9.5	0,62	0.41	T2000	6000 (K000)
T116F	25	-16	25,4	1	35,5	1.40	90	1300	360	5200	300	11.8	0,90	0.60	T2000	6000 (K000)
Cutting and A	Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au .															





EYC8 WT

ITW BOYE

RYCO TWINWELD RED AND BLUE

RECOMMENDED FOR:

Welding purposes.

TUBE: Black SBR/NBR.

REINFORCEMENT:

High tensile synthetic yarn.

COVER:

Extruded red/blue EPDM/SBR - abrasion and ozone resistant.

FEATURES:

Excellent UV and abrasion resistant cover, with very good minimum bend radius charicteristics.

TEMPERATURE RANGE:

From -30°C to +80°C (-22°F to 176°F).

WORKING PRESSURE:

Maximum working pressures are based on a 3:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS: 100 Metre.

TOLERANCES:

Refer to the Rubber Hose Manufacturing Tolerances listed in the Technical Section on page 253.

COUPLINGS:

Approved Oxy and Acetylene fittings.

NOTE: Any assemblies manufactured would be rated to the lesser working pressure of either the Hose, Fittings and Clamping method used.



TECHNICAL



Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

INTRODUCTION

HOSE

COUPLINGS

HOSE PVC - AIR/WATER

PFAW/T

AIR/WATER RYCO FRAS AIR/WATER DELIVERY

SINGLE OR TWIN

INCO PFAW FRAS AIR/WATER

RECOMMENDED FOR:

Underground air and water mining hose. RYCO PFAWT is also ideal for rockbolting. Fire resistant anti-static hose with unique 3 layer construction that offers optimum performance and handling characteristics.

RYCO PFAWT is a fire resistant anti-static twin hose with 12.5mm and 25 mm hoses permanently coupled together as one hose. Each hose has a unique 3 layer construction that offers optimum performance and handling characteristics.

STANDARDS MET OR EXCEEDED:

Manufactured to AS 2660 Class A (1991) and AS/NZS 2554 Class A.

TUBE:

Black flexible FRAS PVC.

REINFORCEMENT:

High strength synthetic braids.

COVER:

Yellow flexible PVC with two black FRAS strips.

FEATURES:

Fire resistant anti static hose with unique 3 layer construction that offers optimum performance and handling characteristics.

NOTE: PFAWT Twin Hose combines a PFAW 1/2 inch and PFAW 1 inch hose.

FRAS - FLAME RESISTANCE AND ANTI-STATIC:

Complies with Flame Resistant and Electrical Resistance (Anti-Static) requirements of Australian Standard AS 2660 and Methods of Test AS 1180.10B and 13A. Meets Flame Resistant Designation "U.S. MSHA" of the US Department of Labor, Mine Safety and Health Administration.

TEMPERATURE RANGE:

From 0°C to +50°C (32°F to 122°F).

WORKING PRESSURE:

Maximum working pressures are based on a 4:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20, 30, or 100 Metre.

TOLERANCES:

Available on request.

COUPLINGS:

NOTE: Crimped assemblies must be Tested and Certified before use.

		Н	Ð		
CLAW TYPE COUPLINGS WITH SAFETY COLLARS	> 300 PSI HOSE TAIL COUPLINGS	<1000 PSI HOSE TAIL HIGH PRESSURE	2 BOLT CLAMPS W/ SAFETY CLAWS	HEAVY DUTY BOLT CLAMPS W/ SAFETY CLAWS	USE ONLY APPLICATION APPROVED FITTING

	PFAW/T FRAS HOSE		IO			\bigcirc		\bigcirc		Ž	Ŵ	
PART NO	PART NO HOSE SIZE		NOMINAL HOSE ID		NOMINAL HOSE OD		MAXIMUM WORKING PRESSURE		MINIMUM BURST PRESSURE		AVERAGE WEIGHT	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	kg/m	lb/ft
PFAW6	10	-06	9,5	3/8	18,0	0.71	21	305	84	1220	0,25	0.17
PFAW8	12	-08	12,7	1/2	20,9	0.82	21	305	84	1220	0,26	0.17
PFAW12	19	-12	19,1	3/4	29,4	1.16	21	305	84	1220	0,58	0.40
PFAW16	25	-16	25,4	1	34,8	1.37	21	305	84	1220	0,71	0.48
PFAW24	38	-24	38,1	1.1/2	48,8	1.92	21	305	84	1220	1,19	0.80
PFAW32	51	-32	50,8	2	62,4	2.46	21	305	84	1220	1,80	1.21
PFAWT0816	12 25	-0816	12,7 25,4	1/2 1	20,9 34,8	0.82 1.37	21	305	84	1220	1,51	1.01
Cutting and Assem	Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.											



PAW

AIR/WATER **RYCO AIR/WATER** YELLOW/BLUE

INCO PAW AIR/WATER

HOSE

RECOMMENDED FOR:

Suitable for general purpose air and water supply. Also suitable for the conveyance of liquids, gases and many chemicals. Ideal for High Pressure air lines and compressors.

General purpose air and water hose with a highly distinctive yellow and blue stripes, optimum flexibility, resilience and kink resistance.

STANDARDS MET OR EXCEEDED:

Exceeds AS/NZS 2554 Class B for burst pressure, wall thickness, abrasion resistance, weathering resistance, low temperature flexibility, ozone resistance and bond strength.

TUBE: Black PVC.

REINFORCEMENT:

Textile braid.

COVER:

Yellow/blue PVC.

FEATURES:

Good flexibility and kink resistance. Good oil and chemical resistance. Excellent abrasion and UV resistance Exceeds AS 2554 Class B. Very visible smooth cover.

TEMPERATURE RANGE:

From 0°C to +50°C (+32°F to 122°F)

WORKING PRESSURE:

Maximum working pressures are based on a 4:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20, 30, or 100 Metre and Reels.

TOLERANCES:

Available on request.

COUPLINGS:

	F	<u> </u>	\bigcirc	\bigcirc	\bigcirc
CLAW TYPE COUPLINGS WITH SAFETY COLLARS	>300 PSI HOSE TAIL COUPLINGS	CAMLOCK COUPLINGS	WORM DRIVE CLAMPS	BOLT CLAMPS W/ OR W/ OUT SAFETY CLAWS	BAND CLAMPING SYSTEMS

	Q T P			
300 PSI DSE TAIL UPLINGS	CAMLOCK COUPLINGS	WORM DRIVE CLAMPS	BOLT CLAMPS W/ OR W/ OUT SAFETY CLAWS	B CLA SY

	PAW AIR/WATEI LOW/BLUE	२			Ç	\mathbf{O}	Ç	Ì	V	۲ V		
PART NO HOSE SIZE		NOMINAL HOSE ID		NOMINAL HOSE OD		MAXIMUM WORKING PRESSURE		MINIMUM BURST PRESSURE		AVERAGE WEIGHT		
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	kg/m	lb/ft
PAW4	6	-04	6,4	1/4	12,8	0.50	20	290	80	1160	0,13	0.09
PAW5	8	-05	7,9	5/16	14,8	0.58	20	290	80	1160	0,16	0.11
PAW6	10	-06	9,5	3/8	16,6	0.65	20	290	80	1160	0,17	0.11
PAW8	12	-08	12,7	1/2	19,3	0.76	20	290	80	1160	0,19	0.13
PAW12	19	-12	19,1	3/4	29,0	1.14	16	230	64	920	0,45	0.30
PAW16	25	-16	25,4	1	34,6	1.36	16	230	64	920	0,62	0.42
PAW20	31	-20	31,8	1.1/4	42,9	1.69	16	230	64	920	1,15	0.77
PAW24	38	-24	38,1	1.1/2	50,6	1.99	16	230	64	920	1,56	1.05
PAW32	51	-32	50,8	2	63,0	2.48	16	230	64	920	2,40	1.61

CONNECTING PARTNERSHIPS

HOSE PVC - AIR HOSE ASSEMBLY



PAW PVC AIR HOSE ASSEMBLIES WITH RYCO 200, 200S AND 400 SERIES AIRLINE FITTINGS

INCO PAW AIR/WATER

PVC SAFETY FITTED AIR HOSE ASSEMBLIES

AS/NZS 2554 Class B for optimum performance

20 BAR/290 PSI

LOW TEMP FLEXIBILITY KINK RESISTANT HIGH BURST PRESSURE ABRASION RESISTANT

- Fitted with safety adaptors to reduce noise and avoid dangerous hose whip when disconnecting the hose.
- RYCO quality connection couplings.
- Swaged end crimps for secure clamping.
- Yellow safety stripe and safety fittings for improved OH&S.

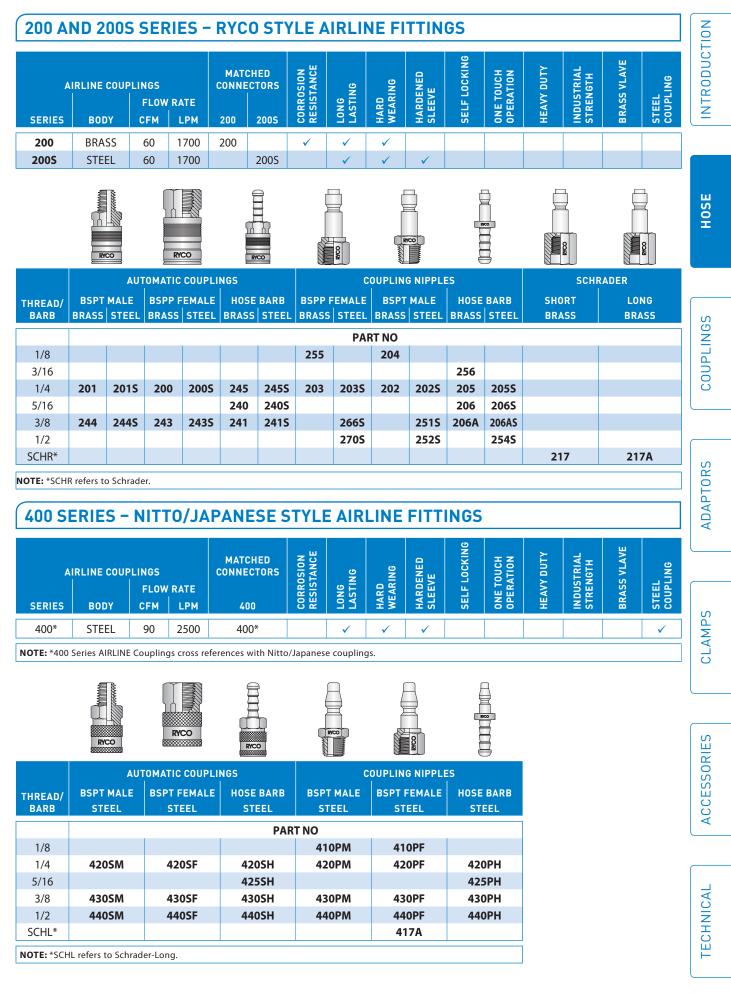
PART NUMBER	DESCRIPTION
PAW6-10M-HA2	-06 3/8" RYCO PVC Air Hose fitted with Type 200 (RYCO Style) Safety Fittings in 10 metre assembly
PAW6-20M-HA2	-06 3/8" RYCO PVC Air Hose fitted with Type 200 (RYCO Style) Safety Fittings in 20 metre assembly
PAW6-10M-HA4	-06 3/8" RYCO PVC Air Hose fitted with Type 400 (NITTO/Japanese Style) Safety Fittings in 10 metre assembly
PAW6-20M-HA4	-06 3/8" RYCO PVC Air Hose fitted with Type 400 Safety (NITTO/Japanese Style) Fittings in 20 metre assembly

VC SAFE

NOTE: Other custom length hose assemblies are made against specific customer orders that meet our Minimum Order Terms and Conditions. Please refer to your RYCO Customer Service representative for details.



PVC - AIR HOSE ASSEMBLY



HOSE **PVC - AIR/WATER**

PCW

AIR/WATER

RYCO COLD WASHDOWN

RYCO PCW COLD WASHDOWN

RECOMMENDED FOR:

All commercial parks, gardens and turf watering applications. Ideal as a general cold water wash-down hose in cattle yards and dairies.

Highly flexible premium hose for watering parks and gardens. With high visibility and two distinctive blue stripes, it is kink, burst and UV light resistant.

TUBE:

Black PVC.

REINFORCEMENT:

Textile braid.

COVER: White PVC.

FEATURES:

Good flexibility and kink resistance. General purpose chemical resistance. Excellent abrasion and UV resistance. Excellent washdown and ideal for mobile sprinkler use. Very visible ribbed cover.

TEMPERATURE RANGE:

From -5°C to +55°C (23°F to +131°F).

WORKING PRESSURE:

Maximum working pressures are based on a 4:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20, 30, 60, 80 or 100 Metre and Reels.

TOLERANCES:

Available on request.

COUPLINGS:



BOLT CLAMPS W/ OR W/ OUT SAFETY CLAWS

RYCO COI	PCW RYCO COLD WASHDOWN				\bigcirc	\bigcirc		Ø		Ŵ		
PART NO	HOSE	SIZE		INAL E ID	NOM Hos	INAL E OD	WOR	MUM KING SURE	MINI BUI PRES	RST	AVEF WEI	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	kg/m	lb/ft
PCW8	12	-08	12,7	1/2	19.0	0.75	10	145	40	580	0.22	0.15
PCW12	19	-12	19,1	3/4	26.5	1.04	10	145	40	580	0.40	0.27
PCW16	25	-16	25,4	1	34.0	1.34	10	145	40	580	0.58	0.40
PCW20	31	-20	31,8	1.1/4	42.0	1.65	10	145	40	580	0.85	0.57
PCW24	38	-24	38,1	1.1/2	49.5	1.95	10	145	40	580	1.11	0.75

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.



HOSE

COUPLINGS

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MDW/MDWH

AIR/WATER

RYCO MINE DEWATERING RYCO MINE DEWATERING HD LAYFLAT

RECOMMENDED FOR:

High Pressure Heavy Duty mine dewatering.

TUBE: Polyurethane.

Folyurethane.

REINFORCEMENT:

Polyester woven jacket.

COVER:

Polyurethane.

FEATURES:

Ultra tough layflat. Maximum abrasion and excellent chemical resistance. Excellent UV resistance. Smooth bore for minimal friction loss. Light weight. Suitable for air/water/slurries. Long lengths of 100 metres+ available on request.

TEMPERATURE RANGE:

From -40°C to 70°C (-40°F to 178°F).

WORKING PRESSURE:

Maximum working pressures are based on a 2:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

100 Metre.

TOLERANCES:

Available on request.

COUPLINGS:

For MDW;

MF

> 300 PSI HOSE TAIL COUPLINGS



For MDWH;

Г П _н р		
<1000 PSI HOSE TAIL HIGH PRESSURE	COMBINATION HOSE NIPPLES	

HD EAVY DUTY ILT CLAMPS V/SAFETY CLAWS

BAND AMPING YSTEMS

MDW/MDWH Ĩ DEWATERING LAYFLAT NOMINAL HOSE ID MAXIMUM MINIMUM WORKING PRESSURE PART NO **HOSE SIZE BURST PRESSURE** DN Dash inch bar Hose mm bar psi psi -24 38,0 1.1/2 19 38 MDW24 38 275 560 **MDW32** 45 51 -32 51,0 2 22 320 660 MDW40 63 -40 63,5 2.1/2 20 290 41 600 17 **MDW48** 75 -48 76,0 3 250 35 510 MDW56 89 89,0 3.1/2 17 250 35 510 -56 MDW64 100 -64 102.0 4 16 230 33 480 4.1/2 40 **MDW80** 115 -80 114,3 20 290 590 MDW96 150 -96 152,4 6 14 200 27 400 **MDW128** 200 -128 203,0 8 13 190 25 350 MDWH32 51 -32 51,0 2 27 390 54 780 75 3 MDWH48 -48 76,0 27 390 54 780 MDWH64 100 102,0 4 25 360 50 720 -64 MDWH96 150 -96 44 152,4 6 22 320 640 **MDWH128** 200 -128 203,0 8 18 260 35 510 Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

CONNECTING PARTNERSHIPS

HOSE PVC - AIR/WATER

PLB

AIR/WATER

RYCO LAYFLAT BLUE

RECOMMENDED FOR:

Suitable for irrigation or drainage, washdown, water supply for construction sites or general dewatering.

TUBE: PVC compound.

REINFORCEMENT:

High strength yarn.

FEATURES:

UV stabilised and medium abrasion resistance. Suitable for general purpose pump delivery applications construction, councils, plumbers etc. Excellent for market garden irrigation applications. Minimal snaking while under pressure.

Good external cover protection over general hoses.

TEMPERATURE RANGE:

From -20°C to +55°C. (-4°F to +131°F).

COIL LENGTHS:

100 metre.
TOLERANCES:

Available on request.

COUPLINGS:

		<u> </u>		\bigcirc	¢	\bigcirc
>150 PSI HOSE TAIL COUPLINGS	COMBINATION HOSE NIPPLES	CAMLOCK COUPLINGS	IRRIGATION COUPLINGS	WORM DRIVE CLAMPS	BOLT CLAMPS W/ OR W/ OUT SAFETY CLAWS	BAND CLAMPING SYSTEMS

PLB RYCO LAYFLAT BLUE			I	\bigcirc	\square	\supset	Ç	\mathbf{O}	Ŵ	
PART NO	HOSE	SIZE		NOMINAL HOSE ID		NOMINAL HOSE OD		MUM PRESSURE	AVERAGE WEIGHT	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	kg/m	lb/ft
PLB16	25	-16	25	1	28,0	1.10	7	100	0,16	0.11
PLB20	32	-20	32	1.1/4	35,0	1.38	7	100	0,20	0.13
PLB24	40	-24	40	1.1/2	42,5	1.67	5	73	0,20	0.13
PLB32	50	-32	50	2	52,6	2.07	4.5	65	0,27	0.18
PLB40	65	-40	65	2.1/2	68,0	2.68	4	58	0,38	0.25
PLB48	75	-48	75	3	78,4	3.08	3.5	58	0,53	0.35
PLB64	100	-64	100	4	103,5	4.07	3	58	0,70	0.47
PLB80	125	-80	125	5	128,7	5.07	3	44	0,93	0.62
PLB96	150	-96	150	6	153,9	6.06	3	44	1,17	0.78
PLB128	200	-128	200	8	204,4	8.05	3	44	1,78	1.19
PLB160	250	-160	250	10	255,3	10.05	2.5	36	2,65	1.78
PLB192	300	-192	300	12	305,0	12.01	2	30	2,91	1.95
PLB224	350	-224	350	14	355,0	13.98	2	30	3,65	2.45
PLB256	400	-256	400	16	405,4	15.96	2	30	4,28	2.87



PLR

AIR/WATER

RYCO LAYFLAT RED HEAVY DUTY

INTRODUCTION

TECHNICAL

HIGHER TECHNOLOGY EQUALS GREATER PERFORMANCE 89

RECOMMENDED FOR:

Dewatering pits, building sites, dams, mines and guarries. Also suitable for pumping more abrasive slurries.

TUBE:

PVC compound.

REINFORCEMENT:

High strength yarn.

COVER:

PVC compound.

FEATURES:

UV stabilised and medium abrasion resistance. Suitable for general purpose pump delivery applications construction, councils, plumbers etc. Excellent for market garden irrigation applications.

Minimal snaking while under pressure.

Good external cover protection over general hoses.

TEMPERATURE RANGE:

From -20°C to +55°C. (-4°F to +131°F).

COIL LENGTHS:

100 metre.

TOLERANCES:

Available on request.

COUPLINGS:

		<u> </u>		\bigcirc	\bigcirc	\bigcirc
>300 PSI HOSE TAIL COUPLINGS	COMBINATION HOSE NIPPLES	CAMLOCK COUPLINGS	IRRIGATION COUPLINGS	WORM DRIVE CLAMPS	BOLT CLAMPS W/ OR W/ OUT SAFETY	BAND CLAMPING SYSTEMS

PLR RYCO LAYFLAT RED HEAVY DUTY		I	\bigcirc		\bigcirc	C C	\mathcal{D}	W		
PART NO	HOSE	SIZE	NOM HOS		NOMINAL HOSE OD		MAXIMUM WORKING PRESSURE		AVERAGE WEIGHT	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	kg/m	lb/ft
PLR24	40	-24	40	1.1/2	45,8	1.80	10	150	0,29	0.19
PLR32	50	-32	50	2	54,1	2.13	10	150	0,42	0.28
PLR40	65	-40	65	2.1/2	69,3	2.73	10	150	0,54	0.36
PLR48	75	-48	75	3	79,5	3.13	9	130	0,66	0.44
PLR64	100	-64	100	4	105,1	4.14	9	130	1,00	0.67
PLR96	150	-96	150	6	155,9	6.14	7	100	1,68	0.13
PLR128	200	-128	200	8	205,9	8.11	5	75	2,20	1.48

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

HOSE PVC - AIR/WATER

PFR

AIR/WATER

FIRE REEL

RYCO PFR FIRE REEL

RECOMMENDED FOR:

Stationary or mobile hose reels in fire control systems located in commercial or public buildings. Also an excellent general purpose water delivery hose.

The hose is lightweight, flexible, resistant to UV light and has self-extinguishing properties.

STANDARDS MET OR EXCEEDED:

Manufactured to AS/NZS 1221.

TUBE:

Smooth black PVC.

REINFORCEMENT:

Textile.

COVER: Ribbed black PVC.

FEATURES:

Light weight and flexible General Purpose PVC water hose. Ribbed cover for good abrasion resistance. Good UV resistance. Excellent range of standard coil lengths. Excellent PVC Fire Reel hose.

TEMPERATURE RANGE:

From 0°C to 50°C (+32°F to +122°F).

WORKING PRESSURE:

Maximum working pressures are based on a 4:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20, 30, 36, 50 or 100 Metre.

TOLERANCES:

Available on request.

COUPLINGS:



FII	PFR RE REEL				NOM		MAX					
PART NO	HOSE	SIZE		EID		E OD		SURE		SURE	WEI	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	kg/m	lb/ft
PFR12	19	-12	19,1	3/4	26,0	1.02	10	145	40	580	0,36	0.24
PFR16	25	-16	25,4	1	34,2	1.35	10	145	40	580	0,45	0.30

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.



INTRODUCTION

PGPW

AIR/WATER **RYCO GENERAL PURPOSE**

WATER

RECOMMENDED FOR:

General domestic and commercial use.

A premium quality, Higher Pressure Heavy Duty garden hose with excellent flexibility and kink resistance. With its higher quality construction and excellent resistance to UV light, the hose can be expected to give outstanding service for many years.

TUBE:

Smooth translucent (green) flexible PVC.

REINFORCEMENT:

Textile braid.

COVER:

Smooth translucent flexible PVC.

FEATURES:

Excellent general purpose water hose. Premium long lasting garden hose. Excellent flexibility and kink resistance.

Excellent UV and abrasion resistance.

Excellent for water supply to concrete cutting equipment.

TEMPERATURE RANGE:

From -20°C to +55°C (-4°F to +131°F).

ILYCO PGPW GENERAL PURPOSE WATER

WORKING PRESSURE:

Maximum working pressures are based on a 4:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20, 30 or 100 Metre.

TOLERANCES:

Available on request.

COUPLINGS:

		\bigcirc	\bigcirc	\bigcirc		
>150 PSI HOSE TAIL COUPLINGS	CLAW TYPE COUPLINGS WITH SAFETY COLLARS	WORM DRIVE CLAMPS	BOLT CLAMPS W/ OR W/ OUT SAFETY CLAWS	BAND CLAMPING SYSTEMS	PVC/METAL NOZZLE	WASHDOWN NOZZLE

RYCO GEN	PGPW ERAL PUR WATER	POSE	Ĩ	\bigcirc		\bigcirc	Ç	\bigcirc	Ç	Ì	Í V	~ ∨
PART NO	HOSI	E SIZE		INAL E ID		INAL E OD	WOR	IMUM KING SURE	MINI BUI PRES		AVEF WEI	RAGE GHT
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	kg/m	lb/ft
PGPW8	12	-08	12,7	1/2	16,5	0.65	8	120	32	480	0,22	0.15
PGPW12	19	-12	19,1	3/4	24,5	0.96	8	120	32	480	0,32	0.21
PGPW16	25	-16	25,4	1	31,0	1.22	8	120	32	480	0,40	0.27

HOSE PVC - AIR/WATER

PSG

AIR/WATER

RYCO GREY GP WATER SUCTION AND DELIVERY

RECOMMENDED FOR:

A tough, flexible and easy to handle suction and delivery hose for the transfer of water, slurry, sludge, waste matter, sand and gravel and general purpose applications.

TUBE AND COVER:

Flexible PVC.

REINFORCEMENT:

Rigid PVC spiral.

FEATURES:

25% more flexible than standard Heavy Duty Grey Suction hose.

Excellent abrasion resistance.

Suitable for some chemical applications.

Ideal construction site and plumbers Heavy Duty PVC Suction Hose.

TEMPERATURE RANGE:

From -5°C to 60°C (+23°F to +140°F).

COIL LENGTHS:

PSG

IYC0

20 Metre.

TOLERANCES: Available on request.

COUPLINGS:





CAMLOCK

P GREY GP WA	SG TER SUC	TION	IC.	\bigcirc		\bigcirc	Ć	\mathbf{O}	ſ.	\searrow		(Hg	Ń	2 V
PART NO	HOSE	SIZE	NOM HOS		NOM HOSI		WOR	MUM KING SURE	BE	MUM ND)IUS	VACU RAT ଜ 20	ING	AVEF WEI	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	mm	inch	mmHg	inHg	kg/m	lb/ft
PSG16	25	-16	25,4	1	31,4	1.24	7	100	90	3.5	760	30	0,36	0.24
PSG20	31	-20	31,8	1.1/4	38,6	1.52	7	100	120	4.7	760	30	0,49	0.33
PSG24	38	-24	38,1	1.1/2	45,6	1.79	6	85	150	5.9	760	30	0,61	0.41
PSG28	44	-28	44,5	1.3/4	52,6	2.07	6	85	180	7.1	760	30	0,81	0.54
PSG32	51	-32	50,8	2	59,6	2.35	5	70	200	7.9	760	30	1,00	0.67
PSG40	63	-40	63,5	2.1/2	73,3	2.88	5	70	250	9.8	760	30	1,27	0.85
PSG48	76	-48	76	3	88,0	3.46	4	55	330	13.0	760	30	2,03	1.36
PSG64	102	-64	101,6	4	116,0	4.57	4	55	470	18.5	760	30	2,98	2.00
PSG80	127	-80	127,0	5	142,0	5.59	4	55	590	23.2	760	30	3,65	2.45
PSG96	152	-96	152,4	6	170,0	6.69	4	55	800	31.5	760	30	5,10	3.43

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.



PAS

CHEMICAL/ACID

RYCO AGRI CHEM SPRAY

RYCO PAS AGRI CHEM SPRAY

CLAMPS

RECOMMENDED FOR:

Transferring diluted weedicides, pesticides in general agricultural and horticultural applications.

A general purpose agricultural spray and chemical hose for Medium Pressures. Lower cost but still has superior resistance to solvents and longer life.

TUBE:

PVC Nitrile.

REINFORCEMENT:

Textile braid reinforcement.

PAS

RYCO AGRI CHEM SPRAY

DN

10

12

19

25

HOSE SIZE

Dash

-06

-08

-12

-16

COVER:

PVC Nitrile.

FEATURES:

PART NO

Hose

PAS6

PAS8

PAS12

PAS16

Low cost. Superior resistance to solvents. Long life. Excellent flexibility and kink resistance. Suitable for most pest control applications.

TEMPERATURE RANGE:

From 0°C to +50°C (+32°F to 122°F).

WORKING PRESSURE:

Maximum working pressures are based on a 4:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

PAS6 - PAS8: 30, 100, 200 Metre. PAS12 - PAS16: 30, 100 Metre.

TOLERANCES:

Available on request.

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MAXIMUM

WORKING

PRESSURE

psi

305

305

305

305

bar

21

21

21

21

COUPLINGS:

 $\overline{\mathbb{O}}$

NOMINAL

HOSE OD

inch

0.64

0.75

1.08

1.39

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

mm

16,4

19,0

27.5

35,4

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NOMINAL

HOSE ID

mm

9,5

12,7

19.1

25,4

inch

3/8

1/2

3/4

1

	ss	\bigcirc	\bigcirc	\bigcirc	
>300 PSI HOSE TAIL COUPLINGS	STAINLESS STEEL HOSE TAIL COUPLINGS	HEAVY DUTY ONE BOLT CLAMP	STAINLESS STEEL WORM DRIVE CLAMPS	BAND CLAMPING SYSTEMS	USE ONLY APPLICATION APPROVED FITTING

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MINIMUM

BURST

PRESSURE

psi

1220

1220

1220

1220

bar

84

84

84

84

ESS BAND USE ONLY DRM CLAMPING APPLICATION SYSTEMS APPROVED
PS FITTING



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AVERAGE

WEIGHT

lb/ft

0.13

0.15

0.28

0.36

kg/m

0,19

0,22

0.42

0,53

HOSE PVC - FOOD/BEVERAGE

PSR

FOOD/BEVERAGE RYCO RED WINE SUCTION AND DELIVERY

RECOMMENDED FOR:

Heavy Duty flexible food quality PVC suction/discharge hose reinforced with a rigid spiral. Has a smooth bore to minimise flow losses and is UV light resistant.

Suitable for the wine, canning and food packaging industries. It can be used for the suction of wine and spirits up to 28 1/4 proof.

The smooth bore enables easy cleaning and reduces bacteria buildup.

STANDARDS MET OR EXCEEDED:

Australian Standard AS 2070, European Standard EU 2002-72-EC, certified phenol-free.

TUBE AND COVER:

Flexible clear PVC.

REINFORCEMENT:

Rigid red PVC spiral.

FEATURES:

Excellent chemical and abrasion resistance. Mirror smooth bore for sanitation requirements. For all beverages including wine and beer. Good flexibility and strength. Excellent UV resistance.

TEMPERATURE RANGE:

From -5°C to +60°C (+23°F to +140°F).

COIL LENGTHS:

20 Metre.

Available on request.

COUPLINGS:

Hygienic industry standard couplings. Also suitable for BSM, CIP, Triclover style fittings. SS Hose Tail Fittings

NOTE: Any assemblies manufactured would be rated to the lesser working pressure of either Hose, Fittings and Clamping methods used.



F RYCO RED V	PSR VINE SUC	TION	Ĩ	\bigcirc		\bigcirc	Ć	\mathbf{O}	ſ	N.		(Hg	ĺ	V
PART NO	HOSE	SIZE	NOM HOS		NOM HOSI		MAXI WOR PRES	KING	MINI BE RAD	ND	VACI RAT ଜ 2	ING	AVEF WEI	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	mm	inch	mmHg	inHg	kg/m	lb/ft
PSR16	25	-16	25,4	1	34,0	1.34	7	100	160	6.3	760	30	0,60	0.40
PSR20	31	-20	31,8	1.1/4	41,0	1.61	7	100	190	7.5	760	30	0,71	0.48
PSR24	38	-24	38,1	1.1/2	48,0	1.89	6	85	230	9.0	760	30	0,82	0.55
PSR32	51	-32	50,8	2	62,0	2.44	5	75	290	11.4	760	30	1,20	0.81
PSR40	63	-40	63,5	2.1/2	76,0	2.99	5	75	360	14.2	760	30	1,73	1.16
PSR48	76	-48	76,2	3	90,0	3.54	5	75	450	17.7	760	30	2,29	1.54
PSR64	102	-64	101,6	4	117,0	4.60	4	60	640	25.2	760	30	3,33	2.24
PSR80	127	-80	127,0	5	143,0	5.63	4	60	900	35.4	760	30	4,58	3.08
PSR96	152	-96	152,4	6	170,0	6.70	3.5	50	1200	47.2	760	30	6,75	4.53

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

PVC - FOOD/BEVERAGE

PSP

FOOD/BEVERAGE RYCO CLEAR SPIRAL SUCTION AND DELIVERY

HOSE

COUPLINGS

RECOMMENDED FOR:

Pressure or suction of any liquid or semi liquid that requires a food grade hose. Included are wineries, milk processing plants or tankers. Can be used with wine and spirits to 28 1/4 proof.

Specifically designed to outperform all other hoses in the beverage industry. It is both a suction and pressure hose in one. It is UV light resistant, conforms to AS 2070 and EU 2022-72-EC for use with food products, and uses a plastic helix that will not rust or cut the hands of operators.

STANDARDS MET OR EXCEEDED:

Australian Standard AS 2070, European Standard EU 2002-72-EC, certified phenol free.

TUBE:

Flexible clear PVC wall.

REINFORCEMENT:

Rigid Clear PVC spiral and textile braid.

COVER:

Flexible clear PVC wall.

PSP

RYCO CLEAR SPIRAL SUCTION

FEATURES:

Excellent chemical and abrasion resistance. Excellent flexibility. UV resistant. Smooth internal tube for sanitation requirements. Good chemical resistance.

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TEMPERATURE RANGE:

From -5°C to +60°C (+23°F to +140°F).

COIL LENGTHS: 20 Metre.

TOLERANCES:

Available on request.

COUPLINGS:

NOTE: Any assemblies manufactured would be rated to the lesser working pressure of either Hose, Fittings and Clamping methods used.



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RADIUS	ດ 2	0°C	WEIGHT			
BEND	RAT		AVERAGE			
INIMUM	VAC					
\bigcirc		(Hg	Ŵ			

PART NO	HOSE	E SIZE		INAL E ID		INAL E OD	WOR	IMUM KING SURE	BE	MUM ND DIUS	VACI RAT ଜ 2	ING	AVEF WEI	RAGE GHT
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	mm	inch	mmHg	inHg	kg/m	lb/ft
PSP16	25	-16	25,4	1	35,4	1.39	12	175	130	5.1	760	30	0,68	0.45
PSP24	38	-24	38,1	1.1/2	49,9	1.96	12	175	220	8.6	760	30	1,01	0.68
PSP32	51	-32	50,8	2	64,4	2.53	10	145	300	11.8	760	30	1,67	1.12
PSP48	76	-48	76,2	3	92,4	3.64	10	145	490	19.3	760	30	2,57	1.73

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Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

CONNECTING PARTNERSHIPS

HOSE PVC - FOOD/BEVERAGE

PSW

FOOD/BEVERAGE RYCO WHITE FOOD SUCTION AND DELIVERY

RECOMMENDED FOR:

Suitable for the tanker delivery of milk, other dairy products, drinking water, wine and other food products. The smooth bore enables easy cleaning and reduces bacteria buildup.

A general purpose suction/discharge hose for the transfer of food products, including beer, wine, drinking water and milk. Resistant to chemicals used in cleaning and is UV light resistant.

TUBE:

Clear flexible PVC wall.

REINFORCEMENT:

Rigid white PVC spiral.

COVER:

Clear flexible PVC wall.

FEATURES:

Good flexibility and strength. Mirror smooth bore for sanitation requirements. For milk, dairy products, and all other beverages and foodstuffs. Excellent UV resistance. Good cleaning chemical resistance.

TEMPERATURE RANGE:

From -5°C to +60°C (+23°F to +140°F).

COIL LENGTHS:

20 Metre.

TOLERANCES:

Available on request.

COUPLINGS:

NOTE: Any assemblies manufactured would be rated to the lesser working pressure of either Hose, Fittings and Clamping methods used.



P RYCO WHITE PART NO		CTION SIZE			NOM		WOR		BE) VACI RAT		AVEF	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	mm	inch	mmHg	inHg	kg/m	lb/ft
PSW16	25	-16	25,4	1	32,0	1.26	7	100	120	4.7	760	30	0,41	0.27
PSW20	32	-20	31,8	1.1/4	39,0	1.53	7	100	150	5.9	760	30	0,52	0.35
PSW24	38	-24	38,1	1.1/2	46,2	1.82	6	85	200	7.8	760	30	0,68	0.46
PSW32	51	-32	50,8	2	60,0	2.36	5	75	270	10.6	760	30	1,02	0.68
PSW40	63	-40	63,5	2.1/2	74,3	2.92	5	75	330	13.0	760	30	1,40	0.94
PSW48	76	-48	76,2	3	89,0	3.50	4	60	440	17.3	760	30	2,01	1.35
PSW64	102	-64	101,6	4	116,0	4.57	4	60	620	24.4	760	30	3,06	2.06
Cutting and Assem	ably Charge	es apply to	all RVCO in	dustrial bo	ses and va	ry by bose	types and	sizes Conta	act RVCO fo	raddition	al informatio	on or visit i		com au

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.



PSB

FUEL/OIL

RYCO BLUE PETROL AND OIL SUCTION AND DELIVERY

ITYCO PSB PETROL & OIL SUCTION

	IPS
	CLAMPS
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RECOMMENDED FOR:

Collection of waste on environmental waste trucks, pumping the contents of grease pits, sewage collection, pumping of fuels, lubricants and most chemicals.

Medium Duty flexible PVC suction/discharge hose. Good resistance to chemicals and oil. Highly flexible at low temperatures and a mirror smooth bore for pumping efficiency.

TUBE:

Blue flexible PVC wall.

REINFORCEMENT:

Rigid PVC spiral.

COVER:

Blue flexible PVC wall.

FEATURES:

Excellent chemical resistance and flexibility.

TEMPERATURE RANGE:

From $-5^{\circ}C$ to $+60^{\circ}C$ ($+23^{\circ}F$ to $+140^{\circ}F$).

COIL LENGTHS: 20 Metre.

TOLERANCES:

Available on request.

COUPLINGS:

NOTE: Any assemblies manufactured would be rated to the lesser working pressure of either Hose, Fittings and Clamping methods used.

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		<u> </u>	\bigcirc	\bigcirc
>150 PSI HOSE TAIL COUPLINGS	COMBINATION HOSE NIPPLES		WORM DRIVE CLAMPS	BAND CLAMPING SYSTEMS

PSB RYCO BLUE PETROL AND OIL SUCTION	IO		\bigcirc	6
	NOMINAL	NOMINAL	MAXIMUM WORKING	MI

PART NO	HOSE	SIZE		INAL E ID	NOM HOS		WOR	MUM KING SURE	BE	MUM ND DIUS	VACI RAT		AVEF WEI	RAGE GHT
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	mm	inch	mmHg	inHg	kg/m	lb/ft
PSB12	19	-12	19,1	3/4	32,0	1.26	10	145	65	2.6	760	30	0,41	0.27
PSB16	25	-16	25,4	1	39,0	1.53	9	130	100	3.9	760	30	0,54	0.36
PSB20	31	-20	31,8	1.1/4	46,2	1.82	9	130	150	5.9	760	30	0,70	0.47
PSB24	38	-24	38,1	1.1/2	60,0	2.36	7	100	190	7.5	760	30	1,07	0.72
PSB32	51	-32	50,8	2	74,1	2.92	6	85	230	9.0	760	30	1,50	1.01
PSB40	63	-40	63,5	2.1/2	89,0	3.50	6	85	330	13.0	760	30	2,25	1.51
PSB48	76	-48	76,2	3	116,0	4.57	5	75	520	20.5	760	30	3,04	2.04

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

HOSE PVC - FUEL/OIL

PDP

FUEL/0IL

RYCO DRUM PUMP

RECOMMENDED FOR:

Dispensing fuels from overhead tanks and drums.

Petrol and oil resistant hose with excellent flexibility. The PVC/Nitrile blend inner tube is highly resistant to hydrocarbons including aromatics. Excellent resistance to UV light ensures a long life. Good low temperature flexibility.

The 25 mm hose includes twin antistatic copper wires for increased safety when used to transfer volatile solvents.

TUBE:

Black PVC Nitrile.

REINFORCEMENT:

Textile braid with twin anti-static copper wires.

COVER: Black PVC.

FEATURES:

Petrol, oil and kerosene resistant. Low temperature flexibility. UV Resistant. Anti-static for transfer of volatile solvents and fuels. Drum and tank transfer.

TEMPERATURE RANGE:

From -15°C to +50°C (+59°F to +122°F).

WORKING PRESSURE:

Maximum working pressures are based on a 3:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

20, 60 or 100 Metre.

TOLERANCES:

Available on request.

COUPLINGS:



DRI	PDP UM PUMP		I	\bigcirc		\bigcirc	Ć	\bigcirc	Ç	Ì	Í	V
PART NO	HOSE	SIZE	NOM HOS	INAL E ID		INAL E OD		MUM KING SURE	BU	MUM RST SURE	AVEF WEI	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	kg/m	lb/ft
PDP12	19	-12	19,1	3/4	27,0	1.06	10	145	40	580	0,36	0.24
PDP16	25	-16	25,4	1	33,5	1.32	10	145	40	580	0,55	0.37

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.



USE ONLY APPLICATIO APPROVED FITTING

BAND

CLAMPING SYSTEMS

580

1,20

0.80

PPA

RYCO PPA

FUEL/OIL

safety. TUBE:

COVER:

Black PVC.

FEATURES:

UV resistant.

PPA24

Black PVC Nitrile.

REINFORCEMENT:

RYCO PETROL RESISTANT ANTISTATIC

Dispensing oil, greases, petrol (including unleaded), diesel

blend inner tube for excellent resistance to unleaded fuels.

All sizes incorporate twin copper anti-static wires for added

and home heating fuel. Ideal as a tanker delivery hose.

A superior petrol resistant hose with a Blue PVC/Nitrile

Textile braid with twin anti-static copper wires.

Anti-static for transfer of volatile solvents and fuels.

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38

38,1

1.1/2

52,4

Petrol, oil and kerosene resistant. Low temperature flexibility.

Diesel, oil and fuel transfer.

RECOMMENDED FOR:

TEMPERATURE RANGE:

WORKING PRESSURE:

COIL LENGTHS: 20, 40, 60, or 100 Metre.

TOLERANCES:

COUPLINGS:

>150 PSI HOSE TAIL COUPLINGS

Available on request.

CAMLOCK COUPLINGS

From -15°C to +50°C (+59°F to +122°F).

Maximum working pressures are based on a 3:1 safety factor

(maximum working pressure to minimum burst pressure).

WORM DRIVE HEAVY DUTY CLAMPS ONE BOLT

ONE BOLT CLAMP

RYCO PETE	TISTATIC	TANT : SIZE					WOR		MINI BUI PRES	RST		V NAGE GHT	CLAMPS
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	kg/m	lb/ft	
PPA16	25	-16	25,4	1	34,0	1.34	13	193	53	772	0,60	0.40	
PPA20	31	-20	31,8	1.1/4	42,0	1.65	12	175	48	700	0,80	0.54	ES

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

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CONNECTING PARTNERSHIPS

HOSE PVC - MATERIAL HANDLING

PSAR

MATERIAL HANDLING RYCO ABRASION RESISTANT SUCTION AND DELIVERY

RECOMMENDED FOR:

Pumping slurries, air seeder machines, industrial/ commercial vacuum cleaning.

A Heavy Duty suction/discharge hose especially formulated to be hard wearing and resistant to abrasion. A flexible thick PVC/Nitrile blend with an external rigid PVC spiral results in a hose with exceptional wear resistance, both inside and out, and flexibility for ease of use.

TUBE:

PVC Nitrile blend.

REINFORCEMENT:

Rigid PVC spiral.

COVER:

Green corrugated spiral.

FEATURES:

Excellent chemical and abrasion resistance, weathering properties and flexibility.

TEMPERATURE RANGE:

From -5°C to +60°C (+23°F to +140°F).

COIL LENGTHS:

10 or 20 Metre.

TOLERANCES:

Available on request.

COUPLINGS:

		6F \$		\bigcirc	\bigcirc	\bigcirc
>150 PSI HOSE TAIL COUPLINGS	COMBINATION HOSE NIPPLES	CAMLOCK COUPLINGS	IRRIGATION COUPLINGS	HEAVY DUTY ONE BOLT CLAMP	SPIRAL CLAMP	BAND CLAMPING SYSTEMS

RYCO ABRAS	CTION	STANT : SIZE	NOM HOS		NOM HOS		MAXI WOR PRES		BE) VACI RAT		AVEF	V NAGE GHT
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	mm	inch	mmHg	inHg	kg/m	lb/ft
PSAR20	31	-20	31,8	1.1/4	40,5	1.59	3	45	250	9.8	600	24	0,55	0.37
PSAR24	38	-24	38,1	1.1/2	48,4	1.90	3	45	280	11.0	600	24	0,65	0.44
PSAR28	44	-28	44,5	1.3/4	57,0	2.24	3	45	310	12.2	600	24	0,75	0.50
PSAR32	51	-32	50,8	2	63,0	2.48	3	45	350	13.8	600	24	0,88	0.59
PSAR40	63	-40	63,5	2.1/2	79,0	3.11	3	45	370	14.6	600	24	1,34	0.90
PSAR48	76	-48	76,2	3	92,5	3.64	3	45	400	15.7	600	24	1,60	1.07
PSAR64	102	-64	101,6	4	118,0	4.64	3	45	500	19.7	600	24	2,40	1.61
PSAR80	127	-80	127,0	5	149,8	5.89	3	45	550	21.6	600	24	4,75	3.19
PSAR96	152	-96	152,4	6	174,0	6.85	3	45	600	23.6	600	24	5,96	4.00
PSAR128	203	-128	203,2	8	225,0	8.86	3	45	650	25.6	600	24	7,55	5.07

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

PVC - MATERIAL HANDLING

USAR

MATERIAL HANDLING RYCO URETHANE ABRASION RESISTANT SUCTION AND DELIVERY

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RECOMMENDED FOR:

An extremely flexible hose with outstanding abrasion resistance due to the inclusion of urethane rubber. The latest and best hose for seeding equipment, soil and rock removal on vacuum diggers and street sweepers and any particulate collection in extreme environments.

TUBE:

Urethane.

REINFORCEMENT:

Rigid PVC spiral.

COVER:

Urethane.

FEATURES:

Excellent chemical and abrasion resistance, weathering properties and flexibility.

TEMPERATURE RANGE:

From $-5^{\circ}C$ to $+60^{\circ}C$ ($+23^{\circ}F$ to $+140^{\circ}F$).

COIL LENGTHS: 10 or 20 Metre.

TOLERANCES:

Available on request.

COUPLINGS:

		<u> </u>		\bigcirc	\bigcirc
>150 PSI	COMBINATION	CAMLOCK	IRRIGATION	HEAVY DUTY	BAND
HOSE TAIL	HOSE NIPPLES	COUPLINGS	COUPLINGS	ONE BOLT	CLAMPING

RYCO U	SAR RETHANE UCTION	1	Ĩ	\bigcirc		\bigcirc	Ç	\mathbf{O}	ſ.	\mathcal{N}		(Hg	Í V	V
PART NO	HOSE	SIZE		INAL E ID	NOM HOS		WOR	MUM KING SURE	BE	MUM ND DIUS	VACI RAT		AVERAGE WEIGHT	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	mm	inch	mmHg	inHg	kg/m	lb/ft
USAR20	31	-20	31,8	1.1/4	40,5	1.59	3	45	250	9.8	600	24	0,39	0.26
USAR24	38	-24	38,1	1.1/2	48,0	1.89	3	45	310	12.2	600	24	0,45	0.30
USAR32	51	-32	50,8	2	61,0	2.40	3	45	350	13.8	600	24	0,76	0.51
USAR40	63	-40	63,5	2.1/2	77,0	3.03	3	4	370	14.6	600	24	1,46	0.98
USAR48	76	-48	76,2	3	91,0	3.58	3	45	400	15.7	600	24	1,77	1.20
USAR64	102	-64	101,6	4	118,0	4.64	3	45	500	19.7	600	24	3,48	2.34
USAR80	127	-80	127,0	5	149,0	5.86	3	45	550	21.6	600	24	5,70	3.83
USAR96	152	-96	152,4	6	172,0	6.77	3	45	600	23.6	600	24	6,63	4.45
USAR128	203	-128	203,0	8	227,0	8.93	3	45	650	25.6	600	24	10,59	7.12

HOSE PVC - MATERIAL HANDLING

PCAS MATERIAL HANDLING

RYCO CLEAR AIRSEEDER

RECOMMENDED FOR:

Suitable for primary, secondary and tertiary lines on air seeder machines.

A Medium Duty flexible PVC suction/discharge hose reinforced with a black spiral. It has a mirror smooth bore to minimise friction losses and is UV light stabilised.

TUBE: Clear flexible PVC wall.

REINFORCEMENT:

Black rigid PVC spiral.

COVER: Clear flexible PVC wall.

FEATURES:

Excellent abrasion resistance and flexibility. Mirror smooth bore minimising friction. UV stabilised. Seed, grain or fertiliser transfer use.

TEMPERATURE RANGE:

From -5° C to $+60^{\circ}$ C ($+23^{\circ}$ F to $+140^{\circ}$ F).

COIL LENGTHS:

20 Metre.

TOLERANCES: Available on request.

COUPLINGS:

		8 4 8	\bigcirc	\bigcirc	\bigcirc
>150 PSI HOSE TAIL COUPLINGS	>300 PSI HOSE TAIL COUPLINGS	CAMLOCK COUPLINGS	WORM DRIVE CLAMPS	HEAVY DUTY ONE BOLT CLAMP	BAND CLAMPING SYSTEMS

PI RYCO CLEA	Ĩ	\bigcirc		\bigcirc	MAXI		MINI	МИМ)) (Hg		V		
PART NO	PART NO HOSE SIZE			INAL E ID		INAL E OD		KING SURE		ND DIUS	VACUUM	RATING	AVEF WEI	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	mm	inch	mmHg	inHg	kg/m	lb/ft
PCAS16	25	-16	25,4	1	31,4	1.24	8	116	120	4.7	600	24	0,34	0.23
PCAS20	31	-20	31,8	1.1/4	38,4	1.51	7	102	150	5.9	600	24	0,47	0.31
PCAS24	38	-24	38,1	1.1/2	45,4	1.79	6	87	200	7.8	600	24	0,62	0.42
PCAS28	44	-28	44,5	1.3/4	52,0	2.05	6	79	240	9.4	600	24	0,70	0.47
PCAS32	51	-32	50,8	2	60,0	2.36	5	72	300	11.8	600	24	0,93	0.62
PCAS40	63	-40	63,5	2.1/2	73,8	2.90	5	72	400	15.7	600	24	1,43	0.96
PCAS48	76	-48	76,2	3	87,4	3.44	4	58	450	17.7	600	24	2,02	1.36
	76	-48	76,2	3	87,4	3.44	4	58	450	17.7	600	24	2,02	1.36

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

PVC - MATERIAL HANDLING

HOSE

TECHNICAL

RECOMMENDED FOR:

MATERIAL HANDLING **EPDM A/R CORRUGATED**

тмн

RYCO TMH hose is used for a variety of abrasive, materialhandling applications to transfer sand, gravel, cement, fly ash, glass, metals, plastic pellets, fertilisers, rock salts and slurries.

TUBE:

Thermoplastic alloyed blend of polyurethane and PVC (static dissipating/static conductive).

REINFORCEMENT:

Rigid high-density PVC helix.

COVER:

Thermoplastic alloyed blend of nitrile, polyurethane and PVC (non-conductive) - corrugated.

FEATURES:

HD abrasion resistant tube. Excellent flexibility. Lightweight and strong suction and delivery.

TEMPERATURE RANGE:

From -40°F to 158°F (-40°C to 70°C).

COIL LENGTHS:

20 Metre or 60 Metre.

TOLERANCES:

Available on request.

COUPLINGS:

			\bigcirc	\bigcirc	\bigcirc
>300 PSI HOSE TAIL COUPLINGS	COMBINATION HOSE NIPPLES	IRRIGATION COUPLINGS	WORM DRIVE CLAMPS	HEAVY DUTY ONE BOLT CLAMP	BAND CLAMPING SYSTEMS

TMH EPDM A/R CORRUGATED PART NO HOSE SIZE						NOMINAL HOSE OD		MAXIMUM WORKING PRESSURE		WORKING BEND) (Hg Vacuum rating		V V RAGE GHT	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	mm	inch	mmHg	inHg	kg/m	lb/ft	1		
TMH20	31	-20	31,8	1.1/4	41,4	1.63	3,0	45	76	3	760	30	0,51	0.34	ſ		
TMH24	38	-24	38,1	1.1/2	48,0	1.90	2,8	40	81	3	760	30	0,60	0.40			
TMH32	51	-32	50,8	2	62,7	2.47	2,8	40	140	6	760	30	1,00	0.67			
TMH40	63	-40	63,5	2.1/2	77,5	3.05	2.5	35	152	6	760	30	1,29	0.87			
TMH48	76	-48	76,2	3	93,7	3.70	2,0	30	191	8	760	30	1,73	1.16			
TMH64	102	-64	101,6	4	122,2	4.81	2,0	30	279	11	760	30	3,21	2.16			
TMH80	127	-80	127,0	5	146,8	5.78	2,0	30	381	10	760	30	3,87	2.60			
TMH96	152	-96	152,4	6	179,8	7.08	1,8	25	508	20	760	30	5,10	3.43			
TMH128	203	-128	203,2	8	234,2	9.22	1,5	20	762	30	760	30	8,69	5.84	۱۱		
TMH160	254	-160	254,0	10	284,7	11.2	1,5	20	1143	45	760	30	11,85	7.96			
tting and Assem	hbly Charge	es apply to	all RYCO in	dustrial ho	ses, and va	ry by hose	types and	sizes. Conta	act RYCO fo	or addition	al informatio	on or visit v	www.RYCO	.com.au.	1		

CONNECTING PARTNERSHIPS

HOSE PVC - MULTI-PURPOSE

RYCO MULTI-FLEX SUCTION

PSMF

MULTI-PURPOSE

RECOMMENDED FOR:

Collection of waste on environmental waste trucks, pumping the contents of grease pits, sewage collection, pumping of fuels, lubricants and most chemicals.

An extremely flexible suction/discharge hose with a hard wearing exposed rigid PVC spiral. Excellent chemical resistance, making the hose suitable for diesel fuels petrol, oils, sewage and chemicals.

TUBE:

Black flexible PVC.

REINFORCEMENT:

Rigid PVC spiral.

COVER:

Yellow PVC corrugated spiral.

FEATURES:

Excellent chemical resistance and flexibility. Multi-pupose suction and delivery hose. Excellent abrasion resistant tube. Good UV resistance. Yellow external spiral. Lightweight design.

TEMPERATURE RANGE:

From -5°C to +60°C (+23°F to +140°F).

COIL LENGTHS:

20 Metre.

TOLERANCES:

Available on request.

COUPLINGS:

		<u> </u>		\bigcirc	\bigcirc	\bigcirc
>150 PSI HOSE TAIL COUPLINGS	COMBINATION HOSE NIPPLES	CAMLOCK COUPLINGS	IRRIGATION COUPLINGS	WORM DRIVE CLAMPS	HEAVY DUTY ONE BOLT CLAMP	BAND CLAMPING SYSTEMS

PSMF RYCO MULTI-FLEX SUCTIOI			I	\bigcirc	1	\bigcirc	Ç	\bigcirc	ſ.	\searrow		(Hg	Í V	<u>v</u>
PART NO HOSE SIZE			NOMINAL HOSE ID		NOMINAL HOSE OD		MAXIMUM WORKING PRESSURE		MINIMUM BEND RADIUS		VACUUM RATING		AVERAGE WEIGHT	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	mm	inch	mmHg	inHg	kg/m	lb/ft
PSMF28	44	-28	44,5	1.3/4	55,5	2.18	3	45	180	7.1	600	24	0,64	0.43
PSMF32	51	-32	50,8	2	61,0	2.40	3	45	220	8.6	600	24	0,88	0.59
PSMF40	63	-40	63,5	2.1/2	77,0	3.03	3	45	270	10.6	600	24	1,27	0.85
PSMF48	76	-48	76,2	3	91,0	3.60	3	45	350	13.8	600	24	1,62	1.09
PSMF64	102	-64	101,6	4	118,0	4.64	3	45	450	17.7	600	24	2,43	1.63
PSMF80	127	-80	127,0	5	149,0	5.86	3	45	475	18.7	600	24	3,99	2.70
PSMF96	152	-96	152,4	6	172,0	6.77	3	45	500	19.7	600	24	5,10	3.42
PSMF128	203	-128	203,2	8	224,0	8.82	3	45	650	25.6	600	24	7,55	5.07

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

PVC - MULTI-PURPOSE

BOLT CLAMPS HEAVY DUTY W/ OR W/ ONE BOLT OUT SAFETY CLAWS

PCM

MULTI-PURPOSE

RECOMMENDED FOR:

distinctive dual striping.

Clear multi-purpose PVC.

REINFORCEMENT:

Clear flexible PVC.

TUBE:

COVFR:

FEATURES:

dual striping.

PCM6 PCM8 **PCM10** PCM12 **PCM16 PCM20** PCM24

PCM32

CLEAR MULTI-PURPOSE NON-TOXIC/AIR/WATER/ PETROLEUM BASED PRODUCTS

liquids and petroleum-based products.

STANDARDS MET OR EXCEEDED:

Textile braid with red fuel tracer.

Suitable for food and beverage. Suitable for petroleum based fluids. Transparent and kink resistant hose.

38

51

-24

-32

38,1

50,8

1.1/2

2

Translucent multi-purpose food contact hose.

Yellow and blue stripes with distinctive red tracer.

Highly flexible and kink resistant, with highly distinctive

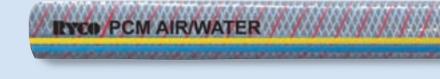
Suitable for air, water, food and beverage liquids and semi-

A Translucent multi-purpose food contact hose. It meets

The hose is highly flexible but kink resistant with a highly

AS 2070, with a food contact inner and outer covering.

AS 2070, with a food contact inner and outer covering.



TEMPERATURE RANGE:

WORKING PRESSURE:

COIL LENGTHS:

TOLERANCES:

COUPLINGS:

>300 PSI HOSE TAIL COUPLINGS

20, 100 or 300 Metre.

Available on request.

CAMLOCK

From 0°C to +50°C (+32°F to +122°F).

CLAW TYPE COUPLINGS WITH SAFETY COLLARS

Maximum working pressures are based on a 4:1 safety factor

WORM DRIVE CLAMPS

(maximum working pressure to minimum burst pressure).

HOSE

COUPLINGS

BAND CLAMPING SYSTEMS

Excellent UV	Excellent UV resistance.														
PCM MULTI-PURPOSE HOSE			Ĩ				Ć	\bigcirc	Ç	Ž	<u>v</u>	∼ V	CLAMPS		
PART NO	ART NO HOSE SIZE			IINAL SE ID		INAL E OD		IMUM KING SURE	BU	IMUM RST SURE		RAGE GHT	CL		
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	kg/m	lb/ft			
PCM4	6	-04	6,4	1/4	10,2	0.40	14	200	56	800	0,08	0.05			
PCM5	8	-05	7,9	5/16	12,4	0.48	14	200	56	800	0,10	0.07	ORIES		
PCM6	10	-06	9,5	3/8	15,0	0.59	14	200	56	800	0,14	0.09	OR		
PCM8	12	-08	12,7	1/2	18,1	0.71	14	200	56	800	0,19	0.13	SS		
PCM10	16	-10	15,9	5/8	22,8	0.89	14	200	56	800	0,30	0.20	Ш О		
PCM12	19	-12	19,1	3/4	27,6	1.08	14	200	56	800	0,40	0.27	ACCE		
PCM16	25	-16	25,4	1	33,4	1.31	14	200	56	800	0,54	0.36			
PCM20	31	-20	31,8	1.1/4	40,9	1.61	12	175	48	700	0,97	0.65			
	1												(

12

9

175

130

48

36

700

520

1,32

2,12

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

1.96

2.53

0.88

1.42

MULTI-PUR PART NO Hose PCM4 PCM5

49,8

64,2

HIGHER TECHNOLOGY EQUALS GREATER PERFORMANCE 105

HOSE PVC - SPECIALTY

PSS/PSSG

SPIRAL SUCTION



RECOMMENDED FOR:

Secondary and tertiary lines on air seeder machines. Also suitable for water conveyance, ventilation duct on business machines and dust collection.

A lightweight, flexible air seeder hose also suitable for many other less demanding applications. UV light stabilised.

PSS hose is black, while PSSG hose is grey.

CONSTRUCTION - SPIRAL:

Flexible Medium Duty PVC spiral extrusion profile.

FEATURES:

Extremely lightweight and flexible. Vacuum - dust, seed or granules. Very broad range of sizes available. Corrugated cover with spiral bore. UV stabilised

TEMPERATURE RANGE:

From $-5^{\circ}C$ to $+30^{\circ}C$ ($+23^{\circ}F$ to $+86^{\circ}F$).

COIL LENGTHS: 20 Metre.

TOLERANCES: Available on request.

COUPLINGS:



	PSS/PSSG RAL SUCTION	I	Ĩ	IO		\bigcirc		У	Ŵ	
PART NO	HOSE	SIZE		NOMINAL HOSE ID		NOMINAL Hose od		MUM ND DIUS	AVERAGE WEIGHT	
Hose	DN	Dash	mm	inch	mm	inch	mm	inch	kg/m	lb/ft
PSSG8	12	-08	12,7	1/2	18,9	0.74	50	1.9	0,10	0.06
PSSG10	16	-10	15,9	5/8	21,3	0.84	65	2.5	0,13	0.09
PSS12	19	-12	19,1	3/4	26,0	1.02	65	2.5	0,20	0.13
PSS16	25	-16	25,4	1	32,5	1.28	70	2.7	0,25	0.17
PSS18	28	-18	28,6	1.1/8	35,3	1.40	80	3.1	0,28	0.18
PSS19	31	-19	30,5	1.3/16	39,5	1.55	85	3.3	0,31	0.21
PSS20	31	-20	31,8	1.1/4	42,0	1.65	85	3.3	0,39	0.26
PSS21	32	-21	32,0	1.9/32	41,0	1.61	90	3.5	0,38	0.25
PSS22	35	-22	34,9	1.3/8	45,0	1.72	90	3.5	0,40	0.27
PSS24	38	-24	38,1	1.1/2	47,3	1.77	90	3.5	0,42	0.28
PSS28	44	-28	44,5	1.3/4	53,8	1.86	100	3.9	0,45	0.30
PSS32	51	-32	50,8	2	63,3	2.12	110	4.3	0,48	0.32
PSS40	63	-40	63,5	2.1/2	74,3	2.50	125	4.9	0,85	0.57
PSS48	76	-48	76,2	3	87,8	2.92	200	7.8	1,00	0.67
PSS64	102	-64	101,6	4	114,3	3.45	250	9.8	1,10	0.74

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.





RECOMMENDED FOR:

Collection of dust, sawdust, fumes. Transport of small particulates.

Medium to Heavy Duty vacuum and delivery hose with good flexibility. UV light stabilised.

CONSTRUCTION - SPIRAL:

Flexible PVC Heavy Duty spiral extrusion profile.

FEATURES:

Extremely lightweight and flexible. Heavy Duty Vacuum - dust, seed or granules. Very broad range of sizes available. Corrugated cover with spiral bore. UV stabilised

PSSH

HD SPIRAL SUCTION

DN

31

38

44

51

63

76

102

127

152

203

HOSE SIZE

Dash

-20

-24

-28

-32

-40

-48

-64

-80

-96

-128

PART NO

Hose

PSSH20

PSSH24

PSSH28

PSSH32

PSSH40

PSSH48

PSSH64

PSSH80

PSSH96

PSSH128

TEMPERATURE RANGE:

From $-5^{\circ}C$ to $+30^{\circ}C$ ($+23^{\circ}F$ to $+86^{\circ}F$).

COIL LENGTHS: 20 Metre.

TOLERANCES:

Available on request.

COUPLINGS:

 $[\bigcirc$

NOMINAL HOSE OD

mm

41,8

48,6

57,8

67,5

79,4

91,9

121,5

149,0

174,0

226,0

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

inch

1.64

1.91

2.27

2.48

2.66

3.12

3.62

4.78

5.86

6.85

 \mathbb{I}

NOMINAL HOSE ID

mm

31,8

38,1

44,5

50,8

63,5

76,2

101,6

127,0

152,4

203,2

inch

1.1/4

1.1/2

1.3/4

2

2.1/2

3

4

5

6

8

	<u> </u>		\bigcirc	\bigcirc	\bigcirc
>150 PSI HOSE TAIL COUPLINGS	CAMLOCK COUPLINGS	LIGHT DUTY NON-SHARP SHEET METAL	WORM DRIVE CLAMPS	HEAVY DUTY ONE BOLT CLAMP	BAND CLAMPING SYSTEMS

MINIMUM

BEND RADIUS

mm

125

130

135

200

175

200

300

400

450

550

inch

4.15/16

5.1/8

5.5/16

7.7/8

6.7/8

7.7/8

11.13/16

15.3/4

17.3/4

21.5/8

Ŵ

AVERAGE WEIGHT

kg/m

0,42

0,55

0,75

1,00

1,00

1,10

1,40

2,50

3,70

4,20

lb/ft

0.30

0.37

0.50

0.67

0.67

0.74

0.94

1.68

2.50

2.82

CONNECTING	PARTNERSHIPS
0011112011110	

HOSE PVC - SPECIALTY

PABD

SPECIALTY AIR BREATHER AND DIVER

ILYCO PVC AIR BREATHER PABD6 3/8" -6 DM

RECOMMENDED FOR:

Diving, air breathing applications.

Approved braided divers air breathing hose for professional and sports diving. Also suitable for breathing apparatus for spray booths and sand blasting. Conforms to AS 2299 and AS/NZS 1716. Outer cover pricked for added safety. Extremely low odor inner tube.

STANDARDS MET OR EXCEEDED:

Manufactured to AS 2299 and AS/NZS 1716.

TUBE:

Food grade white PVC.

REINFORCEMENT:

Textile braid.

COVER:

Bright yellow flexible PVC.

FEATURES:

Excellent kink resistance. Low temperature flexibility. Smooth food grade, low odour tube. Suitable for most air breathing equipment and applications. (use only approved fittings).

TEMPERATURE RANGE:

From 0°C to +50°C (+32°F to +122°F).

WORKING PRESSURE:

Maximum working pressures are based on a 3:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

50, 100 and 300 Metre.

TOLERANCES:

Available on request.

COUPLINGS:



AIR BRE	PABD ATH AND DIVER		Ĩ	\bigcirc		\bigcirc	Ç	\bigcirc		Ì	V	∑ V
PART NO	нозе	SIZE	NOM HOS	INAL E ID	NOMINAL HOSE OD		MAXIMUM WORKING PRESSURE		IG BURST		AVERAGE WEIGHT	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	kg/m	lb/ft
PABD5	8	-05	7,9	5/16	14,3	0.56	16	235	64	940	0,14	0.09
PABD6	10	-06	9,5	3/8	17,2	0.67	25	365	100	1,460	0,22	0.15

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.



INTRODUCTION

PHW SPECIALTY

HOT WASHDOWN

RECOMMENDED FOR:

ITYCO PVC HOT WASHDOWN PHW8 1/2" -8

where milk, fats and other food products are present. Highest grade hose for hot washdown use in the food industry. The thermoplastic rubber smooth outer cover is highly resistant to lactic acid and fats.

Hot washdown of all food preparation and retail areas,

TUBE:

White flexible PVC.

Textile braid.

COVER: White smooth thermoplastic.

FEATURES:

Rated to 85°C when used at Low Pressure. Suitable for dishwashers and washing machines (max 85°C). Good flexibility. UV resistance for outdoor applications. Excellent abrasion resistance.

TEMPERATURE RANGE:

From 0°C to +85°C (+32°F to +185°F).

WORKING PRESSURE:

Maximum working pressures are based on a 4:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS: 20 or 100 Metre.

20 or 100 Metre.

TOLERANCES:

Available on request.

COUPLINGS:

	\bigcirc	\bigcirc		
>300 PSI HOSE TAIL COUPLINGS	WORM DRIVE CLAMPS	HEAVY DUTY ONE BOLT CLAMP	WASHDOWN NOZZLE	USE ONLY APPLICATION APPROVED FITTING

	PHW /ASHDOWN	ı	IO				Q		Ø		Ŵ	
PART NO	ноѕе	SIZE		INAL SE ID		NOMINAL HOSE OD		MAXIMUM WORKING PRESSURE		MINIMUM BURST PRESSURE		RAGE GHT
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	kg/m	lb/ft
PHW8	12	-08	12,7	1/2	19,7	0.77	20	290	80	1,160	0,28	0.20
PHW12	19	-12	19,1	3/4	28,0	1.10	18	250	72	1,000	0,48	0.32

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit **www.RYCO.com.au**.

HOSE PVC - SPECIALTY

ANFR/ANFF

RYCO ANFO TUBE RIGID RYCO ANFO TUBE FLEXIBLE Ityce ANFF

Ityco ANFR

RECOMMENDED FOR:

For the transfer of ANFO explosives.

RYCO ANFR is a rigid ANFO hose and RYCO ANFF is a flexible ANFO hose.

STANDARDS MET OR EXCEEDED:

Conforms to AS 2187.2.

TUBE:

Thermoplastic extruded tube.

FEATURES:

Black with orange stripe. Conforms to AS 2187.2. Rigid or flexible types available. Must be used with approved equipment by approved operators only. **TEMPERATURE RANGE:** From 0°C to +40°C (+32°F to +104°F).

COIL LENGTHS: 30 or 60 Metre.

NOTE: RYCO do not supply cut lengths.

TOLERANCES: Available on request.

COUPLINGS:



ANFR/ANFF RYCO ANFO TUBE			\bigcirc		\bigcirc	Ŵ		
HOSE	SIZE	NOMINAL HOSE ID		NOMINAL HOSE OD			RAGE GHT	
DN	Dash	mm	inch	mm	inch	kg/m	lb/ft	
19	-12	19,1	3/4	26,0	1.02	2,70	1.81	
25	-16	25,4	1	33,0	1.30	4,50	3.02	
19	-12	19,1	3/4	26,0	1.02	3,70	2.50	
25	-16	25,4	1	33,0	1.30	6,10	4.10	
	YCO ANFO TUBI HOSE DN 19 25 19	Nose Dash 19 -12 25 -16 19 -12	VCO ANFO TUBE NOM HOSE SIZE NOM DN Dash mm 19 -12 19,1 25 -16 25,4 19 -12 19,1	YCO ANFO TUBE NOMINAL HOSE SIZE DN Dash mm inch 19 -12 19,1 3/4 25 -16 25,4 1 19 -12 19,1 3/4	YCO ANFO TUBE NOMINAL HOSE SIZE NOMINAL HOSE ID NOM HOSE DN Dash mm inch mm 19 -12 19,1 3/4 26,0 25 -16 25,4 1 33,0 19 -12 19,1 3/4 26,0	VCO ANFO TUBE NOMINAL HOSE SIZE NOMINAL HOSE ID NOMINAL HOSE OD DN Dash mm inch mm inch 19 -12 19,1 3/4 26,0 1.02 25 -16 25,4 1 33,0 1.30 19 -12 19,1 3/4 26,0 1.02	VCO ANFO TUBE Image: Mominal Hose of the second secon	

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.



HOSE

RECOMMENDED FOR:

NSS

Pneumatic and hydraulic control systems, fuel tubing, air and gas tubing. Also ideal for handling weed killing solutions, refrigerants, fresh and sea water, fumigants, paints and lacquers and many other products.

RYCO NYLON SELFSTORE TUBING

Nylon pressure tubing is made from premium quality raw materials and precision of connections with fittings and adaptors.

TUBE:

Nylon extruded and formed tubing.

FEATURES:

Self store memory.

Use in overhead or wall mounted air applications. Available in yellow or orange safety colours. Fitted assemblies with spring guards on each end. Also available unfitted.

TEMPERATURE RANGE:

From 0°C to +60°C (+32°F to 140°F).

WORKING PRESSURE:

Maximum working pressures are based on a 4:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS:

9.1 Metre (30 ft) lengths only.

TOLERANCES:

Available on request.

COUPLINGS:

Use only application approved Fittings and Clamps.



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/ERAGE /EIGHT		MUM RST SURE	BUI	MUM KING SURE		INAL E OD		INAL E ID		SIZE	HOSE	PART NO								
lb/ft	kg/m	psi	bar	psi	bar	inch	mm	inch	mm	Dash	DN	Hose								
0.13	0,20	700	48	175	12	0.23	6,0	1/4	4,4	-04	6	NSS4								
0.26	0,39	700	48	175	12	0.39	10,0	3/8	7,8	-06	10	NSS6								
0.52	0,77	700	48	175	12	0.50	12,5	1/2	9,3	-08	13	NSS8								

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

CONNECTING PARTNERSHIPS

HOSE PVC - SPECIALTY

NTIB/NTIN

SPECIALTY

NYLON TUBING IMPERIAL BLACK NYLON TUBING IMPERIAL NATURAL

RYCO NTIB

RYCO NTIN

RECOMMENDED FOR:

Pneumatic and hydraulic control systems, fuel tubing, air and gas tubing. Also ideal for handling weed killing solutions, refrigerants, fresh and sea water, fumigants, paints and lacquers and many other products.

Nylon pressure tubing is made from premium quality raw materials and precision engineered to ensure simplicity of connections with fittings and adaptors.

RYCO NTIB hose is black, and RYCO NTIN hose is natural (translucent).

TUBE:

Thermoplastic extruded tube.

FEATURES:

High quality nylon. Excellent dimensional stability. Temperature and light stabilised. Chemical, oil, fuel and grease resistant. Easily installed and assembled. Lighter than rubber or steel lines. Good flexibility characteristics.

TEMPERATURE RANGE:

From -20° C to $+90^{\circ}$ C (-4° F to 194° F).

NOTE: At the maximum temperature of $+90^{\circ}C$ (194°F) the recommended working pressure is reduced by 50% to a MWP of 10 bar/145 psi.

WORKING PRESSURE:

Maximum working pressures are based on a 4:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS: 100 Metre.

TOLERANCES:

Available on request.

COUPLINGS:

Use only approved imperial nylon Push-In or Compression Fittings.



	IB/NTIN BING IMPE	RIAL			\bigcirc		Ø				Ŵ	
PART NO	HOSE	E SIZE	NOMINAL HOSE OD		MAXIMUM WORKING PRESSURE		MINIMUM BURST 80PRESSURE		MINIMUM BEND RADIUS		AVERAGE WEIGHT	
Hose	DN	Dash	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft
NTIB2	3	-02	3,2	1/8	17	250	68	1000	28	1.1	0,04	0.03
NTIB3	5	-03	4,8	3/16	17	250	68	1000	32	1.2	0,10	0.07
NTIB4	6	-04	6,3	1/4	17	250	68	1000	38	1.5	0,18	0.12
NTIB5	8	-05	7,9	5/16	17	250	68	1000	51	2.0	0,27	0.18
NTIB6	10	-06	9,5	3/8	17	250	68	1000	63	2.5	0,40	0.27
NTIB8	12	-08	12,7	1/2	17	250	68	1000	85	3.3	0,69	0.46
NTIN2	3	-02	3,2	1/8	17	250	68	1000	28	1.1	0,04	0.03
NTIN3	5	-03	4,8	3/16	17	250	68	1000	32	1.2	0,10	0.07
NTIN4	6	-04	6,3	1/4	17	250	68	1000	38	1.5	0,18	0.12
NTIN5	8	-05	7,9	5/16	17	250	68	1000	51	2.0	0,27	0.18
NTIN6	10	-06	9,5	3/8	17	250	68	1000	63	2.5	0,40	0.27
NTIN8	12	-08	12,7	1/2	17	250	68	1000	85	3.3	0,69	0.46

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.



NTMB/NTMN

SPECIALTY

NYLON TUBING METRIC **BLACK OR NATURAL**

RYCO NTMB

RYCO NTMN

RECOMMENDED FOR:

Pneumatic and hydraulic control systems, fuel tubing, air and gas tubing. Also ideal for handling weed killing solutions, refrigerants, fresh and sea water, fumigants, paints and lacquers and many other products.

Nylon pressure tubing is made from premium quality raw materials and precision engineered to ensure simplicity of connections with fittings and adaptors.

RYCO NTMB hose is black, and RYCO NTMN hose is natural (translucent).

TUBE:

Thermoplastic extruded tube.

FEATURES:

High quality nylon. Excellent dimensional stability. Temperature and light stabilised. Chemical, oil, fuel and grease resistant. Easily installed and assembled. Lighter than rubber or steel lines. Good flexibility characteristics.

TEMPERATURE RANGE:

From -20°C to +90°C (-4°F to 194°F).

NOTE: At the maximum temperature of +90°C (194°F) the recommended working pressure is reduced by 50% to a MWP of 10 bar/145 psi.

WORKING PRESSURE:

Maximum working pressures are based on a 4:1 safety factor (maximum working pressure to minimum burst pressure).

COIL LENGTHS: 100 Metre.

TOLERANCES:

Available on request.

COUPLINGS:

Use only approved metric nylon Push-In or Compression Fittings.



	MB/NTMN UBING MET	TRIC	\bigcirc		Ç	\bigcirc		Ø		\searrow	Ŵ	
PART NO	HOSE	E SIZE	NOMINAL HOSE OD		MAXIMUM WORKING PRESSURE		MINIMUM BURST PRESSURE		MINIMUM BEND RADIUS		AVERAGE WEIGHT	
Hose	DN	Dash	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft
NTMB4	4	-02	4	-	20	290	80	1160	28	1.1	0,04	0.03
NTMB5	5	-03	5	-	20	290	80	1160	35	1.4	0,10	0.07
NTMB6	6	-04	6	-	20	290	80	1160	42	1.6	0,18	0.12
NTMB8	8	-05	8	-	20	290	80	1160	56	2.2	0,27	0.18
NTMB10	10	-06	10	-	20	290	80	1160	70	2.7	0,40	0.27
NTMB12	12	-08	12	-	20	290	80	1160	84	3.3	0,69	0.46
NTMN4	4	-02	4	-	20	290	80	1160	28	1.1	0,04	0.03
NTMN5	5	-03	5	-	20	290	80	1160	35	1.4	0,10	0.07
NTMN6	6	-04	6	-	20	290	80	1160	42	1.6	0,18	0.12
NTMN8	8	-05	8	-	20	290	80	1160	56	2.2	0,27	0.18
NTMN10	10	-06	10	-	20	290	80	1160	70	2.7	0,40	0.27
NTMN12	12	-08	12	-	20	290	80	1160	84	3.3	0,69	0.46

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

HOSE PVC - SPECIALTY

PCVTM/H

RYCO CLEAR VINYL TUBING RYCO CLEAR VINYL TUBING HD

RECOMMENDED FOR:

Suitable for food and beverage fluids, medical drainage and Low Pressure general delivery lines.

Non-toxic tube manufactured to AS 2070 with excellent clarity, flexibility and mirror smooth bore for low friction flow.

STANDARDS MET OR EXCEEDED:

AS 2070.

TUBE:

Clear extruded vinyl.

FEATURES:

High grade mirror finish. Non-toxic food contact. Abrasion resistant. Crystal clear. PCVTMH10 has a Heavy Duty thicker wall.

TEMPERATURE RANGE:

From 0°C to +50°C (+32°F to +122°F).

COIL LENGTHS:

15, 30, 60 and 100 Metre.

TOLERANCES:

Available on request.

COUPLINGS:

Use only application approved Fittings and Clamps

NOTE: Petrol resistant vinyl tubing is available on request.



	CVT/PCVTH EAR VINYL TU	JBING	I	IO		\bigcirc		\bigcirc	Ŵ	
PART NO	HOSE	SIZE		NOMINAL HOSE ID		NOMINAL HOSE OD		IMUM KING SURE	AVERAGE WEIGHT	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	kg/m	lb/ft
PCVTM3	3	-02	3,0	1/8	5,0	0.19	9	125	0,17	0.11
PCVTM4	4	-02	4,0	5/32	6,0	0.23	8	115	0,25	0.17
PCVTM5	5	-03	5,0	3/16	8,0	0.31	8	115	0,42	0.28
PCVTM6	6	-04	6,0	1/4	9,0	0.35	6	90	0,48	0.32
PCVTM8	8	-05	8,0	5/16	11,0	0.43	5	75	0,61	0.41
PCVTM10	10	-06	10,0	3/8	13,0	0.51	4	60	0,74	0.50
PCVTM12	13	-08	12,5	1/2	15,5	0.61	5	70	0,90	0.60
PCVTM16	16	-10	16,0	5/8	19,0	0.75	4	60	1,13	0.76
PCVTM19	19	-12	19,0	3/4	23,0	0.90	3.5	50	1,81	1.22
PCVTM25	25	-16	25,0	1	31,0	1.22	3.5	50	3,60	2.42
PCVTM32	32	-20	32,0	1.1/4	38,0	1.50	3	40	4,52	3.04
PCVTM38	38	-24	38,0	1.1/2	46,0	1.81	3	40	7,12	4.78
PCVTM50	50	-32	50,0	2	60,0	2.36	3	40	11,65	7.83
PCVTMH10	10	-06	10,0	3/8	15,0	0.59	6	90	1,34	0.90

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

TEFLON[®] - SPECIALTY

HOSE

COUPLINGS

TECHNICAL

CONNECTING PARTNERSHIPS

RECOMMENDED FOR:

STAINLESS STEEL BRAID TEFLON* HOSE

RTH1

SPECIALTY

High Pressure hydraulic oil lines. Fluids at extremes of pressure and temperature. RYCO RTH1 Series Hose Lining is chemically pure, inert and contains no leachable additives. RYCO RTH1 is remarkably resistant to high temperature and flame. It has a very high melting point, thermal degradation threshold and auto-ignition temperature. **Warning:** RTH1 Hose Liner is non-conductive. Do not use with high velocity fluids and gases, as static electricity may be generated and cause premature failure of hose. If in doubt contact RYCO Hydraulics Technical Department.

PERFORMANCE:

Meets or Exceeds the Performance Requirements of: SAE 100R14. RTH112 meets ID and OD requirements of SAE 100R14. Other sizes have ID and OD different to SAE 100R14.

TUBE:

TEFLON* (PTFE).

REINFORCEMENT:

One braid of high tensile Grade 304 stainless steel wire.

TEMPERATURE RANGE:

From -60° C to $+260^{\circ}$ C (-76° F to $+500^{\circ}$ F). (According to application).

WORKING PRESSURE:

GL

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

WORKING TE	MPERATURE	% OF WORKING PRESSURE THAT MAY BE USED SAFELY
°C	٥F	Percentage
-60°C to +100°C	(-76°F to +212°F)	100
+101°C to +150°C	(+214°F to +302°F)	93
+151°C to +200°C	(+304°F to +392°F)	85
+201°C to +250°C	(+394°F to +482°F)	77
+251°C to +260°C	(+484°F to +500°F)	70

THIRD PARTY APPROVALS: MED and USCG.

COUPLINGS:



TT000 Series (sizes -04 to -16).

For coupling specifications and assembly instructions see the latest RYCO Product Technical Manual - Hydraulics and the latest Crimp Chart on our website **www.RYCO.com.au**.

	H1 - N* HOSE		Ĩ	\bigcirc		\bigcirc	Ç	\mathbf{O}	Ç	\mathbf{O}	Ç	Ì	ſ.	\searrow	۷	V V
PART NO	HOSE	SIZE		INAL E ID	NOM HOS	INAL E OD	WOR	MUM KING SURE	WOR PRES	MUM KING SURE 00R14	BU	MUM RST SURE	BE	MUM ND DIUS	AVEF WEI	
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	bar	psi	mm	inch	kg/m	lb/ft
RTH14	6	-04	6,4	1/4	9,4	0.37	170	2450	103	1500	680	9800	75	3.0	0,12	0.08
RTH16	10	-06	9,5	3/8	11,7	0.46	165	2375	103	1500	660	9500	125	5.0	0,14	0.09
RTH18	12	-08	12,7	1/2	15,4	0.61	120	1750	55	800	485	7000	140	5.5	0,22	0.15
RTH110	16	-10	15,9	5/8	18,4	0.72	105	1500	55	800	420	6000	165	6.5	0,28	0.19
RTH112	19	-12	19,1	3/4	22,1	0.87	85	1250	55	800	345	5000	200	8.0	0,33	0.22
RTH116	25	-16	25,4	1	28,6	1.13	55	800	55	800	220	3200	300	12.0	0,46	0.31

115

HOSE FLEXIBLE DUCTING - SPECIALTY



SPECIALTY
PVC FLEXIBLE DUCTING BLUE



RECOMMENDED FOR:

A flexible PVC Ducting with a thicker wall than other PVC Ducting and with an embedded helix wire making it ideal for Medium Duty dust or fume extraction.

Suitable for use in: manufacturing and processing industries, grain handling industries, agricultural equipment, chemical processing, construction and mining, woodworking and timber industries etc.

TUBE:

An extruded PVC wall.

REINFORCEMENT:

Spiral helix steel wire.

COVER:

An extruded PVC wall.

FEATURES:

A flexible lower cost Light Duty ducting, suitable for a wide range of applications. Medium Duty suction and delivery of abrasive powders, shavings

and fumes.

Excellent UV resistance. Excellent flexibility. Good chemical resistance.

TEMPERATURE RANGE:

From $0^{\circ}C$ to $+50^{\circ}C$ ($+32^{\circ}F$ to $+122^{\circ}F$).

COIL LENGTHS: 10 Metre.

TOLERANCES: Available on request.

COUPLINGS:

Light Duty sheet metal type Fittings, with no sharp or serrated ends.

NOTE: The routing of any Flexible Ducting is critical. • **DO NOT** let it sag anywhere.

• DO NOT let it rub against any sharp edges at all.



DPV PVC FLEXIBLE DUCTING		IO) (Hg		
PART NO	HOSE	SIZE	NOMINAL HOSE ID		MINIMUM BEND RADIUS		VACUUM	I RATING
Hose	DN	Dash	mm	inch	mm	inch	mmHg	inHg
DPV32	51	-32	50,8	2	102	4.0	2	0.07
DPV36	57	-36	57,2	2.1/4	114	4.5	1,7	0.07
DPV40	63	-40	63,5	2.1/2	126	5.0	1,7	0.07
DPV48	76	-48	76,2	3	152	6.0	1,7	0.07
DPV56	89	-56	88,9	3.1/2	178	7.0	1,6	0.06
DPV64	102	-64	101,6	4	204	8.0	1,3	0.05
DPV72	114	-72	114,3	4.1/2	228	9.0	1,2	0.04
DPV80	127	-80	127,0	5	254	10.0	1	0.03
DPV96	152	-96	152,4	6	304	12.0	0,8	0.03
DPV112	179	-112	177,8	7	356	14.0	0,5	0.02
DPV128	203	-128	203,2	8	406	16.0	0,4	0.01
DPV160	254	-160	254,0	10	508	20.0	0,4	0.01
DPV192	305	-192	304,8	12	610	24.0	0,3	0.01

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

FLEXIBLE DUCTING - SPECIALTY

ACCESSORIES

TECHNICAI

RECOMMENDED FOR:

THERMOPLASTIC RUBBER FLEXIBLE DUCTING BLACK

DTP

SPECIALTY

An extruded thermoplastic rubber ducting with a steel spiral helix wire embedded in the wall of the ducting. A versatile high quality general purpose ducting with excellent temperature, UV, chemical and abrasion resistance.

Suitable for use in: manufacturing and processing industries, grain handling industries, agricultural equipment, automotive, petrochemical, chemical processing, construction and mining, woodworking and timber industries etc.

TUBE:

Thermoplastic rubber wall.

REINFORCEMENT:

Spiral helix steel wire.

COVER:

Thermoplastic rubber wall.

FEATURES:

A flexible multi-purpose ducting suitable for most general purpose applications. Suction and delivery of abrasive powders, shavings and fumes. Excellent UV resistance. Excellent flexibility. Good chemical resistance.

TEMPERATURE RANGE:

From -50°C to +120°C (-58°F to +248°F).

COIL LENGTHS: 10 Metre.

TOLERANCES:

Available on request.

COUPLINGS:

Light Duty sheet metal type Fittings, with no sharp or serrated ends

NOTE: The routing of any Flexible Ducting is critical. • DO NOT let it sag anywhere.

• DO NOT let it rub against any sharp edges at all.



ORM DRIVE	HEAVY DUTY ONE BOLT CLAMP

DTP THERMOPLASTIC RUBBER FLEXIBLE DUCTING			I	\bigcirc) (Hg	
PART NO	HOSE	SIZE		INAL SE ID		MUM RADIUS	VACUUM	I RATING
Hose	DN	Dash	mm	inch	mm	inch	mmHg	inHg
DTP24	38	-24	38,1	1.1/2	76	3.0	2	0.07
DTP32	51	-32	50,8	2	102	4.0	2	0.07
DTP36	57	-36	57,2	2.1/4	114	4.5	1,7	0.06
DTP40	63	-40	63,5	2.1/2	126	5.0	1,7	0.06
DTP48	76	-48	76,2	3	152	6.0	1,7	0.06
DTP56	89	-56	88,9	3.1/2	178	7.0	1,6	0.06
DTP64	102	-64	101,6	4	204	8.0	1,3	0.05
DTP72	114	-72	114,3	4.1/2	228	8.0	1,2	0.04
DTP80	127	-80	127,0	5	254	10.0	1	0.03
DTP96	152	-96	152,4	6	304	12.0	0,8	0.03
DTP112	178	-112	177,8	7	356	14.0	0,5	0.02
DTP128	203	-128	203,2	8	406	16.0	0,4	0.01
DTP160	254	-160	254,0	10	508	20.0	0,4	0.01
DTP192	305	-192	304,8	12	610	24.0	0,3	0.01

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.



HOSE FLEXIBLE DUCTING - SPECIALTY

DPUA

SPECIALTY POLYURETHANE FLEXIBLE DUCTING CLEAR

RECOMMENDED FOR:

An extruded anti-static polyurethane ducting with a steel spiral helix wire embedded in the wall. A versatile high quality General Heavier Duty ducting with good UV, chemical and excellent abrasion resistance.

Suitable for Heavier Duty use in: manufacturing and processing industries, grain handling industries, agricultural equipment, chemical processing, textile, recycling, construction and mining, woodworking and timber industries etc. Suitable for dry food contact.

TUBE:

HD polyurethane anti-static wall.

REINFORCEMENT:

Spiral helix copper wire.

COVER:

HD polyurethane anti-static wall.

FEATURES:

A flexible Heavy Duty multi-purpose anti-static ducting suitable for applications that also require excellent abrasion or tear resistance. Static dissipating properties.

Five times better abrasion resistance than PVC ducting. Light, flexible but very strong - good tear resistance. Translucent wall to see product flow. Dry food contact.

TEMPERATURE RANGE:

From -40°C to +90°C (-40°F to +194°F).

COIL LENGTHS:

10 Metre.

TOLERANCES: Available on request.

COUPLINGS:

Light Duty sheet metal type Fittings, with no sharp or serrated ends

NOTE: The routing of any Flexible Ducting is critical. **• DO NOT** let it sag anywhere.

• DO NOT let it rub against any sharp edges at all.



DPU POLYURETHANE FLEXIBLE DUCTING		D) (Hg		
PART NO	HOSE	SIZE	NOMINAL HOSE ID		MINIMUM BEND RADIUS		VACUUM	IRATING
Hose	DN	Dash	mm	inch	mm	inch	mmHg	inHg
DPUA24	38	-24	38,1	1.1/2	76	3.0	2	0.07
DPUA32	51	-32	50,8	2	102	4.0	2	0.07
DPUA36	57	-36	57,2	2.1/4	114	4.5	1,7	0.06
DPUA40	63	-40	63,5	2.1/2	126	5.0	1,7	0.06
DPUA48	76	-48	76,2	3	152	6.0	1,7	0.06
DPUA56	89	-56	88,9	3.1/2	178	7.0	1,6	0.06
DPUA64	102	-64	101,6	4	204	8.0	1,3	0.05
DPUA72	114	-72	114,3	4.1/2	228	8.0	1,2	0.04
DPUA80	127	-80	127,0	5	254	10.0	1	0.03
DPUA96	152	-96	152,4	6	304	12.0	0,8	0.03
DPUA112	178	-112	177,8	7	356	14.0	0,5	0.02
DPUA128	203	-128	203,2	8	406	16.0	0,4	0.01
DPUA160	254	-160	254,0	10	508	20.0	0,4	0.01

Cutting and Assembly Charges apply to all RYCO industrial hoses, and vary by hose types and sizes. Contact RYCO for additional information or visit www.RYCO.com.au.

HOSE PROTECTION

HOSE

COUPLINGS

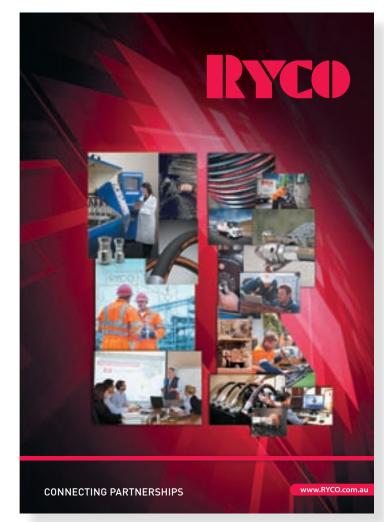
RYCO offers a selection of hose protection and identification products for the prolonged life of hose and hose assemblies. Many of these are suitable for use with RYCO's range of Industrial hose products. For further information on available hose protection products, contact your RYCO representative or download the RYCO Product Technical Manual - Hydraulics from our website, www.RYCO.com.au

CROCSTOP RCS **3 IN 1 SAFETY** CROCSLEEVE DEVICE **FLAME RESISTANT ANTI-STATIC** Burst supression MDG41 SAFE Whipcheck Recommended for hose burst and pinhole protection. Abrasion resistant Protection of individual hoses from severe abrasion. Provides a cost-effective method of bundling hoses together, while providing abrasion resistance to the bundle. RH RSG RAWHIDE POLYETHYLENE SPIRAL GUARD NYLON HOSE SLEEVE RSG (BLACK), RSGY (YELLOW), **RSGF (FRAS)** Recommended for the protection of individual hoses from Lightweight, cost-effective protection of hoses and cables abrasion. Provides a cost-effective method of bundling from abrasion and impact. It can also be used to bundle hoses together, while providing abrasion resistance to hoses together in groups. RSGF meets Flame Resistance the bundle. When abrasion occurs, the thousands of Designation "U.S. MSHA" of the US Department of Labor, tiny filaments in the sleeve bulk up to continually renew Mine Safety and Health Administration. the surface. **RWA** RHYS PACKAGING SLEEVE WIRE ARMOUR Recommended for packaging and protection of hose Protection for Hose Cover in arduous operating assemblies, in transit and in storage. RYCO RHYS conditions; especially against abrasion and deep gouges, thus prolonging the life of the hose. Packaging Sleeve is installed over the finished hose assembly. The ends may be either heat sealed, folded over and stapled, or taped closed. 750/760 FS1072 TWO DELOT- NO PART ILLE SPRING GUARD **FIRE SLEEVE** Recommended for the control of bend radius at the end Recommended for increasing the service life of hoses used in hostile environments. It is a tough, flexible of hoses to avoid excessive strain on hose couplings. insulation, which not only protects from intense external Can be used with L000 Series Field Attachable and T2000 radiant heat, but also sheds molten metal splash. Series BITELOK Couplings.

CLAMPS

CONNECTING PARTNERSHIPS

HOSE FURTHER INFORMATION



RYCO PRODUCT TECHNICAL MANUAL - HYDRAULICS

For further information on RYCO's Hose range, including hose assembly information, chemical compatibilities and a wide range of suitable fittings, request a copy of RYCO's Product Technical Manual - Hydraulics or download one from our website **www.RYCO.com.au**.

CRIMP CHARTS

Consult our website, **www.RYCO.com.au**, for up-to-date crimp charts - in both metric and imperial measurements - for crimping data on RYCO's wide range of Hose and matched Couplings.

Please refer to page 121 of the coupling section.







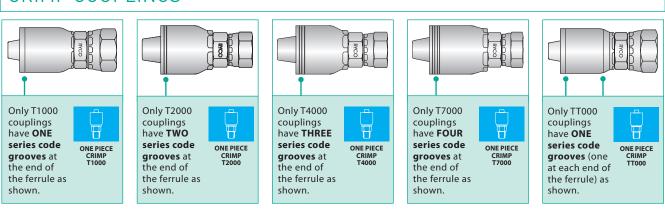




Some Hoses featured in this manual are matched to particular RYCO Hose Couplings series'. These must be assembled according to the instructions listed in the RYCO Product Technical Manual - Hydraulics and the latest Crimp Chart.

There are many different styles of thread and connector for the Coupling series' listed below. For a complete list or for further information please consult the RYCO Product Technical Manual - Hydraulics, the latest Crimp Chart on our website - **www.RYCO.com.au**, or contact your RYCO Representative.

CRIMP COUPLINGS



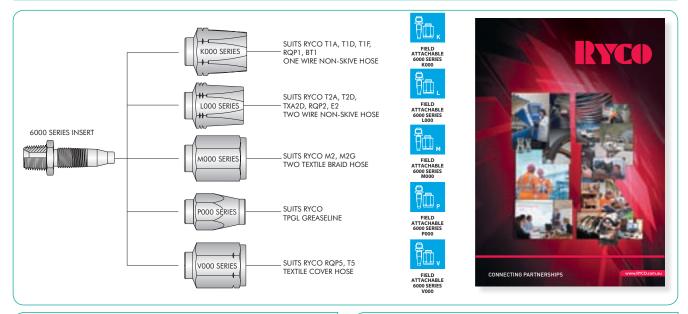
FIELD ATTACHABLE COUPLINGS

FIELD ATTACHABLE FERRULES FOR 6000 SERIES INSERTS

The RYCO Field Attachable system consists of five ferrule styles, each specific to a hose type, and one common insert. Field attachable inserts and ferrules can be ordered individually, or as a complete coupling for specific hose types.

Field Attachable Inserts for RYCO Hose Series T1A, T2A, T1D, T2D, TXA2D, RQP1, RQP2, T1F, M2, M2G, BT1, E2. **V000** Series match to RQP5 and T5 Hose Series.

6000 Series Inserts are used with NON-SKIVE Ferrules K000, L000, M000, P000 and V000 Series.



PUSH-ON COUPLINGS

8000 SERIES PUSH-ON COUPLINGS FOR PL1, PL1D AND RQP6 SERIES HOSE

PL1, PL1D and RQP6 Hose simply pushes on to 8000 Series Couplings. Clamps are required for critical applications, and when Working Pressure exceeds 50% of the Maximum Static Working Pressure. Do not overtighten Clamps as this will damage the hose.



SUCTION AND RETURN COUPLINGS

33000 SERIES SUCTION AND RETURN COUPLINGS FOR SR AND SRF SERIES HOSE 33000 Series Couplings require a suitable Clamp around the outside of the hose.





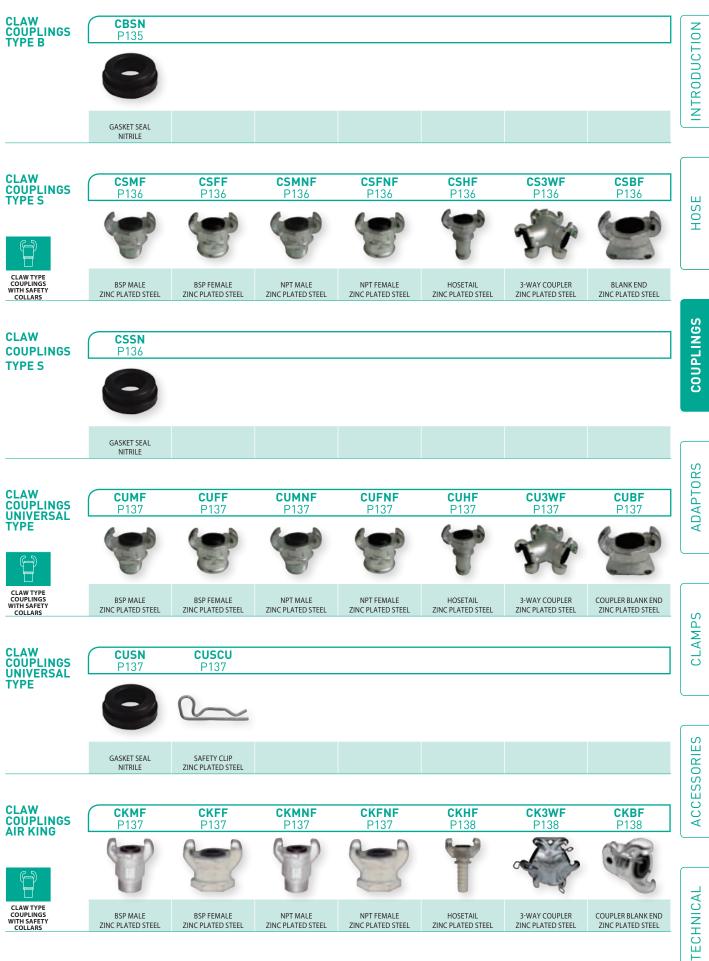
CAMLOCK DUST CAPS	K-A	CLDCA P129	CLDCS P129	CLDCB P129	CLDCH P129	Z
		Stainless Steel pa	rt (CLDCS) shown.			DUCT
CAMLOCK COUPLINGS	DUST CAP	ALUMINIUM	STAINLESS STEEL	BRASS	POLYPROPYLENE	INTRODUCTION
CAMLOCK				CLDPB		
DUST PLUGS		CLDPA P129	CLDPS P129	P129	CLDCH P129	
		Stainless Steel pa	rt (CLDPS) shown.			HOSE
CAMLOCK COUPLINGS	DUST PLUG	ALUMINIUM	STAINLESS STEEL	BRASS	POLYPROPYLENE	<u> </u>
CAMLOCKS TYPE A		CLAA P130	CLAS P130	CLAB P130	CLAH P130	
		Aluminium part (CLAA) shown.			INGS
CAMLOCK COUPLINGS	TYPE A	ALUMINIUM	STAINLESS STEEL	BRASS	POLYPROPYLENE	COUPLINGS
CAMLOCKS TYPE B		CLBA P130	CLBS P130	CLBB P130	CLBH P130	
17°		Stainless Steel pa	rt (CLBS) shown.			ORS
CAMLOCK COUPLINGS	ТҮРЕ В	ALUMINIUM	STAINLESS STEEL	BRASS	POLYPROPYLENE	ADAPTORS
CAMLOCKS TYPE C		CLCA P131	CLCS P131	CLCB P131	CLCH P131	
		Brass part (CLCB)	shown.			S
CAMLOCK COUPLINGS	TYPE C	ALUMINIUM	STAINLESS STEEL	BRASS	POLYPROPYLENE	CLAMPS
						0
CAMLOCKS TYPE D		CLDA P131	CLDS P131	CLDB P131	CLDH P131	
		Polypropylene pa	rt (CLDH) shown.			ES
CAMLOCK COUPLINGS	TYPE D	ALUMINIUM	STAINLESS STEEL	BRASS	POLYPROPYLENE	ACCESSORIES
						ACCE

CONNECTING PARTNERSHIPS

PICTORIAL INDEX

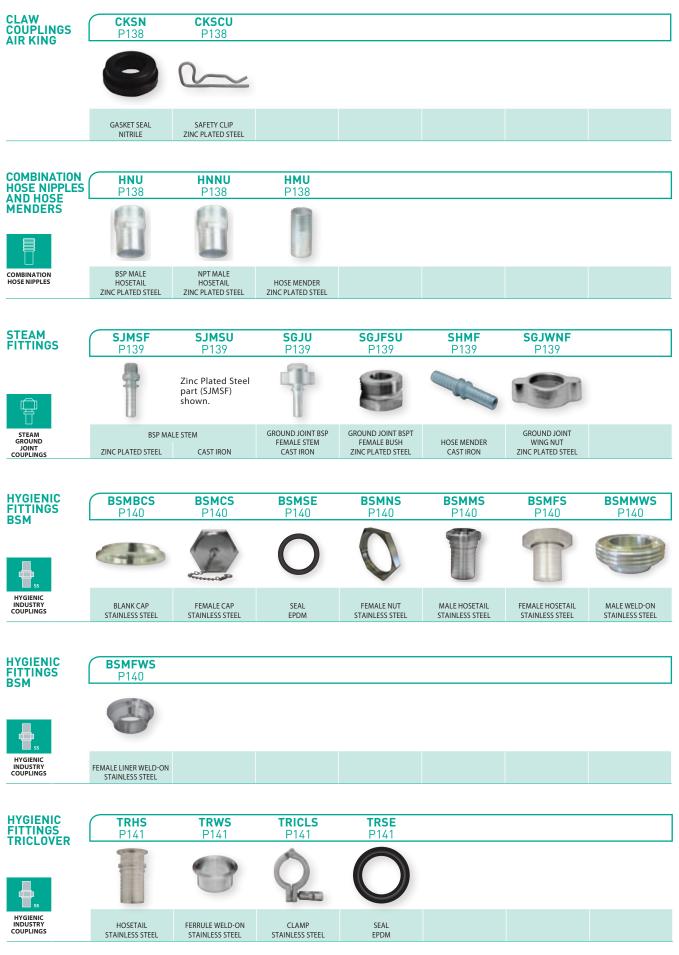
CAMLOCKS TYPE E	53	CLEA P132	CLES P132	CLEB P132	CLEH P132		
8 -	T	Aluminium part (C	LEA) shown.				
CAMLOCK COUPLINGS	TYPE E	ALUMINIUM	STAINLESS STEEL	BRASS	POLYPROPYLENE		
CAMLOCKS TYPE F	1	CLFA P132	CLFS P132	CLFB P132	CLFH P132		
8778	W	Stainless Steel par	t (CLFS) shown.				
CAMLOCK COUPLINGS	TYPE F	ALUMINIUM	STAINLESS STEEL	BRASS	POLYPROPYLENE		
CAMLOCK SPARES	CLSCU	CLPS	CLLS	CLLB	CLWN	CLWC	CLWV
STARES	P133	P133	P133	P133	P133	P133	P133
	\sim		C	R	\mathbf{O}	\mathbf{O}	\mathbf{O}
CAMLOCK	SAFETY CLIP	CAMLOCK PIN		CK LEVER	CAMLOCK SEAL	CAMLOCK SEAL	CAMLOCK SEAL
	ZINC PLATED STEEL	STAINLESS STEEL	STAINLESS STEEL	BRASS	NITRILE	NEOPRENE	VITON
CLAW COUPLINGS TYPE A	CAMF P134	CAFF P134	CAMNF P134	CAFNF P134	CAHF P134	CA3WF P134	CABF P134
		9			T	Ŵ	
CLAW TYPE COUPLINGS WITH SAFETY COLLARS	BSP MALE ZINC PLATED STEEL	BSP FEMALE ZINC PLATED STEEL	NPT MALE ZINC PLATED STEEL	NPT FEMALE ZINC PLATED STEEL	HOSETAIL ZINC PLATED STEEL	3-WAY COUPLER ZINC PLATED STEEL	COUPLER BLANK END ZINC PLATED STEEL
CLAW COUPLINGS TYPE A	CASN P134	CASCU P134					
	0	\bigcirc					
	GASKET SEAL NITRILE	SAFETY CLIP ZINC PLATED STEEL					
CLAW COUPLINGS TYPE B	CBMF P135	CBFF P135	CBMNF P135	CBFNF P135	CBHF P135	CB3WF P135	CBBF P135
		3		3		A	
CLAW TYPE COUPLINGS WITH SAFETY COLLARS	BSP MALE ZINC PLATED STEEL	BSP FEMALE ZINC PLATED STEEL	NPT MALE ZINC PLATED STEEL	NPT FEMALE ZINC PLATED STEEL	HOSETAIL ZINC PLATED STEEL	3-WAY COUPLER ZINC PLATED STEEL	COUPLER BLANK END ZINC PLATED STEEL

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CONNECTING PARTNERSHIPS

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IRRIGATION FITTINGS	BMG P141	BFG P141	BCG P141	BSR P141	BSETG P141		
	T	1	D	0	Comprises BMG, BFG, BCG and BSR shown at left.		INTRODUCTION
	IRRIGATION MALE BALL HOSETAIL GALVANISED STEEL	IRRIGATION FEMALE SOCKET HOSETAIL GALVANISED STEEL	IRRIGATION CLOSURE RING GALVANISED STEEL	IRRIGATION O-SEAL	IRRIGATION BALL AND SOCKET HOSETAIL SET COMPLETE GALVANISED STEEL		
FIRE FITTINGS CFA	CFAMHB P142	CFAFHB P142	CFAPB P142	CFACB P142	CFAWE P142		OSE
		T	-	Cond	0		Ţ
>300 PSI HOSE TAIL COUPLINGS	MALE HOSETAIL BRASS	FEMALE HOSETAIL BRASS	MALE PLUG BRASS	FEMALE CAP BRASS	WASHER EPDM		
FIRE FITTINGS MFB	MFBMHB P142	MFBFHB P142	MFBPB P142	MFBCB P142	MFBWE P142		COUPLINGS
日 日 日 MP		T	-		0		3
>300 PSI HOSE TAIL COUPLINGS	MALE HOSETAIL BRASS	FEMALE HOSETAIL BRASS	MALE PLUG BRASS	FEMALE CAP BRASS	WASHER EPDM		L S S
FIRE FITTINGS STORZ	SZMA P143	SZFA P143	SZHA P143	SZCA P143	SZSE P143		ADAPTOF
→300 PSI HOSE TAIL COUPLINGS		9	T	B	0		
	BSPT MALE ALUMINIUM	BSPT FEMALE ALUMINIUM	HOSETAIL ALUMINIUM	CAP ALUMINIUM	SEAL EPDM		IPS
FIRE FITTINGS WAJAX	WJMA P143	WJFA P143	WJCA P143	WJSE P143			CLAMPS
	ED			0			S
>300 PSI HOSE TAIL COUPLINGS	BSPT MALE ALUMINIUM	BSPT FEMALE ALUMINIUM	CAP ALUMINIUM	SEAL EPDM			ACCESSORIES
PIPE GROOVED AND SHOULDERED	HPGU P144	HPSU P144				 	ACCES
		W					ICAL
HARDENED HOSE TAIL COUPLINGS	PIPE GROOVED END (VICTAULIC) ZINC PLATED STEEL	PIPE SHOULDERED END (VICTAULIC) ZINC PLATED STEEL					TECHNICAL

PICTORIAL INDEX



RYCO
CAMLOCKS

CAMLO	СКЅ	CLDCA	CLDCS	CLDCB	CLDCH			
CAMLOCK COUPLINGS	5							
SI	ZE	ALUMINIUM	STAINLESS STEEL	BRASS	POLYPROPYLENE			
Dash	inch	PART NO	PART NO	PART NO	PART NO			
-08	1/2	CLDCA-08	CLDCS-08		CLDCH-08			
-12	3/4	CLDCA-12	CLDCS-12	CLDCB-12	CLDCH-12			
-16	1	CLDCA-16	CLDCS-16	CLDCB-16	CLDCH-16			
-20	1.1/4	CLDCA-20	CLDCS-20	CLDCB-20	CLDCH-20			
-24	1.1/2	CLDCA-24	CLDCS-24	CLDCB-24	CLDCH-24			
-32	2	CLDCA-32	CLDCS-32	CLDCB-32	CLDCH-32			
-40	2.1/2	CLDCA-40	CLDCS-40	CLDCB-40	CLDCH-40			
-48	3	CLDCA-48	CLDCS-48	CLDCB-48	CLDCH-48			
-64	4	CLDCA-64	CLDCS-64	CLDCB-64	CLDCH-64			
-80	5	CLDCA-80	CLDCS-80		CLDCH-80			
-96	6	CLDCA-96	CLDCS-96		CLDCH-96			

NOTE: Stainless Steel part shown to represent range.

CAMLO	CKS	CLDPA	CLDPS	CLDPB	CLDPH		
	GS						
SI	IZE	ALUMINIUM	STAINLESS STEEL	BRASS	POLYPROPYLENE		
Dash	inch	PART NO	PART NO	PART NO	PART NO		
-08	1/2	CLDPA-08	CLDPS-08		CLDPH-08		
-12	3/4	CLDPA-12	CLDPS-12	CLDPB-12	CLDPH-12		
-16	1	CLDPA-16	CLDPS-16	CLDPB-16	CLDPH-16		
-20	1.1/4	CLDPA-20	CLDPS-20	CLDPB-20	CLDPH-20		
-24	1.1/2	CLDPA-24	CLDPS-24	CLDPB-24	CLDPH-24		
-32	2	CLDPA-32	CLDPS-32	CLDPB-32	CLDPH-32		
-40	2.1/2	CLDPA-40	CLDPS-40	CLDPB-40	CLDPH-40		
-48	3	CLDPA-48	CLDPS-48	CLDPB-48	CLDPH-48		
-64	4	CLDPA-64	CLDPS-64	CLDPB-64	CLDPH-64		
-80	5	CLDPA-80	CLDPS-80		CLDPH-80		
-96	6	CLDPA-96	CLDPS-96		CLDPH-96		

NOTE: Stainless Steel part shown to represent range.

CONNECTING PARTNERSHIPS

CAMLOCKS

CAMLOCKS		CLAA	CLAS	CLAB	CLAH
CAMLOCK COUPLINGS					
SI	ZE	ALUMINIUM	STAINLESS STEEL	BRASS	POLYPROPYLENE
Dash	inch	PART NO	PART NO	PART NO	PART NO
-08	1/2	CLAA-08	CLAS-08		CLAH-08
-12	3/4	CLAA-12	CLAS-12	CLAB-12	CLAH-12
-16	1	CLAA-16	CLAS-16	CLAB-16	CLAH-16
-20	1.1/4	CLAA-20	CLAS-20	CLAB-20	CLAH-20
-24	1.1/2	CLAA-24	CLAS-24	CLAB-24	CLAH-24
-32	2	CLAA-32	CLAS-32	CLAB-32	CLAH-32
-40	2.1/2	CLAA-40	CLAS-40	CLAB-40	CLAH-40
-48	3	CLAA-48	CLAS-48	CLAB-48	CLAH-48
-64	4	CLAA-64	CLAS-64	CLAB-64	CLAH-64
-80	5	CLAA-80	CLAS-80		CLAH-80
-96	6	CLAA-96	CLAS-96		CLAH-96

NOTE: Stainless Steel part shown to represent range.

CAMLOCKS CLBA			CLBS	CLBB	CLBH		
CAMLOCK COUPLINGS							
SI	ZE	ALUMINIUM	STAINLESS STEEL	BRASS	POLYPROPYLENE		
Dash	inch	PART NO	PART NO	PART NO	PART NO		
-08	1/2	CLBA-08	CLBS-08		CLBH-08		
-12	3/4	CLBA-12	CLBS-12	CLBB-12	CLBH-12		
-16	1	CLBA-16	CLBS-16	CLBB-16	CLBH-16		
-20	1.1/4	CLBA-20	CLBS-20	CLBB-20	CLBH-20		
-24	1.1/2	CLBA-24	CLBS-24	CLBB-24	CLBH-24		
-32	2	CLBA-32	CLBS-32	CLBB-32	CLBH-32		
-40	2.1/2	CLBA-40	CLBS-40	CLBB-40	CLBH-40		
-48	3	CLBA-48	CLBS-48	CLBB-48	CLBH-48		
-64	4	CLBA-64	CLBS-64	CLBB-64	CLBH-64		
-80	5	CLBA-80	CLBS-80		CLBH-80		
	6	CLBA-96	CLBS-96		CLBH-96		

NOTE: Stainless Steel part shown to represent range.

RYCO
CAMLOCKS

CAMLOCKS		CLCA	CLCS	CLCB	CLCH
CAMLOCK COUPLINGS					
SI	ZE	ALUMINIUM	STAINLESS STEEL	BRASS	POLYPROPYLENE
Dash	inch	PART NO	PART NO	PART NO	PART NO
-08	1/2	CLCA-08	CLCS-08		CLCH-08
-12	3/4	CLCA-12	CLCS-12	CLCB-12	CLCH-12
-16	1	CLCA-16	CLCS-16	CLCB-16	CLCH-16
-20	1.1/4	CLCA-20	CLCS-20	CLCB-20	CLCH-20
-24	1.1/2	CLCA-24	CLCS-24	CLCB-24	CLCH-24
-32	2	CLCA-32	CLCS-32	CLCB-32	CLCH-32
-40	2.1/2	CLCA-40	CLCS-40	CLCB-40	CLCH-40
-48	3	CLCA-48	CLCS-48	CLCB-48	CLCH-48
-64	4	CLCA-64	CLCS-64	CLCB-64	CLCH-64
-80	5	CLCA-80	CLCS-80		CLCH-80
-96	6	CLCA-96	CLCS-96		CLCH-96

NOTE: Stainless Steel part shown to represent range.

CAMLOCKS CLDA			CLDS	CLDB	CLDH		
CAMLOCK COUPLINGS							
SI	ZE	ALUMINIUM	STAINLESS STEEL	BRASS	POLYPROPYLENE		
Dash	inch	PART NO	PART NO	PART NO	PART NO		
-08	1/2	CLDA-08	CLDS-08		CLDH-08		
-12	3/4	CLDA-12	CLDS-12	CLDB-12	CLDH-12		
-16	1	CLDA-16	CLDS-16	CLDB-16	CLDH-16		
-20	1.1/4	CLDA-20	CLDS-20	CLDB-20	CLDH-20		
-24	1.1/2	CLDA-24	CLDS-24	CLDB-24	CLDH-24		
-32	2	CLDA-32	CLDS-32	CLDB-32	CLDH-32		
-40	2.1/2	CLDA-40	CLDS-40	CLDB-40	CLDH-40		
-48	3	CLDA-48	CLDS-48	CLDB-48	CLDH-48		
-64	4	CLDA-64	CLDS-64	CLDB-64	CLDH-64		
-80	5	CLDA-80	CLDS-80		CLDH-80		
-96	6	CLDA-96	CLDS-96		CLDH-96		

NOTE: Stainless Steel part shown to represent range.

CAMLOCKS

CAMLOCKS		CLEA	CLES	CLEB	CLEH		
SI	ZE	ALUMINIUM	STAINLESS STEEL	BRASS	POLYPROPYLENE		
Dash	inch	PART NO	PART NO	PART NO	PART NO		
-08	1/2	CLEA-08	CLES-08		CLEH-08		
-12	3/4	CLEA-12	CLES-12	CLEB-12	CLEH-12		
-16	1	CLEA-16	CLES-16	CLEB-16	CLEH-16		
-20	1.1/4	CLEA-20	CLES-20	CLEB-20	CLEH-20		
-24	1.1/2	CLEA-24	CLES-24	CLEB-24	CLEH-24		
-32	2	CLEA-32	CLES-32	CLEB-32	CLEH-32		
-40	2.1/2	CLEA-40	CLES-40	CLEB-40	CLEH-40		
-48	3	CLEA-48	CLES-48	CLEB-48	CLEH-48		
-64	4	CLEA-64	CLES-64	CLEB-64	CLEH-64		
-80	5	CLEA-80	CLES-80		CLEH-80		
-96	6	CLEA-96	CLES-96		CLEH-96		

NOTE: Stainless Steel part shown to represent range.

CAMLO	CKS	CLFA	CLFS	CLFB	CLFH		
CAMLOCK COUPLINGS							
SI	ZE	ALUMINIUM	STAINLESS STEEL	BRASS	POLYPROPYLENE		
Dash	inch	PART NO	PART NO	PART NO	PART NO		
-08	1/2	CLFA-08	CLFS-08		CLFH-08		
-12	3/4	CLFA-12	CLFS-12	CLFB-12	CLFH-12		
-16	1	CLFA-16	CLFS-16	CLFB-16	CLFH-16		
-20	1.1/4	CLFA-20	CLFS-20	CLFB-20	CLFH-20		
-24	1.1/2	CLFA-24	CLFS-24	CLFB-24	CLFH-24		
-32	2	CLFA-32	CLFS-32	CLFB-32	CLFH-32		
-40	2.1/2	CLFA-40	CLFS-40	CLFB-40	CLFH-40		
-48	3	CLFA-48	CLFS-48	CLFB-48	CLFH-48		
-64	4	CLFA-64	CLFS-64	CLFB-64	CLFH-64		
-80	5	CLFA-80	CLFS-80		CLFH-80		
06	-96 6 CLFA-96		CLFS-96		CLFH-96		

NOTE: Stainless Steel part shown to represent range.



CAMLOCKS		CLSCU	CLPS	CLLS	CLLB
SPARES CAMLOCK COUPLINGS		\sim			R
SIZE		SAFETY CLIP ZINC PLATED STEEL	PIN STAINLESS STEEL	LEVER STAINLESS STEEL	LEVER BRASS
Dash	inch	PART NO	PART NO	PART NO	PART NO
-08	1/2		CLPS-08	CLLS-08	CLLB-08
-12	3/4				
-16	1	CLSCU-16	CLPS-16	CLLS-16	CLLB-16
-20	1.1/4		CLPS-20	CLLS-20	CLLB-20
-48 3			CLPS-48	CLLS-48	CLLB-48
-64	4	CLSCU-64			
-96 6		CLSCU-96	CLPS-96	CLLS-96	CLLB-96

NOTE: Stainless Steel part shown to represent CLLS and CLLB.

CAMLOCKS		CLWN	CLWC	CLWV
CAMLOCK COUPLINGS		0	0	0
SIZE		NITRILE	NEOPRENE	VITON
Dash	inch	PART NO	PART NO	PART NO
-08	1/2	CLWN-08	CLWC-08	CLWV-08
-12	3/4	CLWN-12	CLWC-12	CLWV-12
-16	1	CLWN-16	CLWC-16	CLWV-16
-20	1.1/4	CLWN-20	CLWC-20	CLWV-20
-24	1.1/2	CLWN-24	CLWC-24	CLWV-24
-32	2	CLWN-32	CLWC-32	CLWV-32
-40	2.1/2	CLWN-40	CLWC-40	CLWV-40
-48	3	CLWN-48	CLWC-48	CLWV-48
-64	4	CLWN-64	CLWC-64	CLWV-64
-80	5	CLWN-80	CLWC-80	CLWV-80
-96	6	CLWN-96	CLWC-96	CLWV-96

COUPLINGS **CLAW COUPLINGS**

CLAW						
COUPL	INGS	CAMF	CAFF	CAMNF	CAFNF	
CLAW TYPE COUPLINGS WITH SAFETY COLLARS	UPLER					
SI	IZE	BSP MALE CAST IRON ZINC PLATED	BSP FEMALE CAST IRON ZINC PLATED	NPT MALE CAST IRON ZINC PLATED	NPT FEMALE CAST IRON ZINC PLATED	
Dash	inch	PART NO	PART NO	PART NO	PART NO	
-06	3/8	CAMF-06	CAFF-06	CAMNF-06	CAFNF-06	
-08	1/2	CAMF-08	CAFF-08	CAMNF-08	CAFNF-08	
-12	3/4	CAMF-12	CAFF-12	CAMNF-12	CAFNF-12	
-16	1	CAMF-16	CAFF-16	CAMNF-16	CAFNF-16	
-20	1.1/4	CAMF-20	CAFF-20	CAMNF-20	CAFNF-20	
-24	1.1/2	CAMF-24	CAFF-24	CAMNF-24	CAFNF-24	
-32	2	CAMF-32	CAFF-32	CAMNF-32	CAFNF-32	
-48	3	CAMF-48	CAFF-48	CAMNF-48	CAFNF-48	
CLAW COUPL	INGS	CAHF	CA3WF	CABF	CASN	CASCU
CLAW TYPE COUPLINGS WITH SAFETY COLLARS	UPLER	1	V		-	\square
SI	IZE	HOSETAIL CAST IRON ZINC PLATED	3-WAY COUPLER CAST IRON ZINC PLATED	COUPLER BLANK END CAST IRON ZINC PLATED	GASKET SEAL NITRILE	SAFETY CLIP ZINC PLATED STEEL
Dash	inch	PART NO	PART NO	PART NO	PART NO	PART NO
-06	3/8	CAHF-06				
-08	1/2	CAHF-08				
-12	3/4	CAHF-12				
-16	1	CAHF-16				
-20	1.1/4	CAHF-20	CA3WF-20	CABF-20	CASN-20	CASCU-20
-24	1.1/2	CAHF-24				
-32	2	CAHF-32	CA3WF-32	CABF-32	CASN-32	CASCU-32
-48	3	CAHF-48	CA3WF-48	CABF-48	CASN-48	CASCU-48

NOTE: NPT on request (minimum order quantity applies)



CLAW COUPLINGS		CBMF	CBFF	CBMNF	CBFNF
CLAW TYPE COUPLINGS WITH SAFETY COLLARS			3		3
SIZE		BSP MALE CAST IRON ZINC PLATED	BSP FEMALE CAST IRON ZINC PLATED	NPT MALE CAST IRON ZINC PLATED	NPT FEMALE CAST IRON ZINC PLATED
Dash	inch	PART NO	PART NO	PART NO	PART NO
-04	1/4	CBMF-04	CBFF-04	CBMNF-04	CBFNF-04
-06	3/8	CBMF-06	CBFF-06	CBMNF-06	CBFNF-06
-08	1/2	CBMF-08	CBFF-08	CBMNF-08	CBFNF-08
-12	3/4	CBMF-12	CBFF-12	CBMNF-12	CBFNF-12
-16	1	CBMF-16	CBFF-16	CBMNF-16	CBFNF-16

	-16	1	CBMF-16	CBFF-16	CBMNF-16	CBFNF-16
	-20	1.1/4	CBMF-20	CBFF-20	CBMNF-20	CBFNF-20
	-24	1.1/2	CBMF-24	CBFF-24	CBMNF-24	CBFNF-24
	-32	2	CBMF-32	CBFF-32	CBMNF-32	CBFNF-32
	-48	3	CBMF-48	CBFF-48	CBMNF-48	CBFNF-48
1						

CLAW COUPLI	NGS	CBHF	CB3WF	CBBF	CBSN
CLAW TYPE COUPLINGS WITH SAFETY COLLARS	UPLER				-
SI	ZE	HOSETAIL CAST IRON ZINC PLATED	3-WAY COUPLER CAST IRON ZINC PLATED	COUPLER BLANK END CAST IRON ZINC PLATED	GASKET SEAL NITRILE
Dash	inch	PART NO	PART NO	PART NO	PART NO
-04	1/4	CBHF-04			
-06	3/8	CBHF-06			
-08	1/2	CBHF-08			
-12	3/4	CBHF-12			
-16	1	CBHF-16	CB3WF-16	CBBF-16	
-20	1.1/4	CBHF-20			CBSN-20
-24	1.1/2	CBHF-24			
-32	2	CBHF-32			CBSN-32
-48	3	CBHF-48			CBSN-48
NOTE: NPT on I	request (minimu	ım order quantity applies)			

CONNECTING PARTNERSHIPS

COUPLINGS CLAW COUPLINGS

CLAW COUPLI	NGS	CSMF	CSFF	CSMNF	CSFNF
CLAW TYPE COUPLINGS WITH SAFETY COLLARS	JPLER				
SI	ZE	BSP MALE CAST IRON ZINC PLATED	BSP FEMALE CAST IRON ZINC PLATED	NPT MALE CAST IRON ZINC PLATED	NPT FEMALE CAST IRON ZINC PLATED
Dash	inch	PART NO	PART NO	PART NO	PART NO
-06	3/8	CSMF-06	CSFF-06	CSMNF-06	CSFNF-06
-08	1/2	CSMF-08	CSFF-08	CSMNF-08	CSFNF-08
-12	3/4	CSMF-12	CSFF-12	CSMNF-12	CSFNF-12
-16	1	CSMF-16	CSFF-16	CSMNF-16	CSFNF-16
-20	1.1/4	CSMF-20	CSFF-20	CSMNF-20	CSFNF-20
-24	1.1/2	CSMF-24	CSFF-24	CSMNF-24	CSFNF-24
-32	2	CSMF-32	CSFF-32	CSMNF-32	CSFNF-32
-48	3	CSMF-48	CSFF-48	CSMNF-48	CSFNF-48
CLAW COUPLI	NGS	CSHF	CS3WF	CSBF	CSSN
TYPE S COU	JPLER	(**)	-		-

S	IZE	HOSETAIL CAST IRON ZINC PLATED	3-WAY COUPLER CAST IRON ZINC PLATED	COUPLER BLANK END CAST IRON ZINC PLATED	GASKET SEAL NITRILE
Dash	inch	PART NO	PART NO	PART NO	PART NO
-06	3/8	CSHF-06			
-08	1/2	CSHF-08			
-12	3/4	CSHF-12			
-16	1	CSHF-16			
-20	1.1/4	CSHF-20	CS3WF-20	CSBF-20	CSSN-20
-24	1.1/2	CSHF-24			
-32	2	CSHF-32	CS3WF-32	CSBF-32	CSSN-32
-48	3	CSHF-48	CS3WF-48	CSBF-48	CSSN-48

Ryco CLAW COUPLINGS

UNIVERSAL COUPLER SIZE CAST IRROX 200C PLATED CAST IRROX 200C PLATED Dash inch PART NO PART NO O CAST IRROX 200C PLATED CAST IRROX 200C PLATED CAST IRROX 200C PLATED Dash inch PART NO PART NO PART NO O Colspan="2">CAST IRROX 200C PLATED CAST IRROX 200C PLATED CAST IRROX 200C PLATED O COLSPAN COLSPAN CUFF-16 CUMIN-06 CUFF-16 CUMF-15 CUMIN-06 CUFF-15 CUMIN-06 CUSF IRROX 200C PLATED CUMF-15 CUMIN-06 CUMEN-06 CUMF-15 CUMIN-06 CUSF IRROX 200C PLATED CUMF-15 CUMIN-06 CUSF IRROX 200C PLATED CUMEN-06 CUSF IRROX 200C PLATED CUMEN-06 CUSF IRROX 200C PLATED CUMPULATED IRROX 200C PLATED CUST IRROX 200C PLATED	CLAW Couplii	NGS	CUMF	CUFF	CUMNF	CUFNF		
SIZE OSE PAALE OST IRONZINCE PLATED OSE PERALE CAST IRONZINCE PLATED CAST IRONZINCE PLATED CAST IRONZINCE PLATED CAST IRONZINCE PLATED Dash inch PART NO PART NO PART NO PART NO PART NO 0.44 1/4 CUMF-06 CUFF-06 CUMINF-08 CUFINF-06 0.72 CUMF-108 CUFF-06 CUMINF-08 CUFINF-12 1.12 3/4 CUMF-16 CUFF-16 CUMINF-12 CUFINF-12 1.13 CUMF-16 CUFF-16 CUMIF-12 CUFINF-12 CUFINF-12 1.14 CUMF-16 CUFF-16 CUMIF-12 CUFINF-12 CUFINF-12 1.14 CUMF-16 CUFF-16 CUMIF-12 CUFINF-12 CUFINF-12 1.15 I CUMF-16 CUFINF-12 CUMINF-12 CUFINF-12 CUFINF-12 COUPLINGS CUFIF-16 CUBF CUFINF-12 SAFETY CLIP SAFETY CLIP Dash inch PART NO PART NO PART NO PART NO PART NO 0.44 1/4 </th <th></th> <th>COUPLER</th> <th></th> <th>6</th> <th></th> <th>1</th> <th></th> <th></th>		COUPLER		6		1		
Dash Inch PART NO PART NO PART NO -04 1/4 CUMF-04 CUFF-06 CUMNF-08 CUFNF-06 -08 1/2 CUMF-08 CUFF-08 CUMNF-08 CUFNF-06 -12 3/8 CUMF-12 CUMNF-08 CUFNF-12 CUMNF-12 -16 1 CUMF-15 CUFF-16 CUMNF-16 CUFNF-12 CLAW CUMF-15 CUFF-16 CUMNF-16 CUFNF-12 CUMNF-16 CLAW CUMF-12 CUMNF-16 CUFNF-12 CUMNF-16 CUFNF-12 CLAW CUHF CUFF-16 CUMNF-16 CUFNF-12 CUMNF-16 CLAW CUHF-16 CUFF-16 CUMNF-16 CUFNF-12 CUFNF-12 CLAW CuFF-16 CUSN Asset 54.4 SAFETY CLIP INVERSAL COUPLER CASTIRONZANCPLATED SAFETY CLIP SAFETY CLIP 12 CUHF-04 -04 1/4 CUHF-05		E						
-04 1/4 CUMF-04 CUFF-04 CUMNF-04 CUFNF-04 -06 3/8 CUMF-06 CUFF-06 CUMNF-06 CUFNF-06 -12 3/4 CUMF-10 CUFF-08 CUMNF-10 CUFNF-08 -12 1 CUMF-12 CUMNF-12 CUMNF-16 CUFNF-16 CUMF-12 CUMNF-16 CUSN CUSCU CUMF-12 CUMNF-12 CUMNF-12 CUMF-12 CUMF-12 CUM bit 21/4 CUSN CUSCU CUMF-12 CUMF-12 CUM bit 21/4 CUMF-12 CUM bit 21/4 CUPLER CUMF-12 <th< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></th<>								
-06 3/8 CUMF-06 CUFF-06 CUMNF-08 CUFNF-06 -12 3/4 CUMF-08 CUFF-12 CUMNF-12 CUFNF-12 -16 1 CUMF-16 CUFF-16 CUMNF-16 CUFNF-16 CLAW CUHF-16 CUFF-16 CUMNF-16 CUFNF-16 CUFNF-16 CLAW CUHF CUGWF CUBF CUBF CUSN CUSCU Vietness CUHF CUGWF CUBF CUSN CUSCU Vietness Vietness Vietness Vietness Vietness Vietness Vietness Size CUHF-04 CUHF-04 CUBF-16 CUSN-16 CUSCU-16 Osh 1/2 CUHF-04 CUBF-16 CUSN-16 CUSCU-16 -12 3/4 CUHF-12 CUBF-16 CUBF-16 CUSN-16 CUSCU-16 -12 3/4 CUHF-12 CUBF-16 CUSN-16 CUSCU-16 CUSCU-16 Size CSI KON ZINC PLATE CSI KON ZINC PLATE CSI KON ZINC PLATE CUSCU-16 CUSCU-16 -12 3/4 CUHF-06 CKFF					_			
-08 1/2 CUMF-08 CUFF-08 CUMNF-08 CUFNF-08 -12 3/4 CUMF-12 CUFF-12 CUMNF-12 CUFNF-12 -16 1 CUMF-16 CUFF-16 CUMNF-16 CUFNF-16 CLAW CUHF CUHF CU3WF CUBF CUSN CUSCU CUVERSAL COUPLER CUHF CU3WF CUBF CUSN CUSCU SIZE CASTRONZINC PLATED S-WAX COUPLER CUST IRONZINC PLATED CUST IRONZINC PLATED CASSRET SEL SAFETY CLP Orde 3/8 CUHF-06 CUST IRONZINC PLATED CUST IRONZINC PLATED CASSRET SEL SAFETY CLP Orde 3/8 CUHF-06 CUST IRONZINC PLATED CUST IRONZINC PLATED CASSRET SEL SAFETY CLP 12 3/4 CUHF-12 Cust IRONZINC PLATED 12 3/4 CUHF-16 CUSWF-16 CUBF-16 CUSN-16 CUSCU-16 CLAW CKMF CKMF								
12 3/4 CUMF-12 CUFF-12 CUMNF-12 CUFF-12 -16 1 CUMF-16 CUFF-16 CUMNF-16 CUFF-16 CLAW CUHF CUHF CUBF CUBF CUSN CUSCU CUMR-16 CUBF CUSN CUSCU WIVERSAL COUPLER WW								
16 1 CUMF-16 CUFF-16 CUMNF-16 CUFNF-16 CLAW COUPLINGS CUHF CUHF CU3WF CUBF CUSN CUSCU NIVERSAL COUPLER COUPLINGS Image: Cumple and the second								
CLAW COUPLINGS CUHF CU3WF CUBF CUSN CUSCU INVERSAL COUPLER COUPLERS Image: Comparison of the comparison								
COUPLINGS COHF COUNT COUPLER NIVERSAL COUPLER Image: Constraint of the second of the se	-10	1			COMIN TO	CONN 10	l	
Construction Construction<		NGS	CUHF	CU3WF	CUBF	CUSN	CUSCU	
SIZE HOSETAIL CASTIRON ZINC PLATED 3-WAY COUPLER CASTIRON ZINC PLATED COUPLER BLANK END CASTIRON ZINC PLATED GASKET SEAL NITRILE SAFETY CLIP ZINC PLATED STEEL Dash inch PART NO PART NO PART NO PART NO PART NO -04 1/4 CUHF-04 PART NO PART NO PART NO PART NO -06 3/8 CUHF-06 PART NO PART NO PART NO PART NO -08 1/2 CUHF-06 PART NO PART NO PART NO PART NO -12 3/4 CUHF-12 CUHF-16 CU3WF-16 CUBF-16 CUSN-16 CUSCU-16 CLAW COUPLINGS AKMF CKFF OK KMF CKFNF OK KMF <td>UNIVERSAL</td> <td>COUPLER</td> <td>A - N</td> <td>650 n</td> <td></td> <td></td> <td></td> <td></td>	UNIVERSAL	COUPLER	A - N	650 n				
SIZE HOSETAIL CASTIRON ZINC PLATED 3-WAY COUPLER CASTIRON ZINC PLATED COUPLER BLANK END CASTIRON ZINC PLATED GASKET SEAL NITRILE SAFETY CLIP ZINC PLATED STEEL Dash inch PART NO PART NO PART NO PART NO PART NO -04 1/4 CUHF-06 -06 3/8 CUHF-06 -12 3/4 CUHF-12 -16 1 CUHF-16 CU3WF-16 CUBF-16 CUSN-16 CUSCU-16 CLAW COUPLINGS AKMF CKFF CKMNF CKFNF AUTOR COUPLER BSP MALE CAST IRON ZINC PLATED CAST IRON ZINC PLATED NPT MALE CAST IRON ZINC PLATED NPT FEMALE CAST IRON ZINC PLATED </td <td>(-)</td> <td></td> <td></td> <td>STATE OF</td> <td>R-COR</td> <td></td> <td>0</td> <td></td>	(-)			STATE OF	R-COR		0	
SIZE HOSETAIL CASTIRON ZINC PLATED 3-WAY COUPLER CASTIRON ZINC PLATED COUPLER BLANK END CASTIRON ZINC PLATED GASKET SEAL NITRILE SAFETY CLIP ZINC PLATED STEEL Dash inch PART NO PART NO PART NO PART NO PART NO -04 1/4 CUHF-04 PART NO PART NO PART NO PART NO -06 3/8 CUHF-06 PART NO PART NO PART NO PART NO -08 1/2 CUHF-06 PART NO PART NO PART NO PART NO -12 3/4 CUHF-12 CUHF-16 CU3WF-16 CUBF-16 CUSN-16 CUSCU-16 CLAW COUPLINGS AKMF CKFF CKMNF CKFNF ALLE CAST IRON ZINC PLATED CAST IRON ZINC PLATED CAST IRON ZINC PLATED CAST IRON ZINC PLATED NPT MALE CAST IRON ZINC PLATED NPT FEMALE CAST IRON ZINC PLATED NPT FEMALE CAST IRON ZINC PLATED CAST IRON ZINC PLATED CAST IRON ZINC PLATED SIZE BSP MALE CAST IRON ZINC PLATED CAST IRON ZINC PLATED CAST IRON ZINC PLATED NPT FEMALE CAST IRON Z			-	1000			\sim	
SIZE HOSETAIL CASTIRON ZINC PLATED 3-WAY COUPLER CASTIRON ZINC PLATED COUPLER BLANK END CASTIRON ZINC PLATED GASKET SEAL NITRILE SAFETY CLIP ZINC PLATED STEEL Dash inch PART NO PART NO PART NO PART NO PART NO -04 1/4 CUHF-04 PART NO PART NO PART NO PART NO -06 3/8 CUHF-06 PART NO PART NO PART NO PART NO -08 1/2 CUHF-06 PART NO PART NO PART NO PART NO -12 3/4 CUHF-12 CUHF-16 CU3WF-16 CUBF-16 CUSN-16 CUSCU-16 CLAW COUPLINGS AKMF CKFF OK KMF CKFNF OK KMF <td>CLAW TYPE COUPLINGS</td> <td></td> <td></td> <td></td> <td>and the second s</td> <td></td> <td></td> <td>'</td>	CLAW TYPE COUPLINGS				and the second s			'
SIZE CAST IRON ZINC PLATED CAST IRON ZINC PLATED CAST IRON ZINC PLATED NITRILE ZINC PLATED STEEL Dash inch PART NO PART NO <td>COLLARS</td> <td></td> <td>•</td> <td>•••</td> <td></td> <td>-</td> <td></td> <td></td>	COLLARS		•	•••		-		
-04 1/4 CUHF-04 Image: Cube Point	SIZ	E						
-06 3/8 CUHF-06 Image: cump of the state of th	Dash	inch	PART NO	PART NO	PART NO	PART NO	PART NO	
-08 1/2 CUHF-08 Image: Cumposition of the cumposition	-04	1/4	CUHF-04					
12 3/4 CUHF-12 CU3WF-16 CUBF-16 CUSN-16 CUSCU-16 1 CUHF-16 CU3WF-16 CUBF-16 CUSN-16 CUSCU-16 CLAW COUPLINGS CKMF CKFF CKMNF CKFNF AIR KING CUPLER With Safery Size BSP MALE CAST IRON ZINC PLATED BSP FEMALE CAST IRON ZINC PLATED OMAT NO PART NO PART NO Dash inch PART NO PART NO PART NO PART NO -06 3/8 CKMF-06 CKFF-06 CKMNF-06 CKFNF-06 -08 1/2 CKMF-08 CKFF-12 CKMNF-12 CKFNF-12	-06	3/8	CUHF-06					
-16 1 CUHF-16 CU3WF-16 CUBF-16 CUSN-16 CUSCU-16 CLAW COUPLINGS CKMF CKMF CKFF CKMNF CKFNF AIR KING COUPLER WITH SAFEY V	-08	1/2	CUHF-08					
CLAW COUPLINGSCKMFCKFFCKMNFCKFNFAIR KING COUPLER COUPLINGSImage: Coupling and the second and the se	-12	3/4	CUHF-12					
COUPLINGSCKMIFCKFFCKMIFCKFNFAIR KING COUPLERImage: Coupling transmission of the transmission of	-16	1	CUHF-16	CU3WF-16	CUBF-16	CUSN-16	CUSCU-16	
COUPLINGSCKMIFCKFFCKMIFCKFNFAIR KING COUPLERImage: Coupling transmission of the transmission of							L	
AIR KING COUPLERImage: Construction of the second seco		NGS	CKMF	CKFF	CKMNF	CKFNF		
COUPLINES WITH SAFERYCOUPLINES WITH SAFERYSEE USE USE USE USE USE USE USE USE USE			0 0	0 0	0 0	0 0		
COUPINGS WITH SAFERYCOUPINGS WITH SAFERYCOUPINGS WITH SAFERYSIZESIZENPT MALE CAST IRON ZINC PLATEDNPT FEMALE CAST IRON ZINC PLATEDNPT FEMALE CAST IRON ZINC PLATEDDashinchPART NOPART NOPART NOPART NO-041/4CKMF-04CKFF-04CKMNF-04CKFNF-04-063/8CKMF-06CKFF-06CKMNF-06CKFNF-06-081/2CKMF-08CKFF-08CKMNF-08CKFNF-08-123/4CKMF-12CKFF-12CKMNF-12CKFNF-12	(-)							
COUPLINES WITH SAFERYCOUPLINES WITH SAFERYSEE USE USE USE USE USE USE USE USE USE				This was		This will		
COLLARSCOLLARSBSP MALE CAST IRON ZINC PLATEDNPT MALE CAST IRON ZINC PLATEDNPT FEMALE CAST IRON ZINC PLATEDDashinchPART NOPART NOPART NOPART NO-041/4CKMF-04CKFF-04CKMNF-04CKFNF-04-063/8CKMF-06CKFF-06CKMNF-06CKFNF-06-081/2CKMF-08CKFF-08CKMNF-08CKFNF-08-123/4CKMF-12CKFF-12CKMNF-12CKFNF-12	CLAW TYPE COUPLINGS							ſ
SIZECAST IRON ZINC PLATEDCAST IRON ZINC PLATEDCAST IRON ZINC PLATEDCAST IRON ZINC PLATEDDashinchPART NOPART NOPART NO-041/4CKMF-04CKFF-04CKMNF-04-063/8CKMF-06CKFF-06CKMNF-06-081/2CKMF-08CKFF-08CKMNF-08-123/4CKMF-12CKFF-12CKMNF-12	COLLARS							
-04 1/4 CKMF-04 CKFF-04 CKMNF-04 CKFNF-04 -06 3/8 CKMF-06 CKFF-06 CKMNF-06 CKFNF-06 -08 1/2 CKMF-08 CKFF-12 CKMNF-12 CKFNF-12 -12 3/4 CKMF-12 CKFF-12 CKMNF-12 CKFNF-12	SIZ	E						
-06 3/8 CKMF-06 CKFF-06 CKMNF-06 CKFNF-06 -08 1/2 CKMF-08 CKFF-08 CKMNF-08 CKFNF-08 -12 3/4 CKMF-12 CKFF-12 CKMNF-12 CKFNF-12	Dash	inch	PART NO	PART NO	PART NO	PART NO		
-08 1/2 CKMF-08 CKFF-08 CKMNF-08 CKFNF-08 -12 3/4 CKMF-12 CKFF-12 CKMNF-12 CKFNF-12	-04	1/4	CKMF-04	CKFF-04	CKMNF-04	CKFNF-04		
-12 3/4 CKMF-12 CKFF-12 CKMNF-12 CKFNF-12	-06	3/8	CKMF-06	CKFF-06	CKMNF-06	CKFNF-06		L
	-08	1/2	CKMF-08	CKFF-08	CKMNF-08	CKFNF-08		
-16 1 CKMF-16 CKFF-16 CKMNF-16 CKFNF-16	-12	3/4	CKMF-12	CKFF-12	CKMNF-12	CKFNF-12		ſ
	-16	1	CKMF-16	CKFF-16	CKMNF-16	CKFNF-16		
DTE: NPT on request (minimum order quantity applies)								

HIGHER TECHNOLOGY EQUALS GREATER PERFORMANCE 137

CLAW COUPLI	NGS	CKHF	CK3WF	CKBF	CKS	N	CKSCU
CLAW TYPE COUPLINGS WITH SAFETY COLLARS	OUPLER	T			e		2~
SI	ZE	HOSETAIL CAST IRON ZINC PLATED	3-WAY COUPLER CAST IRON ZINC PLATED	COUPLER BLANK END CAST IRON ZINC PLATED	GASKET S NITRIL		SAFETY CLIP NC PLATED STEEL
Dash	inch	PART NO	PART NO	PART NO	PART N	10	PART NO
-06	1/4	CKHF-06					
-08	3/8	CKHF-08					
-10	1/2	CKHF-10					
-12	3/4	CKHF-12					
-16	1	CKHF-16	CK3WF-16	CKBF-16	CKSN-	16	CKSCU-16
	NATION IIPPLES	HNU	HNNU	HOSE MEN	IDER	нми	

HOSE NIPPLES			
S	IZE	BSP MALE Hosetail Zinc plated steel	NPT MALE Hosetail Zinc plated steel
Dash	inch	PART NO	PART NO
-08	1/2	HNU-0808	HNNU-0808
-12	3/4	HNU-1212	HNNU-1212
-16	1	HNU-1616	HNNU-1616
-20	1.1/4	HNU-2020	HNNU-2020
-24	1.1/2	HNU-2424	HNNU-2424
-32	2	HNU-3232	HNNU-3232
-40	2.1/2	HNU-4040	HNNU-4040
-48	3	HNU-4848	HNNU-4848
-64	4	HNU-6464	HNNU-6464
-80	5	HNU-8080	HNNU-8080
-96	6	HNU-9696	HNNU-9696
-128	8	HNU-128128	HNNU-128128
-160	10	HNU-160160	HNNU-160160
-192	12	HNU-192192	HNNU-192192

HOSE MENDER SIZE ZINC PLATED STEEL Dash inch PART NO HMU-08 1/2 -08 3/4 HMU-12 -12 1 HMU-16 -16 1.1/4 HMU-20 -20 1.1/2 HMU-24 -24 2 -32 HMU-32 2.1/2 HMU-40 -40 -48 3 HMU-48

NOTE: NPT on request (minimum order quantity applies)



STEAM FITTING	S	SJMSF	SJMSU	SGJU	SGJFSU
STEAM GROUND JOINT COUPLINGS					
SI	ZE	BSP MALE STEM CAST IRON	BSP MALE STEM ZINC PLATED STEEL	BSP FEMALE GROUND JOINT STEAM CAST IRON	GJ BSPT FEMALE BUSH ZINC PLATED STEEL
Dash	inch	PART NO	PART NO	PART NO	PART NO
-04	1/4	SJMSF-04	SJMSU-04	SGJU-04	SGJFSU-04
-06	3/8	SJMSF-06	SJMSU-06	SGJU-06	SGJFSU-06
-08	1/2	SJMSF-08	SJMSU-08	SGJU-08	SGJFSU-08
-12	3/4	SJMSF-12	SJMSU-12	SGJU-12	SGJFSU-12
-16	1	SJMSF-16	SJMSU-16	SGJU-16	SGJFSU-16
-20	1.1/4	SJMSF-20	SJMSU-20	SGJU-20	SGJFSU-20
-24	1.1/2	SJMSF-24	SJMSU-24	SGJU-24	SGJFSU-24
-32	2	SJMSF-32	SJMSU-32	SGJU-32	SGJFSU-32
-40	2.1/2	SJMSF-40	SJMSU-40	SGJU-40	SGJFSU-40
-48	3	SJMSF-48	SJMSU-48	SGJU-48	SGJFSU-48
-64	4	SJMSF-64		SGJU-64	SGJFSU-64

NOTE: Zinc Plated Steel part shown to represent SJMSF and SJMSU.

TEAM	5	SHMF
STEAM GROUND JOINT DUPLINGS		
SIZ	E	HOSE MENDER CAST IRON
Dash	inch	PART NO
-08	1/2	SHMF-08
-12	3/4	SHMF-12
-16	1	SHMF-16
-20	1.1/4	SHMF-20
-24	1.1/2	SHMF-24
-32	2	SHMF-32
	2.1/2	SHMF-40
-40	,_	

STEAM FITTIN	GS	SGJWNF
STEAM GROUND JOINT COUPLINGS		9
SI	ZE	GJ WING NUT CAST IRON ZINC PLATED
Dash	inch	PART NO
-04	1/4	SGJWNF-04
-06	2/0	
00	3/8	SGJWNF-06
-08	3/8	SGJWNF-06 SGJWNF-08
	-, -	
-08	1/2	SGJWNF-08
-08 -16	1/2 1	SGJWNF-08 SGJWNF-16
-08 -16 -24	1/2 1 1.1/2	SGJWNF-08 SGJWNF-16 SGJWNF-24

HYGIEN		BSMBCS	BSMCS	BSMSE	BSMNS
BSM 55 HYGIENIC INDUSTRY COUPLINGS				0	0
SI	ZE	BSM BLANK CAP STAINLESS STEEL	BSM FEMALE CAP STAINLESS STEEL	BSM SEAL EPDM	BSM FEMALE NUT STAINLESS STEEL
Dash	inch	PART NO	PART NO	PART NO	PART NO
-16	1	BSMBCS-16	BSMCS-16	BSMSE-16	BSMNS-16
-20	1.1/4	BSMBCS-20	BSMCS-20	BSMSE-20	BSMNS-20
-24	1.1/2	BSMBCS-24	BSMCS-24	BSMSE-24	BSMNS-24
-32	2	BSMBCS-32	BSMCS-32	BSMSE-32	BSMNS-32
-40	2.1/2	BSMBCS-40	BSMCS-40	BSMSE-40	BSMNS-40
-48	3	BSMBCS-48	BSMCS-48	BSMSE-48	BSMNS-48
-64	4	BSMBCS-64	BSMCS-64	BSMSE-64	BSMNS-64

		BSMMS	BSMFS	BSMMWS	BSMFWS
BSM ss Hygienic INDUSTRY COUPLINGS		Ĩ	T		
SI	ZE	BSM MALE HOSETAIL STAINLESS STEEL	BSM FEMALE HOSETAIL STAINLESS STEEL	BSM MALE WELD-ON STAINLESS STEEL	BSM FEMALE LINER WELD-ON STAINLESS STEEL
Dash	inch	PART NO	PART NO	PART NO	PART NO
-16	1	BSMMS-16	BSMFS-16	BSMMWS-16	BSMFWS-16
-20	1.1/4	BSMMS-20	BSMFS-20	BSMMWS-20	BSMFWS-20
-24	1.1/2	BSMMS-24	BSMFS-24	BSMMWS-24	BSMFWS-24
-32	2	BSMMS-32	BSMFS-32	BSMMWS-32	BSMFWS-32
-40	2.1/2	BSMMS-40	BSMFS-40	BSMMWS-40	BSMFWS-40
-48	3	BSMMS-48	BSMFS-48	BSMMWS-48	BSMFWS-48
-64	4	BSMMS-64	BSMFS-64	BSMMWS-64	BSMFWS-64



		TRHS	TRWS	TRICLS	TRSE		CTION
TRICLOVER 55 HYGIENIC INDUSTRY COUPLINGS	R				0		INTRODUCTION
SI	IZE	TRICLOVER HOSETAIL STAINLESS STEEL	TRICLOVER FERRULE WELD-ON STAINLESS STEEL	TRICLOVER CLAMP STAINLESS STEEL	TRICLOVER SEAL EPDM		
Dash	inch	PART NO	PART NO	PART NO	PART NO]	SП
-16	1	TRHS-16	TRWS-16	TRICLS-24	TRSE-16		Ŭ Ŭ Ŭ Ŭ
-20	1.1/4	TRHS-20	TRWS-20	TRICLS-24	TRSE-20		-
-24	1.1/2	TRHS-24	TRWS-24	TRICLS-24	TRSE-24		
-32	2	TRHS-32	TRWS-32	TRICLS-32	TRSE-32		
-40	2.1/2	TRHS-40	TRWS-40	TRICLS-40	TRSE-40		
-48	3	TRHS-48	TRWS-48	TRICLS-48	TRSE-48		
-64	4	TRHS-64	TRWS-64	TRICLS-64	TRSE-64		GS
		BMG	BFG	BCG	BSR	BSETG	COUPLINGS
\square							
IRRIGATION			Ē	D	O	Comprises BMG, BFG, BCG and BSR shown at left.	SS
COUPLINGS	IZE	IRRIGATION MALE BALL HOSETAIL GALVANISED STEEL	IRRIGATION FEMALE SOCKET HOSETAIL GALVANISED STEEL	IRRIGATION CLOSURE RING GALVANISED STEEL	IRRIGATION O-SEAL	BCG and BSR shown	ADAPTORS
COUPLINGS	IZE inch	BALL HOSETAIL	SOCKET HOSETAIL	CLOSURE RING		BCG and BSR shown at left. IRRIGATION BALL AND SOCKET HOSETAIL SET COMPLETE	ADAPTORS
COUPLINGS		BALL HOSETAIL GALVANISED STEEL	SOCKET HOSETAIL GALVANISED STEEL	CLOSURE RING GALVANISED STEEL	0-SEAL	BCG and BSR shown at left. IRRIGATION BALL AND SOCKET HOSETAIL SET COMPLETE GALVANISED STEEL	ADAPTORS
COUPLINGS SI Dash -32	inch 2	BALL HOSETAIL GALVANISED STEEL PART NO BMG-32	SOCKET HOSETAIL GALVANISED STEEL PART NO BFG-32	CLOSURE RING GALVANISED STEEL PART NO BCG-32	0-SEAL PART NO BSR-32	BCG and BSR shown at left. IRRIGATION BALL AND SOCKET HOSETAIL SET COMPLETE GALVANISED STEEL PART NO BSETG-32	ADAPTORS
COUPLINGS SI Dash	inch	BALL HOSETAIL GALVANISED STEEL PART NO	SOCKET HOSETAIL GALVANISED STEEL PART NO BFG-32 BFG-40	CLOSURE RING GALVANISED STEEL PART NO	0-SEAL PART NO	BCG and BSR shown at left. IRRIGATION BALL AND SOCKET HOSETAIL SET COMPLETE GALVANISED STEEL PART NO BSETG-32 BSETG-40	S S
COUPLINGS 51 Dash -32 -40 -48	inch 2 2.1/2 3	BALL HOSETAIL GALVANISED STEEL PART NO BMG-32 BMG-40 BMG-48	SOCKET HOSETAIL GALVANISED STEEL PART NO BFG-32 BFG-40 BFG-48	CLOSURE RING GALVANISED STEEL PART NO BCG-32 BCG-40 BCG-48	O-SEAL PART NO BSR-32 BSR-40 BSR-48	BCG and BSR shown at left. IRRIGATION BALL AND SOCKET HOSETAIL SET COMPLETE GALVANISED STEEL PART NO BSETG-32 BSETG-40 BSETG-48	BS
COUPLINGS SI Dash -32 -40 -48 -64	inch 2 2.1/2 3 4	BALL HOSETAIL GALVANISED STEEL PART NO BMG-32 BMG-40 BMG-48 BMG-64	SOCKET HOSETAIL GALVANISED STEEL PART NO BFG-32 BFG-40 BFG-48 BFG-64	CLOSURE RING GALVANISED STEEL PART NO BCG-32 BCG-40 BCG-48 BCG-64	O-SEAL PART NO BSR-32 BSR-40 BSR-48 BSR-64	BCG and BSR shown at left. IRRIGATION BALL AND SOCKET HOSETAIL SET COMPLETE GALVANISED STEEL PART NO BSETG-32 BSETG-40 BSETG-48 BSETG-64	BS
COUPLINGS SI Dash -32 -40 -48	inch 2 2.1/2 3	BALL HOSETAIL GALVANISED STEEL PART NO BMG-32 BMG-40 BMG-48	SOCKET HOSETAIL GALVANISED STEEL PART NO BFG-32 BFG-40 BFG-48	CLOSURE RING GALVANISED STEEL PART NO BCG-32 BCG-40 BCG-48	O-SEAL PART NO BSR-32 BSR-40 BSR-48	BCG and BSR shown at left. IRRIGATION BALL AND SOCKET HOSETAIL SET COMPLETE GALVANISED STEEL PART NO BSETG-32 BSETG-40 BSETG-48	ν ν

COUPLINGS

IRRIGATION AND FIRE FITTINGS

FIRE FI	TINGS	СГАМНВ	CFAFHB	CFAPB	CFACB	CFAWE
CFA			-	-	Cond	0
SIZ	٤.	CFA MALE HOSETAIL BRASS	CFA FEMALE Hosetail Brass	CFA MALE PLUG BRASS	CFA FEMALE CAP BRASS	CFA WASHER EPDM
Dash	inch	PART NO	PART NO	PART NO	PART NO	PART NO
-24	1.1/2	CFAMHB-24	CFAFHB-24	СҒАРВ	CFACB	CFAWE
-32	2	CFAMHB-32	CFAFHB-32	СҒАРВ	CFACB	CFAWE
-40	2.1/2	CFAMHB-40	CFAFHB-40	СҒАРВ	CFACB	CFAWE
-48	3	CFAMHB-48	CFAFHB-48	CFAPB	CFACB	CFAWE

FIRE FI	TTINGS	мғвмнв	MFBFHB	MFBPB	MFBCB	MFBWE
MFB MP >300 PSI HOSE TAIL COUPLINGS			T	-		0
SI	ZE	MFB MALE HOSETAIL BRASS	MFB FEMALE HOSETAIL BRASS	MFB MALE PLUG BRASS	MFB FEMALE CAP BRASS	MFB WASHER EPDM
Dash	inch	PART NO	PART NO	PART NO	PART NO	PART NO
-24	1.1/2	MFBMHB-24	MFBFHB-24	MFBPB	MFBCB	MFBWE
-32	2	MFBMHB-32	MFBFHB-32	MFBPB	MFBCB	MFBWE
-40	2.1/2	MFBMHB-40	MFBFHB-40	MFBPB	MFBCB	MFBWE
-48	3	MFBMHB-48	MFBFHB-48	MFBPB	MFBCB	MFBWE



CTION	SZSE	SZCA	SZHA	SZFA	SZMA	TTINGS	FIRE FI
INTRODU	0		T	A B	A B		STORZ MP >300 PSI HOSE TAIL COUPLINGS
	STORZ SEAL EPDM	STORZ CAP Aluminium	STORZ HOSETAIL ALUMINIUM	STORZ BSPT FEMALE ALUMINIUM	STORZ BSPT MALE ALUMINIUM	ZE	SI
SE [PART NO	PART NO	PART NO	PART NO	PART NO	inch	Dash
	SZSE-16	SZCA-16	SZHA-1616	SZFA-1616	SZMA-1616	1	-16
	SZSE-24	SZCA-24	SZHA-2424	SZFA-2424	SZMA-2424	1.1/2	-24
	SZSE-32	SZCA-32	SZHA-3232	SZFA-3232	SZMA-3232	2	-32
	SZSE-40	SZCA-40	SZHA-4040	SZFA-4040	SZMA-4040	2.1/2	-40
	SZSE-48	SZCA-48	SZHA-4848	SZFA-4848	SZMA-4848	3	-48
S	SZSE-64	SZCA-64	SZHA-6464	SZFA-6464	SZMA-6464	4	-64
UPLINGS	SZSE-80	SZCA-80	SZHA-8080	SZFA-8080	SZMA-8080	5	-80
	SZSE-96	SZCA-96	SZHA-9696	SZFA-9696	SZMA-9696	6	-96

FIRE FI	TTINGS	WJMA	WJFA	WJCA	WJSE
WAJAX MP >300 PSI HOSE TAIL COUPLINGS		ED			0
SI	ZE	WAJAX BSPT MALE ALUMINIUM	WAJAX BSPT FEMALE ALUMINIUM	WAJAX CAP Aluminium	WAJAX SEAL EPDM
Dash	inch	PART NO	PART NO	PART NO	PART NO
-12	3/4	WJMA-12	WJFA-12	WJCA	WJSE
-16	1	WJMA-16	WJFA-16	WJCA	WJSE
-20	1.1/4	WJMA-20	WJFA-20	WJCA	WJSE
-24	1.1/2	WJMA-24	WJFA-24	WJCA	WJSE
-32	2	WJMA-32	WJFA-32	WJCA	WJSE

CONNECTING PARTNERSHIPS

COUPLINGS

PIPE GROOVED, SHOULDERED AND MUFF COUPLINGS

PIPE GROOVI SHOULI		HPGU	HPSU
HD HARDENED HOSE TAIL COUPLINGS		B	B
SI	ZE	PIPE GROOVED END (VICTAULIC) STEEL	PIPE SHOULDERED END (VICTAULIC) STEEL
Dash	inch	PART NO	PART NO
-20	1.1/4	HPGU-2020	HPSU-2020
-24	1.1/2	HPGU-2424	HPSU-2424
-32	2	HPGU-3232	HPSU-3232
-40	2.1/2	HPGU-4040	HPSU-4040
-48	3	HPGU-4848	HPSU-4848
-64	4	HPGU-6464	HPSU-6464
-80	5	HPGU-8080	HPSU-8080
-96	6	HPGU-9696	HPSU-9696
-128	8	HPGU-128128	HPSU-128128
-160	10	HPGU-160160	HPSU-160160

MUFF COUPLINGS		MUDA	MUEA	MUA15A
USE ONLY APPLICATION APPROVED FITTING				C.A.
SI	ZE	MUFF COUPLING D ALUMINIUM	MUFF COUPLING E Aluminium	MUFF COUPLING ANSI 150 ALUMINIUM
Dash	inch	PART NO	PART NO	PART NO
-32	2	MUDA-32	MUEA-32	MUA15A-32
-48	3	MUDA-48	MUEA-48	MUA15A-48
-64	4	MUDA-64	MUEA-64	MUA15A-64
-80	5	MUDA-80	MUEA-80	MUA15A-80
-96	6	MUDA-96	MUEA-96	MUA15A-96
-128	8	MUDA-128	MUEA-128	MUA15A-128
-160	10	MUDA-160	MUEA-160	MUA15A-160
-100				

RYCO QUALITY

HOSE TAIL FITTINGS

HOSE 1	AIL		НМВ	HMS	нмн	HMSB
MALE MP >300 PSI HOSE TAIL COUPLINGS			P A	В	B	B A
		ZE	BSPT MALE (WITH HEX)	BSPT MALE (WITH HEX)	BSPT MALE (WITH HEX)	BSPT MALE SWIVEL (WITH HEX)
	A	В	BRASS P3	STAINLESS STEEL	POLYPROPYLENE	BRASS SP3
	•	• •		DADTNO	DADTNO	
Dash -0202	inch 1/8	inch 1/8	PART NO HMB-0202	PART NO	PART NO	PART NO
-0202	3/16	1/8	НМВ-0202			
-0302	3/16	1/6	HMB-0302			
-0304	3/10	1/4	НМВ-0304			
-0402	1/4	1/6	HMB-0402	HMS-0404		HMSB-0404
-0404	1/4	3/8	HMB-0404	11013-0404		11030-0404
-0408	1/4	1/2	HMB-0408			
-0502	5/16	1/2	HMB-0502			
-0504	5/16	1/4	HMB-0504			
-0506	5/16	3/8	HMB-0506			
-0508	5/16	1/2	HMB-0508			
-0602	3/8	1/2	HMB-0602			
-0604	3/8	1/4	HMB-0604			
-0606	3/8	3/8	HMB-0606	HMS-0606		HMSB-0606
-0608	3/8	1/2	HMB-0608			
-0612	3/8	3/4	HMB-0612			
-0802	1/2	1/8	HMB-0802			
-0804	1/2	1/4	HMB-0804			
-0806	1/2	3/8	HMB-0806			
-0808	1/2	1/2	HMB-0808	HMS-0808	HMH-0808	HMSB-0808
-0812	1/2	3/4	HMB-0812			HMSB-0812
-1004	5/8	1/4	HMB-1004			
-1006	5/8	3/8	HMB-1006			
-1008	5/8	1/2	HMB-1008			
-1012	5/8	3/4	HMB-1012			
-1206	3/4	3/8	HMB-1206			
-1208	3/4	1/2	HMB-1208			
-1212	3/4	3/4	HMB-1212	HMS-1212	HMH-1212	HMSB-1212
-1216	3/4	1	HMB-1216			
-1608	1	1/2	HMB-1608			
-1612	1	3/4	HMB-1612			
-1616	1	1	HMB-1616	HMS-1616	HMH-1616	HMSB-1616
-2020	1.1/4	1.1/4	HMB-2020	HMS-2020	HMH-2020	
-2424	1.1/2	1.1/2			HMH-2424	
-3232	2	2	HMB-3232	HMS-3232	HMH-3232	
-4040	2.1/2	2.1/2	HMB-4040	HMS-4040		
-4848	3	3	HMB-4848	HMS-4848	HMH-4848	
-6464	4	4	HMB-6464	HMS-6464		

INTRODUCTION

COUPLINGS

HOSE T FITTING		HJB	HJU	HJS
MENDERS		B A	B	D ^B _A
SI	ZE	HOSE TAIL MENDER BRASS P7	HOSE TAIL MENDER ZINC PLATED STEEL	HOSE TAIL MENDER STAINLESS STEEL
Dash	inch	PART NO	PART NO	PART NO
-0303	3/16	HJB-0303		
-0404	1/4	HJB-0404	HJU-0404	HJS-0404
-0505	5/16	HJB-0505		
-0606	3/8	HJB-0606	HJU-0606	HJS-0606
-0808	1/2	HJB-0808	HJU-0808	HJS-0808
-1010	5/8	HJB-1010	HJU-1010	HJS-1010
-1212	3/4	HJB-1212	HJU-1212	HJS-1212
-1616	1	HJB-1616	HJU-1616	HJS-1616
-2020	1.1/4		HJU-2020	HJS-2020
-2222	1.3/8		HJU-2222	HJS-2222
-2424	1.1/2		HJU-2424	HJS-2424
-3232	2		HJU-3232	HJS-3232
-4040	2.1/2		HJU-4040	HJS-4040
-4848	3		HJU-4848	HJS-4848
-6464	4		HJU-6464	HJS-6464
-8080	5		HJU-8080	
-9696	6		HJU-9696	
-128128	8		HJU-128128	
-160160	10		HJU-160160	
-192192	12		HJU-192192	



HOSI	E TAIL		HEB	НЕМВ
90°	L		В А	B A
	SIZE A	В	ELBOW 90' HOSE TAIL BRASS	ELBOW 90' HOSE TAIL BSPT MALE BRASS
			P11	P6
Dash	inch	inch	PART NO	PART NO
-0202	1/8	1/8		HEMB-0202
-0302	3/16	1/8		HEMB-0302
-0303	3/16	3/16	HEB-0303	
-0304	3/16	1/4		HEMB-0304
-0402	1/4	1/8		HEMB-0402
-0404	1/4	1/4	HEB-0404	HEMB-0404
-0406	1/4	3/8		HEMB-0406
-0408	1/4	1/2		HEMB-0408
-0502	5/16	1/8		HEMB-0502
-0504	5/16	1/4		HEMB-0504
-0505	5/16	5/16	HEB-0505	
-0506	5/16	3/8		HEMB-0506
-0508	5/16	1/2		HEMB-0508
-0602	3/8	1/8		HEMB-0602
-0604	3/8	1/4		HEMB-0604
-0606	3/8	3/8	HEB-0606	HEMB-0606
-0608	3/8	1/2		HEMB-0608
-0804	1/2	1/4		HEMB-0804
-0806	1/2	3/8		HEMB-0806
-0808	1/2	1/2	HEB-0808	HEMB-0808
-0812	1/2	3/4		HEMB-0812
-1004	5/8	1/4		HEMB-1004
-1006	5/8	3/8		HEMB-1006
-1008	5/8	1/2		HEMB-1008
-1010	5/8	5/8	HEB-1010	
-1208	3/4	1/2		HEMB-1208
-1212	3/4	3/4	HEB-1212	HEMB-1212
-1612	1	3/4		HEMB-1612
-1616	1	1	HEB-1616	HEMB-1616

CONNECTING PARTNERSHIPS

COUPLINGS

HOSI	ΞΤΑΙ	L		НТВ	НТМВ
TEE MP >300 PSI HOSE TAIL COUPLING	s			B A C	
	A	SIZE B	C	TEE HOSE TAIL BRASS	TEE HOSE TAIL BSPT MALE (BRANCH) BRASS
				P14	P12
Dash	inch	inch	inch	PART NO	PART NO
-020202	1/8	1/8	1/8	HTB-020202	
-030302	3/16	3/16	1/8		HTMB-030302
-030303	3/16	3/16	3/16	HTB-030303	
-040402	1/4	1/4	1/8		HTMB-040402
-040404	1/4	1/4	1/4	HTB-040404	HTMB-040404
-050502	5/16	5/16	1/8		HTMB-050502
-050504	5/16	5/16	1/4		HTMB-050504
-050505	5/16	5/16	5/16	HTB-050505	
-060602	3/8	3/8	1/8		HTMB-060602
-060604	3/8	3/8	1/4		HTMB-060604
-060606	3/8	3/8	3/8	HTB-060606	HTMB-060606
-060608	3/8	3/8	1/2		HTMB-060608
-080804	1/2	1/2	1/4		HTMB-080804
-080806	1/2	1/2	3/8		HTMB-080806
-080808	1/2	1/2	1/2	HTB-080808	HTMB-080808
-101006	5/8	5/8	3/8		HTMB-101006
-101010	5/8	5/8	5/8	HTB-101010	
-121208	3/4	3/4	1/2		HTMB-121208
-121212	3/4	3/4	3/4	HTB-121212	HTMB-121212
-141412	7/8	7/8	3/4		HTMB-141412
-161612	1	1	3/4		HTMB-161612
-161616	1	1	1		HTMB-161616



	E TAIL		HFLB	HFLH	НҒНВ
FEMAL MP >300 PSI HOSE TAIL COUPLING			T	T	Тр ^А в
	SIZE A	В	HOSE TAIL FEMALE LUG NUT (BSPP FEMALE SWIVEL, FLAT SEAT)	HOSE TAIL FEMALE LUG NUT (BSPP FEMALE SWIVEL FLAT SEAL) POLYPROPYLENE	HOSE TAIL FEMALE HEX NUT (BSPP FEMALE SWIVEL, FLAT SEAT) BRASS
Dash	inch	inch	PART NO	PART NO	PART NO
-0808	1/2	1/2	HFLB-0808	HFLH-0808	HFHB-0808
-0812	1/2	3/4	HFLB-0812		HFHB-0812
-1212	3/4	3/4	HFLB-1212	HFLH-1212	HFHB-1212
-0816	1/2	1	HFLB-0816		HFHB-0816
-1216	3/4	1	HFLB-1216		HFHB-1216
-1616	1	1	HFLB-1616	HFLH-1616	HFHB-1616
-1620	1	1.1/4	HFLB-1620		HFHB-1620
-2020	1.1/4	1.1/4	HFLB-2020	HFLH-2020	HFHB-2020
-2024	1.1/4	1.1/2	HFLB-2024		HFHB-2024
-2424	1.1/2	1.1/2	HFLB-2424	HFLH-2424	HFHB-2424
-2432	1.1/2	2	HFLB-2432		HFHB-2432
-3232	2	2	HFLB-3232	HFLH-3232	HFHB-3232
-4040	2.1/2	2.1/2	HFLB-4040		HFHB-4040
-4848	3	3	HFLB-4848	HFLH-4848	HFHB-4848
-6464	4	4	HFLB-6464		HFHB-6464

AB

	SIZE A B		HOSE TAIL BSPP FEMALE SWIVEL (60° CONE, HEX NUT) BRASS
			P5
Dash	inch	inch	PART NO
-0302	3/16	1/8	HFB-0302
-0304	3/16	1/4	HFB-0304
-0404	1/4	1/4	HFB-0404
-0406	1/4	3/8	HFB-0406
-0504	5/16	1/4	HFB-0504
-0506	5/16	3/8	HFB-0506
-0508	5/16	1/2	HFB-0508
-0606	3/8	3/8	HFB-0606
-0608	3/8	1/2	HFB-0608
-0808	1/2	1/2	HFB-0808
-1212	3/4	3/4	HFB-1212

HOSE T	AIL	HFWE
WASHER		0
SI	ZE	FLAT WASHER (SUIT HFLB, HFLH, HFHB)
Dash	inch	PART NO
-08	1/2	HFWE-08
-12	3/4	HFWE-12
-16	1	HFWE-16
-20	1.1/4	HFWE-20
-24	1.1/2	HFWE-24
-32	2	HFWE-32
-40	2.1/2	HFWE-40
-48	3	HFWE-48
-64	4	HFWE-64











BRASS	RX64B P154	RX33 P154	RX27B P155	RX26B P155	RX72B P155	RXD48B P156	RXD25B P156
					T	r	3
	BSPT MALE PLUG	BSPT FEMALE CAP	STRAIGHT MALE NIPPLE HEX	STRAIGHT FEMALE SOCKET HEX	STRAIGHT BSPT MALE BSPT FEMALE	BSPT MALE BSPT MALE ELBOW 45°	BSPT MALE BSPT FEMALE ELBOW 45°
BRASS	RXD34B P156	RX48B P156	RX25B P156	RX34B P156	RXM35B P157	RXB35B P157	RX35B P157
		F	1°			ŀ	
	BSPT FEMALE BSPT FEMALE ELBOW 45°	BSPT MALE BSPT MALE ELBOW 90°	BSPT MALE BSPT FEMALE ELBOW 90°	BSPT FEMALE BSPT FEMALE ELBOW 90°	BSPT MALE TEE	BSPT FEMALE BSPT MALE (BRANCH) TEE	BSPT FEMALE TEE
BRASS	RX37B	RX24B					
	P157	P158					
	BSPT FEMALE CROSS	REDUCING BUSH					
STAINLESS STEEL	RX64S P159	RX64NS P159	RX335 P159	RX33NS P159	RX27S P159	RX27NS P159	RX88S P159
STAINLESS STEEL	RX64S P159	RX64NS P159	RX33S P159	RX33NS P159	RX275 P159	RX27NS P159	RX885 P159
STAINLESS STEEL	RX64S P159	RX64NS P159	RX33S P159 BSPT FEMALE CAP	RX33NS P159	RX27S P159 D BSPT MALE NIPPLE HEX	RX27NS P159	RX88S P159
STAINLESS STEEL	P159	P159	P159	P159	P159	P159	P159
STAINLESS	P159 BSPT MALE PLUG	P159	P159	P159	P159 BSPT MALE NIPPLE HEX RXD25S	P159	P159
STAINLESS	P159 BSPT MALE PLUG	P159	P159	P159	P159 BSPT MALE NIPPLE HEX RXD25S	P159	P159
STAINLESS	P159 BSPT MALE PLUG RX26S P160 BSPT FEMALE SOCKET HEX RX34S	P159 NPT MALE PLUG RX26NS P160 NPT FEMALE SOCKET HEX RX35S	P159 With the second s	P159	P159 BSPT MALE NIPPLE HEX RXD25S P160 BSPT MALE BSPT MALE BSPT FEMALE	P159 P159 NPT MALE NIPPLE HEX P160 BSPT FEMALE BSPT FEMALE BSPT FEMALE	P159 P159 NPT MALE NIPPLE TOE RX25S P160 BSPT MALE BSPT FEMALE
STAINLESS STEEL	P159 BSPT MALE PLUG RX26S P160 BSPT FEMALE SOCKET HEX	P159 NPT MALE PLUG RX26NS P160 NPT FEMALE SOCKET HEX	P159 With the second s	P159	P159 BSPT MALE NIPPLE HEX RXD25S P160 BSPT MALE BSPT MALE BSPT FEMALE	P159 P159 NPT MALE NIPPLE HEX P160 BSPT FEMALE BSPT FEMALE BSPT FEMALE	P159 P159 NPT MALE NIPPLE TOE RX25S P160 BSPT MALE BSPT FEMALE

ADAPTORS

GALVANISED	RX64G P162	RX33G P162	RX27G P162	RX26G P162	RXD255 P163	RXD34S P163	
	BSPT MALE PLUG	BSPT FEMALE CAP	BSPT MALE NIPPLE HEX	BSPT FEMALE SOCKET TOE	BSPT MALE BSPT FEMALE 45° ELBOW	BSPT FEMALE BSPT FEMALE 45° ELBOW	
GALVANISED	RX25G P164	RX34G P164	RXB25G P164	RXB34G P164	RX35G P165	RX37G P165	RX24G P166
	F	P	r	r	B		9
	BSPT MALE BSPT MALE 90° ELBOW	BSPT MALE BSPT FEMALE 90° ELBOW	BSPT MALE BSPT FEMALE 90° ELBOW BEND	BSPT FEMALE BSPT FEMALE 90° ELBOW BEND	BSPT FEMALE TEE	BSPT FEMALE CROSS	REDUCING BUSH
QUICK FIT MPERIAL	RQF3 P167	RQF4 P167	RQF5 P167	RQF11 P167	RQF12 P167	RQF14 P167	RQF31 P167
		Ī					9
IMPERIAL/ METRIC NYLON FITTINGS	QUICK FIT BSPTM PLASTIC	QUICK FIT STRAIGHT COUPLING PLASTIC	QUICK FIT BSPTM 90° ELBOW PLASTIC	QUICK FIT 90° ELBOW PLASTIC	QUICK FIT BSPTM BRANCH TEE PLASTIC	QUICK FIT EQUAL TEE PLASTIC	QUICK FIT BULKHEAD STRAIGHT PLASTIC
UICK FIT METRIC	RQFM3 P168	RQFM4 P169	RQFM5 P168	RQFM11 P169	RQFM12 P168	RQFM14 P169	RQFM31 P169
	0						5
IMPERIAL/ METRIC NYLON FITTINGS	QUICK FIT BSPTM PLASTIC	QUICK FIT STRAIGHT COUPLING PLASTIC	QUICK FIT BSPTM 90° ELBOW PLASTIC	QUICK FIT 90° ELBOW PLASTIC	QUICK FIT BSPTM BRANCH TEE PLASTIC	QUICK FIT EQUAL TEE PLASTIC	QUICK FIT BULKHEAD STRAIGH ⁻ PLASTIC
LANGES	FDHG P170						
	L						
>300 PSI HOSE TAIL COUPLINGS	FLANGE D X HOSETAIL						
FLANGES	FDWU P170	FDBU P170	FDSU P170	FEWU P170	FEBU P170	FESU P170	

RYCO QUALITY



FLANGES	FHWU P170	FHBU P171	FHSU P171	FAN15WU P171	FAN15BU P171	FAN15SU P171	
		CY.		-00	CV.		
			6.6	-		6.5	
	FLANGE F WELD-ON	FLANGE F BLANK	FLANGE F SLIP-ON	FLANGE ANSI 150 WELD-ON	FLANGE ANSI 150 BLANK	FLANGE ANSI 150 SLIP-ON	
HAMMER UNION	RF100 P172	RF100BW P172	RF100W P172	RF100N P172	RF200 P172	RF200BW P172	RF200W P172
	1	1	0	Q			0
	FIGURE 100 PAINTED STEEL	FIGURE 100 BUTT-WELD PAINTED STEEL	FIGURE 100 SEAL	FIGURE 100 NUT PAINTED STEEL	FIGURE 200 PAINTED STEEL	FIGURE 200 BUTT-WELD PAINTED STEEL	FIGURE 200 SEAL
HAMMER UNION	RF200N P172	RF206 P173	RF206W P173	RF206N P173	RF602 P173	RF602W P173	RF602N P173
	0		0	Q		0	Q
	FIGURE 200 NUT PAINTED STEEL	FIGURE 206 PAINTED STEEL	FIGURE 206 SEAL	FIGURE 206 NUT PAINTED STEEL	FIGURE 602 PAINTED STEEL	FIGURE 602 SEAL	FIGURE 602 NUT PAINTED STEEL
HAMMER UNION	RF1002 P174	RF1002W P174	RF1002N P174	RF1502 P174	RF1502W P174	RF1502N P174	
		0	Q		0	Q	
	FIGURE 1002 PAINTED STEEL	FIGURE 1002 SEAL	FIGURE 1002 NUT PAINTED STEEL	FIGURE 1502 PAINTED STEEL	FIGURE 1502 SEAL	FIGURE 1502 NUT PAINTED STEEL	

ADAPTORS BRASS ADAPTORS

BRASS		RX64B	RX33
PLUG AND	САР	N	
SI	ZE	BSPT MALE PLUG BRASS	BSPT FEMALE CAP BRASS
		64	33
Dash	inch	PART NO	PART NO
-04	1/4	RX64B-04	RX33-04
-06	3/8	RX64B-06	RX33-06
-08	1/2	RX64B-08	RX33-08
-12	3/4	RX64B-12	RX33-12
-16	1	RX64B-16	RX33-16
-20	1.1/4	RX64B-20	RX33-20
-24	1.1/2	RX64B-24	RX33-24
-32	2	RX64B-32	RX33-32
-40	2.1/2	RX64B-40	RX33-40
-48	3	RX64B-48	RX33-48
-64	4	RX64B-64	RX33-64

	I YCO
BRASS	ADAPTORS

BRA	SS		RX27B	RX26B	RX72B
STRAI	ЭНТ		B	A B	A B
	SIZE	в	MALE NIPPLE HEX BRASS	FEMALE SOCKET HEX BRASS	BSPT MALE BSPT FEMALE BRASS
			27	26	72
Dash	inch	Inch	PART NO	PART NO	PART NO
-0202	1/8	1/8			RX72B-0202
-0402	1/4	1/8	RX27B-0402		RX72B-0402
-0404	1/4	1/4	RX27B-0404	RX26B-0404	RX72B-0404
-0602	3/8	1/8	RX27B-0602		RX72B-0602
-0604	3/8	1/4	RX27B-0604		RX72B-0604
-0606	3/8	3/8	RX27B-0606	RX26B-0606	RX72B-0606
-0802	1/2	1/8			RX72B-0802
-0804	1/2	1/4	RX27B-0804		RX72B-0804
-0806	1/2	3/8	RX27B-0806		RX72B-0806
-0808	1/2	1/2	RX27B-0808	RX26B-0808	RX72B-0808
-1206	3/4	3/8	RX27B-1206		
-1208	3/4	1/2	RX27B-1208		RX72B-1208
-1212	3/4	3/4	RX27B-1212	RX26B-1212	RX72B-1212
-1612	1	3/4	RX27B-1612		RX72B-1612
-1616	1	1	RX27B-1616	RX26B-1616	RX72B-1616
-2016	1.1/4	1			RX72B-2016
-2020	1.1/4	1.1/4	RX27B-2020	RX26B-2020	RX72B-2020
-2416	1.1/2	1			RX72B-2416
-2420	1.1/2	1.1/4			RX72B-2420
-2424	1.1/2	1.1/2	RX27B-2424	RX26B-2424	RX72B-2424
-3220	2	1.1/4			RX72B-3220
-3224	2	1.1/2			RX72B-3224
-3232	2	2	RX27B-3232	RX26B-3232	RX72B-3232
-4040	2.1/2	2.1/2	RX27B-4040	RX26B-4040	
-4848	3	3	RX27B-4848	RX26B-4848	
-6464	4	4	RX27B-6464	RX26B-6464	

INTRODUCTION

ADAPTORS BRASS ADAPTORS

BRAS	55		RXD48B	RXD25B	RXD34B
45º ELI	BOW		B A	A	B
	SIZE		BSPT MALE BSPT MALE ELBOW 45°	BSPT MALE BSPT FEMALE ELBOW 45°	BSPT FEMALE BSPT FEMALE ELBOW 45°
	A	В	BRASS D48	BRASS D25	BRASS D34
Dash	inch	inch	PART NO	PART NO	PART NO
-0202	1/8	1/8	RXD48B-0202	RXD25B-0202	RXD34B-0202
-0202	1/8	1/4	1170400 0202	RXD25B-0204	11/0540 0202
-0402	1/4	1/8	RXD48B-0402		
-0404	1/4	1/4	RXD48B-0404	RXD25B-0404	RXD34B-0404
-0604	3/8	1/4		RXD25B-0604	
-0606	3/8	3/8	RXD48B-0606	RXD25B-0606	RXD34B-0606
-0808	1/2	1/2		RXD25B-0808	
-1212	3/4	3/4		RXD25B-1212	

BRA	55		RX48B	RX25B	RX34B
90º EL	BOW		A B	A B	A B
	SIZE	в	BSPT MALE BSPT MALE ELBOW 90° BRASS	BSPT MALE BSPT FEMALE ELBOW 90° BRASS	BSPT FEMALE BSPT FEMALE ELBOW 90° BRASS
			48	25	34
Dash	inch	inch	PART NO	PART NO	PART NO
-0202	1/8	1/8	RX48B-0202	RX25B-0202	RX34B-0202
-0402	1/4	1/8	RX48B-0402		
-0404	1/4	1/4	RX48B-0404	RX25B-0404	RX34B-0404
-0604	3/8	1/4	RX48B-0604		
-0606	3/8	3/8	RX48B-0606	RX25B-0606	RX34B-0606
-0806	1/2	3/8	RX48B-0806		
-0808	1/2	1/2	RX48B-0808	RX25B-0808	RX34B-0808
-1212	3/4	3/4	RX48B-1212	RX25B-1212	
-1616	1	1	RX48B-1616		

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BRASS ADAPTORS

BRASS		RXM35B	RXB35B	RX35B
TEE		B A C	B A C	C A
SIZE		BSPT MALE TEE BRASS	BSPT FEMALE BSPT MALE (BRANCH) TEE BRASS	BSPT FEMALE TEE BRASS
		M35	B35	35
Dash	inch	PART NO	PART NO	PART NO
-02	1/8	RXM35B-020202	RXB35B-020202	RX35B-020202
-04	1/4	RXM35B-040404	RXB35B-040404	RX35B-040404
-06	3/8	RXM35B-060606	RXB35B-060606	RX35B-060606
-08	1/2	RXM35B-080808	RXB35B-080808	RX35B-080808
-12	3/4			RX35B-121212

BRASS		RX37B
CROSS		
SI	ZE	BSPT FEMALE CROSS BRASS
		37
Dash	inch	PART NO
-02	1/8	RX37B-02
-04	1/4	RX37B-04
-06	3/8	RX37B-06
-08	1/2	RX37B-08
-12	3/4	RX37B-12

CONNECTING PARTNERSHIPS

ADAPTORS BRASS ADAPTORS

BRASS			RX24B
REDUCING BUSH			A B
	SIZE A	В	REDUCING BUSH BRASS
			24
Dash	inch	inch	PART NO
-0402	1/4	1/8	RX24B-0402
-0602	3/8	1/8	RX24B-0602
-0604	3/8	1/4	RX24B-0604
-0802	1/2	1/8	RX24B-0802
-0804	1/2	1/4	RX24B-0804
-0806	1/2	3/8	RX24B-0806
-1202	3/4	1/8	RX24B-1202
-1204	3/4	1/4	RX24B-1204
-1206	3/4	3/8	RX24B-1206
-1208	3/4	1/2	RX24B-1208
-1604	1	1/4	RX24B-1604
-1606	1	3/8	RX24B-1606
-1608	1	1/2	RX24B-1608
-1612	1	3/4	RX24B-1612
-2006	1.1/4	3/8	RX24B-2006
-2008	1.1/4	1/2	RX24B-2008
-2012	1.1/4	3/4	RX24B-2012
-2016	1.1/4	1	RX24B-2016
-2408	1.1/2	1/2	RX24B-2408
-2412	1.1/2	3/4	RX24B-2412
-2416	1.1/2	1	RX24B-2416
-2420	1.1/2	1.1/4	RX24B-2420
-3208	2	1/2	RX24B-3208
-3212	2	3/4	RX24B-3212
-3216	2	1	RX24B-3216
-3220	2	1.1/4	RX24B-3220
-3224	2	1.1/2	RX24B-3224

STAINLESS STEEL ADAPTORS

STAI STEE	NLES L	S	RX64S	RX64NS	RX33S	RX33NS
PLUG A	AND CAP)			Ø	Ø
	SIZE		BSPT MALE PLUG STAINLESS STEEL	NPT MALE PLUG STAINLESS STEEL	BSPT FEMALE CAP STAINLESS STEEL	NPT FEMALE CAP STAINLESS STEEL
			64	N64	33	N33
Dash		inch	PART NO	PART NO	PART NO	PART NO
-04	-	1/4	RX64S-04	RX64NS-04	RX33S-04	RX33NS-04
-06		3/8	RX645-06	RX64NS-06	RX33S-06	RX33NS-06
-08		1/2	RX645-08	RX64NS-08	RX335-08	RX33NS-08
-12		3/4	RX645-00	RX64NS-12	RX335-12	RX33NS-12
-16		1	RX645-16	RX64NS-16	RX335-16	RX33NS-16
-10		1.1/4	RX645-20	RX64NS-20	RX335-20	RX33NS-20
-20		1.1/4	RX645-20	RX64NS-20	RX335-20	RX33NS-20
-24		2	RX645-24 RX645-32	RX64NS-24	RX335-24 RX33S-32	RX33N5-24 RX33NS-32
-32		2.1/2	RX645-32	RX64NS-40	RX335-40	RX33NS-32
-40		3	RX645-40	RX64NS-40	RX335-40	RX33NS-40
-40		4	RX645-64	RX64NS-64	RX335-64	RX33NS-64
STEE		S	RX27S	RX27NS	RX88S	
STRAI	JHI		B	B	2	
	SIZE A	В	BSPT MALE NIPPLE HEX STAINLESS STEEL	NPT MALE NIPPLE HEX STAINLESS STEEL	BSPT MALE NIPPLE TOE STAINLESS STEEL	
			27, 73	N27, N73	88	
Dash	inch	inch	PART NO	PART NO	PART NO	
-0402	1/4	1/8	RX27S-0402	RX27NS-0402		
-0404	1/4	1/4	RX27S-0404	RX27NS-0404	RX885-0404	
-0602	3/8	1/8	RX27S-0602	RX27NS-0602		
-0604	3/8	1/4	RX27S-0604	RX27NS-0604		
0101	3/8	3/8	RX27S-0606	RX27NS-0606	RX88S-0606	
-0606		1/4	RX27S-0804			
-0606 -0804	1/2	1/4		RX27NS-0804		
	1/2 1/2	3/8	RX27S-0806	RX27NS-0804 RX27NS-0806		
-0804					RX885-0808	
-0804 -0806	1/2	3/8	RX27S-0806	RX27NS-0806	RX885-0808	
-0804 -0806 -0808	1/2 1/2	3/8 1/2	RX275-0806 RX275-0808	RX27NS-0806 RX27NS-0808	RX885-0808	
-0804 -0806 -0808 -1206	1/2 1/2 3/4	3/8 1/2 3/8	RX275-0806 RX275-0808 RX275-1206	RX27NS-0806 RX27NS-0808 RX27NS-1206	RX885-0808 RX885-1212	
-0804 -0806 -0808 -1206 -1208	1/2 1/2 3/4 3/4	3/8 1/2 3/8 1/2	RX27S-0806 RX27S-0808 RX27S-1206 RX27S-1208	RX27NS-0806 RX27NS-0808 RX27NS-1206 RX27NS-1208		
-0804 -0806 -0808 -1206 -1208 -1212	1/2 1/2 3/4 3/4 3/4	3/8 1/2 3/8 1/2 3/4	RX27S-0806 RX27S-0808 RX27S-1206 RX27S-1208 RX27S-1212	RX27NS-0806 RX27NS-0808 RX27NS-1206 RX27NS-1208 RX27NS-1212		
-0804 -0806 -0808 -1206 -1208 -1212 -1612	1/2 1/2 3/4 3/4 3/4 1	3/8 1/2 3/8 1/2 3/4 3/4	RX27S-0806 RX27S-0808 RX27S-1206 RX27S-1208 RX27S-1212 RX27S-1612	RX27NS-0806 RX27NS-0808 RX27NS-1206 RX27NS-1208 RX27NS-1212 RX27NS-1612	RX885-1212	
-0804 -0806 -0808 -1206 -1208 -1212 -1612	1/2 1/2 3/4 3/4 3/4 1 1	3/8 1/2 3/8 1/2 3/4 3/4 1	RX27S-0806 RX27S-0808 RX27S-1206 RX27S-1208 RX27S-1212 RX27S-1612 RX27S-1616	RX27NS-0806 RX27NS-0808 RX27NS-1206 RX27NS-1208 RX27NS-1208 RX27NS-1212 RX27NS-1612 RX27NS-1616	RX885-1212 RX885-1616	
-0804 -0806 -0808 -1206 -1208 -1212 -1612 -1616 -2020	1/2 1/2 3/4 3/4 3/4 1 1 1.1/4	3/8 1/2 3/8 1/2 3/4 3/4 1 1.1/4	RX27S-0806 RX27S-0808 RX27S-1206 RX27S-1208 RX27S-1212 RX27S-1612 RX27S-1616 RX27S-2020	RX27NS-0806 RX27NS-0808 RX27NS-1206 RX27NS-1208 RX27NS-1212 RX27NS-1612 RX27NS-1616 RX27NS-2020	RX885-1212 RX885-1616 RX885-2020	
-0804 -0806 -1206 -1208 -1212 -1612 -1616 -2020	1/2 1/2 3/4 3/4 1 1 1.1/4 1.1/2	3/8 1/2 3/8 1/2 3/4 3/4 1 1.1/4 1.1/2	RX27S-0806 RX27S-0808 RX27S-1206 RX27S-1208 RX27S-1212 RX27S-1612 RX27S-1616 RX27S-2020 RX27S-2424	RX27NS-0806 RX27NS-0808 RX27NS-1206 RX27NS-1208 RX27NS-1212 RX27NS-1612 RX27NS-1616 RX27NS-2020 RX27NS-2424	RX885-1212 RX885-1616 RX885-2020 RX885-2424	
-0804 -0806 -1206 -1208 -1212 -1612 -1616 -2020 -2424	1/2 1/2 3/4 3/4 1 1 1.1/4 1.1/2 2	3/8 1/2 3/8 1/2 3/4 3/4 1 1.1/4 1.1/2 2	RX27S-0806 RX27S-0808 RX27S-1206 RX27S-1208 RX27S-1212 RX27S-1612 RX27S-1616 RX27S-2020 RX27S-2424 RX27S-3232	RX27NS-0806 RX27NS-0808 RX27NS-1206 RX27NS-1208 RX27NS-1212 RX27NS-1612 RX27NS-1616 RX27NS-2020 RX27NS-2424 RX27NS-3232	RX885-1212 RX885-1616 RX885-2020 RX885-2424 RX885-3232	

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ADAPTORS STAINLESS STEEL ADAPTORS

STAINL STEEL	ESS	RX26S	RX26NS	RXH26S	RXH26NS
STRAIGHT		A	A B	B	B
SI	ZE	BSPT FEMALE SOCKET HEX STAINLESS STEEL	NPT FEMALE SOCKET HEX STAINLESS STEEL	BSPT FEMALE SOCKET TOE STAINLESS STEEL	NPT FEMALE SOCKET TOE STAINLESS STEEL
		26	N26	H26	NH26
Dash	inch	PART NO	PART NO	PART NO	PART NO
-04	1/4	RX26S-0404	RX26NS-0404	RXH26S-04	RXH26NS-04
-06	3/8	RX26S-0606	RX26NS-0606	RXH26S-06	RXH26NS-06
-08	1/2	RX26S-0808	RX26NS-0808	RXH26S-08	RXH26NS-08
-12	3/4	RX26S-1212	RX26NS-1212	RXH26S-12	RXH26NS-12
-16	1	RX26S-1616	RX26NS-1616	RXH26S-16	RXH26NS-16
-20	1.1/4	RX26S-2020	RX26NS-2020	RXH26S-20	RXH26NS-20
-24	1.1.2	RX26S-2424	RX26NS-2424	RXH26S-24	RXH26NS-24
-32	2	RX26S-3232	RX26NS-3232	RXH26S-32	RXH26NS-32
-40	2.1/2	RX26S-4040	RX26NS-4040	RXH26S-40	RXH26NS-40
-48	3	RX26S-4848	RX26NS-4848	RXH26S-48	RXH26NS-48
-64	4	RX26S-6464	RX26NS-6464	RXH26S-64	RXH26NS-64

STAINL STEEL	ESS	RXD25S	RXD34S	RX25S	RX34S
45º ELBOW 90º ELBOW	-	A B	A	B A	B A
SI	ZE	BSPT MALE BSPT FEMALE 45° ELBOW STAINLESS STEEL	BSPT FEMALE BSPT FEMALE 45° ELBOW STAINLESS STEEL	BSPT MALE BSPT FEMALE 90° ELBOW STAINLESS STEEL	BSPT FEMALE BSPT FEMALE 90° ELBOW STAINLESS STEEL
		D25	D34	25	34
Dash	inch	PART NO	PART NO	PART NO	PART NO
-02	1/8			RX25S-0202	RX34S-0202
-04	1/4		RXD34S-0404	RX25S-0404	RX34S-0404
-06	3/8		RXD34S-0606	RX25S-0606	RX34S-0606
-08	1/2	RXD25S-0808	RXD34S-0808	RX25S-0808	RX34S-0808
-12	3/4	RXD25S-1212	RXD34S-1212	RX25S-1212	RX34S-1212
-16	1	RXD25S-1616	RXD34S-1616	RX25S-1616	RX34S-1616
-20	1.1/4	RXD25S-2020	RXD34S-2020	RX25S-2020	RX34S-2020
-24	1.1/2	RXD25S-2424	RXD34S-2424	RX25S-2424	RX34S-2424
-32	2	RXD25S-3232	RXD34S-3232	RX25S-3232	RX34S-3232

RXD34S-4040

RXD34S-4848

RYCO QUALITY

RX25S-4040

RX25S-4848

RX34S-4040

RX34S-4848

RX34S-6464

-40

-48

-64

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STAINLESS STEEL ADAPTORS

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STAI	NLES EL	5	RX24S
REDUC	CING BUS	5H	
	SIZE A	в	REDUCING BUSI STAINLESS STEE
	A	D	24
Dash	inch	inch	PART NO
-0402	1/4	1/8	RX24S-0402
-0602	3/8	1/8	RX24S-0602
-0604	3/8	1/4	RX24S-0604
-0802	1/2	1/8	RX245-0802
-0804	1/2	1/4	RX24S-0804
-0806	1/2	3/8	RX24S-0806
-1202	3/4	1/8	RX24S-1202
-1204	3/4	1/4	RX245-1204
-1206	3/4	3/8	RX24S-1206
-1208	3/4	1/2	RX24S-1208
-1604	1	1/4	RX24S-1604
-1606	1	3/8	RX24S-1606
-1608	1	1/2	RX245-1608
-1612	1	3/4	RX245-1612
	1.1/4		
-2006		3/8	RX245-2006
-2008	1.1/4	1/2	RX245-2008
-2012	1.1/4	3/4	RX24S-2012
-2016	1.1/4	1	RX245-2016
-2408	1.1/2	1/2	RX24S-2408
-2412	1.1/2	3/4	RX24S-2412
-2416	1.1/2	1	RX24S-2416
-2420	1.1/2	1.1/4	RX24S-2420
-3208	2	1/2	RX24S-3208
-3212	2	3/4	RX24S-3212
-3216	2	1	RX24S-3216
-3220	2	1.1/4	RX24S-3220
-3224	2	1.1/2	RX24S-3224
-4016	2.1/2	1	RX24S-4016
-4020	2.1/2	1.1/4	RX24S-4020
-4024	2.1/2	1.1/2	RX24S-4024
-4032	2.1/2	2	RX24S-4032
-4816	3	1	RX24S-4816
-4820	3	1.1/4	RX24S-4820
-4824	3	1.1/2	RX24S-4824
-4832	3	2	RX24S-4832
-4840	3	2.1/2	RX24S-4840
-6424	4	1.1/2	RX24S-6424
-6432	4	2	RX24S-6432
-6440	4	2.1/2	RX24S-6440
-6448	4	3	RX24S-6448

STAINLESS STEEL		RX35S
TEE		C A C
s	IZE	BSPT FEMALE TEE STAINLESS STEEL
		35
Dash	inch	PART NO
-02	1/8	RX35S-020202
-04	1/4	RX35S-040404
-06	3/8	RX35S-060606
-08	1/2	RX35S-080808
-12	3/4	RX35S-121212
-16	1	RX35S-161616
-20	1.1/4	RX35S-202020
-24	1.1/2	RX35S-242424
-32	2	RX35S-323232
-40	2.1/2	RX35S-404040
-48	3	RX35S-484848
-64	4	RX35S-646464

CONNECTING PARTNERSHIPS

ADAPTORS GALVANISED ADAPTORS

GALVA	NISED	RX64G	RX33G
PLUG AND CAP			
S	IZE	BSPT MALE PLUG GALVANISED	BSPT FEMALE CAP GALVANISED
		64	33
Dash	inch	PART NO	PART NO
-04	1/4	RX64G-04	RX33G-04
-06	3/8	RX64G-06	RX33G-06
-08	1/2	RX64G-08	RX33G-08
-12	3/4	RX64G-12	RX33G-12
-16	1	RX64G-16	RX33G-16
-20	1.1/4	RX64G-20	RX33G-20
-24	1.1.2	RX64G-24	RX33G-24
-32	2	RX64G-32	RX33G-32
-40	2.1/2	RX64G-40	RX33G-40
-48	3	RX64G-48	RX33G-48
-64	4	RX64G-64	RX33G-64

GALVAI	NISED	RX27G	RX26G
STRAIGHT		STRAIGHT	
SI	ZE	BSPT MALE NIPPLE HEX GALVANISED	BSPT FEMALE SOCKET GALVANISED
		27	26
Dash	inch	PART NO	PART NO
-04	1/4	RX27G-0404	RX26G-0404
-06	3/8	RX27G-0606	RX26G-0606
-08	1/2	RX27G-0808	RX26G-0808
-12	3/4	RX27G-1212	RX26G-1212
-16	1	RX27G-1616	RX26G-1616
-20	1.1/4	RX27G-2020	RX26G-2020
-24	1.1.2	RX27G-2424	RX26G-2424
-32	2	RX27G-3232	RX26G-3232
-40	2.1/2	RX27G-4040	RX26G-4040
-48	3	RX27G-4848	RX26G-4848
-64	4	RX27G-6464	RX26G-6464



GALVA	NISED	RXD25G	RXD34G
45° ELBOW		5° ELBOW	
SI	ZE	BSPT MALE BSPT FEMALE 45° ELBOW GALVANISED	BSPT FEMALE BSPT FEMALE 45° ELBOW GALVANISED
		D25	D34
Dash	inch	PART NO	PART NO
-08	1/2	RXD25G-0808	RXD34G-0808
-12	3/4	RXD25G-1212	RXD34G-1212
-16	1	RXD25G-1616	RXD34G-1616
-20	1.1/4	RXD25G-2020	RXD34G-2020
-24	1.1/2	RXD25G-2424	RXD34G-2424
-32	2	RXD25G-3232	RXD34G-3232
-40	2.1/2		RXD34G-4040
-48	3		RXD34G-4848
-64	4		RXD34G-6464

ADAPTORS GALVANISED ADAPTORS

GAL	/ANIS	ED	RX25G	RX34G	RXB25G	RXB34G
90° EL	BOW		B	B	B	B
90º EL	BOW BE	ND	A		A	A
	SIZE	в	BSPT MALE BSPT FEMALE ELBOW 90° GALVANISED	BSPT FEMALE BSPT FEMALE ELBOW 90° GALVANISED	BSPT MALE BSPT FEMALE ELBOW BEND 90° GALVANISED	BSPT FEMALE BSPT FEMALE ELBOW BEND 90° GALVANISED
			25	34	B25	B34
Dash	inch	inch	PART NO	PART NO	PART NO	PART NO
-0202	1/8	1/8		RX34G-0202		
-0404	1/4	1/4	RX25G-0404	RX34G-0404	RXB25G-0404	
-0606	3/8	3/8	RX25G-0606	RX34G-0606	RXB25G-0606	RXB34G-0606
-0806	1/2	3/8		RX34G-0806		
-0808	1/2	1/2	RX25G-0808	RX34G-0808	RXB25G-0808	RXB34G-0808
-1206	3/4	3/8		RX34G-1206		
-1208	3/4	1/2		RX34G-1208		
-1212	3/4	3/4	RX25G-1212	RX34G-1212	RXB25G-1212	RXB34G-1212
-1606	1	3/8		RX34G-1606		
-1608	1	1/2		RX34G-1608		
-1612	1	3/4		RX34G-1612		
-1616	1	1	RX25G-1616	RX34G-1616	RXB25G-1616	RXB34G-1616
-2008	1.1/4	1/2		RX34G-2008		
-2012	1.1/4	3/4		RX34G-2012		
-2016	1.1/4	1		RX34G-2016		
-2020	1.1/4	1.1/4	RX25G-2020	RX34G-2020	RXB25G-2020	RXB34G-2020
-2408	1.1/2	1/2		RX34G-2408		
-2412	1.1/2	3/4		RX34G-2412		
-2416	1.1/2	1		RX34G-2416		
-2420	1.1/2	1.1/4		RX34G-2420		
-2424	1.1/2	1.1/2	RX25G-2424	RX34G-2424	RXB25G-2424	RXB34G-2424
-3208	2	1/2		RX34G-3208		
-3212	2	3/4		RX34G-3212		
-3216	2	1		RX34G-3216		
-3220	2	1.1/4		RX34G-3220		
-3224	2	1.1/2		RX34G-3224		
-3232	2	2	RX25G-3232	RX34G-3232	RXB25G-3232	RXB34G-3232
-4040	2.1/2	2.1/2	RX25G-4040	RX34G-4040	RXB25G-4040	RXB34G-4040
-4840	3	2.1/2		RX34G-4840		
-4848	3	3	RX25G-4848	RX34G-4848	RXB25G-4848	RXB34G-4848
-6464	4	4	RX25G-6464	RX34G-6464	RXB25G-6464	RXB34G-6464
-9696	6	6		RX34G-9696		

GALVANISED ADAPTORS

GALVA	NISE	D		RX35G	GALVAI	NISED	RX37G
EE				C A C	CROSS		Ś
	SIZE	в	с	BSPT FEMALE TEE GALVANISED	SI	ZE	BSPT FEMALE CROSS GALVANISED
				35			37
Dash	inch	inch	inch	PART NO	Dash	inch	PART NO
-020202	1/8	1/8	1/8	RX35G-020202	-06	3/8	RX37G-06
-040404	1/4	1/4	1/4	RX35G-040404	-08	1/2	RX37G-08
-060606	3/8	3/8	3/8	RX35G-060606	-12	3/4	RX37G-12
-080808	1/2	1/2	1/2	RX35G-080808	-16	1	RX37G-16
-121208	3/4	3/4	1/2	RX35G-121208	-20	1.1/4	RX37G-20
-121212	3/4	3/4	3/4	RX35G-121212	-20	1.1/4	RX37G-20
-161212	1	3/4	3/4	RX35G-161212			
-161606	1	1	3/8	RX35G-161606	-32	2	RX37G-32
-161608	1	1	1/2	RX35G-161608	-40	2.1/2	RX37G-40
-161612	1	1	3/4	RX35G-161612	-48	3	RX37G-48
-161616	1	1	1	RX35G-161616	-64	4	RX37G-64
-161620	1	1	1.1/4	RX35G-161620			
-161624	1	1	1.1/2	RX35G-161624			
-201608	1.1/4	1	1/2	RX35G-201608			
-201616	1.1/4	1	1	RX35G-201616			
-202008	1.1/4	1.1/4	1/2	RX35G-202008			
-202012	1.1/4	1.1/4	3/4	RX35G-202012			
-202016	1.1/4	1.1/4	1	RX35G-202016			
-202020	1.1/4	1.1/4	1.1/4	RX35G-202020			
-202024	1.1/4	1.1/4	1.1/2	RX35G-202024			
-202032	1.1/4	1.1/4	2	RX35G-202032			
-242016	1.1/2	1.1/4	1	RX35G-242016			
-242408	1.1/2	1.1/2	1/2	RX35G-242408			
-242412	1.1/2	1.1/2	3/4	RX35G-242412			
-242416	1.1/2	1.1/2	1	RX35G-242416			
-242420	1.1/2	1.1/2	1.1/4	RX35G-242420			
-242424	1.1/2			RX35G-242424			
-242432	1.1/2	1.1/2	2	RX35G-242432			
-323208	2	2	1/2	RX35G-323208			
-323212	2	2	3/4	RX35G-323212			
-323216	2	2	1	RX35G-323216			
-323220	2	2	1.1/4	RX35G-323220			
-323224	2	2	1.1/2	RX35G-323224			
-323232	2			RX35G-323232			
-323240	2	2	2.1/2	RX35G-323240			
	2.1/2	2.1/2	2.1/2	RX35G-404040			
-404040							
-404040 -484832	3	3	2	RX35G-484832			
	3 3	3 3	2 3	RX35G-484832 RX35G-484848			
-484832							

ADAPTORS GALVANISED ADAPTORS

GAL	/ANIS	RX24G	
REDUC	ING BUS	B	
	SIZE A	В	REDUCING BUSH GALVANISED
			24
Dash	inch	inch	PART NO
-0402	1/4	1/8	RX24G-0402
-0602	3/8	1/8	RX24G-0602
-0604	3/8	1/4	RX24G-0604
-0802	1/2	1/8	RX24G-0802
-0804	1/2	1/4	RX24G-0804
-0806	1/2	3/8	RX24G-0806
-1202	3/4	1/8	RX24G-1202
-1204	3/4	1/4	RX24G-1204
-1206	3/4	3/8	RX24G-1206
-1208	3/4	1/2	RX24G-1208
-1604	1	1/4	RX24G-1604
-1606	1	3/8	RX24G-1606
-1608	1	1/2	RX24G-1608
-1612	1	3/4	RX24G-1612
-2006	1.1/4	3/8	RX24G-2006
-2008	1.1/4	1/2	RX24G-2008
-2012	1.1/4	3/4	RX24G-2012
-2016	1.1/4	1	RX24G-2016
-2408	1.1/2	1/2	RX24G-2408
-2412	1.1/2	3/4	RX24G-2412
-2416	1.1/2	1	RX24G-2416
-2420	1.1/2	1.1/4	RX24G-2420
-3208	2	1/2	RX24G-3208
-3212	2	3/4	RX24G-3212
-3216	2	1	RX24G-3216
-3220	2	1.1/4	RX24G-3220
-3224	2	1.1/2	RX24G-3224
-4016	2.1/2	1	RX24G-4016
-4020	2.1/2	1.1/4	RX24G-4020
-4024	2.1/2	1.1/2	RX24G-4024
-4032	2.1/2	2	RX24G-4032
-4816	3	1	RX24G-4816
-4820	3	1.1/4	RX24G-4820
-4824	3	1.1/2	RX24G-4824
-4832	3	2	RX24G-4832
-4840	3	2.1/2	RX24G-4840
-6424	4	1.1/2	RX24G-6424
-6432	4	2	RX24G-6432
-6440	4	2.1/2	RX24G-6440
-6448	4	3	RX24G-6448
-9664	6	4	RX24G-9664



QUICK FIT TUBE ADAPTORS

QUIC	K FIT		RQF3	RQF4	RQF5	RQF11	RQF31	NOI
IMPERIAL/ METRIC NYLON FITTINGS			B	B A	A	A	B A	INTRODUCTION
	SIZE A	В	QUICK FIT BSPTM Plastic	QUICK FIT STRAIGHT PLASTIC	QUICK FIT BSPTM 90° Elbow Plastic	QUICK FIT 90° ELBOW PLASTIC	QUICK FIT BULKHEAD STRAIGHT PLASTIC	
Dash	inch	inch	PART NO	PART NO	PART NO	PART NO	PART NO] ш
-0202	1/8	1/8	RQF3-0202	RQF4-0202	RQF5-0202	RQF11-0202	RQF31-0202	HOS
-0302	3/16	1/8	RQF3-0302		RQF5-0302			
-0303	3/16	3/16		RQF4-0303		RQF11-0303	RQF31-0303	
-0402	1/4	1/8	RQF3-0402		RQF5-0402			
-0404	1/4	1/4	RQF3-0404	RQF4-0404	RQF5-0404	RQF11-0404	RQF31-0404	
-0406	1/4	3/8	RQF3-0406		RQF5-0406			
-0504	5/16	1/4	RQF3-0504		RQF5-0504			SC
-0505	5/16	5/16		RQF4-0505		RQF11-0505	RQF31-0505	COUPLING
-0506	5/16	3/8			RQF5-0506			Г
-0604	3/8	1/4	RQF3-0604		RQF5-0604			00
-0606	3/8	3/8	RQF3-0606	RQF4-0606	RQF5-0606	RQF11-0606	RQF31-0606	υ
-0608	3/8	1/2	RQF3-0608					

RQF4-0808

RQF5-0804

RQF5-0806

RQF5-0808

RQF11-0808

QUICK FIT				RQF12	RQF14
IMPERIA IMPERIAL/ METRIC NYLON FITTINGS	\ L			B A C	C A
	SIZE	1		QUICK FIT BSPTM BRANCH TEE	QUICK FIT EQUAL TEE
	Α	В	С	PLASTIC	PLASTIC
Dash	inch	inch	inch	PART NO	PART NO
-020202	1/8	1/8	1/8	RQF12-020202	RQF14-020202
-030302	3/16	3/16	1/8	RQF12-030302	
-030303	3/16	3/16	3/16		RQF14-030303
-030304	3/16	3/16	1/4	RQF12-030304	
-040402	1/4	1/4	1/8	RQF12-040402	
-040404	1/4	1/4	1/4	RQF12-040404	RQF14-040404
-040406	1/4	1/4	3/8	RQF12-040406	
-050502	5/16	5/16	1/8	RQF12-050502	
-050504	5/16	5/16	1/4	RQF12-050504	
-050505	5/16	5/16	5/16		RQF14-050505
-050506	5/16	5/16	3/8	RQF12-050506	
-060604	3/8	3/8	1/4	RQF12-060604	
-060606	3/8	3/8	3/8	RQF12-060606	RQF14-060606
-060608	3/8	3/8	1/2	RQF12-060608	
-080804	1/2	1/2	1/4	RQF12-080804	
-080806	1/2	1/2	3/8	RQF12-080806	
-080808	1/2	1/2	1/2	RQF12-080808	RQF14-080808

RQF3-0806

RQF3-0808

-0804

-0806

-0808

1/2

1/2

1/2

1/4

3/8

1/2

ADAPTORS

RQF31-0808

HIGHER TECHNOLOGY EQUALS GREATER PERFORMANCE 167

ADAPTORS

QUICK	FI	RQFM12		
METRIC				B
				c
IMPERIAL/ METRIC NYLON FITTINGS				A
		TUBE	THRD	QUICK FIT BSPTM BRANCH TEE
	Α	В	С	PLASTIC
Dash	mm	mm	inch	PART NO
-040402	6	6	1/8	RQFM12-040402
-040404	6	6	1/4	RQFM12-040404
-060602	10	10	1/8	RQFM12-060602
-060604	10	10	1/4	RQFM12-060604
-060606	10	10	3/8	RQFM12-060606

QUIC	K FIT		RQFM3	RQFM5
METRI IMPERIAL METRIC NYLON FITTINGS]	A		
	SIZE TUBE A	THRD B	QUICK FIT BSPTM Plastic	QUICK FIT BSPTM 90° ELBOW PLASTIC
Dash	mm	inch	PART NO	PART NO
-0402	6	1/8	RQFM3-0402	RQFM5-0402
-0404	6	1/4	RQFM3-0404	RQFM5-0404
-0602	10	1/8	RQFM3-0602	RQFM5-0602
-0604	10	1/4	RQFM3-0604	RQFM5-0604
-0606	10	3/8	RQFM3-0606	RQFM5-0606
-0802	12	1/8	RQFM3-0802	RQFM5-0802
-0804	12	1/4	RQFM3-0804	RQFM5-0804
-0806	12	3/8	RQFM3-0806	RQFM5-0806
-1002	16	1/8	RQFM3-1002	RQFM5-1002
-1004	16	1/4	RQFM3-1004	RQFM5-1004
-1006	16	3/8	RQFM3-1006	RQFM5-1006
-1008	16	1/2	RQFM3-1008	RQFM5-1008
-1204	19	1/4	RQFM3-1204	RQFM5-1204
-1206	19	3/8	RQFM3-1206	RQFM5-1206
-1208	19	1/2	RQFM3-1208	RQFM5-1208

RYCO QUALITY

QUICK FIT TU	BE ADAPTORS

Dvra

QUICK FIT				RQFM14
METRIC Imperial/ METRIC NYLON FITTINGS				B A
	SIZE TUBE A	тиве В	тиве С	QUICK FIT EQUAL TEE PLASTIC
Dash	mm	mm	mm	PART NO
-040404	6	6	3	RQFM14-040404
-060606	10	10	6	RQFM14-060606
-080808	12	12	3	RQFM14-080808
-101010	16	16	6	RQFM14-101010
-121212	20	20	10	RQFM14-121212

QUIC	K FIT		RQFM4	RQFM31	
METRI Imperial METRIC			B	A	B
FITTINGS	SIZE A	В	QUICK FIT STRAIGHT PLASTIC	QUICK FIT 90° ELBOW PLASTIC	QUICK FIT BULKHEAD STRAIGHT PLASTIC
Dash	mm	mm	PART NO	PART NO	PART NO
-0404	6	6	RQFM4-0404	RQFM11-0404	RQFM31-0404
-0606	10	10	RQFM4-0606	RQFM11-0606	RQFM31-0606
-0808	12	1/2	RQFM4-0808	RQFM11-0808	RQFM31-0808
-1010	16	16	RQFM4-1010	RQFM11-1010	RQFM31-1010
-1212	20	20	RQFM4-1212	RQFM11-1212	RQFM31-1212

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ADAPTORS

CONNECTING PARTNERSHIPS

ADAPTORS

FLANGES

FLANG	ES	FDHG	FDHG FDWU FDBU		FDSU
FLANGE D			- 0-		
SI	ZE	FLANGE D X HOSETAIL GALVANISED	FLANGE D WELD-ON STEEL	FLANGE D BLANK STEEL	FLANGE D SLIP-ON STEEL
Dash	inch	PART NO	PART NO	PART NO	PART NO
-08	1/2		FDWU-08	FDBU-08	FDSU-08
-12	3/4		FDWU-12	FDBU-12	FDSU-12
-16	1		FDWU-16	FDBU-16	FDSU-16
-20	1.1/4		FDWU-20	FDBU-20	FDSU-20
-24	1.1/2		FDWU-24	FDBU-24	FDSU-24
-32	2		FDWU-32	FDBU-32	FDSU-32
-40	2.1/2		FDWU-40	FDBU-40	FDSU-40
-48	3	FDHG-48	FDWU-48	FDBU-48	FDSU-48
-64	4	FDHG-64	FDWU-64	FDBU-64	FDSU-64
-80	5		FDWU-80	FDBU-80	FDSU-80
-96	6	FDHG-96	FDWU-96	FDBU-96	FDSU-96
-128	8	FDHG-128	FDWU-128	FDBU-128	FDSU-128
-160	10		FDWU-160	FDBU-160	FDSU-160

FLANG	ES	FEWU	FEBU	FESU
FLANGE E				
SI	ZE	FLANGE E WELD-ON STEEL	FLANGE E BLANK STEEL	FLANGE E SLIP-ON STEEL
Dash	inch	PART NO	PART NO	PART NO
-08	1/2	FEWU-08	FEBU-08	FESU-08
-12	3/4	FEWU-12	FEBU-12	FESU-12
-16	1	FEWU-16	FEBU-16	FESU-16
-20	1.1/4	FEWU-20	FEBU-20	FESU-20
-24	1.1/2	FEWU-24	FEBU-24	FESU-24
-32	2	FEWU-32	FEBU-32	FESU-32
-40	2.1/2	FEWU-40	FEBU-40	FESU-40
-48	3	FEWU-48	FEBU-48	FESU-48
-64	4	FEWU-64	FEBU-64	FESU-64
-80	5	FEWU-80	FEBU-80	FESU-80
-96	6	FEWU-96	FEBU-96	FESU-96
-128	8	FEWU-128	FEBU-128	FESU-128
-160	10	FEWU-160	FEBU-160	FESU-160

RYCO QUALITY

RYCO
FLANGES

FLANG	ES	FHWU	FHBU	FHSU	
FLANGE H		0		\bigcirc	
S	IZE	FLANGE F WELD-ON STEEL	FLANGE F BLANK STEEL	FLANGE F SLIP-ON STEEL	
Dash	inch	PART NO	PART NO	PART NO	
-08	1/2	FHWU-08	FHBU-08	FHSU-08	
-12	3/4	FHWU-12	FHBU-12	FHSU-12	
-16	1	FHWU-16	FHBU-16	FHSU-16	
-20	1.1/4	FHWU-20	FHBU-20	FHSU-20	
-24	1.1/2	FHWU-24	FHBU-24	FHSU-24	
-32	2	FHWU-32	FHBU-32	FHSU-32	
-40	2.1/2	FHWU-40	FHBU-40	FHSU-40	
-48	3	FHWU-48	FHBU-48	FHSU-48	
-64	4	FHWU-64	FHBU-64	FHSU-64	
-80	5	FHWU-80	FHBU-80	FHSU-80	
-96	6	FHWU-96	FHBU-96	FHSU-96	
-128	8	FHWU-128	FHBU-128	FHSU-128	
-160	10	FHWU-160	FHBU-160	FHSU-160	

FLANG	ES	FAN15WU FAN15BU		FAN15SU	
FLANGE ANSI 150		-			
SI	ZE	FLANGE ANSI 150 WELD-ON STEEL	FLANGE ANSI 150 BLANK STEEL	FLANGE ANSI 150 SLIP-ON STEEL	
Dash	inch	PART NO	PART NO	PART NO	
-16	1	FAN15WU-16	FAN15BU-16	FAN15SU-16	
-24	1.1/2	FAN15WU-24	FAN15BU-24	FAN15SU-24	
-32	2	FAN15WU-32	FAN15BU-32	FAN15SU-32	
-48	3	FAN15WU-48	FAN15BU-48	FAN15SU-48	
-64	4	FAN15WU-64	FAN15BU-64	FAN15SU-64	
-96	6	FAN15WU-96	FAN15BU-96	FAN15SU-96	
-128	8	FAN15WU-128	FAN15BU-128	FAN15SU-128	

ADAPTORS HAMMER UNIONS

HAMME UNION	R	RF100 RF100BW		RF100N	
HAMMER UNION FIGURE 100				Q	
SIZE		HAMMER UNION FIGURE 100 PAINTED STEEL	HAMMER UNION FIGURE 100 BUTT-WELD PAINTED STEEL	HAMMER UNION FIGURE 100 NUT PAINTED STEEL	
Dash	inch	PART NO	PART NO	PART NO	
-32	2	RF100-32	RF100BW-32	RF100N-32	
-40	2.1/2	RF100-40		RF100N-40	
-48	3	RF100-48		RF100N-48	
-64	4	RF100-64	RF100BW-64	RF100N-64	
-96	6	RF100-96		RF100N-96	
-128	8	RF100-128			

HAMME	R	RF200	RF200 RF200BW	
HAMMER UNION FIGURE 200				Q
SI	ZE	HAMMER UNION FIGURE 200 PAINTED STEEL	HAMMER UNION FIGURE 200 BUTT-WELD PAINTED STEEL	HAMMER UNION FIGURE 200 NUT PAINTED STEEL
Dash	inch	PART NO	PART NO	PART NO
-16	1	RF200-16		RF200N-16
-24	1.1/2	RF200-24		RF200N-24
-32	2	RF200-32		RF200N-32
-40	2.1/2	RF200-40		RF200N-40
-48	3	RF200-48		RF200N-48
-64	4	RF200-64	RF200BW-64	RF200N-64
-96	6	RF200-96		RF200N-96

	IYCO
HAMMER	UNIONS

HAMMER UNIONS		RF206	RF206W	RF206N
HAMMER UNIONS FIGURE 206			0	Q
S	IZE	HAMMER UNION FIGURE 206 PAINTED STEEL	HAMMER UNION FIGURE 206 SEAL	HAMMER UNION FIGURE 206 NUT PAINTED STEEL
Dash	inch	PART NO	PART NO	PART NO
-16	1	RF206-16	RF206W-16	RF206N-16
-24	1.1/2	RF206-24	RF206W-24	RF206N-24
-32	2	RF206-32	RF206W-32	RF206N-32
-40	2.1/2	RF206-40	RF206W-40	RF206N-40
-48	3	RF206-48	RF206W-48	RF206N-48
-64	4	RF206-64	RF206W-64	RF206N-64
-96 6		RF206-96	RF206W-96	RF206N-96
HAMME	5	RF602	RF602W	RF602N
HAMMER UNIONS FIGURE 602			0	Q
S	IZE	HAMMER UNION FIGURE 602 PAINTED STEEL	HAMMER UNION FIGURE 602 SEAL	HAMMER UNION FIGURE 602 NUT PAINTED STEEL
Dash	inch	PART NO	PART NO	PART NO

-16

-32

1

2

RF602-16

RF602-32

RF602W-16

RF602W-32

RF602N-16 RF602N-32 INTRODUCTION

HOSE

COUPLINGS

CONNECTING PARTNERSHIPS

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ADAPTORS

HAMME		RF1002	RF1002W	RF1002N
HAMMER UNIONS FIGURE 1002			0	Q
SI	ZE	HAMMER UNION FIGURE 1002 PAINTED STEEL	HAMMER UNION FIGURE 1002 SEAL	HAMMER UNION FIGURE 1002 NUT PAINTED STEEL
Dash	inch	PART NO	PART NO	PART NO
-16	1	RF1002-16	RF1002W-16	RF1002N-16
-32	2	RF1002-32	RF1002W-32	RF1002N-32
-64 4		RF1002-64	RF1002W-64	RF1002N-64
HAMME		RF1502	RF1502W	RF1502N
HAMMER UNIONS FIGURE 1502			0	Q
SIZE		HAMMER UNION FIGURE 1502 PAINTED STEEL	HAMMER UNION FIGURE 1502 SEAL	HAMMER UNION FIGURE 1502 NUT PAINTED STEEL
Dash	inch	PART NO	PART NO	PART NO
-32	2	RF1502-32	RF1502W-32	RF1502N-32









CLAMPS

PICTORIAL INDEX

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	\bigcirc				
EXTERNAL CRIMP	EXTERNAL CRIMP FERRULE ZINC PLATED STEEL	EXTERNAL CRIMP FERRULE, LONG ZINC PLATED STEEL	HYGIENIC CRIMP FERRULE STAINLESS STEEL		
HEAVY DUTY BOLT CLAMPS	RSC P181	RSC4S P181			
~	60	1			
HEAVY DUTY ONE BOLT CLAMP	1-BOLT HD SUPER CLAMP ZINC PLATED STEEL	1-BOLT HD SUPER CLAMP TYPE 4 STAINLESS STEEL			
HEAVY DUTY BOLT CLAMPS	BC2F P182	BC2SF P182	BC2CF P182		
	- Com				
BOLT CLAMPS W/OR W/ OUT SAFETY CLAWS	2-BOLT CLAMP NO CLAW CAST IRON	2-BOLT SADDLE CLAMP NO CLAW ZINC PLATED STEEL	2-BOLT CLAW CLAMP CAST IRON		
HEAVY DUTY BOLT CLAMPS	BC4CF P183				
HD HEAVY DUTY BOLT CLAMPS W/ SAFETY CLAWS	4-BOLT CLAW CLAMP CAST IRON				
WORM DRIVE CLAMPS	WDGU P184	WDGS P184	WDSS P185		
\bigcirc	Õ	Õ	and the second s		
WORM DRIVE CLAMPS	WORM DRIVE GEAR CLAMP ZINC PLATED STEEL	WORM DRIVE GEAR CLAMP STAINLESS STEEL	WORM DRIVE SLOTTED CLAMP STAINLESS STEEL		

RYCO PICTORIAL INDEX

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								INTRODUCTION
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BAND CLAMPS	BDP4S P186	BDP6S P186	BDP8S P186	BDP10S P186	BDP12S P186	BDP-T P186	BDP-TA P186	ш
\bigcirc	Q	Q	Q	Q	Q	and the		HOSI
BAND CLAMPING SYSTEMS	BAND PRE-FORMED CLAMP STAINLESS STEEL	BAND PRE-FORMED CLAMP STAINLESS STEEL	BAND PRE-FORMED CLAMP STAINLESS STEEL	BAND PRE-FORMED CLAMP STAINLESS STEEL	BAND PRE-FORMED CLAMP STAINLESS STEEL	BAND PRE-FORMED TOOL	BAND PRE-FORMED TOOL ADAPTOR	
PIPE REPAIR CLAMPS	PRCS P187-P188							COUPLINGS
	()							COUP
USE ONLY								
APPLICATION APPROVED FITTING	PIPE REPAIR CLAMP STAINLESS STEEL/EPDM							
								ORS
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10015							6	A
	WDGU ZINC PLATED CLAMPS MERCHANDISER	WDGS STAINLESS STEEL CLAMPS MERCHANDISER	RSC ZINC PLATED CLAMPS MERCHANDISER	RSC4S STAINLESS STEEL CLAMPS MERCHANDISER	ZINC PLATED CLAMPS KIT	STAINLESS STEEL CLAMPS KIT	FLEXIDRIVER TOOL	PS

CLAME

CLAMPS CRIMP FERRULES

_	FERRUL			CFU	CFLU
	ED STEEL (C	ONTINUED ON NEXT	PAGE)	Q	
SI	IZE	SUITS H RAN		EXTERNAL CRIMP FERRULE ZINC PLATED STEEL	EXTERNAL CRIMP FERRULE, LONG ZINC PLATED STEEL
Dash	inch	mm	inch	PART NO	PART NO
20-1	1.1/4	42.9 - 44.5	1.69 - 1.75	CFU20-1	CFLU20-1
20-2	1.1/4	44.8 - 47.6	1.76 - 1.87	CFU20-2	CFLU20-2
20-3	1.1/4	48.0 - 50.8	1.89 - 2.00	CFU20-3	CFLU20-3
20-4	1.1/4	51.2 - 54.0	2.02 - 2.13	CFU20-4	CFLU20-4
24-1	1.1/2	48.4 - 50.8	1.91 - 2.00	CFU24-1	CFLU24-1
24-2	1.1/2	51.2 - 54.0	2.02 - 2.13	CFU24-2	CFLU24-2
24-3	1.1/2	54.4 - 57.2	2.14 - 2.25	CFU24-3	CFLU24-3
24-4	1.1/2	57.5 - 60.3	2.26 - 2.37	CFU24-4	CFLU24-4
24-5	1.1/2	60.7 - 63.5	2.39 - 2.50	CFU24-5	CFLU24-5
32-1	2	61.9 - 66.7	2.44 - 2.63	CFU32-1	CFLU32-1
32-2	2	67.1 - 69.9	2.64 - 2.75	CFU32-2	CFLU32-2
32-3	2	70.2 - 73.0	2.76 - 2.87	CFU32-3	CFLU32-3
32-4	2	73.4 - 77.0	2.89 - 3.03	CFU32-4	CFLU32-4
40-1	2.1/2	77.4 - 79.4	3.05 - 3.13	CFU40-1	CFLU40-1
40-2	2.1/2	79.8 - 82.6	3.14 - 3.25	CFU40-2	CFLU40-2
40-3	2.1/2	82.9 - 85.7	3.26 - 3.37	CFU40-3	CFLU40-3
40-4	2.1/2	86.1 - 88.9	3.39 - 3.50	CFU40-4	CFLU40-4
40-5	2.1/2	89.3 - 92.1	3.52 - 3.63	CFU40-5	CFLU40-5
48-1	3	88.1 - 92.1	3.47 - 3.63	CFU48-1	CFLU48-1
48-2	3	92.5 - 95.3	3.64 - 3.75	CFU48-2	CFLU48-2
48-3	3	95.6 - 98.4	3.76 - 3.87	CFU48-3	CFLU48-3
48-4	3	98.8 - 101.6	3.89 - 4.00	CFU48-4	CFLU48-4
48-5	3	102.0 - 104.8	4.02 - 4.13	CFU48-5	CFLU48-5
64-1	4	117.5 - 119.1	4.63 - 4.69	CFU64-1	CFLU64-1
64-2	4	119.5 - 122.2	4.70 - 4.81	CFU64-2	CFLU64-2
64-3	4	122.6 - 125.4	4.83 - 4.94	CFU64-3	CFLU64-3
64-4	4	125.8 - 128.6	4.95 - 5.06	CFU64-4	CFLU64-4
64-5	4	129.0 - 131.8	5.08 - 5.19	CFU64-5	CFLU64-5
64-6	4	132.2 - 134.9	5.20 - 5.31	CFU64-6	CFLU64-6
64-7	4	135.3 - 138.1	5.33 - 5.44	CFU64-7	CFLU64-7
64-8	4	138.5 - 141.3	5.45 - 5.56	CFU64-8	CFLU64-8
80-1	5	149.2 - 150.8	5.87 - 5.94	CFU80-1	CFLU80-1
80-2	5	151.2 - 154.0	5.95 - 6.06	CFU80-2	CFLU80-2
80-3	5	154.4 - 157.2	6.08 - 6.19	CFU80-3	CFLU80-3
80-4	5	157.6 - 160.3	6.20 - 6.31	CFU80-4	CFLU80-4
80-5	5	160.7 - 163.5	6.33 - 6.44	CFU80-5	CFLU80-5
80-6	5	163.9 - 166.7	6.45 - 6.56	CFU80-6	CFLU80-6
80-7	5	167.1 - 169.9	6.58 - 6.69	CFU80-7	CFLU80-7
L	1			1	L

RYCO QUALITY

	RYCO
CRIMP	FERRULES

CRIMP	FERRUL	ES		CFU	CFLU
	ED STEEL (ci	DNTINUED FROM PI	REVIOUS PAGE)	0	
SI	ZE		IOSE OD NGE	EXTERNAL CRIMP FERRULE ZINC PLATED STEEL	EXTERNAL CRIMP FERRULE, LONG ZINC PLATED STEEL
Dash	inch	mm	inch	PART NO	PART NO
96-1	6	177.8 - 179.4	7.00 - 7.06	CFU96-1	CFLU96-1
96-2	6	179.8 - 182.6	7.08 - 7.19	CFU96-2	CFLU96-2
96-3	6	183.0 - 185.7	7.20 - 7.31	CFU96-3	CFLU96-3
96-4	6	186.1 - 188.9	7.33 - 7.44	CFU96-4	CFLU96-4
96-5	6	189.3 - 192.1	7.45 - 7.56	CFU96-5	CFLU96-5
96-6	6	192.5 - 195.3	7.58 - 7.69	CFU96-6	CFLU96-6
96-7	6	195.7 - 198.4	7.70 - 7.81	CFU96-7	CFLU96-7
96-8	6	198.8 - 201.6	7.83 - 7.94	CFU96-8	CFLU96-8
96-9	6	202.0 - 203.2	7.95 - 8.00	CFU96-9	CFLU96-9
128-1	8	236.5 - 238.1	9.31 - 9.37	CFU128-1	CFLU128-1
128-2	8	238.5 - 241.3	9.39 - 9.50	CFU128-2	CFLU128-2
128-3	8	241.7 - 244.5	9.52 - 9.63	CFU128-3	CFLU128-3
128-4	8	244.9 - 247.7	9.64 - 9.75	CFU128-4	CFLU128-4
128-5	8	248.0 - 250.8	9.76 - 9.87	CFU128-5	CFLU128-5
128-6	8	251.2 - 254.0	9.89 - 10.00	CFU128-6	CFLU128-6
128-7	8	254.4 - 255.6	10.02 - 10.06	CFU128-7	CFLU128-7
160-1	10	292.1 - 296.9	11.50 - 11.69	CFU160-1	CFLU160-1
160-2	10	297.3 - 303.2	11.70 - 11.94	CFU160-2	CFLU160-2
160-3	10	303.6 - 309.6	11.95 - 12.19	CFU160-3	CFLU160-3
160-4	10	310.0 - 315.9	12.20 - 12.44	CFU160-4	CFLU160-4
160-5	10	316.3 - 322.3	12.45 - 12.69	CFU160-5	CFLU160-5
160-6	10	322.7 - 328.6	12.70 - 12.94	CFU160-6	CFLU160-6

HIGHER TECHNOLOGY EQUALS GREATER PERFORMANCE 1**7**9

CLAMPS CRIMP FERRULES

CRIMP	FERRULI	ES		CFHS
HYGIENIC EXTERNAL CRIMP				
SI	ZE	SUITS H RAM		HYGIENIC CRIMP FERRULE STAINLESS STEEL
Dash	inch	mm	inch	PART NO
16-1	1	33.0 - 35.0	1.30 - 1.38	CFHS16-1
16-2	1	35.7 - 36.5	1.41 - 1.44	CFHS16-2
16-3	1	36.9 - 37.7	1.45 - 1.48	CFHS16-3
16-4	1	38.1 - 38.9	1.5 - 1.53	CFHS16-4
16-5	1	39.3 - 40.1	1.55 - 1.58	CFHS16-5
16-6	1	40.5 - 41.3	1.59 - 1.63	CFHS16-6
24-1	1.1/2	48.4 - 49.6	1.91 - 1.95	CFHS24-1
24-2	1.1/2	50.0 - 51.2	1.97 - 2.02	CFHS24-2
24-3	1.1/2	51.6 - 52.8	2.03 - 2.08	CFHS24-3
24-4	1.1/2	53.2 - 54.4	2.09 - 2.14	CFHS24-4
32-1	2	62.7 - 63.9	2.47 - 2.52	CFHS32-1
32-2	2	64.3 - 65.5	2.53 - 2.58	CFHS32-2
32-3	2	65.9 - 67.1	2.59 - 2.64	CFHS32-3
32-4	2	67.4 - 68.7	2.65 - 2.70	CFHS32-4
40-1	2.1/2	76.1 - 78.1	3.00 - 3.07	CFHS40-1
40-2	2.1/2	78.1 - 80.1	3.07 - 3.15	CFHS40-2
40-3	2.1/2	81.1 - 83.1	3.19 - 3.27	CFHS40-3
48-1	3	88.0 - 91.0	3.46 - 3.58	CFHS48-1
48-2	3	91.7 - 92.9	3.61 - 3.66	CFHS48-2
48-3	3	92.1 - 93.3	3.63 - 3.67	CFHS48-3
48-4	3	93.6 - 94.9	3.69 - 3.74	CFHS48-4
48-5	3	95.2 - 96.5	3.75 - 3.80	CFHS48-5
48-6	3	96.8 - 98.0	3.81 - 3.86	CFHS48-6
48-7	3	98.4 - 99.6	3.87 - 3.92	CFHS48-7
64-1	4	117.5 - 118.7	4.63 - 4.67	CFHS64-1
64-2	4	119.0 - 120.3	4.69 - 4.74	CFHS64-2
64-3	4	120.6 - 121.9	4.75 - 4.80	CFHS64-3
64-4	4	122.2 - 123.5	4.81 - 4.86	CFHS64-4
64-5	4	123.8 - 125.0	4.87 - 4.92	CFHS64-5

			R	
HEAVY	DUTY	BOLT	CL	AMPS

1-BOLT DUTY	HEAVY	RSC	RSC4S
SUPER CLA HEAVY DUTY ONE BOLT CLAMP	ΑMΡ	00	0
SIZE F	RANGE	1-BOLT HD SUPER CLAMP ZINC PLATED STEEL	1-BOLT HD SUPER CLAMP TYPE 4 STAINLESS STEEL
mm	inch	PART NO	PART NO
17 - 19	0.67 - 0.75	RSC-1719	RSC4S-017019
19 - 21	0.75 - 0.83	RSC-1921	RSC4S-019021
21 - 23	0.83 - 0.91	RSC-2123	RSC4S-021023
23 - 25	0.91 - 0.98	RSC-2325	RSC4S-023025
25 - 27	0.98 - 1.06	RSC-2527	RSC4S-025027
27 - 29	1.06 - 1.14	RSC-2729	RSC4S-027029
29 - 31	1.14 - 1.22	RSC-2931	RSC4S-029031
31 - 34	1.22 - 1.34	RSC-3134	RSC4S-031034
34 - 37	1.34 - 1.46	RSC-3437	RSC4S-034037
37 - 40	1.46 - 1.57	RSC-3740	RSC4S-037040
40 - 43	1.57 - 1.69	RSC-4043	RSC4S-040043
43 - 47	1.69 - 1.85	RSC-4347	RSC4S-043047
47 - 51	1.85 - 2.01	RSC-4751	RSC4S-047051
51 - 55	2.01 - 2.17	RSC-5155	RSC4S-051055
55 - 59	2.17 - 2.32	RSC-5559	RSC4S-055059
59 - 63	2.32 - 2.48	RSC-5963	RSC4S-059063
63 - 68	2.48 - 2.68	RSC-6368	RSC4S-063068
68 - 73	2.68 - 2.87	RSC-6873 RSC-7379	RSC4S-068073
73 - 79 79 - 85	2.87 - 3.11 3.11 - 3.35	RSC-7379	RSC4S-073079 RSC4S-079085
85 - 91	3.35 - 3.58	RSC-8591	RSC4S-079085
91 - 97	3.58 - 3.82	RSC-9197	RSC4S-091097
97 - 104	3.82 - 4.09	RSC-97104	RSC4S-097104
104 - 112	4.09 - 4.41	RSC-104112	RSC4S-104112
112 - 121	4.41 - 4.76	RSC-112121	RSC4S-112121
12 121	4.76 - 5.12	RSC-12121	RSC4S-12121
130 - 140	5.12 - 5.51	RSC-130140	RSC4S-130140
140 - 150	5.51 - 5.91	RSC-140150	RSC4S-140150
150 - 162	5.91 - 6.38	RSC-150162	RSC4S-150162
162 - 174	6.38 - 6.85	RSC-162174	RSC4S-162174
174 - 187	6.85 - 7.36	RSC-174187	RSC4S-174187
187 - 200	7.36 - 7.87	RSC-187200	RSC4S-187200
200 - 213	7.87 - 8.39	RSC-200213	RSC4S-200213
213 - 226	8.39 - 8.90	RSC-213226	RSC4S-213226
226 - 239	8.90 - 9.41	RSC-226239	RSC4S-226239
239 - 252	9.41 - 9.92	RSC-239252	RSC4S-239252
250 - 265	9.84 - 10.43		RSC4S-250265
265 - 278	10.43 - 10.94		RSC4S-265278
304 - 317	11.97 - 12.48		RSC4S-304317
317 - 338	12.48 - 13.31		RSC4S-317338

INTRODUCTION

HOSE

CONNECTING PARTNERSHIPS

CLAMPS HEAVY DUTY BOLT CLAMPS

2-BOLT DUTY	HEAVY	BC2F
NO CLAW		A CONTRACTOR
SIZE F	ANGE	2-BOLT CLAMP No Claw Cast Iron
mm	inch	PART NO
28,6-30,2	1.13-1.19	BC2F-029030
30,2-34,9	1.19-1.37	BC2F-030035
36,5-38,9	1.44-1.53	BC2F-037039
41,3-46,0	1.63-1.81	BC2F-041046
44,5-52,0	1.75-2.05	BC2F-045052
53,6-58,3	2.11-2.30	BC2F-054058
58,7-66,7	2.31-2.63	BC2F-059067
63,5-69,9	2.50-2.75	BC2F-064070
69,9-77,8	2.75-3.06	BC2F-070078
02/2		
77,8-85,7	3.06-3.37	BC2F-078086



2-BOLT DUTY	HEAVY	BC2SF
SADDLE CL NO CLAW	_AMP	
SIZE F	RANGE	2-BOLT SADDLE CLAMP NO CLAW CAST IRON
mm	inch	PART NO
16 - 22	0.63 - 0.87	BC2SF-016022
22 - 29	0.87 - 1.14	BC2SF-022029
29 - 34	1.14 - 1.34	BC2SF-029034
33 - 40	1.30 - 1.57	BC2SF-033040
40 - 49	1.57 - 1.93	BC2SF-040049
49 - 60	1.93 - 2.36	BC2SF-049060
60 - 76	2.36 - 2.99	BC2SF-060076
76 - 94	2.99 - 3.70	BC2SF-076094
90 - 100	3.54 - 3.94	BC2SF-090100
94 - 115	3.70 - 4.53	BC2SF-094115
103 - 114	4.06 - 4.49	BC2SF-103114
108 - 125	4.25 - 4.92	BC2SF-108125
125 - 140	4.92 - 5.51	BC2SF-125140
140 - 155	5.51 - 6.10	BC2SF-140155
155 - 174	6.10 - 6.85	BC2SF-155174
175 - 194	6.89 - 7.64	BC2SF-175194
195 - 210	7.68 - 8.27	BC2SF-195210
210 - 225	8.27 - 8.86	BC2SF-210225
225 - 250	8.86 - 9.84	BC2SF-225250
250 - 285	9.84 - 11.22	BC2SF-250285
285 - 330	11.22 - 12.99	BC2SF-285330

RYCO QUALITY

HEAVY DUTY BOLT CLAMPS

4-BOLT DUTY	HEAVY	BC4CF
CLAW HEAVY DUTY BOLT CLAMPS W/SAFETY CLAWS		
SIZE F	ANGE	4-BOLT CLAW CLAMP CAST IRON
mm	inch	PART NO
23 - 26	0.91 - 1.02	BC4CF-023026
36 - 39	1.42 - 1.54	BC4CF-036039
38 - 45	1.50 - 1.77	BC4CF-038045
39 - 43	1.54 - 1.69	BC4CF-039043
43 - 47	1.69 - 1.85	BC4CF-043047
43 - 49	1.69 - 1.93	BC4CF-043049
46 - 51	1.81 - 2.01	BC4CF-046051
46 - 53	1.81 - 2.09	BC4CF-046053
48 - 52	1.89 - 2.05	BC4CF-048052
50 - 54	1.97 - 2.13	BC4CF-050054
51 - 54	2.01 - 2.13	BC4CF-051054
51 - 56	2.01 - 2.20	BC4CF-051056
53 - 57	2.09 - 2.24	BC4CF-053057
54 - 60	2.13 - 2.36	BC4CF-054060
56 - 60	2.20 - 2.36	BC4CF-056060
58 - 63	2.28 - 2.48	BC4CF-058063
60 - 64	2.36 - 2.52	BC4CF-060064
61 - 65	2.40 - 2.56	BC4CF-061065
64 - 71	2.52 - 2.80	BC4CF-064071
65 - 70	2.56 - 2.76	BC4CF-065070
70 - 78	2.76 - 3.07	BC4CF-070078
79 - 87	3.11 - 3.43	BC4CF-079087
89 - 100	3.50 - 3.94	BC4CF-089100
97 - 103	3.82 - 4.06	BC4CF-097103
104 - 113	4.09 - 4.45	BC4CF-104113
107 - 114	4.21 - 4.49	BC4CF-107114

CLAMPS STANDARD CLAMPS

WORM	DRIVE	WDGU
GEAR WORM DRIVE CLAMPS		Õ
SIZE I	RANGE	WORM DRIVE GEAR Clamp Zinc plated steel
mm	inch	PART NO
16 - 27	0.63 - 1.06	WDGU-016027
20 - 32	0.79 - 1.26	WDGU-020032
25 - 40	0.98 - 1.57	WDGU-025040
30 - 45	1.18 - 1.77	WDGU-030045
35 - 50	1.38 - 1.97	WDGU-035050
40 - 60	1.57 - 2.36	WDGU-040060
50 - 70	1.97 - 2.76	WDGU-050070
60 - 80	2.36 - 3.15	WDGU-060080
70 - 90	2.76 - 3.54	WDGU-070090
80 - 100	3.15 - 3.94	WDGU-080100
90 - 110	3.54 - 4.33	WDGU-090110
100 - 120	3.94 - 4.72	WDGU-100120
110 - 130	4.33 - 5.12	WDGU-110130
120 - 140	4.72 - 5.51	WDGU-120140
130 - 150	5.12 - 5.91	WDGU-130150
140 - 160	5.51 - 6.30	WDGU-140160
150 - 170	5.91 - 6.69	WDGU-150170
160 - 180	6.30 - 7.09	WDGU-160180
170 - 190	6.69 - 7.48	WDGU-170190
180 - 200	7.09 - 7.87	WDGU-180200
190 - 210	7.48 - 8.27	WDGU-190210
200 - 220	7.87 - 8.66	WDGU-200220
210 - 230	8.27 - 9.06	WDGU-210230
230 - 250	9.06 - 9.84	WDGU-230250
260 - 280	10.24 - 11.02	WDGU-260280
280 - 300	11.02 - 11.81	WDGU-280300

WORM	DRIVE	WDGS
GEAR STAINLESS STEEL WORM DRIVE CLAMPS		Õ
SIZE I	RANGE	WORM DRIVE GEAR CLAMP STAINLESS STEEL
mm	inch	PART NO
8 - 16	0.31 - 0.63	WDGS-008016
12 - 22	0.47 - 0.87	WDGS-012022
16 - 27	0.63 - 1.06	WDGS-016027
20 - 32	0.79 - 1.26	WDGS-020032
25 - 40	0.98 - 1.57	WDGS-025040
30 - 45	1.18 - 1.77	WDGS-030045
35 - 50	1.38 - 1.97	WDGS-035050
40 - 60	1.57 - 2.36	WDGS-040060
50 - 70	1.97 - 2.76	WDGS-050070
60 - 80	2.36 - 3.15	WDGS-060080
70 - 90	2.76 - 3.54	WDGS-070090
80 - 100	3.15 - 3.94	WDGS-080100
90 - 110	3.54 - 4.33	WDGS-090110
100 - 120	3.94 - 4.72	WDGS-100120
110 - 130	4.33 - 5.12	WDGS-110130
120 - 140	4.72 - 5.51	WDGS-120140
130 - 150	5.12 - 5.91	WDGS-130150
140 - 160	5.51 - 6.30	WDGS-140160
150 - 170	5.91 - 6.69	WDGS-150170
160 - 180	6.30 - 7.09	WDGS-160180

STANDARD CLAMPS

SPIRAL	CLAMP	SPCLU
LEFT HAND)	
\bigcirc		
SPIRAL CLAMP		00
SI	ZE	SPIRAL CLAMP LEFT HAND ZINC PLATED STEEL
Dash	inch	PART NO
-24	1.1/2	SPCLU-24
-32	2	SPCLU-32
-40	2.1/2	SPCLU-40
-48	3	SPCLU-48
-64	4	SPCLU-64
-80	5	SPCLU-80
-96	6	SPCLU-96
-128	8	SPCLU-128
SPIRAL	CLAMP	SPCRU
RIGHT HAN		
SPIRAL	ZE	SPIRAL CLAMP RIGHT HAND ZINC PLATED STEEL
SPIRAL		RIGHT HAND
SPIRAL CLAMP	ZE	RIGHT HAND ZINC PLATED STEEL
SPIRAL CLAMP SI Dash	ZE	RIGHT HAND ZINC PLATED STEEL PART NO
SPIRAL CLAMP SI Dash -24	ze inch 1.1/2	RIGHT HAND ZINC PLATED STEEL PART NO SPCRU-24
SPIRAL CLAMP SI Dash -24 -32	ZE inch 1.1/2 2	RIGHT HAND ZINC PLATED STEEL PART NO SPCRU-24 SPCRU-32
SPIRAL CLAMP	ZE inch 1.1/2 2 2.1/2	RIGHT HAND ZINC PLATED STEEL PART NO SPCRU-24 SPCRU-32 SPCRU-40
SPIRAL CLAMP CLAMP Clamp	ZE inch 1.1/2 2 2.1/2 3	RIGHT HAND ZINC PLATED STEEL PART NO SPCRU-24 SPCRU-32 SPCRU-40 SPCRU-48
SPIRAL CLAMP SI Dash -24 -32 -40 -48 -48 -64	ZE inch 1.1/2 2 2.1/2 3 4	RIGHT HAND ZINC PLATED STEEL PART NO SPCRU-24 SPCRU-32 SPCRU-40 SPCRU-48 SPCRU-64

WORM	DRIVE	WDSS		
SLOTTED				
\square				
STAINLESS		and and		
STEEL WORM DRIVE CLAMPS				
		WORM DRIVE		
C17E B	ANGE	SLOTTED CLAMP STAINLESS STEEL		
JIZE N	ANDE	STAINLESS STEEL		
mm	inch	PART NO		
11 - 20	0.43 - 0.79	WDSS-011020		
13 - 23	0.51 - 0.91	WDSS-013023		
14 - 27	0.55 - 1.06	WDSS-014027		
17 - 32	0.67 - 1.26	WDSS-017032		
21 - 38	0.83 - 1.50	WDSS-021038		
21 - 44	0.83 - 1.73	WDSS-021044		
27 - 51	1.06 - 2.01	WDSS-027051		
33 - 57	1.30 - 2.24	WDSS-033057		
40 - 64	1.57 - 2.52	WDSS-040064		
46 - 70	1.81 - 2.76	WDSS-046070		
48 - 127	1.89 - 5.00	WDSS-048127		
52 - 76	2.05 - 2.99	WDSS-052076		
59 - 83	2.32 - 3.27	WDSS-059083		
65 - 89	2.56 - 3.50	WDSS-065089		
71 - 95	2.80 - 3.74	WDSS-071095		
64 - 140	2.52 - 5.51	WDSS-064140		
78 - 102	3.07 - 4.02	WDSS-078102		
79 - 152	3.11 - 5.98	WDSS-079152		
84 - 108	3.31 - 4.25	WDSS-084108		
91 - 114	3.58 - 4.49	WDSS-091114		
92 - 165	3.62 - 6.50	WDSS-092165		
105 - 178	4.13 - 7.01	WDSS-105178		

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SPCRU-128

CLAMPS STANDARD CLAMPS

BAND		BDP4S	BDP6S	BDP8S	BDP10S	BDP12S
PRE-FORM CLAMPS BAND CLAMPING SYSTEMS	1ED	Q	Q	Q	Q	Q
SI	IZE	BAND PRE-FORMED CLAMP STAINLESS STEEL				
Dash	inch	PART NO				
-12	3/4	BDP4S-12				
-13	13/16		BDP6S-13			
-16	1	BDP4S-16	BDP6S-16	BDP8S-16		
-19	1.3/16	BDP4S-19	BDP6S-19			
-20	1.1/4			BDP8S-20		
-24	1.1/2	BDP4S-24	BDP6S-24	BDP8S-24	BDP10S-24	
-28	1.3/4			BDP8S-28	BDP10S-28	
-30	1.7/8		BDP6S-30			
-32	2	BDP4S-32		BDP8S-32	BDP10S-32	BDP12S-32
-36	2.1/4				BDP10S-36	
-40	2.1/2				BDP10S-40	
-44	2.3/4	BDP4S-44		BDP8S-44		BDP12S-44
-48	3	BDP4S-48	BDP6S-48			BDP12S-48
-56	3.1/2	BDP4S-56				BDP12S-56
-64	4		BDP6S-64	BDP8S-64		BDP12S-64
-72	4.1/2					BDP12S-72
-80	5					BDP12S-80
-96	6					BDP12S-96
-112	7					BDP12S-112

BAND CLAMP	BDP-T	BDP-TA
PRE-FORMED CLAMP TOOLING	and the	
	BAND PRE-FORMED TOOL	BAND PRE-FORMED TOOL ADAPTOR
	PART NO	PART NO
	BDP-T	BDP-TA



PIPE RE	PAIR			PRCS
(CONTINUED ON USE ONLY APPLICATION APPROVED FITTING	NEXT PAGE)			
SI	ZE	RAN	IGE	PIPE REPAIR CLAMP STAINLESS STEEL/ EPDM
	inch		inch	PART NO
mm 26.9	1.06	mm 26.4 - 27.5	1.04 - 1.08	PRCS-026-9
28.0	1.10	27.5 - 28.5	1.04 - 1.08	PRCS-020-9
30.0	1.18	29.5 - 30.6	1.16 - 1.20	PRCS-020-0
33.7	1.13	33.0 - 34.3	1.30 - 1.35	PRCS-030-0
35.0	1.33	34.5 - 35.6	1.36 - 1.40	PRCS-035-0
	1.38	34.5 - 35.0	1.36 - 1.40	PRCS-035-0 PRCS-038-0
38.0 42.4	1.50	41.7 - 43.0	1.48 - 1.52 1.64 - 1.69	PRCS-038-0 PRCS-042-4
			1.04 - 1.09	
44.5	1.75	44.0 - 45.1		PRCS-044-5
48.3	1.90	47.6 - 50.5	1.87 - 1.99	PRCS-048-3
54.0	2.13	53.3 - 54.6	2.10 - 2.15	PRCS-054-0
57.0	2.24	56.3 - 57.7	2.22 - 2.27	PRCS-057-0
60.3	2.37	59.5 - 61.0	2.34 - 2.40	PRCS-060-3
63.0	2.48	62.2 - 63.9	2.45 - 2.52	PRCS-063-0
70.0	2.76	69.0 - 71.0	2.72 - 2.80	PRCS-070-0
73.0	2.87	72.1 - 73.8	2.84 - 2.91	PRCS-073-0
76.1	3.00	75.2 - 77.0	2.96 - 3.03	PRCS-076-1
78.0	3.07	77.1 - 78.9	3.04 - 3.11	PRCS-078-0
80.0	3.15	79.0 - 80.8	3.11 - 3.18	PRCS-080-0
84.0	3.31	83.0 - 85.0	3.27 - 3.35	PRCS-084-0
88.9	3.50	87.0 - 89.9	3.43 - 3.54	PRCS-088-9
101.6	4.00	100.4 - 102.8	3.95 - 4.05	PRCS-101-6
104.0	4.09	102.8 - 106.1	4.05 - 4.18	PRCS-104-0
110.0	4.33	108.8 - 111.4	4.28 - 4.39	PRCS-110-0
114.3	4.50	113.0 - 115.5	4.45 - 4.55	PRCS-114-3
122.0	4.80	120.8 - 123.2	4.76 - 4.85	PRCS-122-0
129.0	5.08	127.6 - 131.1	5.02 - 5.16	PRCS-129-0
133.0	5.24	131.5 - 134.4	5.18 - 5.29	PRCS-133-0
139.7	5.50	138.1 - 141.6	5.44 - 5.57	PRCS-139-7
141.6	5.57	139.6 - 142.8	5.50 - 5.62	PRCS-141-6
154.0	6.06	152.3 - 156.1	6.00 - 6.15	PRCS-154-0
159.0	6.26	157.3 - 160.7	6.19 - 6.33	PRCS-159-0
168.3	6.63	166.5 - 170.1	6.56 - 6.70	PRCS-168-3
180.0	7.09	178.0 - 182.0	7.01 - 7.17	PRCS-180-0
193.7	7.63	192.0 - 196.0	7.56 - 7.72	PRCS-193-7
206.0	8.11	202.0 - 208.0	7.95 - 8.19	PRCS-206-0
219.1	8.63	216.0 - 221.0	8.50 - 8.70	PRCS-219-1
225.0	8.86	222.0 - 227.0	8.74 - 8.94	PRCS-225-0
229.0	9.02	228.0 - 232.0	8.98 - 9.13	PRCS-229-0
244.5	9.63	242.0 - 247.0	9.53 - 9.72	PRCS-244-5
254.0	10.00	250.0 - 256.0	9.84 - 10.08	PRCS-254-0
267.0	10.51	264.0 - 269.0	10.39 - 10.59	PRCS-267-0

INTRODUCTION

CLAMPS PIPE REPAIR CLAMPS

PIPE RE	PAIR			PRCS
(CONTINUED FR	OM PREVIOUS PAG	iE)		the second
USE ONLY APPLICATION APPROVED FITTING				()
SI	ZE	RAN	NGE	PIPE REPAIR CLAMP STAINLESS STEEL/ EPDM
mm	inch	mm	inch	PART NO
273.0	10.75	270.0 - 275.0	10.63 - 10.83	PRCS-273-0
306.0	12.05	302.0 - 308.0	11.89 - 12.13	PRCS-306-0
323.9	12.75	320 - 327.0	12.60 - 12.87	PRCS-323-9
326.0	12.83	322 - 329.0	12.68 - 12.95	PRCS-326-0
355.6	14.00	352 - 359.0	13.86 - 14.13	PRCS-355-6
406.4	16.00	402.0 - 410.0	15.83 - 16.14	PRCS-406-4
429.0	16.89	426.0 - 431.0	16.77 - 16.97	PRCS-429-0
442.0	17.4	439.0 - 444.0	17.28 - 17.48	PRCS-442-0
457.2	18.00	454.0 - 459.0	17.87 - 18.07	PRCS-457-2
508.0	20.00	505.0 - 510.0	19.88 - 20.08	PRCS-508-0
531.0	20.91	528.0 - 534.0	20.79 - 21.02	PRCS-531-0
558.0	21.97	556.0 - 562.0	21.89 - 22.13	PRCS-558-0
609.6	24.00	606.0 - 613.0	23.86 - 24.13	PRCS-609-6
634.0	24.96	631.0 - 637.0	24.84 - 25.08	PRCS-634-0
711.2	28.00	707.0 - 715.0	27.83 - 28.15	PRCS-711-2
762.0	30.00	758.0 - 766.0	29.84 - 30.16	PRCS-762-0
812.8	32.00	808.0 - 817.0	31.81 - 32.17	PRCS-812-8
914.4	36.00	909.0 - 919.0	35.79 - 36.18	PRCS-914-4
1,016.0	40.00	1,013.0 - 1,019.0	39.88 - 40.12	PRCS-1016-0
1,117.5	44.00	1,114.0 - 1,120.0	43.86 - 44.09	PRCS-1117-5
1,219.2	48.00	1,216.0 - 1,222.0	47.87 - 48.11	PRCS-1219-2



MERCHANDISER	NHC135W1
NORMACLAMP® NHC135W1 Merchandiser	Note Dips
Worm Drive Clamps Zinc Plated Steel	

MERCHANDISER CONTENTS							
PART NO	CLAMPING BAND WIDTH RANGE PART NO mm mm						
8-12-9W1	9.0	8-12	20				
10-16-9W1	9.0	10-16	20				
12-22-9W1	9.0	12-22	20				
16-27-12W1	12.0	16-27	15				
20-32-12W1	12.0	20-32	15				
25-40-12W1	12.0	25-40	15				
35-50-12W1	12.0	35-50	15				
40-60-12W1	12.0	40-60	15				

MERCHANDISER	NHC135W4		MERCHANDISER CONTENTS			
NORMACLAMP® NHC135W4 Merchandiser	PART NO	BAND WIDTH mm	CLAMPING RANGE mm	QTY		
Worm Drive Clamps Stainless Steel	The state of the s	8-16-9	9.0	8-16	20	
	AND	12-20-9	9.0	12-20	20	
	A 11111120111110	16-27-12	12.0	16-27	15	
	MIMILIAN	20-32-12	12.0	20-32	15	
	-manunnan	25-40-12	12.0	25-40	15	
	and the second second	35-50-12	12.0	35-50	15	
	and the second second	40-60-12	12.0	40-60	15	

ADAPTORS

INTRODUCTION

HOSE

COUPLINGS

CONNECTING PARTNERSHIPS

CLAMPS MERCHANDISERS

MERCHANDISER CONTENTS **MERCHANDISER** NHC190W1 CLAMPING NORMACLAMP® NHC190W1 BAND WIDTH RANGE Merchandiser PART NO QTY Worm Drive Clamps 8-12-9W1 9.0 8-12 10 Zinc Plated Steel 10-16-9W1 9.0 10-16 10 12-22-9W1 9.0 12-22 10 16-27-12W1 12.0 16-27 10 20-32-12W1 12.0 20-32 10 25-40-12W1 12.0 25-40 10 30-45-12W1 12.0 30-45 10 12.0 35-50-12W1 35-50 10 12.0 10 40-60-12W1 40-60 50-70 50-70-12W1 12.0 10 60-80-12W1 12.0 60-80 10 70-90-12W1 12.0 70-90 10 80-100-12W1 12.0 80-100 10 90-110-12W1 12.0 90-110 10

100-120-12W1

110-130-12W1

120-140-12W1

130-150-12W1

140-160-12W1

70-90-12W4

80-100-12W4

90-110-12W4

100-120-12W4

110-130-12W4

120-140-12W4

130-150-12W4

140-160-12W4

12.0

12.0

12.0

12.0

12.0

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12.0

12.0

100-120

110-130

120-140

130-150

140-160

70-90

80-100

90-110

100-120

110-130

120-140

130-150

140-160

10

10

10

10

10

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10

10

10

10

10

MERCHANDISER	NHC190W4		MERCHANDIS	ER CONTENTS	
NORMACLAMP® NHC190W4 Merchandiser	NORMA	PART NO	BAND WIDTH mm	CLAMPING RANGE mm	ΩΤΥ
Worm Drive Clamps		8-12-9W4	9.0	8-12	10
Stainless Steel	00000	8-16-9W4	9.0	10-16	10
	40000	12-20-9W4	9.0	12-20	10
		16-27-12W4	12.0	16-27	10
		20-32-12W4	12.0	20-32	10
	a a a a	25-40-12W4	12.0	25-40	10
		30-45-12W4	12.0	30-45	10
		35-50-12W4	12.0	35-50	10
	CAR	40-60-12W4	12.0	40-60	10
		50-70-12W4	12.0	50-70	10
		60-80-12W4	12.0	60-80	10



КІТ	NHC100W1
NORMACLAMP® NHC 100W1 Assortment Kit	
Worm Drive Clamps Zinc Plated Steel	

KIT CONTENTS						
PART NO	BAND WIDTH mm	CLAMPING RANGE mm	ατγ			
SL9-11-9W1	9.0	9-11	10			
SL11-13-9W1	9.0	11-13	10			
8-12-9W1	9.0	8-12	10			
10-16-9W1	9.0	10-16	12			
12-22-9W1	9.0	12-22	10			
16-27-12W1	12.0	16-27	10			
20-32-12W1	12.0	20-32	8			
25-40-12W1	12.0	25-40	10			
35-50-12W1	12.0	35-50	10			
40-60-12W1	12.0	40-60	10			
SW7	Flexidriver	7mm Hex	1			

IT	NHC100W4	KIT CONTENTS				
NORMACLAMP® NHC 100W4 Assortment Kit	NORHA NO	PART NO	BAND WIDTH mm	CLAMPING RANGE mm	ΩΤΥ	
Worm Drive Clamps	BEREN DAVE HOLE CLARP	MINI10-9W4	9.0	9.5-11	10	
Stainless Steel		MINI12-9W4	9.0	11.5-13	10	
		8-16-9W4	9.0	8-16	12	
	<u>کاکات</u>	كالكالك كالكالك	12-20-9W4	9.0	12-20	20
e		16-27-12W4	12.0	16-27	10	
		20-32-12W4	12.0	20-32	8	
		25-40-12W4	12.0	25-40	10	
		35-50-12W4	12.0	35-50	10	
		40-60-12W4	12.0	40-60	10	
		SW6-7	Flexidriver	6 & 7mm Hex	1	

TOOLS	FLEXIDRIVERS	
Flexidrivers Suit Worm Drive Hose Clamps	-	PAR
		S
		SI
	0	SV
		SN
		SM
		SV

CONTENTS				
PART NO	SIZE	QTY		
SW6	6mm	1		
SW7	7mm	1		
SW7L	7mm	1		
SW6-7	6-7mm	1		
SW6-8	1/4" & 5/16"	1		
SW8L	5/16"	1		

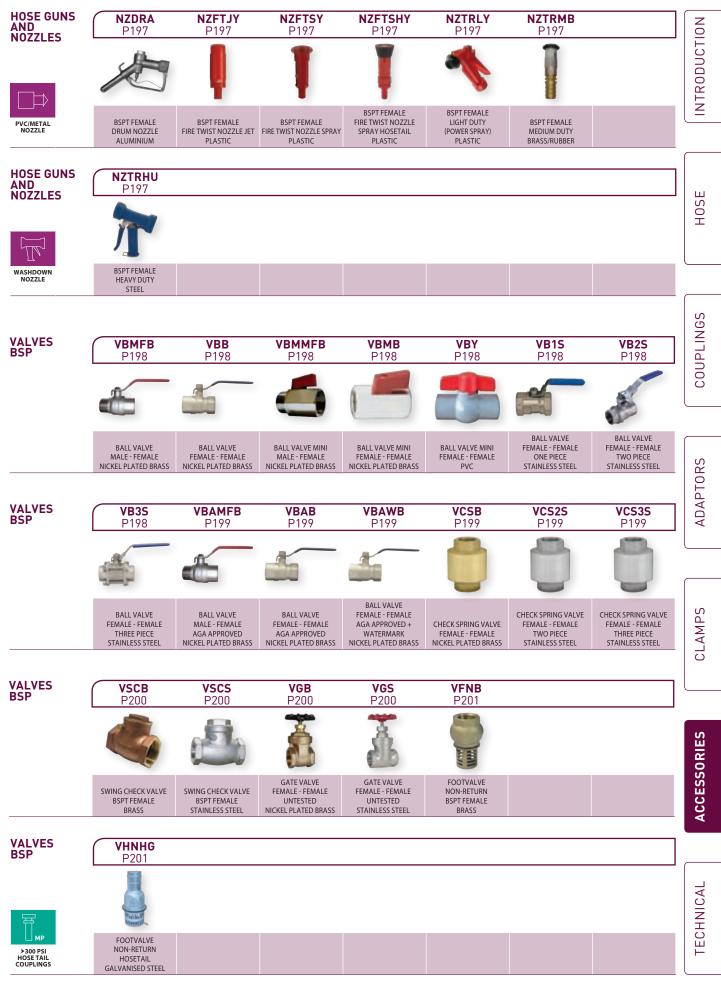


ACCESSORIES AND SPECIALTY PRODUCTS





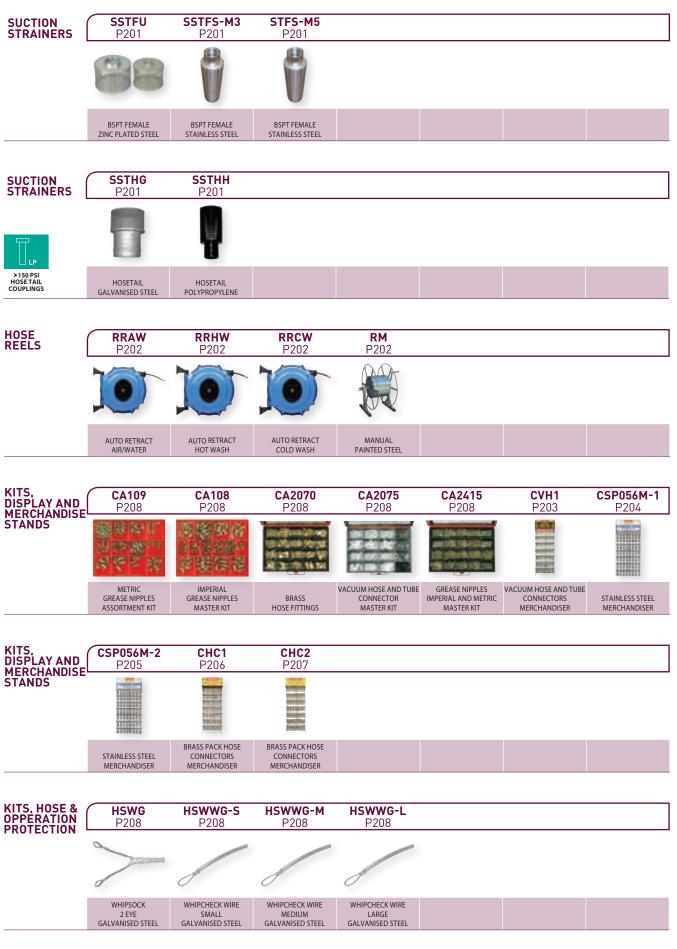




CONNECTING PARTNERSHIPS

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PICTORIAL INDEX



RYCO QUALITY



SPILL CONTROL	RSKIT P209	RSK-PS20P P209	RSK-PS5K P209	RSK-15K P209				ZO
-		-						INTRODUCTION
	RYCO SPILL KIT COMPLETE	RYCO PREMIUM SWEEP 20L	RYCO PREMIUM SWEEP 5KG	RYCO GRANULAR SWEEP 15KG				
FUEL MANAGEMENT	BNM800 P211	AUS45 P211	DRYBREAK P211	ULTRA-FINE P212	FLUSH-FACED P212	CLASSIC P212	COUPLINGS P212	
	1.1	1 - 0			00 00 00 00 00 00 00	80.0 800 300 300	₩₽	HOSI
	800 LPM MINING REFUELLING SYSTEM	UNDERGROUND MINING REFUELLING SYSTEM	BANLAW SECUREFILL™ DRY BREAK	ULTRA-FINE FILTERED VENT	BANLAW LUBECENTRAL™ FLUSH-FACED COUPLING RANGE	BANLAW LUBECENTRAL™ CLASSIC RANGE OF OIL COUPLINGS	FLUSH-FACE "CONNECT UNDER PRESSURE" GREASE AND FLUID COUPLINGS	
		NEI OLLING STSTEM	DITUILAR	VLIT	MANGE	COOLENGS	COOLENGS	NGS
FUEL MANAGEMENT	REFUELING P213	CHECK VALVE P213	BREAKAWAY P213					COUPLINGS
	1000							CO
			•					
	REFUELLING SYSTEM ACCESSORIES	CHECK VALVE FUEL RECEIVER	BREAKAWAY VALVE					ORS
OILS. LUBRICANTS (AND	RHOIL32 P214	RHOIL46 P214	RHOIL68 P214	RHVI32 P214	RHVI46 P214	RHVI68 P214	RHZF32 P215	ADAPTORS
SPECIALTY PRODUCTS								
	HYDRAULIC OIL	HYDRAULIC OIL	HYDRAULIC OIL	HVI HYDRAULIC OIL	HVI HYDRAULIC OIL	HVI HYDRAULIC OIL	ZINC FREE HYDRAULIC OIL	S
OILS, (505570	5115000		5115676	5110500	5116577	CLAMPS
LUBRICANTS (AND SPECIALTY	RHZF46 P215	RHZF68 P215	RHFG32 P215	RHFG46 P215	RHFG68 P215	RHSB32 P215	RHSB46 P215	
PRODUCTS								ES
	ZINC FREE HYDRAULIC OIL	ZINC FREE HYDRAULIC OIL	FOOD GRADE HYDRAULIC OIL	FOOD GRADE HYDRAULIC OIL	FOOD GRADE HYDRAULIC OIL	S-TYPE SYNTHETIC HYDRAULIC OIL	S-TYPE SYNTHETIC HYDRAULIC OIL	ACCESSORIES
OILS, (RHSB68	RHBV32	RHBV46	RHBV68	RHFR46	RHFR68	RHFR720	ACCES
LUBRICANTS	P215	P216	P216	P216	P216	P216	P216	
PRODUCTS								CAL
	S-TYPE SYNTHETIC HYDRAULIC OIL	V-TYPE HYDRAULIC OIL	V-TYPE HYDRAULIC OIL	V-TYPE HYDRAULIC OIL	FIRE RESISTANT HYDRAULIC FLUID	FIRE RESISTANT HYDRAULIC FLUID	FIRE RESISTANT HYDRAULIC FLUID	TECHNICAL

PICTORIAL INDEX



Ryco HOSE GUNS AND NOZZLES

NOZZLE		NZDRA
DRUM NOZ	ZLE	
SI	ZE	BSPT FEMALE DRUM NOZZLE ALUMINIUM
Dash	inch	PART NO
-08	1/2	NZDRA-08
-12 3/4		NZDRA-12
-16	1	NZDRA-16

NOZZLE	E	NZFTJY	NZFTSY	NZFTSHY	NZFTSHB	NZTRLY	
FIRE TWIS	T NOZZLE	N8	N6	Ţ			COUPLINGS
SI	ZE	FIRE TWIST NOZZLE JET H/T PLASTIC	FIRE TWIST NOZZLE SPRAY H/T PLASTIC	FIRE TWIST NOZZLE SPRAY HOSETAIL PLASTIC	MEDIUM DUTY BRASS/RUBBER	LIGHT DUTY (POWER SPRAY) PLASTIC	
Dash	inch	PART NO	PART NO	PART NO	PART NO	PART NO]
-12	3/4	NZFTJY-12	NZFTSY-12	NZFTSHY-12	NZFTSHB-12	NZTRLY-12	ORS
-16	1		NZFTSY-16]] DT(

NOZZLE		NZTRHU	
TRIGGER W WASHDOWN NOZZLE	/ASHDOWN	1	
SI	ZE	BSPT FEMALE HEAVY DUTY STEEL	
Dash	inch	PART NO	
-12	3/4	NZTRHU-12	

INTRODUCTION

HOSE

VALVES

VALVES	5	VBMFB	VBB	VBMMFB	VBMB	VBY
BALL VALV BSP	/ES					
SI	ZE	BALL VALVE MALE - FEMALE NICKEL PLATED BRASS	BALL VALVE FEMALE - FEMALE NICKEL PLATED BRASS	BALL VALVE MINI MALE - FEMALE NICKEL PLATED BRASS	BALL VALVE MINI FEMALE - FEMALE NICKEL PLATED BRASS	BALL VALVE MINI FEMALE - FEMALE NICKEL/PVC
Dash	inch	PART NO	PART NO	PART NO	PART NO	PART NO
-02	1/8			VBMMFB-02	VBMB-02	
-04	1/4	VBMFB-04	VBB-04	VBMMFB-04	VBMB-04	
-06	3/8	VBMFB-06	VBB-06	VBMMFB-06	VBMB-06	
-08	1/2	VBMFB-08	VBB-08	VBMMFB-08	VBMB-08	
-12	3/4	VBMFB-12	VBB-12	VBMMFB-12	VBMB-12	VBY-12
-16	1	VBMFB-16	VBB-16			VBY-16
-20	1.1/4	VBMFB-20	VBB-20			VBY-20
-24	1.1/2	VBMFB-24	VBB-24			VBY-24
-32	2	VBMFB-32	VBB-32			VBY-32
-40	2.1/2	VBMFB-40	VBB-40			VBY-40
-48	3	VBMFB-48	VBB-48			VBY-48
-64	4	VBMFB-64	VBB-64			VBY-64

VALVES	5	VB1S	VB2S	VB3S
BALL VALV BSP	'ES			
SI	ZE	BALL VALVE FEMALE - FEMALE ONE PIECE STAINLESS STEEL	BALL VALVE FEMALE - FEMALE TWO PIECE STAINLESS STEEL	BALL VALVE FEMALE - FEMALE THREE PIECE STAINLESS STEEL
Dash	inch	PART NO	PART NO	PART NO
-04	1/4	VB1S-04	VB2S-04	
-06	3/8	VB1S-06	VB2S-06	
-08	1/2	VB1S-08	VB2S-08	VB3S-08
-12	3/4	VB1S-12	VB2S-12	VB3S-12
-16	1	VB1S-16	VB2S-16	VB3S-16
-20	1.1/4	VB1S-20	VB2S-20	VB3S-20
-24	1.1/2	VB1S-24	VB2S-24	VB3S-24
-32	2	VB1S-32	VB2S-32	VB3S-32
-40	2.1/2			VB3S-40
-48	3			VB3S-48
-64	4			VB3S-64

IYCO
VALVES

VALVES		VBAMFB	VBAB	VBAWB
BALL VALV BSP	'ES	-		
SI	ZE	BALL VALVE MALE - FEMALE AGA APPROVED NICKEL PLATED BRASS	BALL VALVE FEMALE - FEMALE AGA APPROVED NICKEL PLATED BRASS	BALL VALVE FEMALE - FEMALE AGA APPROVED +WATERMARK NICKEL PLATED BRASS
Dash	inch	PART NO	PART NO	PART NO
-04	1/4		VBAB-04	
-06	3/8		VBAB-06	
-08	1/2	VBAMFB-08	VBAB-08	VBAWB-08
-12	3/4	VBAMFB-12	VBAB-12	VBAWB-12
-16	1	VBAMFB-16	VBAB-16	VBAWB-16
-20	1.1/4	VBAMFB-20	VBAB-20	VBAWB-20
-24	1.1/2	VBAMFB-24	VBAB-24	VBAWB-24
-32	2		VBAB-32	VBAWB-32

VALVES	VCSB	VCS2S	VCS3S
CHECK SPRING			
VALVES		the second se	
BSP		10.00	

SI	ZE	CHECK SPRING VALVE FEMALE - FEMALE NICKEL PLATED BRASS	CHECK SPRING VALVE FEMALE - FEMALE 2-PIECE STAINLESS STEEL	CHECK SPRING VALVE FEMALE - FEMALE 3-PIECE STAINLESS STEEL
Dash	inch	PART NO	PART NO	PART NO
-04	1/4			VCS3S-04
-06	3/8	VCSB-06		VCS3S-06
-08	1/2	VCSB-08	VCS2S-08	VCS3S-08
-12	3/4	VCSB-12	VCS2S-12	VCS3S-12
-16	1	VCSB-16	VCS2S-16	VCS3S-16
-20	1.1/4	VCSB-20	VCS2S-20	VCS3S-20
-24	1.1/2	VCSB-24	VCS2S-24	VCS3S-24
-32	2	VCSB-32	VCS2S-32	VCS3S-32
-40	2.1/2	VCSB-40		VCS3S-40
-48	3	VCSB-48		VCS3S-48
-64	4	VCSB-64		VCS3S-64

INTRODUCTION

HOSE

VALVES

VALVES	ALVES VSCB		VSCS
SWING CHECK VALVES BSP			
SI	ZE	SWING CHECK VALVE BSPT FEMALE BRASS	SWING CHECK VALVE BSPT FEMALE STAINLESS STEEL
Dash	inch	PART NO	PART NO
-08	1/2	VSCB-08	VSCS-08
-12	3/4	VSCB-12	VSCS-12
-16	1	VSCB-16	VSCS-16
-20	1.1/4	VSCB-20	VSCS-20
-24	1.1/2	VSCB-24	VSCS-24
-32	2	VSCB-32	VSCS-32
-40	2.1/2	VSCB-40	
-48	3	VSCB-48	
-64	4	VSCB-64	

VALVES	;	VGB	VGS
GATE CHECK VALVES BSP		Å	
SIZE		GATE VALVE FEMALE-FEMALE UNTESTED NICKEL PLATED BRASS	GATE VALVE FEMALE-FEMALE UNTESTED STAINLESS STEEL
Dash	inch	PART NO	PART NO
-08	1/2	VGB-08	VGS-08
-12	3/4	VGB-12	VGS-12
-16	1	VGB-16	VGS-16
-20	1.1/4	VGB-20	VGS-20
-24	1.1/2	VGB-24	VGS-24
-32	2	VGB-32	VGS-32
-40	2.1/2	VGB-40	
-48	3	VGB-48	
-64	4	VGB-64	



VALVES AND SUCTION STRAINERS

VALVES	5	VFNB	VHNHG
FOOTVALV	ES		
SI	ZE	FOOTVALVE NON-RETURN BSPT FEMALE BRASS	FOOTVALVE NON-RETURN HOSETAIL GALVANISED STEEL
Dash	inch	PART NO	PART NO
-08	1/2	VFNB-08	
-12	3/4	VFNB-12	
-16	1	VFNB-16	
-20	1.1/4	VFNB-20	
-24	1.1/2	VFNB-24	
-32	2	VFNB-32	
-40	2.1/2	VFNB-40	
-48	3	VFNB-48	VHNHG-48
-64	4	VFNB-64	VHNHG-64
-96	6		VHNHG-96
-128	8		VHNHG-128

SSTFU

SUCTION STRAINERS

LP

SSTHG	SSTHH	SS
		ADAPTORS

>150 PSI HOSE TAIL COUPLINGS			U	U		T	
9	SIZE	SUCTION STRAINER BSPT FEMALE ZINC PLATED STEEL	SUCTION STRAINER 3 MICRON MESH BSPT FEMALE STAINLESS STEEL	SUCTION STRAINER 5 MICRON MESH BSPT FEMALE STAINLESS STEEL	SUCTION STRAINER HOSETAIL GALVANISED STEEL	SUCTION STRAINER HOSETAIL POLYPROPYLENE	S S
Dash	inch	PART NO	PART NO	PART NO	PART NO	PART NO	AMP
-24	1.1/2	SSTFU-24			SSTHG-24	SSTHH-24	
-32	2	SSTFU-32	SSTFS-32M3	STFS-32M5	SSTHG-32	SSTHH-32	
-40	2.1/2	SSTFU-40			SSTHG-40	SSTHH-40	
-48	3	SSTFU-48			SSTHG-48	SSTHH-48	
-64	4	SSTFU-64			SSTHG-64		
-80	5	SSTFU-80					RIES
-96	6	SSTFU-96			SSTHG-96		
-128	8	SSTFU-128			SSTHG-128		ESS

STFS-M5

SSTFS-M3

HOSE REELS

HOSE REE	LS	RRAW	RRHW	RRCW
AUTO RETRAC	T			
HOSE SIZE	REEL CAPACITY	HOSE REEL AUTO RETRACT AIR/WATER	HOSE REEL AUTO RETRACT HOT WASH	HOSE REEL AUTO RETRACT COLD WASH
Dash	Metres	PART NO	PART NO	PART NO
-05	15	RRAW5-15M		
-05	20	RRAW5-20M		
-06	15	RRAW6-15M	RRHW6-15M	RRCW6-15M
-06	20	RRAW6-20M	RRHW6-20M	RRCW6-20M
-08	15	RRAW8-15M	RRHW8-15M	RRCW8-15M
-08	18	RRAW8-18M		RRCW8-18M

HOSE REE	RM	
MANUAL		
HOSE SIZE	REEL CAPACITY	HOSE REEL MANUAL PAINTED STEEL
Dash	Metres	PART NO
-08	30	RM8-30
-08	50	RM8-50
-12	40	RM12-40
-12	60	RM12-60
-12	100	RM12-100
-12	200	RM12-200
-16	60	RM16-60
-16	100	RM16-100
-20	14	RM20-14
-20	57	RM20-57



DISPLAY AND MERCHANDISE STANDS

DOUANDISED CONTENTS

VACUUM HOSE AND TUBE CONNECTORS

Merchandiser Contents (49 Types) CVH1 Vacuum Hose and Tube Connectors

Includes:

- 3 x 49 types of Vacuum Connector Packs
- Total of 147 packs
- Merchandiser Dimensions: 400mm x 1100mm (incl. header board)

This wall merchandiser carries a popular selection of vacuum and fuel hose fittings. All packaged in reusable blisters, designed to be sold at one price.

These fittings are ideal for automotive and industrial use. They are fuel compatible with connectors, manufactured from acetal resin and feature tapered thread fittings made from polymide 6.

- 2 and 3-Way Barb Fittings
- Straight Barbs

CVH1

- Hex Plugs
- Male Hose Tails
 Vacuum Caps
- 'Y' Barbs 'T' Barbs
- vacuum



MERCHANDISER CONTENTS				
PART NO	SIZE	DESCRIPTION		
CVC1	3mm	'T' Piece		
CVC2	5mm	'T' Piece		
CVC3	6mm	'T' Piece		
CVC4	8mm	'T' Piece		
CVC5	10mm	'T' Piece		
CVC6	3mm	90° Elbows		
CVC7	5mm	90° Elbows		
CVC8	6mm	90° Elbows		
CVC9	8mm	90° Elbows		
CVC10	10mm	90° Elbows		
CVC11	3mm - 4mm - 3mm	Reducing 'T' Piece		
CVC12	4mm - 6mm - 4mm	Reducing 'T' Piece		
CVC13	6mm - 4mm - 6mm	Reducing 'T' Piece		
CVC14	8mm - 4mm - 8mm	Reducing 'T' Piece		
CVC15	8mm - 6mm - 8mm	Reducing 'T' Piece		
CVC16	10mm - 6mm - 10mm	Reducing 'T' Piece		
CVC17	3mm	Straight Connectors		
CVC18	5mm	Straight Connectors		
CVC19	6mm	Straight Connectors		
CVC20	8mm	Straight Connectors		
CVC21	10mm	Straight Connectors		
CVC22	4mm - 3mm	Reducing Straight Connectors		
CVC23	6mm - 4mm	Reducing Straight Connectors		
CVC24	8mm - 6mm	Reducing Straight Connectors		
CVC25	10mm - 6mm	Reducing Straight Connectors		
CVC26	10mm - 8mm	Reducing Straight Connectors		
CVC27	5mm	4-Way 'X' Piece		
CVC28	Piece 6mm	4-Way 'X' Piece		
CVC29	3mm	3-Way 'Y' Piece		
CVC30	5mm	3-Way 'Y' Piece		
CVC31	6mm	3-Way 'Y' Piece		
CVC32	8mm	3-Way 'Y' Piece		
CVC33	10mm	3-Way 'Y' Piece		
CVC34	6mm - 8mm - 6mm	Reducing "Y" Piece		
CVC35	4mm x 1/4" BSP	Tailpiece		
CVC36	5mm x 1/4" BS	Tailpiece		
CVC37	6mm x 1/4" BSP	Tailpiece		
CVC38	8mm x 1/4" BSP	Tailpiece		
CVC39	6mm x 1/4" BSP	Elbows		
CVC40	8mm x 1/4" BSP	Elbows		
CVC41	1/8" BSP	Hex Taper Plugs		
CVC42	1/4" BSP	Hex Taper Plugs		
CVC43	3/8" BSP	Hex Taper Plugs		
CVC44	3mm	Caps		
CVC45	4mm	Caps		
CVC46	5mm	Caps		
CVC47	6mm	Caps		
CVC48	8mm	Caps		
CVC49	10mm	Caps		

DISPLAY AND MERCHANDISE STANDS

MERCHANDISER

CSP056M-1

STAINLESS STEEL

Merchandiser Contents (56 Types) Marine Grade 316/A4 Stainless Steel

Includes:

- 3 x 56 types of Marine Grade 316/A4 Stainless Steel
- Total of 168 Packs
- Merchandiser Dimensions: 440mm x 900mm (incl. header board)

A carefully selected range of Marine Grade 316/A4 Stainless Steel products, packaged in reusable clam shell with a two price structure. Barcoded for easy identification.

- Self-Tapping Screws
- Spring and Flat Washer
- Split Pins
- Machine Screws and Nuts
- Bolts and Nuts
- Socket Head Cap Screws



MERCHANDISER CONTENTS			
PART NO	SIZE	DESCRIPTION	
CSP02	6G x 1/2"	Self-Tapping Screws Countersunk	
CSP03	6G x 3/4"	Self-Tapping Screws Countersunk	
CSP04	6G x 1"	Self-Tapping Screws Countersunk	
CSP05	8G x 3/4"	Self-Tapping Screws Countersunk	
CSP06	8G x 1"	Self-Tapping Screws Countersunk	
CSP07	10G x 3/4"	Self-Tapping Screws Countersunk	
CSP08	10G x 1"	Self-Tapping Screws Countersunk	
CSP09	4G x 5/8"	Self-Tapping Screws Pan x Rec	
CSP10	6G x 1/2"	Self-Tapping Screws Pan x Rec	
CSP11	6G x 3/4"	Self-Tapping Screws Pan x Rec	
CSP12	6G x 1"	Self-Tapping Screws Pan x Rec	
CSP13	8G x 3/8"	Self-Tapping Screws Pan x Rec	
CSP14	8G x 1/2"	Self-Tapping Screws Pan x Rec	
CSP15	8G x 3/4"	Self-Tapping Screws Pan x Rec	
CSP16	8G x 1"	Self-Tapping Screws Pan x Rec	
CSP17	10G x 1/2"	Self-Tapping Screws Pan x Rec	
CSP18	10G x 1"	Self-Tapping Screws Pan x Rec	
CSP19	6 x 25mm	Screws and Nuts Pan x Rec	
CSP20	6 x 50mm	Screws and Nuts Pan x Rec	
CSP21	6 x 25mm	Screws and Nuts Countersunk	
CSP22	6 x 50mm	Screws and Nuts Countersunk	
CSP23	1.6 x 32mm	Split Pins	
CSP24	2.0 x 40mm	Split Pins	
CSP25	2.5 x 40mm	Split Pins	
CSP26	3.2 x 50mm	Split Pins	
CSP27	4mm	Spring Washers	
CSP28	5mm	Spring Washers	
CSP29	6mm	Spring Washers	
CSP30	8mm	Spring Washers	
CSP31	10mm	Spring Washers	
CSP32	4mm	Flat Washers	
CSP33	5mm	Flat Washers	
CSP34	6mm	Flat Washers	
CSP35	8mm	Flat Washers	
CSP36	10mm	Flat Washers	
CSP37	4 x 20mm	Set Screws and Nuts	
CSP38	4 x 35mm	Set Screws and Nuts	
CSP39	5 x 25mm	Set Screws and Nuts	
CSP40	5 x 35mm	Set Screws and Nuts	
CSP41	6 x 16mm	Set Screws and Nuts	
CSP42	6 x 25mm	Set Screws and Nuts	
CSP43	6 x 40mm	Set Screws and Nuts	
CSP44	8 x 25mm	Set Screws and Nuts	
CSP45	8 x 35mm	Set Screws and Nuts	
CSP46	8 x 40mm	Set Screws and Nuts	
CSP47	8 x 50mm	Set Screws and Nuts	
CSP48	10 x 25mm	Set Screws and Nuts	
CSP49	10 x 35mm	Set Screws and Nuts	
CSP50	10 x 50mm	Set Screws and Nuts	
CSP51	5 x 10mm	Socket Head Cap Screws	
CSP52	5 x 25mm	Socket Head Cap Screws	
CSP53	6 x 16mm	Socket Head Cap Screws	
CSP54	6 x 25mm	Socket Head Cap Screws	
CSP55	8 x 16mm	Socket Head Cap Screws	
CSP56	8 x 25mm	Socket Head Cap Screws	
CSP57	10 x 25mm	Socket Head Cap Screws	

RYCO QUALITY



INTRODUCTION

HOSE

COUPLINGS

DISPLAY AND MERCHANDISE STANDS

MERCHANDISER

CSP056M-2

STAINLESS STEEL

Merchandiser Contents (56 Types) Marine Grade 316/A4 Stainless Steel

Includes:

- 3 x 56 types of Marine Grade 316/A4 Stainless Steel •
- Total of 168 Packs •
- Merchandiser Dimensions: 440mm x 900mm 9 (incl. • header board)

A carefully selected range of Marine Grade 316/A4 Stainless Steel products, packaged in reusable clam shell with a three price structure. Barcoded for easy identification.

- Self-Tapping Screws
- Machine Screws and Nuts
- Self-Locking Nuts
- Bolts and Nuts UNC • Dome Nuts



MERCHANDISER CONTENTS				
PART NO	SIZE	DESCRIPTION		
CSP58	1/4 x 3/4" UNC	Hex Set Screws		
CSP59	1/4 x 1" UNC	Hex Set Screws		
CSP60	1/4 x 1-1/2" UNC	Hex Set Screws		
CSP61	5/16 x 1" UNC	Hex Set Screws		
CSP62	5/16 x 1-1/2" UNC	Hex Set Screws		
CSP63	3/8 x 1" UNC	Hex Set Screws		
CSP64	3/8 x 1-1/2" UNC	Hex Set Screws		
CSP65	3/16 x 1/2" UNC	Pan Head Screws		
CSP66	3/16 x 3/4" UNC	Pan Head Screws		
CSP67	3/16 x 1" UNC	Pan Head Screws		
CSP68	3/16 x 1-1/4" UNC	Pan Head Screws		
CSP69	3/16 x 1-1/2" UNC	Pan Head Screws		
CSP70	3/16 x 2" UNC	Pan Head Screws		
CSP71	1/4 x 1/2" UNC	Pan Head Screws		
CSP72	1/4 x 3/4" UNC	Pan Head Screws		
CSP73	1/4 x 1" UNC	Pan Head Screws		
CSP74	1/4 x 1-1/4" UNC	Pan Head Screws		
CSP75	P1/4 x 1-1/2"	UNC Pan Head Screws		
CSP76	1/4 x 2" UNC	Pan Head Screws		
CSP77	3/16 x 1/2" UNC	Countersunk Screws		
CSP78	3/16 x 1" UNC	Countersunk Screws		
CSP79	3/16 x 1-1/4" UNC	Countersunk Screws		
CSP80	3/16 x 1-1/2" UNC	Countersunk Screws		
CSP81	3/16 x 2" UNC	Countersunk Screws		
CSP82	1/4 x 1/2" UNC	Countersunk Screws		
CSP83	1/4 x 3/4" UNC	Countersunk Screws		
CSP84	1/4 x 1" UNC	Countersunk Screws		
CSP85	1/4 x 1-1/4" UNC	Countersunk Screws		
CSP86	1/4 x 1-1/2" UNC	Countersunk Screws		
CSP87	1/4 x 2" UNC	Countersunk Screws		
CSP88	1/4" UNC	Self-Locking Nuts		
CSP89	5/16" UNC	Self-Locking Nuts		
CSP90	3/8" UNC	Self-Locking Nuts		
CSP91	3/16" UNC	Dome Nuts		
CSP92	1/4" UNC	Dome Nuts		
CSP93	8G x 1-1/4"	Self-Tapping Screws Pan Head		
CSP94	10G x 1-1/4"	Self-Tapping Screws Pan Head		
CSP95	10G x 1-1/2"	Self-Tapping Screws Pan Head		
CSP96	8G x 1/2"	Self-Tapping Screws Countersunk		
		Self-Tapping Screws		
CSP97	8G x 1-1/4"	Countersunk		
CSP98	10G x 1-1/4"	Self-Tapping Screws Countersunk		
CSP99	10G x 1-1/2"	Self-Tapping Screws		
660400		Countersunk		
CSP100	3/16" UNC	Hex Nuts		
CSP101	1/4" UNC	Hex Nuts		
CSP102	5/16" UNC	Hex Nuts		
CSP103 DN4	3/8" UNC	Hex Nuts Dome Nuts		
DN4 DN5	4mm	Dome Nuts		
DN5 DN6	5mm			
	6mm	Dome Nuts		
DN8	8mm	Dome Nuts		
DN10	10mm	Dome Nuts		
SLN4	4mm	Self-Locking Nuts		
SLN5	5mm	Self-Locking Nuts		
SLN6	6mm	Self-Locking Nuts		
SLN8	8mm	Self-Locking Nuts		
SLN10	10mm	Self-Locking Nuts		

CONNECTING PARTNERSHIPS

DISPLAY AND MERCHANDISE STANDS

MERCHANDISER CHC1		СПСТ		MERCHANDISER (
BRASS PACK HOSE C	CONNECTORS		PART NO	SIZE	DESCRIPTION
Merchandiser Conte	ents (49 Types)		HC1	3/16"	Brass Hose Joiner
Brass Fittings			HC2	1/4"	Brass Hose Joiner
_			HC3	5/16"	Brass Hose Joiner
ncludes:2 x 49 types of B	Prace Dacks		HC4	3/8"	Brass Hose Joiner
 Z x 49 types of b Total of 98 Packs 			HC5	1/2"	Brass Hose Joiner
	imensions: 400mm x	1100mm (incl.	HC6	5/8"	Brass Hose Joiner
header row)			HC7	3/4"	Brass Hose Joiner
his wall mounted Bra	ass Fittings merchar	ndiser includes	HC8 HC9	3/16" 1/4"	Brass 'T' Joiners Brass 'T' Joiners
a comprehensive rang			HC10	5/16"	Brass 'T' Joiners
Attractively packaged		and barcoded	HC11	3/8"	Brass 'T' Fittings
or easy identification	າ.		HC12	1/2"	Brass 'T' Fittings
• Hose joiners	Elbows		HC12	5/8"	Brass 'T' Fittings
 Hose joiners 'T' Joiners 	Reducing	Bushas	HC14	3/16 x 1/8"	Male Hose Barbs
	Sockets	busnes	HC15	1/4 x 1/8"	Male Hose Barbs
Hose Barbs	• Sockets		HC16	5/16 x 1/8"	Male Hose Barbs
			HC17	3/8 x 1/8"	Male Hose Barbs
<u> </u>	hampion		HC18	3/16 x 1/4	Male Hose Barbs
			HC19	1/4 x 1/4	Male Hose Barbs
00/	ASSPA	1-11	HC20	5/16 x 1/4	Male Hose Barbs
2175	199241	517	HC21	3/8 x 1/4"	Male Hose Barb
and the second	BRASS FITTINGS		HC22	1/2 x 1/4"	Male Hose Barbs
	0		HC23	5/8 x 1/4"	Male Hose Barb
No. of Concession, Name	NAME OF TAXABLE PARTY.	and showing	HC24	5/16 x 3/8"	Male Hose Barb
			HC25	3/8 x 3/8"	Male Hose Barb
2.7 H.F.	11.14 House 10 10 10		HC26	1/2 x 3/8"	Male Hose Barb
		And Ale	HC27	5/8 x 3/8"	Male Hose Barbs
00	ADDI	70	HC28	3/8 x 1/2"	Male Hose Barbs
			HC29 HC30	1/2 x 1/2"	Male Hose Barbs Male Hose Barbs
1000		PLAN PERSON	HC31	5/8 x 1/2" 3/4 x 1/2"	Male Hose Barb
100	No Real Ends	1	HC32	3/4 x 3/4"	Male Hose Barb
			HC32	1/4 x 1/8"	90° Male Elbow
THE	THHH	7.77	HC34	5/16 x 1/8	90° Male Elbows
the second s			HC35	1/4 x 1/4"	90° Male Elbow
section sectors.			HC36	5/16 x 1/4"	90° Male Elbows
			HC37	3/8 x 1/4"	90° Male Elbows
00	0001	20	HC38	1/2 x 1/4"	90° Male Elbows
		411	HC39	5/8 x 1/4"	90° Male Elbows
Second Second	Antonia Description of the		HC40	5/8 x 3/8"	90° Male Elbows
	Contraction of the owner	and the other states	HC41	1/2 x 1/2"	90° Male Elbows
		SE 105	HC42	5/8 x 1/2"	90° Male Elbows
0.0	0.001	70	HC43	1/4 - 1/8"	Hex Reducing Bu
			HC44	3/8 - 1/4"	Hex Reducing Bus
			HC45	1/2 - 1/4"	Hex Reducing Bus
52 85	123 125 1		HC46	1/8"	Hex Sockets
			HC47	1/4"	Hex Sockets
		Contraction of the second	HC48	1/8"	Female Brass 'T'
			HC49	1/4"	Brass Female '



DISPLAY AND MERCHANDISE STANDS

MERCHANDISER

BRASS PACK HOSE CONNECTORS

Merchandiser Contents (49 Types) Brass Fittings

Includes:

- 2 x 49 types of Brass Packs
- Total of 98 Packs
- Merchandiser Dimensions: 400mm x 1100mm (incl. header row)

CHC2

This wall mountable selection of Brass Fittings

complements the CHC1 and offers an extended range of Joiners, Barbs and Elbows. Packaged in reusable blisters and barcoded for easy identification.

Elbows

- Hose Joiners
- 'T' Joiners
- Reducing Bushes
 Sockota



	MERCHANDISER CONTENTS				
PART NO	SIZE	DESCRIPTION			
HC50	1/8" BSP	Hex Taper Plugs			
HC51	1/4" BSP	Hex TaperPlugs			
HC52	3/8"BSP	Hex TaperPlugs			
HC53	1/2" BSP	Hex TaperPlugs			
HC54	1/8" BSP	Hex Nipples			
HC55	1/4" BSP	Hex Nipples			
HC56	3/8" BSP	Hex Nipples			
HC57	1/2" BSP	Hex Nipples			
HC58	1/8" BSP	Male and Female Elbows			
HC59	1/4" BSP	Male and Female Elbows			
HC60	3/8 x 1/8" BSP	Reducing Bush			
HC61	1/2 x 1/8" BSP	Reducing Bush			
HC62	1/2 x 3/8" BSP	Reducing Bush			
HC63	3/8" BSP	Hex Sockets			
HC64	1/2" BSP	Hex Sockets			
HC65	1/4 x 1/8" BSP	Reducing Sockets			
HC66	3/8 x 1/8" BSP	Reducing Sockets			
HC67	3/8 x 1/4" BSP	Reducing Sockets			
HC68	1/2 x 1/4" BSP	Reducing Sockets			
HC69	1/2 x 3/8" BSP	Reducing Sockets			
HC70	3/4 x 3/8" BSP	Reducing Bush			
HC71	3/4 x 1/2" BSP	Reducing Bush			
HC72	1/8" BSP	Female Elbows			
HC73	1/4" BSP	Female Elbows			
HC74	3/8" BSP	Female Elbows			
HC75	1/2" BSP	Female Elbows			
HC76	1/4 x 1/8" BSP	Male and Female Adaptors			
HC77	1/4 x 1/4" BSP	Male and Female Adaptors			
HC78	3/8 x 1/8" BSP	Male and Female Adaptors			
HC79	3/8 x 1/4" BSP	Male and Female Adaptors			
HC80	3/8 x 3/8" BSP	Male and Female Adaptors			
HC81	1/2 x 1/4" BSP	Male and Female Adaptors			
HC82	1/2 x 3/8" BSP	Male and Female Adaptors			
HC83	1/4 x 1/8" BSP	Reducing Nipples			
HC84	3/8 x 1/8" BSP	Reducing Nipples			
HC85	3/8 x 1/4" BSP	Reducing Nipples			
HC86	1/2 x 1/4" BSP	Reducing Nipples			
HC87	1/2 x 3/8" BSP	Reducing Nipples			
HC88	3/4 x 1/2" BSP	Reducing Nipples			
HC89	3/16 x 1/8"	Female Tailpiece			
HC90	1/4 x 1/8"	Female Tailpiece			
HC91	5/16 x 1/8"	Female Tailpiece			
HC92	3/16 x 1/4"	Female Tailpiece			
HC93	1/4 x 1/4"	Female Tailpiece			
HC94	5/16 x 1/4"	Female Tailpiece			
HC95	3/8 x 1/4"	Female Tailpiece			
HC96	1/2 x 1/4"	Female Tailpiece			
HC97	3/8 x 3/8"	Female Tailpiece			
HC98	1/2 x 3/8"	Female Tailpiece			

KITS, HOSE AND OPERATOR PROTECTION

KITS	CA109	CA108	CA2070	CA2075	CA2415
	なない湯	就要追求 1928年1984年 1928年1984年	100000000 (三)(1000000 (10000000 (1000000000000000000		
CONTENTS	METRIC GREASE NIPPLES ASSORTMENT KIT	IMPERIAL GREASE NIPPLES MASTER KIT	BRASS HOSE FITTINGS	VACUUM HOSE AND TUBE CONNECTOR MASTER KIT	GREASE NIPPLES IMPERIAL AND METRIC MASTER KIT
Description	Straight and Angle Nipples. Metric, Fine and Coarse.	Straight and Angle Nipples. UNF, BSF, BSP and NPT Threads.	'T' Pieces, Joiners, Tails, Elbows and Adaptors.		Zinc Plated
Sizes	12 Sizes: 6mm to 10mm diameter	15 Sizes	53 Sizes	49 Sizes	20 Sizes
Pieces	105 Pieces	113 Pieces	106 Pieces	136 Pieces	410 Pieces

SAFETY	SOCK	HSWG
SUITS H	IOSE OD	HOSE SAFETY WHIPSOCK 2-EYE GALVANISED STEEL
mm	inch	PART NO
30-40	1.18-1.57	HSWG-030040
40-50	1.57-1.97	HSWG-040050
50-60	1.97-2.36	HSWG-050060
60-70	2.36-2.76	HSWG-060070
70-85	2.76-3.35	HSWG-070085
85-100	3.35-3.94	HSWG-085100
100-120	3.94-4.72	HSWG-100120
120-150	4.72-5.91	HSWG-120150
150-190	5.91-7.48	HSWG-150190

WHIPCHECK			HWWG		
					0
SIZE	SUITS HOSE ID		LENGTH		HOSE SAFETY WHIPCHECK WIRE GALVANISED STEEL
	DN	inch	mm	inch	PART NO
SMALL	10-31	3/8-1.1/4	510	20.1	HWWG-S
MEDIUM	31-51	1.1/4-2	810	31.9	HWWG-M
LARGE	63-102	2.1/2-4	1200	47.2	HWWG-L





AN EFFICIENT, NATURAL AND COST-EFFECTIVE SPILL CONTROL SOLUTION 100% BIO DEGRADABLE



SPILL KIT			INTRODUCTION
CONTENTS	QUANTITY	PART NO	
Complete Kit	1	RSKIT	
Cotton Absorption Pads (200 gsm)*	10	RSK-CP45	ш
Absorption Sock 1.2 metre ⁺	1	RSK-AS120	HOSI
Absorption Pillow 35 cm x 35 cm ⁺	1	RSK-APIL	
Disposable Waste Bag and Ties	2	RSK-DWB	
Brush and Pan set	1	N/A	
Nitrile Gloves	1	N/A	GS
Instruction Card	1	N/A	Ξ.
Kit Carry Bag	1	N/A	ן ק
RYCO Premium Sweep 20 L Pail	1	RSK-PS20P	COUPLINGS
REFILLS			
RYCO Premium Sweep 5 kg	1	RSK-PS5K	
RYCO Granular Sweep 15 kg	1	RSK-15K	RS
* RYCO Spill Kit Cotton Pads are 70% more absorbent than polyester pads. † RYCO Spill Kit Absorption Socks and Pillows absorb 17 times their weight in oil.			ADAPTORS

RYCO SAFFTY GUIDE

SAFETY AND ENVIRONMENTAL COMPLIANCE

Spill response and the resulting waste to be disposed of are governed by regulations to protect people and the environment.

Compliance with these regulations is generally met through the use of commercial spill kits containing high performance absorbents, personal protective equipment, written response procedures/quidelines and accessories to ensure proper storage and disposal of spill wastes.

RYCO offers you a range of spill response products that comply with current legislation and Australian Standards, helping you:

- Meet your legal requirements: to ensure your Environmental "Due Diligence", as well as your OH&S "Duty of Care".
- Reduce your spill clean-up costs.
- Meet your environment management plan for waste reduction, increased use of recycled materials, and use of products with a low carbon footprint.

NOTE: Clay granular absorbents should NOT be disposed of in landfill.

HAZARDOUS AND NON-HAZARDOUS LIQUIDS

Fuels and Lubes 1 **Hydraulics** Fluids 1 Coola 1 Solve (ketones, halocarbons, alcohols, etc.) Pai (oil based and water based) 1 Drying Oils (linseed, pine oil, cod liver oil, etc.) Pesticides (solvent based and water based) Ϊ Vegetables Oils or Animal Fats (liquid) Water-based compounds (ie: deterge, food, etc.) 1 Pharmaceuticals/Drugs

DANGEROUS GOODS AND LIQUIDS

Class 3 - Flammable Liquids	\checkmark
Class 5 - Dangerous Goods	X

CONNECTING PARTNERSHIPS



IN PARTNERSHIP WITH THE PIONEERS IN UNIFIED FUEL MANAGEMENT

MINING - RAIL - TRANSPORT - MARINE - CONSTRUCTION



RYCO QUALITY



ACCREDITED NOZZLES REPAIRS

REPAIRABLE, NOT DISPOSABLE

The Banlaw nozzle is repairable, not disposable; they are robust and last considerably longer in the field and can reduce refuelling times. This means less cost in the long run as they are built to last. RYCO are part of Banlaw's network of accredited repairers, and are factory trained in "rebuilding" nozzles. With sustainability and quality in mind, Banlaw nozzles come with warranties for further reassurance.

REFUELLING

BNM800 NOZZLE



800 LPM MINING REFUELLING SYSTEM

Our nozzles perform in some of the harshest working conditions in the world. You can depend on Banlaw nozzles to do the job.

BNM800 Nozzle Technical Specifications

- Flow rate range for Diesel: 90-800 LPM / 24-211GPM
- Mass (with plug): 3.4kg (7.5lbs)
- Products Required
- Mining BNM800 Nozzle
- AUS25A Filter Vent with AUS25AA-1 coupling
- BRM23 Receiver

AUS45 NOZZLE



UNDERGROUND MINING REFUELLING SYSTEM

Underground automatic dry-break refuelling, safe for black coal underground use.

AUS45 Nozzle Technical Specs

- Flow rate range for Diesel: 40-300LPM / 24-211GPM
- Mass (with plug): 3.4kg (7.5lbs)

Products Required

- Underground AUS45 Nozzle
- AUS25E-C Vent with AUS25AA-1 Coupling
- AUS46 Receiver

BANLAW SECUREFILL™ DRY BREAK



Automatically identify and authorise all fuel dispensing.

Automatically and cost-effectively reconcile and secure fuel use for every mining vehicle in your fleet, using Banlaw's Auto ID Dry Break high flow nozzles. SecureFill can be retro-fitted to existing Banlaw FuelTrack[™] depots. Use in conjunction with the SecureFill Splashfill system, Banlaw FuelTrack[™] and Banlaw LevelTrack[™] for an even better, fully integrated fuel management system.

FUEL MANAGEMENT

REFUELLING

ULTRA-FINE FILTERED VENT



A complete vent assembly with all the key functions integrated into the one product.

The integrated Banlaw Ultra-Fine Filtered Vent greatly reduces the unwanted ingress of dust and other particles into the fuel tank via air flow, especially during fuel usage. With modern and up coming diesel engines calling for a low level of particulates in their fuel before performance and engine life is compromised, the Banlaw Ultra-Fine Filtered Vent has been designed fit-for-purpose. Built tough, it's virtually maintenance free and lasts for an entire service interval.

COUPLINGS

BANLAW LUBECENTRAL™ - FLUSH-FACED



BANLAW LUBECENTRAL™ FLUSH-FACED COUPLING RANGE

Eliminate contamination from site related dirt and cross contamination.

The Flush Face coupling is designed to enable the operator to wipe the coupling face clean before engaging in the transfer hose, minimising the extent of contamination entering the fluid stream during servicing and reducing wear on mating seals and other components within the fittings. With a range of ten unique and colour coded couplings, cross contamination is eliminated making the operators job easy and safe. Available in NPT thread sizes to suit both current industry specifications and larger configurations to maximise the flow rate capability.

BANLAW LUBECENTRAL™ - CLASSIC RANGE



BANLAW LUBECENTRAL™ CLASSIC RANGE OF OIL COUPLINGS

Are your Oil and Coolant service times slow and forcing dirt into your valuable machinery fluids?

Banlaw's Classic Range of Oil couplings are purpose-designed to make oil transfer an efficient and safe operation. Where the old industry standard oil couplings are used, Banlaw's standard couplings are the most durable solution. The standard range caters for the fill and evacuation of crankcase, transmission, hydraulic, coolant oils and fluids.

GREASE AND FLUID COUPLINGS



FLUSH-FACE "CONNECT UNDER PRESSURE" GREASE AND FLUID COUPLINGS

Transfer grease and other fluids safely, quickly and cleanly.

The Flush-Face "Connect Under Pressure" couplings are primarily designed for grease transfer but also transfer a wide variety of nonflammable fluids safely and reliably. The couplings may be connected with residual fluid pressure within the nozzle, making service times safer, cleaner and more efficient. The Australian-designed and manufactured couplings are built to last from steel to withstand your tough operating conditions and save you money in the long run.

RYCO QUALITY



VALVES AND ACCESSORIES

REFUELLING SYSTEM ACCESSORIES



High quality accessories to ensure you get the best from your refuelling system.

Banlaw's receivers, swivels, valves and nozzle anchors are made from the highest quality materials like stainless steel, zinc plated steel and anodized aluminium to ensure they withstand harsh everyday treatment.

Caps provide protection when the nozzle and receiver are not connected, reducing contamination. Made from steel or aluminium to prolong the life of your equipment by only using Banlaw accessories.

CHECK VALVE FUEL RECEIVER



The world's toughest and safest fuel security system

Banlaw's Check Valve Receiver cannot be overridden, eliminating fuel theft via the receiver. Intelligent design of the flow path generates low pressure. This prevents the increased risk of premature shut-off of pressure sensitive refuelling nozzles. Versatile design allows installation either directly into the fuel tank or the pipework (min 2"). Manufactured to exacting standards using high quality materials to withstand harsh operating environments. The receiver body can be replaced without the need to drain the tank.

BREAKAWAY VALVE



AN ESSENTIAL SAFETY COMPONENT OF THE DRIVE-AWAY PROTECTION SOLUTION

The Banlaw break-away valve is part of the drive-away protection solution, designed to provide a safe means of protecting diesel dispensing (refuelling) system components from damage and preventing spillage of fuel. The three-shear studs connecting each half of the valve are designed to fracture at a certain stress, allowing the valve assembly to separate into 2 separate dry-break components. These dry-break components prevent fuel spillage from either the delivery hose attached to the offending vehicle or the remainder of the pipework downstream of the pump.

PART NO	DESCRIPTION	
AUS4W-50	2" Breakaway Valve with 2" x 2" BSP (Male) threads	
AUS4W-50N	2" NPT Breakaway Valve	
AUS4W-75	3" Breakaway Valve with 2" x 2" BSP (Male) threads	
AUS4W-75N	3" NPT Breakaway Valve	
AUS4W-KIT	Breakaway Valve repair kit to suit AUS4W-50	
AUS4WKIT-75	Breakaway Valve repair kit to suit AUS4W-75	

INTRODUCTION

HOSE

ACCESSORIES OILS, LUBRICANTS AND SPECIALTY PRODUCTS



RYCO OILS, GREASES AND SPECIALTY PRODUCTS

HYDRAULICS	RH0IL32	RHOIL46	RHOIL68
HYDRAULIC OILS 32, 46, 68	Personal de la	Particular Col 44	Percent Percent
SIZE	HYDRAULIC OIL	HYDRAULIC OIL	HYDRAULIC OIL
Litres	PART NO	PART NO	PART NO
5	RHOIL32-5L	RHOIL46-5L	RHOIL68-5L
20	RHOIL32-20L	RHOIL46-20L	RHOIL68-20L
200	RHOIL32-200L	RHOIL46-200L	RHOIL68-200L
1000	RHOIL32-1000L	RHOIL46-1000L	RHOIL68-1000L

RYCO Hydraulic Oils 32, 46 and 68 meet or exceed the requirements of many international specifications for industrial and mobile hydraulic systems including: Vickers I-286-S, M-2950-S; VDMA 24318; Hagglunds-Denison HF-0, HF-1, HF-2; SS 155434; Racine, variable volume vane pumps; ISO 6743/4 (HM); Cincinnati Machine P-68 (ISO 32), P-69 (ISO 68), P-70 (ISO 46); SEB 181 222; DIN 51524, Part 2; AFNOR NFE 48-603 (HM); US Steel 136, 127; AFNOR NFE 48-691 (wet); Commercial Hydraulics.

HVI HYDRAULICS	RHVI32	RHVI46	RHVI68
HYDRAULIC OILS HVI (HT) 32, 46, 68			
SIZE	HVI HYDRAULIC OIL	HVI HYDRAULIC OIL	HVI HYDRAULIC OIL
Litres	PART NO	PART NO	PART NO
20	RHVI32-20L	RHVI46-20L	RHVI68-20L
200	RHVI32-200L	RHVI46-200L	RHVI68-200L
1000	RHVI32-1000L	RHVI46-1000L	RHVI68-1000L

RYCO Hydraulic Oils HVI (HT) 32, 46 and 68 meet or exceed the requirements of many international specifications for industrial and mobile hydraulic systems: Vickers 1-286-5, M-2950-5; VDMA 24318; Hagglunds-Denison HF-0, HF-1, HF-2; SS 155434; Racine, variable volume vane pumps; ISO 6743/4 (HM, HV); Cincinnati Machine P-68 (ISO 32), P-69 (ISO 68), P-70 (ISO 46); SEB 181 222; DIN 51524, Parts 2 and 3; AFNOR NFE 48-603 (HM, HV); US Steel 136, 127; AFNOR NFE 48-691 (wet); Commercial Hydraulics.

OILS, LUBRICANTS AND SPECIALTY PRODUCTS

ZINC FREE HYDRAULICS	RHZF32	RHZF46	RHZF68
ZINC FREE HYDRAULIC OILS 32, 46, 68			
SIZE	ZINC FREE HYDRAULIC OIL	ZINC FREE HYDRAULIC OIL	ZINC FREE HYDRAULIC OIL
Litres	PART NO	PART NO	PART NO
20	RHZF32-20L	RHZF46-20L	RHZF68-20L
200	RHZF32-200L	RHZF46-200L	RHZF68-200L
1000	RHZF32-1000L	RHZF46-1000L	RHZF68-1000L

RYCO Zinc Free Hydraulic Oils 32, 46 and 68 meet or exceed the requirements of many international specifications for industrial and mobile hydraulic and compressor systems including: DIN 51524, parts 1, 2 (HL, HLP); Cincinnati Machine P-68 (ISO 32), P-69 (ISO 68), P-70 (ISO 46); SEB 181 222; Denison HF-0, HF-1, HF-2; VDMA 24318; Parker Hannifin France HF-0; ISO 6743/4 (HM); AFNOR NFE 48-603 (HM); US Steel 126, 127 and 136; Sperry Vickers I-286-S, M-2950-S; SS 155434; DIN 51506 (VBL, VCL, VDL); ISO/DP 6521 (DAA, DAB, DAH, DAG); ISO 11158 (HM).

FOOD GRADE HYDRAULICS	RHFG32	RHFG46	RHFG68
FOOD GRADE HYDRAULIC OILS 32, 46, 68			
SIZE	ZINC FREE HYDRAULIC OIL	ZINC FREE HYDRAULIC OIL	ZINC FREE HYDRAULIC OIL
Litres	PART NO	PART NO	PART NO
20	RHFG32-20L	RHFG46-20L	RHFG68-20L
200	RHFG32-200L	RHFG46-200L	RHFG68-200L
1000	RHFG32-1000L	RHFG46-1000L	RHFG68-1000L

S-TYPE SYNTHETIC BIO HYDRAULICS	RHSB32	RHSB46	RHSB68
SYNTHETIC HYDRAULIC OILS S 32, 46, 68			
SIZE	S-TYPE SYNTHETIC HYDRAULIC OIL	S-TYPE SYNTHETIC HYDRAULIC OIL	S-TYPE SYNTHETIC HYDRAULIC OIL
Litres	PART NO	PART NO	PART NO
20	RHSB32-20L	RHSB46-20L	RHSB68-20L
200	RHSB32-200L	RHSB46-200L	RHSB68-200L
1000	RHSB32-1000L	RHSB46-1000L	RHSB68-1000L

CLAMPS

Refer to www.RYCO.com.au for Material Safety Data Sheet (MSDS).

INTRODUCTION

RYCO

HOSE

COUPLINGS

ADAPTORS

ACCESSORIES

OILS, LUBRICANTS AND SPECIALTY PRODUCTS

V-TYPE BIO HYDRAULICS	RHBV32	RHBV46	RHBV68
HYDRAULIC OILS BIO V 32, 46, 68			
SIZE	V-TYPE HYDRAULIC OIL	V-TYPE HYDRAULIC OIL	V-TYPE HYDRAULIC OIL
Litres	PART NO	PART NO	PART NO
20	RHBV32-20L	RHBV46-20L	RHBV68-20L
200	RHBV32-200L	RHBV46-200L	RHBV68-200L
1000	RHBV32-1000L	RHBV46-1000L	RHBV68-1000L

FIRE RESISTANT HYDRAULICS	RHFR46	RHFR68	RHFR720
FIRE RESISTANT HYDRAULIC FLUID Q888-46, Q888-68 QA720			
SIZE	FIRE RESISTANT HYDRAULIC FLUID	FIRE RESISTANT HYDRAULIC FLUID	FIRE RESISTANT HYDRAULIC FLUID
Litres	PART NO	PART NO	PART NO
20	RHFR46-20L	RHFR68-20L	RHFR720-20L
200	RHFR46-200L	RHFR68-200L	RHFR720-200L
1000	RHFR46-1000L	RHFR68-1000L	RHFR720-1000L

DIESEL OIL	RDCJ4	RDCI4
DIESEL EXTREME CJ-4 15W/40 DIESEL CI-4 15W/40		
SIZE	DIESEL EXTREME CJ-4 15W/40	DIESEL CI-4 15W/40
Litres	PART NO	PART NO
20	RDCJ4-20L	RDCI4-20L
200	RDCJ4-200L	RDCI4-200L
1000	RDCJ4-1000L	RDCI4-1000L

Refer to www.RYCO.com.au for Material Safety Data Sheet (MSDS).

ALTY PRODUCTS

OILS, LUBRICANTS AND SPECIALTY PRODUCTS

GREASES	RGLCM	RGLC
GREASE LITH COMPLEX MOLY LITH COMPLEX	AVCe of	
SIZE	GREASE LITH COMPLEX MOLY	GREASE LITH COMPLEX
Kilograms	PART NO	PART NO
0.45	RGLCM-450G	RGLC-450G
20	RGLCM-20KG	RGLC-20KG

SPECIALTY	RWD	RTW	RHDD	RSHC
WASHES AND DEGREASERS	ETVO Marine Marine	Truck Wash	ETVOR Internet	Everal State
SIZE	WATER BASED DEGREASER	TRUCK WASH	HEAVY DUTY DEGREASER	SUPER HAND CLEANER
Litres	PART NO	PART NO	PART NO	PART NO
5	RWD-5L	RTW-5L	RHDD-5L	RSHC-5L
20	RWD-20L	RTW-20L	RHDD-20L	RSHC-20L

AEROSOLS	RMDEG	RBCLEAN	REDEG
CLEANERS AND DEGREASERS			1
SIZE	MECHANICS DEGREASER	BRAKE AND PARTS CLEANER	EVERYDAY DEGREASER
Grams	PART NO	PART NO	PART NO
400	RMDEG-400G	RBCLEAN-400G	REDEG-400G

AEROSOLS	RCCLEAN	RDLUBE	RTSHINE
CLEANERS, LUBRICANTS AND SHINES			
SIZE	CARBY CLEANER	DE-RUST LUBRICANT	TYRE SHINE
Grams	PART NO	PART NO	PART NO
350			RTSHINE-350G
400	RCCLEAN-400G	RDLUBE-400G	

CONNECTING PARTNERSHIPS

ACCESSORIES

OILS, LUBRICANTS AND SPECIALTY PRODUCTS

GREASING	AM600A
450G LEVER ACTION GREASE GUN	 Develops grease pressures of up to 12,000 psi (828 bar). Delivers up to 1.6g of grease per stroke. Plastic wing nut enables the rigid extension to be locked at the required angle. Coarse thread on barrel assembly eliminates the possibility of cross threading during cartridge change over. Unique Twin Lock System seals the piston and eliminates the possibility of dummy lubrication. Patented Ever-Flow System enables the gun to be used with thick tacky greases even in the coldest conditions. Large diameter piston with a long lever travel facilitates high volume greasing. High volume, high pressure greasing guaranteed.

GREASING

GREASE GUN

AM660AN

450G TRIGGER ACTION • Grease pressures of up to 8,500 psi (586 bar).

- Delivers up to 1.1g of grease per stroke.
- Coarse thread on barrel assembly eliminates cross-threading during cartridge changeover.
- Twin Lock System seals the piston and eliminates the possibility of dummy lubrication.
- Patented Ever-Flow System enables the gun to be used with thick tacky greases even in the coldest conditions.
- Light weight, durable and compact aluminium die cast head assembly.
- High volume or High Pressure option facilitates fast and efficient greasing.
- 4-jaw coupler and flexible 30cm long extension.
- The ultimate greasing tool.



GREASING	AM670AN3	
450G18V LITHIUM-ION CORDLESS GREASE GUN	 Grease pressures of up to 8,000 psi (552 bar). Delivery rates of up to 170g/min. Second battery included. One-hour fast recharge. Remaining charge and fault indicator. Two Lithium-ion batteries supplied as standard. Up to 24 x 450g cartridges per charge. Ergonomic and light weight at just 3.5kg. The key to fast and efficient plant and machinery greasing. 	2 YEAR

GREASING	AMG10040N	
EL SERIES 450G 18V LITHIUM-ION CORDLESS GREASE GUN	 Generates grease pressures up to 10,000 psi (690 bar). Capable of delivering up to 80g/min. 25 minutes continuous working time. 	
	 Supplied with two batteries, 3000mAh and 1500mAh. Recharge time of 75 minutes (1500mAh battery). Up to 12 x 450g cartridges. Spare battery, recharger, 106cm long grease gun flex and plastic molded carry case supplied standard. Dispenses grease from up to 12 x 450g cartridges before changing over or recharging of the 3000 mAh battery is required. The key to fast and efficient plant and machinery greasing. 	1 YEAR

OILS, LUBRICANTS AND SPECIALTY PRODUCTS

GREASING	AM424170	N N
20KG GREASE KIT	 Integral filter protects pump from foreign particle contamination. Delivery rates of up to 0.9kg/min. 55:1 ratio air motor develops grease pressures of up to 7,950 psi (548 bar). Will handle high-density, tacky greases up to NLGI2. Cast alloy dual cylinder air motor won't dent or distort prematurely. Single toggle air motor operation ensures a long service life. 	INTRODUCT
	2 YEAR	HOSE

GREASING

101 INDUSTRIAL GREASE NIPPLE ASSORTMENT KIT

Grease Nipple Assortment Kits

- Your most popular grease nipples in a convenient compartmentalised refillable carry kit.
- All grease nipples included in the kit are case hardened, fully chromated, zinc passivated, batch tested to 8,000 psi (552 bar) and conform to international standards including BSS 1486, DIN 71412, SAE J534 and JIS B1575.

AML4675

Patented Kinglok® method of construction provides a very substantial mechanical joint with an entirely leak proof fit.

AMB1-120-1-24 BEKAONE

Manufactured in the UK with quality, performance and longevity in mind.

The first refillable, reusable, disposable, sealed-for-life, electro-mechanical

• Refillable with the grease of your choice, allows multiple different greases on different

• 720gm (6 x 120gm) total capacity before replacement - battery life is 6 refills or 24 months. • No grease cartridges/bladders or batteries required, eliminating consumable costs.



ADAPTORS

COUPLINGS

CLAMPS

ACCESSORIES





PULSARLUBE AMM SERIES

The innovative Pulsarlube AMM is designed to ensure reliable lubrication and at the same time cut lubrication costs with an advanced computerised control system. It consists of a vertical feed pump, motor/gear set and microprocessor allowing operating pressure of 30kgf/cm² (425 psi). It is ideal for hard to reach/hazardous locations via remote installation capability.

- AMM60/Main Pulsarlube AMM 60ml Main Unit Only.
- AMM125/Main Pulsarlube AMM 125ml Main Unit Only.
- AMM250/Main Pulsarlube AMM 250cc Main Unit Only.
- AMM500/Main Pulsarlube AMM 500ml Main Unit Only.

219



GREASING

- · Class leading 10 bar maximum pressure allows for remote mounting. • Discharge rates adjustable from 1, 3, 6, 12 months.
- Red LED indication for blockage alarm.

single point lubricator

applications.

• Green LED indication for discharge rates and battery status.

GREASING

ACCESSORIES

OILS, LUBRICANTS AND SPECIALTY PRODUCTS

GREASING	AMBEKAMAX-20
20 AUTOMATIC GREASE LUBRICATION SYSTEM	 Complete kit-to-service 20 grease points automatically. Includes a BekaMax 24V DC pump station with onboard timer and 4kg grease reservoir, 70m of grease filled hose, reusable hose ends, compression fittings and adaptors, nuts and bolts, cable ties and protective hose wrapping. System suitable for use with NLGl2 greases. Increases plant and machine profitability by minimising service downtime. Reduces maintenance costs due to manual under or over greasing. Note: assistance will be required to design a system to suit your specific application.

GREASING

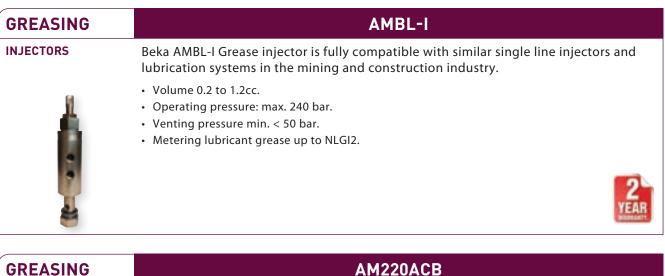
AMBEKAEP-1

PUMP BUILT INTO RUGGED FABRICATED **RESERVOIR** -

- Fabricated tank work with bottom mounted AMEP-1 pump.
- Flow rate from 1.8cc to 7.65cc/min.

TRITON III

- Operating pressure up to 240 bar.
- No overflow environmentally friendly.
- Standard auto fill shut off value.
- With breather and relief valve fitted to the top of the reservoir.
- With high performance fill point filter.
- Low level sensor.
- With choice of troniX1 or EP-tronic controller or cab mounted controller.



GREASING	AM220ACB	
400G TRIGGER ACTION GREASE GUN - CLEAR BARREL	 Develops grease pressures up to 8,500 psi (587 bar). 1.1g delivery per stroke on the high volume setting. 0.70g delivery per stroke on the high pressure setting. 	
	 500g capacity when using bulk grease. Handles up to NLGI2 grease. 3-way loading. 300mm long grease gun flex. Heavy duty 4-jaw coupler. Coarse thread on barrel eliminates the chance of cross threading. Suits a 400g cartridge or bulk grease. 	4 YEAR



INTRODUCTION

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OILS, LUBRICANTS AND SPECIALTY PRODUCTS

FUEL TRANSFER	AM501A	
ROTARY DRUM PUMP	 Zinc alloy impellars make the pump suitable for the transfer of diesel, petrol, kerosene, unleaded petrol and low viscosity oils. Delivery rates of 18L/min or 0.26L per rotation. Cast alloy body construction ensures a long working life and smooth operation. 4 chamber pump body primes quickly and easily. Can syphon and transfer fuels and lubes in reverse. Includes 2.2m of antistatic hose, bung adaptor, rubber gasket, four chamber rotor assembly, spout and spout holster. 	

FUEL TRANSFER

• Low torque, high volume pump is easy to use and delivers up to 110L/min.

HI-SPEED REFUELLING DRUM PUMP

FUEL TRANSFER

- Facilitates best in class delivery rates of 1.1L per rotation. • Lockable handle minimises the possibility of unauthorised fuel transfer.
- New PPR covered handle grip reduces operator fatigue during high volume fuel transfer.

AM5060AN

- New and improved rubber seal above the bung adaptor reduces fuel contamination.
- Supplied complete with 2.6m of UV and fuel resistant hose, spout, in built spout holster, 3-piece downtube and new heavy duty bung adaptor.

AM52000

• Upgrade now and reduce the time and effort required for fuel transfer.



inless steel and brass	
	Í

CLAMPS

12V DIESEL REFUELLING TANK KIT	fuel filter and a manual nozzle.
	Maximum head capacity of 15m.
	 Self priming rotary vane pump includes a built-in bypass.
	Duty cycle of 30 minutes on, 30 minutes off.
	Suction capacity of up to 2m.
	• AM52001 - as above but 24V.
	2 YEAR

FUEL TRANSFER	AM60068PA
600L DIESEL REFUELLING STORAGE AND DISPENSING KIT	 Dispensing kit consists of a self priming vane pump manufactured in Italy, anti-static fuel delivery hose, 2m battery cables and automatic nozzle. Pump flow rates of up to 68L/min.
	 600L capacity polyethylene tank weighing just 32kg cannot dent, scratch or corrode. Tank baffles aid vehicle stability. Pallet lift points and recesses for tie down straps on the tank aids handling and installation. Tank dimensions of: 800mm (W) x 1630mm (D) x 785mm (H). AM60080P also available with manual nozzle, 80L/min.

CONNECTING PARTNERSHIPS

ACCESSORIES

OILS, LUBRICANTS AND SPECIALTY PRODUCTS

FUEL TRANSFER

AML40040PA

400L LOCKABLE DIESEL • 400L storage tank capacity. AND DISPENSING KIT

- **REFUELLING STORAGE** Heavy duty, robustly constructed polyethylene tank.
 - Recessed pump improves overall tank strength.
- Built in nozzle holster.
- Lockable lid aids diesel fuel security and protects dispensing kit components.
- 4-point security locking system.
 - Tank baffles aid vehicle stability. 12V diesel fuel pump capable of flow rates of up to 50L/min.
 - 4 metres of anti-static fuel delivery hose, 2 metre battery cables with clamps and auto shut off fuel nozzle.
 - Metering option available
 - Dimensions: 1165mm (W) x 1165mm (D) x 566mm (H).
 - Also available: AML40040PAM as above but with an electronic fuel meter.

FUEL TRANSFER

AM51008

MECHANICAL DIESEL METER

- Suitable for the metering of diesel.
- Accurate between flow rates of 20L/min to 120L/min.



- - Mechanical gear meter accurate to $\pm 1.0\%$.
 - Maximum working pressure of 145 psi (10 bar).
 - 1" BSP(f) inlet and outlet ports.
 - Batch total of 999L displayed with easy to read 18mm high digits. • 6-digit cumulative total display. • Suitable for gravity feed or pump applications.
 - 6-digit cumulative total display.
 - Repeatability of ±0.3%.

OIL TRANSFER	AM8828N2
20L GEAR OIL DRUM PUMP	 Capable of delivering up to 110mL on the downstroke. Downtube extension and extra Reike adaptor make the pump suitable for use with a variety of 20L drums available on the market. Ideal pump for the transfer of engine, gear, and differential and hydraulic oils in busy vehicle servicing workshops. Drainback nozzle holster ensures that excess oil ends up back in the drum. Incorporates a filter in the drain back holster to protect against foreign particle contamination. UV stabilised long life hose ensures a long service life.

OIL TRANSFER	AM10028
HEAVY DUTY 20L GEAR OIL DRUM PUMP	 Heavy duty fully serviceable drum pump delivers 170mL on the downstroke. Non-drip nozzle and drain back nozzle holster ensure a clean, safe workshop. Height adjustable bung adaptor and two extra adaptors make the pump suitable for use with 20L drums from Australia, Singapore, the USA and Europe. 1.8m long life rubber hose assembly ensures a long service life. Ideal for the transfer and top ups of engine, hydraulic, gear, and differential and synthetic oils where vehicle throughput and owner expectations are high. Also suitable for underground coal mine use.





OILS, LUBRICANTS AND SPECIALTY PRODUCTS

OIL TRANSFER

OIL TRANSFER KIT

WITH METER

AM454110N

- 3:1 ratio pump, 3m x 1/2" ID hydraulic hose and electronic resettable meter.
- Transfer rates of up to 12L/min.
- 3/4" BSP(f) material outlet.



- 1/4" BSP(f) air inlet.
 Suitable for engine, gear, and differential and hydraulic oils.
- Suits 60L or 205L drums.
- Lubricant transfer and metering made easy.
- AM454111N as above but with on/off control valve.



INTRODUCTION

HOSE

COUPLINGS

OIL TRANSFER

OIL TRANSFER

240V OIL TRANSFER

PUMP

AM378100

MOBILE OIL TRANSFER KIT

- Supplied with 3:1 air operated oil pump, 8m hose reel, electronic meter and heavy duty drum trolley.
- Quick, efficient and effortless oil transfer in car, light commercial vehicle and truck workshops
 Adjustable flow rates up to 15L/min.

AM334900

AMSA300N

• Suitable for the transfer of engine, gear, and differential and hydraulic oils up to 500cSt.

- Electronic oil meter accurate to ± 0.5 .
- Electronic oil meter powered by standard AAA batteries.

• AC vane type pump with sintered steel rotor and



CLAMPS

TECHNICAL

Adjustable spring tension.
Working pressure of 300 psi (20 bar).
3/8" BSP(f) inlet and outlet.
AMSA300N - 18m x 10mm ID hose and 0.9m lead in hose, 3/8" BSP(f) inlet and outlet.

• New hybrid polymer hose is more flexible, easier to handle and longer lasting.

3/4" BSP(f) inlet and outlet.
Continuously rated with pressures up to 85 psi (6 bar).

resin vanes.

• Flow rates up to 25 L/min.

Impact resistant UV stabilised covers.
Automatic and positive latching mechanism.
Can be wall, ceiling or floor mounted.

HOSE STORAGE

AIR HOSE REEL

HIGHER TECHNOLOGY EQUALS GREATER PERFORMANCE

ACCESSORIES

OILS, LUBRICANTS AND SPECIALTY PRODUCTS

HOSE STORAGE	AMSA400N
AIR HOSE REEL	 Impact resistant UV stabilised covers. Automatic and positive latching mechanism. Can be wall, ceiling or floor mounted. New hybrid polymer hose is more flexible, easier to handle and longer lasting. Adjustable spring tension. Working pressure of 300 psi (20 bar). High flow swivel and fluid path. Detachable steel mounting bracket enables 180° hose reel rotation. AMSA400N - 15m x 12mm ID hose and 0.9m lead in hose, 1/2" BSP(f) inlet and outlet.

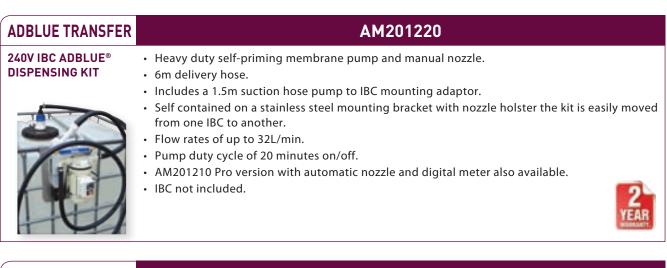
HOSE STORAGE

AM8080-G

ALEMITE LARGE CAPACITY HEAVY DUTY OIL HOSE REEL

Sealed spring cassette.

- Suitable for use with air and water.
- Sealed and plated bearings.
- 1,000 psi (60 bar) hose pressure rating.
- Narrow width.
- Easy and quick mounting.
- Supplied complete with 15m x 24mm ID hose.
- Lifetime warranty on the hose guide assembly and latch pawl spring.
- Also available 8080-F (Fuel), 8080- E (Fuel), 8080-C (Grease).



AMDW20500KS

WATER TRANSFER

DIESEL DRIVEN 2" WATER TRANSFER PUMP

- Flow rates of up to 500L/min.
- 3.8HP air cooled 4-stroke petrol engine.
- 2" (50mm) inlet and outlet ports.
- Maximum suction head of 7m.
- Maximum lift head of 22m.
- Fuel tank capacity of 2.5L.
- Run time of 2.0 hours at 3/4 load.
- Key start operation.



TECHNICAL





TECHNICAL

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INSTALLATION AND MAINTENANCE OF HOSE ASSEMBLIES

SELECTION, INSTALLATION AND MAINTENANCE OF HOSE AND HOSE ASSEMBLIES

SCOPE:

1. Many factors affect the selection, making, installation and maintenance of hose assemblies. This manual, RYCO, and The Society of Automotive Engineers recommended practice SAE J1273, have useful information about selecting, making, installing and servicing hydraulic hose assemblies. For further information, please contact your local RYCO representative.

RYCO recommends hose and coupling combinations in the catalogue only after completing extensive testing. Evaluation of a hose and coupling combination requires considerable impulse testing and cannot be determined by a simple burst or pressure hold test. RYCO disclaims all liability for any hose assembly made in violation of RYCO recommendations.

The consumer's exclusive remedy with respect to any claim shall be a refund of the purchase price or replacement of the product at the option of RYCO. In no event shall RYCO be liable for any incidental or consequential damages whatsoever.

WARNING: IMPROPER SELECTION, INSTALLATION, OR MAINTENANCE MAY RESULT IN PREMATURE FAILURES, BODILY INJURY, AND/OR PROPERTY DAMAGE.

SELECTION:

2. The following is a list of factors which must be considered before final hose selection can be made:

- 2.1 **Internal Pressure** After determining the system pressure, hose selection must be made so that the recommended maximum operating pressure is equal to or greater than the system pressure. Surge pressures higher than the maximum operating pressure will shorten hose life and must be taken into account by the hydraulic engineer. Hose fitting rated pressures should also be considered, as the maximum working pressure is based on the whole hose assembly and not just the hose alone.
- 2.2 **External Pressure** In certain applications the external environmental pressures may exceed the fluid pressure inside the hose, therefore these factors need to be considered.
- 2.3 **Suction** Hoses used for suction applications must be selected to ensure that the hose will withstand the vacuum and pressure of the system.
- 2.4 **Temperature** Care must be taken to ensure that fluid and ambient temperatures, both static and transient, do not exceed the limitations of the hose. Special care must be taken when routing near hot objects such as manifolds.
- 2.5 **Fluid Compatibility** Hose selection must assure compatibility of the hose tube, cover, and fittings with the fluid used. Additional caution must be observed in hose selection for gaseous applications.
- 2.6 **Size** Transmission of power by means of pressurised fluid varies with pressure and rate of flow. The size of the components must be adequate to keep pressure losses to a minimum and avoid damage to the hose due to heat generation or excessive turbulence.
- 2.7 **Routing** Attention must be given to optimum routing to minimise inherent problems.
- 2.8 **Environment** Care must be taken to ensure that the hose and fittings are either compatible with, or protected from, the environment to which they are exposed. Environmental conditions such as ultraviolet light, ozone, salt water, chemicals and air pollutants can cause degradation and premature failure and, therefore, must be considered.
- 2.9 **Mechanical Loads** External forces can significantly reduce hose life. Mechanical loads which must be considered include excessive flexing, twist, kinking, tensile or side loads, bend radius, and vibration. Use of swivel type fittings or adaptors may be required to ensure no twist is put into the hose. Unusual applications may require special testing prior to hose selection.
- 2.10 **Abrasion** While a hose is designed with a reasonable level of abrasion resistance, care must be taken to protect the hose from excessive abrasion which can result in erosion, snagging, and cutting of the hose cover. Exposure of the reinforcement will significantly accelerate hose failure.
- 2.11 **Proper End Fitting** Care must be taken to ensure proper compatibility exists between the hose and coupling selected based on the manufacturer's recommendations substantiated by testing to industry standards such as SAE J517.
- 2.12 **Length** When establishing proper hose length; motion absorption, hose length changes due to pressure, as well as hose and machine tolerances must be considered.
- 2.13 **Specifications and Standards** When selecting hose, government, industry, and manufacturer's specifications and recommendations must be reviewed as applicable.
- 2.14 **Hose Cleanliness** Hose components vary in cleanliness levels. Care must be taken to ensure that the assemblies selected have an adequate level of cleanliness for the application.
- 2.15 **Electrical Conductivity** Certain applications require that hose be non-conductive to prevent electrical current flow. Other applications require the hose to be sufficiently conductive to drain off static electricity. Hose and fittings must be chosen with these needs in mind.
- 2.16 High Pressure Gas Do not use hydraulic hose to transmit High Pressure gases.

TECHNICAL INSTALLATION AND MAINTENANCE OF HOSE ASSEMBLIES

2.17 **Vibration** – Vibration can reduce hose service life. If necessary, conduct tests to evaluate the effects of frequency and amplitude of system vibration on a hose assembly. Clamps of other devices may be used to reduce the effects of vibration.

INSTALLATION:

3. After the selection of proper hose, the following factors must be considered by the installer:

- 3.1 **Pre-Installation Inspection** Prior to installation, a careful examination of the hose must be performed. All components must be checked for correct style, size and length. In addition, the hose assembly, and each of the individual components comprising the assembly, must be examined for cleanliness, I.D. obstructions, blisters, loose cover, or any other visible defects.
- 3.2 Follow Manufacturer's Assembly Instructions.
- 3.3 **Minimum Bend Radius** Installation at less than minimum bend radius may significantly reduce hose life. Particular attention must be given to preclude sharp bending at the hose/fittings juncture which may result in leaking, hose rupturing, or the hose assembly blowing apart.
- 3.4 **Lengths** Unnecessarily long hose can increase pressure drop and affect system performance. When pressurised, hose that is too short may pull loose from its fittings or stress the hose fitting connections, causing premature metallic or seal failures.
- 3.5 **Twist Angle and Orientation** Hose installations must be such that relative motion of machine components produces bending of the hose rather than twisting.
- 3.6 **Securement** In many applications, it may be necessary to restrain, or guide, the hose to protect it from damage by unnecessary flexing, pressure surges, and contact with other mechanical components. Care must be taken to ensure such restraints do not introduce additional stress or wear points.
- 3.7 **Proper Connection of Ports** Proper physical installation of the hose requires a correctly installed port connection while ensuring that no twist or torque is transferred to the hose.
- 3.8 **Avoid External Damage** Proper installation is not complete without ensuring that all tensile loads, side loads, kinking, flattening, potential abrasion, thread damage, or damage to sealing surfaces are corrected or eliminated.
- 3.9 **System Check out** After completing the installation, all entrapped air must be eliminated, then the system must be pressurised to the maximum system pressure and checked for proper function, and for freedom from leaks.

NOTE: Avoid potential hazardous areas while testing.

MAINTENANCE:

- 4. Even with proper selection and installation, hose life may be significantly reduced without a continuing maintenance program. Maintenance and Inspection frequency should be determined by the severity of the application and risk potential. A maintenance program should include the following as a minimum:
 - 4.1 **Hose Storage** Hose products in storage can be adversely affected by temperatures, humidity, ozone, sunlight, oils, solvents, corrosive liquids and fumes, insects, rodents, radioactive materials, sharp edges and abrasive surfaces, electric or strong magnetic fields, mould and fungi. Storage areas should be relatively cool and dark, and free of dust, dirt, dampness and mildew. Store hose in a manner that facilitates age control and first-in, first-out usage based on the manufacturing date on the hose or hose assembly.
 - 4.2 **Visual Inspection** Any of the following conditions require immediate sytem shut down and replacement of the hose assembly:
 - a) Leaks at fittings or in hose. (Leaking fluid is a fire hazard).
 - b) Damaged, cut, or abraded cover. (Any reinforcement exposed).
 - c) Kinked, crushed, flattened, or twisted hose.
 - d) Hard, stiff, heat cracked, or charred hose.
 - e) Blistered, soft, degraded, or loose cover.
 - f) Cracked, damaged, or badly corroded fittings.
 - g) Slippage or movement of fittings on the hose.
 - 4.3 **Visual Inspection** The following items must be tightened, repaired or replaced as required:
 - a) Leaking port conditions.
 - b) Clamps, guards, shields.
 - c) Remove excessive dirt build-up.
 - d) System fluid level, fluid type, and any air entrapment.
 - 4.4 **Functional Test** Operate the system at maximum operating pressure and check for possible malfunctions and freedom from leaks.

NOTE: Avoid potential hazardous areas while testing.

4.5 **Replacement Intervals** – Specific replacement intervals must be considered based on previous service life, government or industry recommendations or when failures could result in unacceptable down time, damage, or injury risk.

SAFETY GUIDE FOR THE SELECTION AND USE OF HOSE, FITTINGS AND RELATED ACCESSORIES

Failure or improper selection or improper use of hose, fittings, or related accessories can cause death, personal injury and property damage. Possible consequences of failure or improper selection or improper use of hose, fittings, or related accessories include, but are not limited to:

- Fittings blown off at high speed.
- High velocity medium discharge.
- Explosion, or burning, of the conveyed medium.
- Electrocution from high voltage electric power lines or other sources of electricity.
- Contact with suddenly moving, or falling, objects that are held in position, or moved, by conveyed medium.
- Injections by high-pressure fluid or air discharge.
- Dangerously whipping hose.
- Contact with conveyed fluids that may be hot, cold, toxic or otherwise injurious.
- Sparking or explosion caused by static electricity build-up.
- Sparking, or explosion, while spraying paint or other flammable liquid.

1.GENERAL INSTRUCTIONS:

- 1.1 **Scope:** This safety guide provides instructions for selecting and using (including assembling, installing and maintaining) hose fittings (including all products commonly called "fittings" or "couplings" for attachment to hose), and related accessories (including crimping machines and tooling). This safety guide is to be used in conjunction with the specific publications for the specific hose, fittings and related accessories that are being considered for use.
- 1.2 **Fail-Safe:** Hose and hose assemblies can and do fail. Design all systems in a fail-safe mode so that failure of the hose or hose assembly or related accessories will not endanger persons or property.
- 1.3 **Distribution:** Provide a copy of this safety guide to each person who is responsible for selecting or using hose and fittings and related accessories. Do not select or use hose and fittings or related accessories without thoroughly understanding this safety guide.
- 1.4 **User Responsibility:** Due to the wide variety of operating conditions and uses for hose and fittings and related accessories, RYCO do not represent or warrant that any particular hose or fitting or related accessories is suitable for any specific end use. This safety guide does not analyse all technical parameters that must be considered in selecting a product. The product user, through their own analysis and testing, is solely responsible for:
 - The final selection of the hose and fittings and related accessories.
 - Assuming that requirements are met and the use presents no health or safety hazards.
 - Providing all appropriate health and safety warnings where hose and fittings and related accessories are used.
- 1.5 Additional Questions: Contact the RYCO Hydraulics Technical Department if you have any questions or require any additional information.

2.HOSE AND FITTING SELECTION INSTRUCTIONS:

- 2.1 **Electrical Conductivity:** Certain applications require that a hose be non-conductive to prevent electrical current flow. Other applications require the hose to be sufficiently conductive to drain off static electricity. Extreme care must be exercised when selecting hose and fittings for these or any other applications. For applications that require the hose to be electrically non-conductive, including but not limited to applications near high voltage electric lines, only special non-conductive hose can be used. The manufacturer of the equipment must be consulted to be certain that the hose and fittings selected are correct for the application. Do not use any RYCO hose or fittings for any such application unless:
 - (i) The application is expressly approved by RYCO.
 - (ii) The hose is both orange colour and marked "non-conductive".
 - (iii) The manufacturer of the equipment specifically approves the particular RYCO hose and fittings.

Do not use any RYCO hose or fittings for conveying paint in airless spraying or similar applications without the written approval of RYCO in each case. A special hose and fittings assembly is required for this application. If the correct hose and fitting application is not used for this application, static electricity can build up and cause sparks that may result in an explosion and/or fire.

The electrical conductivity or non-conductivity of hose and fittings is dependent upon many factors and may be susceptible to change.

- 2.2 **Pressure:** Hose selection must be made so that the published maximum recommended working pressure of the hose is equal or greater than the maximum system pressure. Surge pressures in the system higher than the published maximum recommended working pressure will cause failure, or shorten hose life.
- 2.3 **Suction:** Hoses used for suction applications must be selected to ensure that the hose will withstand the vacuum and pressure of the system.
- 2.4 **Temperature:** Be certain that fluid and ambient temperatures, both steady and transient, do not exceed the limitations of the hose. Care must be taken when routing hose near hot objects such as manifolds.

CONNECTING PARTNERSHIPS

TECHNICAL INSTALLATION AND MAINTENANCE OF HOSE ASSEMBLIES

- 2.5 **Fluid Compatibility:** Hose selection must assure compatibility of the hose tube, cover, reinforcement, and fittings with the fluid media used.
- 2.6 **Permeation:** Permeation (that is, seepage through the hose) will occur from inside the hose to the outside environment when hose is used with gases, liquid and gas fuels, and refrigerants (including but not limited to such materials such as helium, fuel, oil, natural gas or freon). This permeation may result in high concentrations of vapours which are potentially flammable, explosive, or toxic, and in loss of fluid. You must take into account the fact that permeation will occur and could be hazardous.

Permeation of moisture from the outside environment to inside the hose will also occur. If there is a possibility that moisture permeation would have detrimental effects (particularly for, but not limited to, refrigeration and air conditioning systems) incorporation of appropriate system safeguards should be selected and used. Rubber hoses should not be painted without consulting RYCO first.

- 2.7 **Size:** Transmission of power by means of pressurised fluid varies with pressure and rate flow. The size of the components must be adequate to keep pressure losses to a minimum and avoid damage due to heat generation of excessive fluid velocity.
- 2.8 **Routing:** Attention must be given to optimum routing to minimise inherent problems.
- 2.9 **Environment:** Care must be taken to ensure that the hose and fittings are either compatible with or protected from the environment to which they are exposed including but not limited to ultraviolet radiation, sunlight, heat, ozone, moisture, water, salt water, chemicals and air pollutants.
- 2.10 **Mechanical Loads:** Consideration must be given to excessive flexing, twist, kinking, tensile or side loads, bend radius, and vibration. Use of swivel type fittings or adaptors may be required.
- 2.11 **Physical Damage:** Care must be taken to protect hose from wear, snagging and cuts.
- 2.12 **Proper End Fittings:** See instructions below. These recommendations may be substantiated by testing to industry standards.
- 2.13 Length: When establishing a proper hose length, motion absorption, hose length changes due to pressure, and hose and machine tolerances must be considered.
- 2.14 **Specifications and Standards:** When selecting hose and fittings, government, industry, and RYCO specifications and recommendations must be reviewed and followed as applicable.
- 2.15 **Hose Cleanliness:** Hose components may vary in cleanliness levels. Care must be taken to ensure that the assembly selected has an adequate level of cleanliness for the application.
- 2.16 **Fire Resistant Fluids:** Some fire resistant fluids require the same hose that is used with petroleum oil. Some use a special hose, while a few fluids will not work with any type of hose at all. Refer to General Instructions 1.5 and Hose and Fitting Selection Instructions 2.5 on page 229.
- 2.17 **Radiant Heat:** The hose can be heated to destruction without contact by nearby items such as hot manifolds or molten metal.
- 2.18 **Welding and Brazing:** Heating of plated parts, including hose fittings and adaptors, above 232°C (450°F) such as during welding, brazing, or soldering may emit deadly gases.
- 2.19 **Atomic Radiation:** Atomic radiation affects all materials used in hose assemblies. Do not expose hose assemblies to atomic radiation.

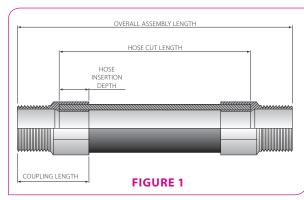
3. HOSE AND FITTING ASSEMBLY AND INSTALLATION INSTRUCTIONS:

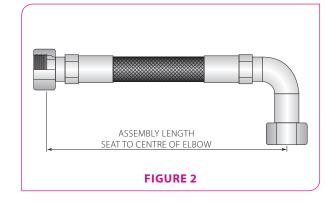
- 3.1 **Pre-Installation Inspection:** Prior to installation, a careful examination of the hose assembly must be performed. All components must be checked for correct style, size, and length. The hose must be examined for cleanliness, obstructions, blisters, cover looseness, or any other visible defects.
- 3.2 **Hose and Fitting Assembly:** Do not assemble a RYCO fitting on a RYCO hose that is not specifically listed for that fitting by RYCO. Do not assemble RYCO fittings on another manufacturer's hose or a RYCO hose on another manufacturer's fitting unless RYCO approves the assembly in writing and the user verifies the assembly and the application. Refer to General Instruction 1.4 on page 229. RYCO's published instructions must be followed for assembling fittings on hose.
- 3.3 **Safety Equipment:** During fabrication, use proper safety equipment, including eye protection, respiratory protection and adequate ventilation.
- 3.4 **Reuse of Hose and Fittings:** Damaged hoses or hose fittings shall not be used.
- 3.5 **Assembly Inspection:** After assembly, hose assemblies shall be inspected for visible defects and interior obstructions, such as tube bulges, etc.
- 3.6 **Marking:** Hose assemblies shall be marked in accordance with any relevant standards.
- 3.7 **Parts:** Do not use any RYCO hose or fitting part unless used with the correct mating parts in accordance with published instructions.
- 3.8 **Field Attachable/Permanent:** Industrial field attachable couplings may be reattached once only after their first use, provided that they have not been part of a hose assembly that has failed, and are in a fit condition for reuse. Do not reuse any field attachable hose coupling that has been blown or pulled off a hose. Do not reuse any permanent (that is, crimped or swaged) hose fittings or any part thereof.



INSTALLATION AND MAINTENANCE OF HOSE ASSEMBLIES

- 3.9 **Minimum Bend Radius:** Installation of a hose at less than the minimum listed bend radius may significantly reduce hose life.
- 3.10 **Twist Angle and Orientation:** Hose installations must be such that relative motion of machine components does not produce twisting.
- 3.11 **Securement:** In many applications, it may be necessary to restrain, protect or guide the hose to protect it from damage. Care must be taken to ensure such restraints do not introduce additional stress or wear points.
- 3.12 **Proper Connection of Ports:** Proper physical installation of the hose requires a correctly installed port connection while ensuring that no twist or torque is transferred to the hose.
- 3.13 **Assembly Torque:** The correct torque instructions and specifications must be followed to obtain a proper seal when a hose assembly is attached to a port, an adaptor or another assembly.
- 3.14 **External Damage:** Proper installation is not complete without ensuring that tensile loads, side loads, kinking, flattening, potential abrasion, thread damage, or damage to sealing surfaces are corrected or eliminated.
- 3.15 **System Check-out:** After completing the installation, all air entrapment must be eliminated and the system pressurised to the maximum system pressure and checked for proper function and freedom from leaks. **NOTE:** Avoid potential hazardous areas while testing.
- 3.16 **Measuring (OAL) Overall Length of Hose and Hose Assemblies**: Measurements are normally taken with the hose or assembly in a straight position. For most assemblies, the OAL is measured from the end of one fitting to the end of the other fitting (refer to Figure 1 below). Assemblies with certain types of fittings, however, require different measuring procedures. Fittings with both a sealing seat and a moveable or retractable nut are measured from the sealing seat. Elbow fittings are measured as illustrated below in Figure 2.





4. HOSE AND FITTING MAINTENANCE INSTRUCTIONS:

Even with proper selection and installation, hose life may be significantly reduced without a continuing maintenance program. Frequency should be determined by the severity of the application and risk potential. A maintenance program must include the following as a minimum.

- 4.1 **Visual Inspection Hose/Fitting:** Any of the following conditions require immediate system shut down and replacement of the hose assembly:
 - Slippage or movement of fittings on the hose.
 - Damaged, cut or abraded cover.
 - Hard, stiff, heat cracked or charred hose.
 - Cracked, damaged or badly corroded fittings.
 - Leaks at fitting or in hose.
 - Kinked, crushed, flattened or twisted hose.
 - Blistered, soft, degraded or loose cover.
 - Unusual noise, odour or heat.
- 4.2 Visual Inspection All Other: The following items must be tightened, repaired or replaced as required:
 - Leaking port conditions.
 - Remove excess dirt build-up.
 - Clamps, guards, shields.
 - System fluid level, fluid type and any air entrapment.
- 4.3 **Functional Test:** Operate the system at maximum operating pressure and check for possible malfunctions and freedom from leaks.
- 4.4 **Replacement Intervals:** Specific replacement intervals must be considered based on previous service life, government or industry recommendations.

TECHNICAL HOSE SELECTION - STAMPED

WHEN FABRICATING AND SPECIFYING HOSE ASSEMBLIES, YOU **NEED** TO ASK THE FOLLOWING QUESTIONS:

The **STAMPED** acronym stands for the 7 major information areas required to provide a quality hose assembly for all customers.

S SIZE

- INSIDE DIAMETER
 OUTSIDE DIAMETER
- OUTSIDE L
- LENGTH

The I.D., O.D. and overall length of the assembly.

Overall length should be specified to include fittings.

Tolerances need to be specified if special requirements exist.

Determine the replacement hose I.D. by reading the printing on the side of the original hose or cut and measure the inside diameter of the hose.

The inside diameter of the hose must be appropriate to keep pressure loss to a minimum, maintain adequate flow and avoid damage to the hose due to heat generation or excessive turbulence.

The flow rate of the system in conjunction with the inside diameter of the hose will dictate the fluid velocity through the hose. Please note that suction line recommendations are different than pressure lines.



TEMPERATURE

MATERIAL CONVEYED
 ENVIRONMENTAL
 CONDITIONS

Does the material being conveyed have particular temperature requirements?

Will flame resistance or flammability be an issue?

Is the assembly going to be exposed to any low or sub-zero temperatures?

Care must be taken when routing near hot manifolds and where necessary a Heat Sleeve should be utilised.



APPLICATION

CONDITIONS OF USE
 CONFIGURATION

ROUTING

What is the orientation and aspect of the hose? Is the hose hanging, laying horizontally supported or unsupported?

What else is attached to the hose?

Are there any external or mechanical loads on the hose?

What are the bend radius requirements?

Are there elongation considerations with working pressure?

Is it for indoor or outdoor use?

What are its electrical conductivity requirements?

What equipment type is the hose attached to?

What external conditions is it exposed to ie; abrasion, oil (specify type), solve (specify type), acid (specify type and concentration), ozone, salt water?

Determine the strength and frequency of impulsing or pressure spikes.

Is it for non-flexing applications (static), or flexing applications (dynamic)?

What are its vacuum requirements?

What type of hose is now in use?

What kind of service life is currently being obtained?

Obtain description of failure or source of customer dissatisfaction.

MEDIA

MATERIAL BEING
 CONVEYED

CONCENTRATION AND
 TYPE OF MATERIAL

Are there special requirements for this hose tube?

Are there any special specifications (or agency requirements) that need to be considered (e.g., FDA, API)?

Will the material be continuously flowing, or sit in the hose for long periods of time?

What kind of media velocity and/or flow rate is required?

Which chemical and/or concentration (MSDS) is being conveyed?

What solids, their description and size, are to be conveyed?

Determine fluid compatibility - some applications require specialised oils or chemicals to be conveyed through the system.

In addition to the hose materials, all other components, which make up the hose assembly (hose ends, o-rings, etc), must also be compatible with the fluid being used.

Depending on the fluid, your hose supplier may lower the maximum temperature or pressure rating of the assembly.

HOSE SELECTION - STAMPED

WHEN FABRICATING AND SPECIFYING HOSE ASSEMBLIES, YOU NEED TO ASK THE FOLLOWING QUESTIONS:

The STAMPED acronym stands for the 7 major information areas required to provide a quality hose assembly for all customers.

PRESSURE

• THE PRESSURE TO WHICH THE ASSEMBLY WILL BE EXPOSED

What is the system pressure, including pressure spikes?

Hose assembly working pressures must be equal to or greater than the system pressure.

Pressure spikes greater than the maximum working pressure will shorten hose life and must be taken into consideration.

What temperature implications are there?

What vacuum considerations are there?

What is the Maximum **Operating Pressure?**

Both the hose and hose end should not be rated to a pressure less than the maximum operating pressure of the system.

E **ENDS**

• STYLE, TYPE, **ORIENTATION AND ATTACHMENT METHODS**

Is it an uncoupled or coupled hose?

Is it a hose with built-in fittings?

Specify end style.

What are its materials and dimensions (steel, stainless, etc.)?

What are its conductivity requirements?

DELIVERY

• THE SPECIFIC **CUSTOMER** REQUIREMENTS

What are the testing requirements?

What are the certification requirements (ie Coast Guard)?

Are there any special packaging, shipping or tagging requirements?

When is the hose needed and where?

INTRODUCTION

HOSE

COUPLINGS

MISAPPLICATIONS OR MISUSE

DAMAGE TO HOSE COVER

The hose cover protects the reinforcement of the hose from damage. If the reinforcement, which provides the hoses pressure rating, is exposed or damaged, it will affect the working pressure of the hose and may lead to failures when pressurised. Damaged hose should be removed from service and repaired or replaced.

WHAT'S UNDER THE TAPE?

The use of duct tape or rags to hide defects or patch leaks should be discontinued as it could be hiding a potential hazard. Any damaged or leaking hoses should be removed from service and repaired or replaced.

HOSE TAIL INSERTION

A hose assembly, in order to be completely safe and functional, must have the tail of the coupling fully inserted into the square cut end of the hose. Failure to correctly do so may result in premature failure of the assembly which has the potential to cause damage to plant and personnel.

CONNECTING PARTNERSHIPS

HOSE ASSEMBLIES

PRESSURE RATINGS:

Pressure ratings for couplings, as stated in this catalogue, are based upon ambient temperature (20°C) applications with: true hose ID, RYCO couplings, RYCO clamps, RYCO hose and proper installation by a qualified assembler. Temperature can affect coupling retention - for temperatures other than ambient (20°C), contact RYCO.

PRODUCT SELECTION:

Many of the products in this manual are used in hose assemblies in a variety of applications. The safety of any hose assembly rests on the proper selection, installation, testing and use of each product. The safe use of any product in this manual is dependent upon the correct selection of the hose, fittings and method of attachment. To ensure a correct selection, the user must inform the distributor of the application and pressure involved when ordering hose assemblies. The use of the acronym **STAMPED** (Size, Temperature, Application, Media, Pressure, Ends) will help in the proper selection of hose assembly components. The selection of couplings and clamping devices is the responsibility of the purchaser or user based upon the hose manufacturer's recommendations.

INSTALLATION:

To achieve a safe and reliable assembly, proper installation procedures must be followed. Each component of the assembly plays a part in determining these procedures. The purchaser or user must follow proper procedures.

TESTING:

RYCO recommends that all hoses assemblies be tested in accordance with the hose manufacturer's recommendations.

RE-TESTING AND INSPECTION:

RYCO recommends inspection and re-testing of hose assemblies on a regular and consistent basis in accordance with the hose manufacturer's recommendations. The application determines the regularity of the inspection and re-testing schedule. Any worn out or damaged hoses and fittings or missing safety devices should be replaced immediately. Bolt-style clamps must be checked and retightened on a regular and consistent basis.

The Handbook of Compressed Gases states: "The very properties that make compressed gases useful in almost every area of modern life can also make them dangerous when mishandled. Years of experience with compressed gases have led to practices and equipment which, if employed, result in complete safety."

All hose assemblies should be viewed as potential hazards. This document is designed to inform and educate anyone who manufactures, specifies, supplies, purchases, assembles, uses, maintains or tests any hose assembly or its component parts. The proper selection and maintenance of hose, couplings, attachment devices and accessories is imperative. It is the end users responsibility to inform RYCO of the application and any special conditions that the hose assembly must meet. Accidents and downtime may occur if hose assemblies are not properly selected for the specific application. The performance and safety of the assembly is affected by the quality of the individual components. The use of the **STAMPED** method will help in the proper selection of the hose assembly components.

AIR HOSE COUPLINGS

Air can be one of the most dangerous forms of energy because it is used in so many applications, and when mishandled it can have more serious consequences than fluids. Air as a gas is compressible (fluids press only against hose or vessel walls and lose little volume under pressure). When pressurised air releases suddenly, it does so with explosive force and can cause rapid hose whip, which can cause serious physical harm to personnel or damage to nearby objects. This is why selecting the correct hose and couplings for air lines, and their proper installation and maintenance, is so important. Never take for granted that a coupling is connected correctly or that a clamp is fully tightened on an air hose - check it regularly and use safety devices.

STEAM AND GAS

The same rules apply for steam and gas as they do for air. As steam and gas are inherently more hazardous, personnel should treat the hose and couplings on these lines with more care and respect. Checking clamp tightness is very important with steam hose, where it is not unusual for clamps to loosen in service, in which case they MUST BE RETIGHTENED! Safety devices should also be used. Hose assemblies for steam must only use components specifically nominated for steam service.

FLUID HOSE COUPLINGS

Again, nothing should be taken for granted. In particular, check clamps for tightness each time the lines are used, especially when petroleum products or other hazardous liquids are involved. When large diameter hose is suspended, it can be quite dangerous if it drops unexpectedly due to a coupling "pull-out" or sudden disconnection. A heavy fitting or clamp, plus the weight of the hose itself falling from any height can cause injuries or damage. Be sure to use safety devices.

ALL HOSE ASSEMBLIES

All hose assemblies should be treated with respect and as a potential hazard. Worn-out fittings should be replaced. Retaining devices such as clips, cables or chains should be used, and clamps should be checked regularly. Under no circumstances should any coupling be disconnected while under pressure unless the coupling is specifically designed to do so. Disconnecting couplings under pressure could result in serious injury or death and destruction of property and equipment.



RYCO HOSE ASSEMBLY PRESSURE RECOMMENDATION CHART

RYCO HOSE ASSEMBLY PRESSURE RECOMMENDATION CHART

Mark hose assembly with pressure from this chart or the hose working pressure, whichever is lower. All pressure recommendations are in pounds per square inch (psi)

- 1. This chart is intended as a guide only. It only applies to metal couplings as shown for ambient temperature (21°C/69.8°F) applications with true ID hose. It assumes RYCO supplied couplings, RYCO supplied clamps, quality hose and proper installation by a qualified assembler using RYCO procedures and equipment. Temperature can affect the coupling retention. For questions relating to temperatures other than ambient (21°C/69.8°F) contact your local RYCO branch.
- 2. This chart does not apply to non-RYCO products, with used hose, in non-approved or unsupported applications or in non-standard assemblies.
- 3. Do not use this chart if it conflicts with the hose manufacturer's recommendations.
- 4. All hose assemblies should be pressure tested to Australian Standards or Rubber Manufacturers Association.

NOTE: ABL stands for '**Alternate Buckle Locations**' when fitting multiple Band Clamps to hoses. Locate the buckle of the clamps so they are not all in a row, ie 2 bands placed on opposite sides (180 degrees) of the hose and 3 or 4 or more clamps at approximately 90 degrees. This will ensure you reduce the chance of any direct leak path under the buckle flat.

				М	AX RE	сом	MEND	ED W	ORKI	NG PI	RESS	JRE E	BAR/P	SI FO	R HO	SE SIZ	ΖE	
HOSE TYPE	COUPLINGS	CLAMPS A FERRULE		1/4"	3/8"	1/2"	5/8"	3/4"	1"	1¼"	1½"	2"	21/2"	3″	4"	5″	6"	SPECIAL NOTES
	Claw Couplings	Preformed Band Clamp	bar			10.34	10.34	10.34	10.34									(2) bands on 5/8" or larger.
	Claw Couplings	Claw Clamp	psi bar			150 10.34	150 10.34	150 10.34	150 10.34									Must use mating RYCO Claw fittings with safety clip
	Brass Nut and Tail - Combination	Preformed Band Clamp	psi bar	13.79	10.34	150 10.34	150 0.98	150 0.98	150 0.98									installed (ABL). (2) bands on 5/8" or larger (ABL).
Air Textile Reinforced Rubber	Nipples Machined - Short Tail	Preformed Band Clamp	psi bar	200	150	150 10.34	100 0.98	100 0.98	100 0.98									(2) bands on 5/8" or larger (ABL).
	Reusable - Brass	Worm Drive Clamps	psi bar	17.23	17.23	150 17.23	100	100	100									(2) clamps on 1/2" to 1" (ABL).
	Machined - Long Tail	Preformed Band Clamp	psi bar psi	250	250	250 20.68 300	20.68 300	20.68 300	20.68 300									(2) bands on 1/2" to 1" (ABL).
Air Wire Reinforced Rubber	Claw Couplings	Interlocking Clamp	bar psi		10.34 150	10.34 150		10.34 150	10.34 150									Must use mating RYCO Claw clamps with safety clip installed.
	Machined - Medium Tail	Preformed Band Clamp	bar psi			8.62 125		8.62 125	8.62 125	8.62 125	8.62 125	5.17 75	5.17 75	3.48 50	3.48 50			(3) bands on 3" & 4"; (2) bands on 1-1/2" to 2-1/2"; (1) band of the rest; (ABL).
	Machined - Medium Tail	HD Bolt Clamps	bar psi							8.62 125	8.62 125	5.17 75	5.17 75	3.48 50	3.48 50			(3) clamps on 3" & 4"; (2) clamps on 1-1/2" to 2-1/2"; (1) clamp on the rest; (ABL).
Chemical Plastic	Machined - Long Tail	Preformed Band Clamp	bar psi			10.34 150		10.34 150	10.34 150	10.34 150	10.34 150	8.62 125	0.98 100	5.17 75	5.17 75			(5) bands on 3" & 4"; (4) bands on 2" & 2-1/2"; (3) bands on 1-1/4" & 1-1/2"; (2) bands on the rest; (ABL).
for Liquid Service	Machined - Long Tail	HD Bolt Clamps	bar psi							10.34 150	10.34 150	8.62	0.98	5.17 75	5.17 75			(5) clamps on 3" & 4"; (4) clamps on 2" & 2-1/2"; (3) clamps on the rest; (ABL).
	Aluminium/Brass/ Stainless Steel Camlocks	nless Steel Band Clamp				10.34 150		10.34 150	17.23 250	17.23 250	17.23 250	17.23 250	10.34 150	8.62 125	0.98 100			(2) bands on 1/2" to 3"; (ABL).
	Aluminium/Brass/ Stainless Steel Camlocks	HD Bolt Clamps	psi bar psi							17.23 250	17.23 250	17.23 250	10.34 150	8.62 125	0.98 100			(2) bands on 1/2" to 3"; (ABL).

TECHNICAL RYCO HOSE ASSEMBLY PRESSURE RECOMMENDATION CHART

				М	AX RE	ЕСОМ	MEND	DED W	ORKI	NG PI	RESSI	URE E	BAR/P	SI FO	R HOS	SE SIZ	ZE	
HOSE TYPE	COUPLINGS	CLAMPS A FERRULE		1/4"	3/8"	1/2"	5/8"	3/4"	1"	1¼"	11⁄2″	2"	2½ "	3"	4"	5"	6"	SPECIAL NOTES
	Machined - Medium Tail	Preformed Band Clamp	bar psi			8.62 125		8.62 125	8.62 125	8.62 125	8.62 125	5.17 75	5.17 75	3.48 50	3.48 50			(3) bands on 3" & 4"; (2) bands on 1-1/2" to 2-1/2"; (1) band on the rest; (ABL).
	Machined - Medium Tail	HD Bolt Clamps	bar psi							8.62 125	8.62 125	5.17 75	5.17 75	3.48 50	3.48 50			(3) clamps on 3" & 4"; (2) clamps on 1-1/2" to 2-1/2"; (1) clamp on the rest; (ABL).
Chemical	Machined - Long Tail	Preformed Band Clamp	bar psi			10.34 150		10.34 150	10.34 150	10.34 150	10.34 150	8.62 125	0.98 100	5.17 75	5.17 75			(5) bands on 3" & 4"; (4) bands on 2" & 2-1/2"; (3) bands on 1-1/4" & 1-1/2"; (2) bands on the rest.
Rubber for Liquid Service	Machined - Long Tail	HD Bolt Clamps	bar psi							10.34 150	10.34 150	8.62 125	0.98 100	5.17 75	5.17 75			(5) clamps on 3" & 4"; (4) clamps on 2" & 2-1/2"; (3) clamps on the rest.
	Aluminium/Brass/ Stainless Steel Camlock and Couplings	Preformed Band Clamp	bar psi			10.34 150		17.23 250	17.23 250	17.23 250	17.23 250	17.23 250	10.34 150	8.62 125	0.98 100			(3) bands on 3" & 4"; (2) bands on 1-1/2" to 2-1/2"; (1) band on the rest; (ABL).
	Aluminium/Brass/ Stainless Steel Camlock and Couplings	HD Bolt Clamps	bar psi							17.23 250	17.23 250	17.23 250	10.34 150	8.62 125	0.98 100			(3) clamps on 3" & 4"; (2) clamps on 1-1/2" to 2-1/2"; (1) clamp on the rest; (ABL).
	Machined - Medium Tail	Preformed Band Clamp	bar psi			8.62 125		8.62 125	8.62 125	8.62 125	8.62 125	5.17 75	5.17 75	3.48 50	3.48 50	1.72 25	1.72	(4) bands on 6"; (3) bands on 3" to 5"; (2) bands on 1-1/2" to 2-1/2"; (1) band on the rest.
	Machined - Medium Tail	HD Bolt Clamps	bar psi							8.62 125	8.62 125	5.17 75	5.17 75	3.48 50	3.48 50	1.72 25	1.72 25	(4) clamps on 6"; (3) clamps on 3" to 5"; (2) clamps on 1-1/2" to 2-1/2"; (1) clamp on the rest.
Food Grade Rubber	Stainless Steel Camlock and Couplings	Preformed Band Clamp	bar psi			10.34 150		17.23 250	17.23 250	17.23 250	17.23 250	17.23 250	10.34 150	8.62 125	0.98 100	5.17 75	5.17 75	(5) bands on 3" & 4"; (4) bands on 2" & 2-1/2"; (3) bands on 1-1/4" & 1-1/2"; (2) bands on the rest.
	Stainless Steel Camlock and Couplings	HD Bolt Clamps	bar psi							17.23 250	17.23 250	17.23 250	10.34 150	8.62 125	0.98 100	5.17 75	5.17 75	(5) clamps on 3" & 4"; (4) clamps on 2" & 2-1/2"; (3) clamps on 1-1/4" & 1-1/2"; (2) clamps on the rest.
	Irrigation Coupling	Preformed Band Clamp	bar psi							17.23 250	17.23 250	17.23 250	10.34 150	8.62 125	0.98 100		5.17 75	(5) bands on 3" & 4"; (4) bands on 2" & 2-1/2"; (3) bands on 1-1/4" & 1-1/2"; (2) bands on the rest.
Layflat	Aluminium/Brass/ Stainless Steel Camlock	Preformed Band Clamp	bar psi							17.23 250	17.23 250	17.23 250	10.34 150	8.62 125	0.98 100		5.17 75	(5) bands on 3" & 4"; (4) bands on 2" & 2-1/2"; (3) bands on 1-1/4" & 1-1/2"; (2) bands on the rest.
	Cast Short Tail	Preformed Band Clamp	bar psi								5.17 75	5.17 75	3.48 50	3.48 50	3.48 50	1.72 25	1.72 25	(4) bands on 6"; (3) bands on 3" to 5"; (2) bands on 1-1/2" to 2-1/2" (ABL).
	Cast Short Tail	HD Bolt Clamps	bar psi								5.17 75	5.17 75	3.48 50	3.48 50	3.48 50	1.72 25	1.72 25	(4) clamps on 6"; (3) clamps on 3" to 5"; (2) clamps on 1-1/2" to 2-1/2" (ABL).
Material-	Machined - Medium Tail	Preformed Band Clamp	bar psi								8.62 125	5.17 75	5.17 75	3.48 50	3.48 50	1.72 25	1.72 25	(4) bands on 6"; (3) bands on 3" to 5"; (2) bands on 1-1/2" to 2-1/2"; (ABL).
Handling Rubber Suction and Delivery	Machined - Medium Tail	HD Bolt Clamps	bar psi								8.62 125	5.17 75	5.17 75	3.48 50	3.48 50	1.72 25	1.72 25	(4) clamps on 6"; (3) clamps on 3" to 5"; (2) clamps on 1-1/2" to 2-1/2"; (ABL).
Denvery	Machined - Long Tail	Preformed Band Clamp	bar psi								10.34 150	8.62 125	0.98	5.17 75	5.17 75	5.17 75		(5) bands on 3" & 4"; (4) bands on 2" & 2-1/2"; (3) bands on the rest; (ABL).
	Machined - Long Tail	HD Bolt Clamps	bar psi								10.34 150	8.62 125	0.98 100	5.17 75	5.17 75			(5) clamps on 3" & 4"; (4) clamps on 2" & 2-1/2"; (3) clamps on the rest; (ABL).
	Aluminium/Brass/ Stainless Steel Camlocks	Preformed Band Clamp	bar psi								17.23 250	17.23 250	10.34 150	8.62 125	0.98 100	5.17 75	5.17 75	(5) bands on 3" & 4"; (4) bands on 2" & 2-1/2"; (3) bands on 1-1/4" & 1-1/2"; (2) bands on the rest.



INTRODUCTION

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RYCO HOSE ASSEMBLY PRESSURE RECOMMENDATION CHART

			MAX RECOMMENDED WORKING PRESSURE BAR/PSI FOR HOSE SIZE															
HOSE TYPE	COUPLINGS	CLAMPS A FERRULE		1/4"	3/8"	1/2"	5/8"	3/4"	1"	1¼"	11⁄2″	2"	21/2"	3″	4"	5″	6"	SPECIAL NOTES
	Cast Short Tail	Double Bolt	bar								5.17	5.17	3.48	3.48	3.48	1.72	1.72	(3) double bolt clamps on 5" & 6"; (2) double bolt clamps on 3" to 4"; (1)
Material		Clamp	psi								75	75	50	50	50	25	25	double bolt clamp on the rest (ABL). (3) double bolt clamps on
Handling Delivery	Machined - Medium Tail	Double Bolt Clamp	bar psi								8.62 125	5.17 75	5.17 75	3.48 50	3.48 50	1.72 25	1.72 25	5" & 6"; (2) double bolt clamps on 3" to 4"; (1) double bolt clamp on the
	Machined - Long Tail	Double Bolt Clamp	bar psi								10.34 150	8.62 125	0.98 100	5.17 75	5.17 75			rest (ABL). (3) double bolt clamps on all sizes; (ABL).
			bar			8.62		8.62	8.62	8.62	8.62	5.17	5.17	3.48	3.48	1.72	1.72	(4) bands on 6"; (3) bands on
	Machined - Medium Tail	Preformed Band Clamp	psi			125		125	125	125	125	75	75	50	50	25	25	3" to 5"; (2) bands on 1-1/2" to 2-1/2"; (1) band on the rest; (ABL).
	Machined - Medium Tail	HD Bolt Clamps	bar psi							8.62 125	8.62 125	5.17 75	5.17 75	3.48 50	3.48 50	1.72 25	1.72 25	(4) clamps on 6"; (3) clamps o 3" to 5"; (2) clamps on 1-1/2" to 2-1/2"; (1) clamp on the
			bar			10.34		10.34	10.34	125	125	8.62	0.98	5.17	5.17	25	25	rest; (ABL). (5) bands on 3" & 4"; (4) bands
Petroleum	Machined - Long Tail	Preformed Band Clamp	psi			150		150	150	150	150	125	100	75	75			on 2" & 2-1/2"; (3) bands on 1-1/4" & 1-1/2"; (2) bands on the rest; (ABL).
Transfer	Machined - Long Tail	HD Bolt Clamps	bar psi							10.34 150	10.34 150	8.62 125	0.98 100	5.17 75	5.17 75			(5) clamps on 3" & 4"; (4) clamps on 2" & 2-1/2"; (3) clamps on the rest; (ABL).
	Aluminium/Brass/ Stainless Steel	Preformed Band Clamp	bar			10.34		17.23	17.23	17.23	17.23	17.23	10.34	8.62	0.98	5.17	5.17	(5) bands on 3" & 4"; (4) bands on 2" & 2-1/2"; (3) bands on 1-1/4" & 1-1/2"; (2) bands on
	Camlocks	·	psi			150		250	250	250	250	250	150	125	100	75	75	the rest. (5) clamps on 3" & 4"; (4)
	Aluminium/Brass/ Stainless Steel Camlocks	HD Bolt Clamps	bar psi					17.23 250	17.23 250	17.23 250	10.34 150	8.62 125	0.98 100	5.17 75	5.17 75			clamps on 2" & 2-1/2"; (3) clamps on 1-1/4" & 1-1/2"; (2) clamps on the rest.
Push-On	Push-On	N/A	bar psi	12.06 175	12.06 175	12.06 175	12.06 175	12.06 175										Push-On fittings should ONLY be used on Push-On hose.
	Steam Couplings	Steam	bar			17.23		17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23		17.23	Requires matched bolt & clav
Steam	with Safety Collar	Interlocking Bolt Clamp	psi			250		250	250	250	250	250	250	250	250		250	clamps for Hose OD.
	Claw Couplings	Preformed	bar			10.34	10.34	10.34	10.34									(2) bands on 5/8" or larger.
	clair couplings	Band Clamp	psi			150	150	150	150									
	Claw Couplings	Interlocking Clamp	bar psi		10.34 150	10.34 150		10.34 150	10.34 150									Must use mating RYCO Claw clamps with safety clip installed.
	Machined - Short Tail	Preformed Band Clamp	bar psi			10.34 150	0.98 100	0.98 100	0.98 100									(2) bands on 5/8″ or larger.
	Cast Short Tail	Preformed Band Clamp	bar psi			10.34 150	0.98 100	0.98 100	0.98 100	5.17 75	5.17 75	3.48 50	3.48 50	3.48 50	1.72 25	1.72 25		(4) bands on 6"; (3) bands on 3" to 5"; (2) bands on 1-1/2" to 2-1/2".
	Cast Short Tail	HD Bolt Clamps	bar psi							5.17 75	5.17 75	5.17 75	3.48 50	3.48 50	3.48 50	1.72 25	1.72 25	(4) clamps on 6"; (3) clamps o 3" to 5"; (2) clamps on 1-1/2" to 2-1/2".
Water Suction and Delivery	Machined -	Preformed	bar			17.23	13.79	13.79	10.34	10.34	8.62	5.17	5.17	3.48	3.48	1.72	1.72	(5) bands on 3" & 4"; (4) bands on 2" & 2-1/2"; (3) bands on
- /	Medium Tail	Band Clamp	psi bar			250 20.68	200 20.68	200 20.68	150 20.68	150 20.68	125 10.34	75 8.62	75 0.98	50 5.17	50 5.17	25	25	1-1/4" & 1-1/2"; (2) bands on the rest. (5) bands on 3" & 4"; (4) bands
	Machined - Long Tail	Preformed Band Clamp	psi			300	300	300	300	300	150	125	100	75	75			on 2" & 2-1/2"; (3) bands on 1-1/4" & 1-1/2"; (2) bands on the rest.
	Aluminium/Brass/ Stainless Steel Camlocks	Preformed Band Clamp	bar psi			10.34 150		17.23 250	17.23 250	17.23 250	17.23 250	17.23 250	10.34 150	8.62 125	0.98 100	5.17 75	5.17 75	(5) bands on 3" & 4"; (4) bands on 2" & 2-1/2"; (3) bands on 1-1/4" & 1-1/2"; (2) bands on the rest.
	Aluminium/Brass/ Stainless Steel Camlocks	HD Bolt Clamps	bar psi							17.23 250	17.23 250	17.23 250	10.34 150	8.62	0.98	5.17 75	5.17 75	(5) clamps on 3" & 4"; (4) clamps on 2" & 2-1/2"; (3) clamps on the rest; (ABL).
	Claw Couplings	Claw Interlocking	bar	41.37 600	41.37 600	41.37 600		41.37 600	41.37 600	41.37 600	41.37 600	41.37 600	31.02 450	31.02 450	17.23 250		17.23 250	Must use mating RYCO Claw clamps with safety clip installed.

TECHNICAL

HOSE ASSEMBLY SAFETY

SAFETY AND TECHNICAL

HOSE ASSEMBLIES

We encourage you to share this information with anyone who may be effected by the selection, installation, maintenance or use of any hose assembly. Always use quality products to BE SAFE.

Hose assemblies must be inspected prior to each use. Worn out fittings, attachment devices, hose and accessory items must be replaced. Retaining and safety devices such as clips, cables or chains must be used. Clamps must be checked regularly to the specified torque found in the RYCO Industrial Product Technical Manual - Hydraulics. Under no circumstance should any coupling be disconnected while under pressure unless the coupling is specifically designed to do so. Disconnecting couplings under pressure could result in serious injury or death, and destruction of property and equipment.

FOR ALL HOSE ASSEMBLIES IN USE:

BEWARE	Hose assemblies can be dangerous when used improperly or in the wrong application. The maximum working pressure shown on the hose is not an indication of the working pressure of the assembly.
	Based on the hose, fittings and attachment method used, all assemblies should be permanently marked with the designed working pressure and the intended media. The assembly working pressure should be permanently displayed.
	Hose assemblies must be used for the intended service only. Never alter manufactured product or substitute component parts.
ELIMINATE	Eliminate hazardous conditions by inspecting, maintaining and testing hose assemblies.
	RYCO recommends that all hose assemblies be tested in accordance with the hose manufacturer's specifications. The application determines the regularity of the re-testing schedule.
SECURE	Secure and inspect hose, fittings, clamping devices and safety accessories before each use. Never take for granted that the coupling or attachment devices are properly installed
ALWAYS	Always inspect and re-tighten the bolts of any bolt-style clamping device to the manufacturer's torque specifications.
FITTINGS	Hose and clamping devices that are worn out or damaged must be removed from service.
EDUCATE	Educate your employees about the proper use, care and potential hazards of hose assemblies. Contact RYCO if you have any questions on applications, use or assembly.



WATER AND AIR FLOW RATES

PRESSURE DROP IN RUBBER HOSES - WATER

The following tables of pressure drops and flow rates are based on experimental data and may be considered typical of most hoses. The data is based upon hoses laid out in a straight line and thus it must not be considered as an exact result that may be obtained at a given pressure. Variables such as hose fittings and bend increase the frictional losses and an estimate of their effect may be determined by adding an "equivalent length" to the hose length. Values of the equivalent length (Le) may be determined using the diameter (D) of the hose in the following relationships:

90° Swept Elbow	Le = 20D
90° Square Elbow	Le = 50D
45° Square Elbow	Le = 16D
Hose Coupling	Le = 05D

PRESSURE DROP (kPa PER 100 METRES) WATER @ 20°C THROUGH HOSE

						HOSE N	OMINAL B	ORE mm					
FLOW RATE	12.5	16	19	25	32	38	40	50	64	75	80	100	125
L/min							kPa						
25	1100	470	210	50	-	-	-	-	-	-	-	-	-
50	-	2440	770	200	90	30	-	-	-	-	-	-	-
100	-	-	2660	730	300	100	55	30	-	-	-	-	-
200	-	-	-	-	1030	405	285	95	25	-	-	-	-
300	-	-	-	-	-	900	650	210	65	20	-	-	-
400	-	-	-	-	-	-	1200	370	110	40	-	-	-
500	-	-	-	-	-	-	-	580	155	70	50	-	-
1000	-	-	-	-	-	-	-	-	575	230	180	55	-
2000	-	-	-	-	-	-	-	-	-	920	600	220	45
3000	-	-	-	-	-	-	-	-	-	2125	1400	490	100
4000	-	-	-	-	-	-	-	-	-	-	-	805	190
5000	-	-	-	-	-	-	-	-	-	-	-	1390	315

NOTE: (1) Pressure drop is directly proportioned to the length of hose.

(2) Friction is independent of pressure and proportional to velocity.

FLOW RATE OF WATER THROUGH HOSE

FLOW	V RAI	E OF	WAI	ERI	ΗΚΟΓ	JGHF	IUSE								0
			VOL	UMETRIC	FLOWRA			UGH 100M DIAMETE		TRE/MIN	JTE)				
INLET PRESSURE	12.5	16	19	25	32	38	40	50	64	75	80	100	150	200	
(kPa)							LITRES PE	R MINUTI	E						
150	15.5	31	48	102	181	299	359	639	1145	1701	2079	3969	11482	24239]
200	18.5	35	57	117	215	352	408	741	1342	2126	2457	4631	13466	28870	
300	24	42	71	157	272	438	499	922	1663	2717	3071	5670	16727	35749	
400	29.5	49	82	178	317	510	582	1081	1950	3189	3662	6710	19609	41675	
500	33	56	93	200	355	575	658	1221	2200	3544	4064	7560	22047	46967	
600	36	62	102	219	397	635	730	1349	2430	3936	4408	8269	24334	51739	ì
700	38	69	111	238	427	688	801	1467	2646	4253	4772	9025	26413	56228	
800	41	73	120	257	464	737	862	1576	2835	4631	5198	9686	28634	60480	
900	43	77	127	272	491	783	919	1686	3013	4938	5576	10348	30335	64260	
1000	45	82	134	291	522	828	972	1788	3187	5198	5906	11009	32036	67946	
1250	52	93	149	333	586	937	1111	2015	3595	5826	6804	12521	36052	76592	

HOSE

TECHNICAL

WATER AND AIR FLOW RATES

PRESSURE DROP IN RUBBER HOSES - AIR

		F	RESSURE DROP	OF AIR THROUG	H RUBBER HOS	E							
HOSE SIZE		m³/min OF FREE AIR											
mm	0.50	1.00	1.25	1.50	2.00	2.75	3.50	4.25					
12.5	249	855	1325	-	-	-	-	-					
19	-	215	350	505	895	1725	2745	-					
25	-	-	-	-	250	465	755	1100					
32	-	-	-	-	80	100	175	285					
38	-	-	-	-	-	45	75	135					

HOSE				PRESSU	RE DROP O		UGH RUBB FREE AIR	ER HOSE				
SIZE mm	15	20	30	40	50	60	70	80	90	100	125	150
51	385	680	1530	2690	4230	-	-	-	-	-	-	-
63	160	270	565	1020	1630	2350	3170	4185	5270	-	-	-
76	-	-	215	330	520	745	1020	1335	1675	2035	3190	4590

FRICTIONAL PRESSURE LOSS

To obtain frictional pressure loss in kPa/100m, divide above values by the ratio of compression listed here:

kPa WP	RATIO OF COMPRESSION
400	3.9
500	4.9
600	5.9
700	6.9
800	7.85
900	8.85
1000	9.85

HOSE SELECTION NOMOGRAPH

INDICATING FLOW CAPACITY OF HOSE ASSEMBLIES INTRODUCTION AT RECOMMENDED FLOW VELOCITIES **SELECTING THE RIGHT HOSE SIZE** With this nomograph, you can easily select the correct Hose ID size, Desired Flow Rate and Recommended Flow Velocity. If any two of these factors are known, the third can be determined. **TO USE THIS NOMOGRAPH:** Pick the two known values. Lay a straightedge to intersect the two values. Intersection on the third vertical line gives the value of that factor. **EXAMPLE:** To find the bore size for a Pressure Line consistent with a Flow HOSE **FLOW RATE** Rate of 100 litres per minute (26 US or 22 Imperial gallons per minute), and a Flow Velocity of 4.5 metres per second (14.8 feet per second), Imp. Gal / min Litres / min US Gal / min connect Flow Rate to Flow Velocity and read Hose Bore on centre scale. 500 400 ANSWER: The line crosses Hose Bore between -12 and -16 on "All Other 1600 400 Dash Sizes" side of Hose Bore axis, so a -16 hose is required. If RQP5 or T5 1400 1200 Hose is to be used for this example -16 would also be required. 300 1000 900 800 200 700 **HOSE BORE FLOW VELOCITY** COUPLINGS 600 inches mm 500 10 400 All Other 100 200 300 m / sec ft / sec 150 0,3 -80 200 50 Maximum 100 0,4 ecommende velocity for **RQP5 & T5** 150 40 0,5 Dash Sizes 0,6 30 100 0.7 20 50 0,8 ADAPTORS -32 Suction Lines 0.9 20 40 15 1.25 30 20 = 50 -16 1,5 40 10 20 2 0.75. Return Lines 30 0.625 -10 3 10 20 5 -08 0.4 10 15 15 -06 5 0.3 Pressure Lines 20 -05 CLAMPS 10 0,2 30 4 10 0.15 40 3 5 L 50 0.1 15 4 3 0.5 2 - 05 ACCESSORIES

The velocity of the fluid should not exceed the range shown in the right hand column. When oil velocities are higher than recommended in the chart, turbulent flow occurs resulting in loss of pressure and excessive heating. For long hoses and/ or high viscosity oil, or if the flow of hydraulic fluid is continuous, it is recommended to use figures at the lower end of the Maximum Recommended Velocity range. For short hoses and/or low viscosity oil, or if the flow of hydraulic fluid is intermittent or for only short periods of time, figures at the higher end of the Maximum Recommended Velocity range can be used.

A FURTHER EXAMPLE WILL HELP YOU TO USE THIS CHART:

1.

2.

3.

Determine the hose size required to carry 40 litres of oil per minute and determine the velocity of the oil through the hose assembly. The assembly is to be used as a pressure line and the flow will be continuous.

Locate the flow, 40 litres per minute (left hand column), and velocity, 15 feet per second (right hand column), since 15 is the centre of the Pressure Lines Maximum recommended velocity range. Lay a straight edge across these two points. The straight edge crosses the centre column just above the -08 on "All Other Dash Sizes" side of Hose Bore axis. Keeping the straight edge on 40 litres per minute, cross the centre column at -08 and -10 sizes and read the Flow Velocity in the right hand column. It can be seen that using -08 Hose Size , Flow Velocity will be 18 feet per second, and for -10 Hose Size, Flow Velocity will be 11 feet per second. As the flow is continuous, -10 Hose Size is recommended.

CONNECTING PARTNERSHIPS

TECHNICAL

TECHNICAL

STEAM HOSE SAFETY

RECOMMENDATIONS FOR USE OF STEAM HOSES

Steam is a medium that causes potential hazard to the user and the material employed. The correct selection of hose, couplings and correct implementation of safety and maintenance regulations will reduce the risk of operator injury and prolong life of the hose.

CONSTRUCTION OF STEAM HOSES

Steam hose design has been subject to extensive research during the last few years. Improved materials and manufacturing processes has improved general performance.

The most common liner material is EPDM. Best results are obtained from compounds vulcanised with peroxidic curing agents. Peroxidic agents are somehow more difficult to process compared to sulphur curing agents. Due to higher degrees of cross linkage and reduced number of compound chemicals it pays back in better overall performance. Also of importance is the quality of carbon black fillers used in the compound. High grade carbon blacks with low humidity give optimum dissipation in the compound and reduce risk of pop corning.

Pin pricked covers are normally utilised to give additional venting of the hose and reduce risk of cover delamination.

Most steam hoses on the market are produced to British Standard, DIN - or ISO Standard.

GENERAL REMARKS ABOUT STEAM

In order to select the right steam hose the following information is required:

- Continuous or intermittent service.
- Steam temperature.
- Steam pressure.

The relation of pressure and temperature determines the real service conditions. Three conditions of steam can be identified:

- Superheated, dry steam.
- Saturated steam.
- Hot water.

The best performance can be obtained from a steam hose if pressure/temperature is identical or as near as possible to the saturated steam curve.

Saturated steam is present at the exact moment of transition from water into steam. Fluid and steam are in a thermodynamic equilibrium.

Superheated, dry steam is generated when at equal pressure saturated steam is further heated up or system pressure is reduced. Superheated steam can be generated at temperatures above 100°C, and theoretically even at lower temperatures. By variation of temperature or pressure only all three conditions of steam can be obtained.

Saturated, slightly wet steam has the effect of adding some "lubrication" to the hose liner. Superheated dry steam tends to "bake" the hose liner. The transition of saturated steam into superheated steam can happen unintentionally. Open end discharge, feeding small pipes into larger hose bore will effect in a rapid drop in pressure without reduction of temperature.

These changes in condition lead to 'popcorning' or heat ageing of the hose. Heat ageing is increased brittleness of the rubber and is caused by oxidation of oxygen under high temperatures with low humidity. This oxidation attack can roughly double with each 10°C increase in temperature. Roughly if a compound lasts at 20°C for 20 years, it will deteriorate at 150°C at 24 hours. The accelerated ageing of the rubber causes cracking and migration of plastifiers, thus inevitably reducing hose life.

Popcorning is caused by the fact that all rubbers are prone to permeability by gases. Steam in the gaseous phase penetrates into the liner. When steam is turned off, the penetrated steam condensates into microscopic droplets of water trapped in the rubber matrix. When steam is turned on again, an explosive increase of volume of the trapped water droplets is the result. This volume increase causes tiny explosions in the matrix, breaking away small bits of rubber. This volume increase reduces with increasing pressure.

Popcorning is accelerated also by frequent changes in temperature or shut on/off, causing frequent cycles of condensation and vaporisation or where the steam is wet. As hoses are used normally in quite some distance from the boiler, steam tends to be wet at point of entry to the hose. Also corrosive steam can cause problems in service. When using water to generate steam, the steam contains dissolved air, oxygen and carbon dioxide which end up in the steam as contaminants. At high temperatures these gases become highly corrosive. Carbon dioxide is acidic and attacks metals. Oxygen corrodes metals and oxidises rubbers. Corrosion of metals in both presence of oxygen and acids is forty times faster than with either alone. Thus boiler water treatment is an important factor when talking about hose life!

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STEAM HOSE SAFETY

Another point is the use of steam hoses with hot water. Hot water can exist at a wide area of pressure temperatures ratios. However this does not imply that a steam hose rated for 200°C saturated steam may be used with hot water at 200°C.

Hot water at elevated temperature has a thermoplastic effect upon the hose liner. Tensile strengths, hardness and break elongation are reduced at high hot water temperatures, thus reducing dramatically the pressure carrying capacity of the hose. In practical terms, steel wire reinforced hoses can be safely used with hot water up to 90°C/8 Bar and 120°C/1 Bar.

GENERAL RECOMMENDATIONS ON STEAM HOSES IN PRACTICE

The points mentioned give rise to a number of points increasing safety and hose life:

- Always drain steam hose after use and allow it to dry, reducing the amount of condensation built up.
- Prolonged use with saturated steam will prolong hose live compared to situations where intermittent service with frequent shut offs is present. For example steam cleaning schedules should be organised in a way, that shut offs are reduced to practical minimum.
- Check that the bore size of the hose is as close as possible to the bore size of existing piping or valves, thus reducing the risk of sudden pressure drops.
- Run the hose as close as possible to the saturated steam curve, thus prolonging hose life. .
- Avoid sharp bends in the hose causing reduction in bore size. Kinking the hose for a moment to shut off steam flow is a potential hazard.
- Make sure a selected steam hose is suitable for the actual working situation. For safety reasons rubber steam hoses should be used to a maximum of 18 bar/210°C saturated steam. For higher pressures/temperatures a metal hose or fixed piping should be employed.
- Make sure that hose cover quality is selected according to environmental conditions. EPDM or EPR cover compounds have poor oil resistance! Where prolonged contact with oils or hydrocarbons is encountered, utilise steam hose with HYPALON or CR covers.
- Make sure that in case of use with hot water, the temperature/pressure limits stated in these recommendations are not exceeded
- Avoid installation of hoses in pipes, heat dissipation and venting are largely reduced. .
- Follow assembly instructions for couplings and use whip checks where ever possible.
- Make sure that the hose and couplings are electrically bonded. Medium flow causes friction and thus static charge build up. This can cause hazards in explosive areas! It is recommended that the hose assembly is earthed to the wall of the tank when cleaning tanks which contain explosive media.
- If a steam hose is used for other media than steam, never use the same hose in a steam service again.
- Check couplings for sealing and corrosion; especially grip areas between tail and clamp and also around ground seal areas should be checked periodically for damages.
- Before using a hose, make a visible check for damage, such as blisters on the cover or visible wires. Remove damaged hose immediately from service.
- If popcorning occurs, small rubber pieces will be visible. This is a clear sign of liner deterioration. The hose is subject to continuous blockage by rubber particles, which can lead to dangerous hose bursts. These hoses must be withdrawn immediately from service.
- Inspection and pressure testing should take place at maximum intervals of 6 months, referring to the inspection and testing procedures laid out in the hose standard or user standards.

PROPER STEAM HOSE SELECTION LEADS TO PERFORMANCE, SAFETY, AND ECONOMIC BENEFITS

There are powerful economic and safety reasons for properly specifying and handling steam hose assemblies. Economically speaking, it is important to acknowledge that steam hose assemblies will fail prematurely if they are not properly selected and handled. Extreme pressures, temperatures, and stresses make eventual replacement inevitable. It makes strong economic sense to do everything possible to get the maximum life out of a steam hose assembly.

In safety terms, workers lives are at stake. Steam hoses routinely carry pressures of at least 250 psi and temperatures up to 450°F, with short-term spikes that can go much higher. Improper specifications or handling procedures can cause an accident with catastrophic consequences.

TECHNICAL

TECHNICAL

CAMLOCK SPECIFICATIONS

CAMLOCK PRESSURE RATINGS

DESIGN INFORMATION

APPLICATIONS

The Camlock coupling is a reliable quick connect coupling for use on hose, pipe, tubing and tanks conveying a wide variety of liquids, dry bulk materials and vapours including cooling water, fuels, chemicals, cosmetics, food products, adhesives, dyes, pharmaceuticals, pellets and much more.

HOW DOES IT WORK?

The coupling is connected by simply opening the coupler arms and inserting the adapter into the coupler. The two cam arms are then closed under normal hand pressure to complete the joint.

The RYCO range of Camlock couplings and adaptors are manufactured to interchange with all product produced to MIL Spec A-A 59326, which supersedes MIL-C-27487.

MAXIMUM PRESSURE RATINGS

Camlocks were mainly designed for use with liquids. Recommendations based on the use of mating RYCO fittings at ambient temperature 21°C (69.8°F) with standard Buna-N seal installed. For use at elevated temperature or other unusual operating conditions, consult your RYCO representative.

CAMLOCK MAXIMUM PRESSURE RATINGS										
CAMLOCK SIZES		ALUMINIUM		STAINLESS STEEL		BRASS		POLYPROPYLENE		
inch	mm	PSI	BAR	PSI	BAR	PSI	BAR	PSI	BAR	
1/2	15	150	10	150	10	150	10			
1/2-1	15-25							125	8.5	
3/4-2	20-50	250	17	250	17	250	17			
1.1/4-2	32-50							100	7	
2.1/2	65	150	10	150	10	150	10			
3	75							75	5	
3	75	125	8.5	125	8.5	125	8.5			
4	100							50	3.5	
4	100	100	7	100	7	100	7			
5-6	125-150	75	5	75	5	75	5			

WELDING OF CAMLOCKS

Couplings made using the diecast process must NOT be welded. Although Bronze Sand Cast Couplings made from the above materials may be welded using the appropriate welding equipment and compatible filler material, any modifications to the product will void your warranty. Welding the couplings changes the integrity of the coupling therefore RYCO will not accept any responsibility for modified couplings.

CLAW COUPLING SPECIFICATIONS

CLAW COUPLING SPECIFICATIONS

TYPE A (AUSTRALIAN PATTERN)

Materials Available:	SG Iron ISO 1083 Zinc Plated
Seal Material:	Natural Rubber (NR)
Temperature Range:	Natural Rubber (NR) Seal -29°C to 71°C (20.2°F to 159.8°F)
Working Pressure:	Standard Seal 500 psi
Size Range:	3/8" to 1.1/4" Hose end and Threaded
Thread Type:	Male and Female BSP

TYPE S (AUSTRALIAN PATTERN)

Materials Available:	SG Iron AS 1789 Zinc Plated
Seal Material:	Natural Rubber (NR)
Temperature Range:	Natural Rubber Seal -29°C to 71°C (20.2°F to 159.8°F)
Working Pressure:	3/8" to 2" 1000 psi, 3" 500 psi
Size Range:	3/8" to 3" Hose end and Threaded 2" Shouldered
Thread Type:	Male and Female BSP

TYPE B (AMERICAN PATTERN)

Materials Available:	Malleable Iron ASTM A47
Seal Materials:	Natural Rubber (NR)
Temperature Range:	Rubber Seal -29°C to 71°C (20.2°F to 159.8°F)
Working Pressure:	150 psi at 21°C (69.8°F)
Size Range:	3/8" to 1" Hose end and Threaded
Thread Type:	Male and Female BSP or NPT
NOTE: Air and Water Serv	ice Only

NOTE: Air and Water Service Only

CLAW COUPLINGS

Claw Couplings provide quick, safe and reliable connections. Claw couplings are designed with a common or universal claw which enables differing hose sizes and nominal bores sizes to be connected. Claw couplings are most commonly used for conveying air and water, and are not be used for steam applications.

Common industry applications: underground and surface mining, mineral processing, compressor and air tool industries, hire companies.

All Claw Couplings comply with AS 2554 and AS 2660 – Hoses and Hose Assemblies for Air/Water.

LOCKING PINS

The use of a RYCO Safety Locking Pin is necessary to ensure that RYCO Type A and Type S Claw Couplings will not become accidentally disconnected. This ensures that the fittings are properly connected as the pin will not go through the holes in both couplings until the couplings are locked into place.

TECHNICAL

THREAD IDENTIFICATION

INDUSTRIAL PIPE THREADING INFORMATION

ABBREVIATION	SYSTEM NAME	COMPATIBILITY	SEAL METHOD*
BSPP	British Standard Pipe Parallel	Male BSPP with Female BSPP Female BSPP with Male BSPP Female BSPP with Male BSPT	Washer Washer Washer
BSPT	British Standard Pipe Taper Male	BSPT with Female BSPT Male BSPT with Female BSPP Female BSPT with Male BSPT Female BSPT not compatible with Male BSPP	Thread Washer Thread
GHT	Garden Hose Thread	Male GHT with Female GHT Female GHT with Male GHT Thread is same for all size hose Not compatible with other systems	Washer Washer
IPS	Iron Pipe Straight Thread	Generic Name for Straight Pipe Thread See NPSH for compatibility	Washer
IPT	Iron Pipe Thread	Generic Name for All Pipe Thread	
JIC	Joint Industries Council	Female JIC with Male JIC Male JIC with Female JIC	Mechanical
JSEAL™	RYCO Proprietary High Performance JIC	JSEAL™ with Male JIC Male JIC with JSEAL™	Convex Self-Aligning
NH or NST	American Standard Fire Hose Coupling Thread (National Hose thread also known as National Standard Thread)		Washer Washer
NPT	American Standard Taper Pipe Thread (National Pipe Tapered)	Male NPT with Female NPT Male NPT with Female NPTF Male NPT with Female NPSM Male NPT with Female NPSH Female NPT with Male NPT Female NPT with Male NPTF Female NPT not compatible with Male NPSM or Male NPSH	Thread Thread Washer Washer Thread Thread
NPTF	American Standard Taper Pipe Fuel Dryseal Thread	Male NPTF with Female NPTF Male NPTF with Female NPT Male NPTF with Female NPSM Male NPTF with Female NPSH Female NPTF with Male NPTF Female NPTF with Male NPT Female NPTF with Male NPSM or NPSH NOTE: NPTF with NPTF threads do not require sealant for the initial use. After that, sealant is required.	Thread Thread Washer Washer Thread Thread Not Compatible
NPSH	American Standard Straight Pipe for Hose Couplings (National Pipe Straight Hose)	Male NPSH with Female NPSH Female NPSH with Male NPSH Female NPSH with Male NPT Female NPSH with Male NPTF Female NPSH with Male NPSM	Washer Washer Washer Washer Washer
NPSM	American Standard Straight Mechanical Joint (National Pipe Straight Mechanical)	Male NPSM with Female NPSM Male NPSM with Female NPSH Female NPSM with Male NPSM Female NPSM with Male NPT Female NPSM with Male NPTF	Seal can be either mechanical or washer. Mating fittings must be of same type.
SIPT	Straight Iron Pipe Thread	Generic name for Straight Pipe Thread	Washer
TIPT	Tapered Iron Pipe Thread	Generic name for Tapered Pipe Thread	Thread

* Refer to page 247 for further information on Industrial Pipe Thread Sealing Information.

THREAD IDENTIFICATION

INDUSTRIAL PIPE THREAD SEALING INFORMATION

THREAD SEAL TYPE

- A seal is obtained by applying a sealant to the male thread before engaging.
- The sealant is used to prevent spiral leakage.
- Thread tape or paste is the preferred sealant in this type of application.

WASHER SEAL TYPE

- A seal is obtained when the male thread is tightened down onto the washer of the female assembly.
- The washer should be inspected regularly and replaced as needed to prevent leakage.

MECHANICAL SEAL TYPE

- A seal is obtained through metal-to-metal contact or metal-to-seal contact, ie JIC couplings have a metal-to-metal seal. Ground Joint couplings have a metal-to-seal contact.
- The couplings should be retightened as needed to prevent leakage.

THREAD SEALING

Sealing NPT threads can be an exasperating experience if certain techniques are not followed.

The following tips will help alleviate many common problems in thread sealing:

- 1. Always use some type of sealant (tape or paste) and apply sealant to male thread only. If using a hydraulic sealant, allow sufficient curing time before system is pressurised.
- 2. When using tape sealant, wrap the threads in a clockwise motion starting at the first thread and, as layers are applied, work towards the imperfect (vanishing) thread. If the system that the connection being made to cannot tolerate foreign matter (ie air systems), leave the first thread exposed and apply the tape sealant as outlined above.
- 3. When using paste sealant, apply to threads with a brush, using the brush to work the sealant into the threads. Apply enough sealant to fill in all the threads all the way around.
- 4. When connecting one stainless steel part to another stainless steel part that will require future disassembly, use a thread sealant that is designed for stainless steel. This stainless steel thread sealant is also useful when connecting aluminum to aluminum that needs to be disconnected in the future. These two materials gall easily, and if the correct sealant is not used, it can be next to impossible to disassemble.
- 5. When connecting parts made of dissimilar metals (ie steel and aluminum), standard tape or paste sealant performs satisfactory.
- 6. For sizes 2" and below, tape or paste performs satisfactorily. When using thread tape, four wraps (covering all necessary threads) is usually sufficient.
- 7. For sizes 2-1/2" and above, thread paste is recommended. If thread tape is used, eight wraps (covering all necessary threads) is usually sufficient. Apply more wraps if necessary.
- 8. For stubborn to seal threads, apply a normal coating of thread paste followed by a normal layer of thread tape.
- 9. For extremely stubborn to seal threads, apply a normal coating of thread paste followed by a single layer of gauze bandage followed by a normal layer of thread tape.

CAUTION! When this procedure is completed, the connection becomes permanent. Extreme measures will be necessary to disconnect these components. All other measures to seal the threads should be explored prior to use of this technique.

10. Over-tightening threads can be just as detrimental as insufficient tightening. For sizes 2" and below, hand tighten the components and, with a wrench, tighten 3 full turns. For sizes 2-1/2" and above, hand tighten the components and, with a wrench, tighten 2 full turns.

TECHNICAL THREAD IDENTIFICATION

NOMINAL DIMENSIONS OF STANDARD PIPE THREADS

ODM Outside Diameter of the Male

IDF Inside Diameter of the Female

TPI Threads Per Inch

		TAPE THRI	ERED EADS	STRAIGHT THREADS											
		NPT	BSPT	NPSH			NPSM			NST (NH)			BSPP		
SIZE (inch)	PIPE OD	трі	ТРІ	ТРІ	ODM (MAX)	IDF (MIN)	ТРІ	ODM (MAX)	IDF (MIN)	TPI	ODM (MAX)	IDF (MIN)	трі	ODM (MAX)	IDF (MIN)
1/8	.405	27	28	-	-	-	27	0.397	0.358	-	-	-	-	0.383	0.337
1/4	.504	18	19	-	-	-	18	0.526	0.468	-	-	-	-	0.516	0.450
3/8	.675	18	19	-	-	-	18	0.662	0.603	-	-	-	-	0.656	0.588
1/2	.840	14	14	14	0.8248	0.7395	14	0.823	0.747	-	-	-	-	0.825	0.733
3/4	1.050	14	14	14	1.0353	0.9500	14	1.034	0.958	8	1.375	1.2246	-	1.041	0.950
1	1.315	11.5	11	11.5	1.2951	1.1921	11.5	1.293	1.201	8	1.375	1.2246	11	1.309	1.193
1.1/4	1.660	11.5	11	11.5	1.6399	1.5369	11.5	1.638	1.546	-	-	-	11	1.650	1.534
1.1/2	1.900	11.5	11	11.5	1.8788	1.7758	11.5	1.877	1.785	9	1.990	1.8577	-	1.882	1.766
2	2.375	11.5	11	11.5	2.3528	2.2498	11.5	2.351	2.259	-	-	-	11	2.347	2.231
2.1/2	2.875	8	11	8	2.8434	2.6930	8	2.841	2.708	7.5	3.068	2.9104	11	2.960	2.844
3	3.500	8	11	-	-	-	8	3.467	3.334	6	3.623	3.5306	11	3.460	3.344
4	4.500	8	11	-	-	-	8	4.466	4.333	4	5.010	4.7111	-	4.450	4.334
4.1/2	-	-	-	-	-	-	-	-	-	4	5.760	5.4611	11	-	-
5	5.563	8	11	-	-	-	8	5.528	5.395	4	6.260	5.9602	11	5.450	5.359
6	6.625	8	11	-	-	-	8	6.585	6.452	4	7.025	6.7252	-	6.450	6.359
8	8.625	8	-	-	-	-	-	-	-	-	-	-	-	-	-
10	10.750	8	-	-	-	-	-	-	-	-	-	-	-	-	-
12	12.750	8	-	-	-	-	-	-	-	-	-	-	-	-	-

GHT (3/4") - 1.0625 ODM, 11-1/2 TPI

NOTE: Female NPT (Tapered Pipe) thread is not available on hose swivel nuts.

NORMAL ENGAGEMENT LENGTH OF NPT THREAD IN INCHES ("A")

SIZE (inch)	"A" (inch)		
1/8	1/4		
1/4	3/8		
3/8	3/8		
1/2	1/2		
3/4	9/16		
1	11/16		
1-1/4	11/16		
1-1/2	11/16		
2	3/4		
2-1/2	15/16		
3	1		
4	1-1/8		
5	1-1/4		
6	1-5/16		
8	1-7/16		
10	1-5/8		
12	1-3/4		



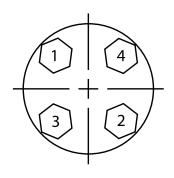
ANSI B16.5 FLANGES

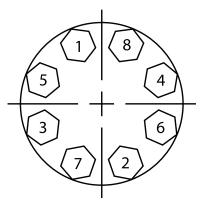
(CLASS 150 AND CLASS 300)

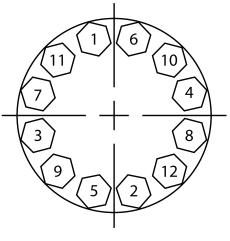
ANSI B16	.5 FLANG	ES						Z
(CLASS 150 AN	ID CLASS 300)							TI0
NOMINAL BORE SIZE (inch)	CLASS	FLANGE OD (mm)	PCD (mm)	NO. OF BOLTS	BOLT (inch)	BOLT HOLE DIA (mm)	FLANGE THICKNESS (mm)	INTRODUCTION
	150	90	60.5	4	1/2	16	11.5	TR(
1/2	300	95	66.5	4	1/2	16	14.5	Ξ
2/4	150	100	70	4	1/2	16	13	
3/4	300	120	82.5	4	5/8	20	16	
	150	110	79.5	4	1/2	16	14.5	
1	300	125	89	4	5/8	20	17.5	
1 1/4	150	120	89	4	1/2	16	16	Ш
1.1/4	300	135	98.5	4	5/8	20	19.5	HOSI
1.1/2	150	127	98.5	4	1/2	16	17.5	
1.1/2	300	155	114.5	4	3/4	22	21	
2	150	150	120.5	4	5/8	20	19.5	
2	300	165	127	8	5/8	20	22.5	
2 1/2	150	180	139.5	4	5/8	20	22.5	
2.1/2	300	190	19	8	3/4	22	22.5	S
3	150	190	152.5	4	5/8	20	24	COUPLINGS
3	300	210	168.5	8	3/4	22	29	
3.1/2	150	215	178	8	5/8	20	24	ЦЦ
5.1/2	300	230	184	8	3/4	22	30.5	
	150	230	190.5	8	5/8	20	24	
4	300	255	200	8	3/4	22	32	
5	150	255	216	8	3/4	22	24	
5	300	280	235	8	3/4	22	35	
6	150	280	241.3	8	3/4	22	25.5	ADAPTORS
6	300	320	270	12	3/4	22	37	10
8	150	345	298.5	8	3/4	22	29	AP
0	300	380	330	12	7/8	26	41.5	AD
10	150	405	362	12	7/8	26	30.5	
10	300	445	387.5	16	1	30	48	
12	150	485	432	12	7/8	26	32	
12	300	520	451	16	1.1/8	33	51	
14	150	535	476	12	1	30	35	0
14	300	580	514.5	20	1.1/8	33	54	CLAMPS
16	150	600	540	16	1	30	37	AA
10	300	650	571.5	20	1.1/4	36	57.5	C
18	150	635	578.5	16	1.1/8	33	40	
10	300	710	628.5	24	1.1/4	36	60.5	
20	150	700	635	20	1.1/8	33	43	
20	300	775	689	24	1.1/4	36	63.5	
24	150	815	749.5	20	1.1/8	33	48	ES
24	300	915	813	24	1.1/2	42	70	RI IRI
30	150	985	914	28	1.1/4	35	54	SSC
50	300	1090	997	28	1.3/4	48	92	
36	150	1170	1086	32	1.1/2	41	60.3	ACCESSORIES
50	300	1270	1168	32	2	54	105	

FLANGE MEASUREMENT GUIDE

FLANGE BOLT TIGHTENING SEQUENCE





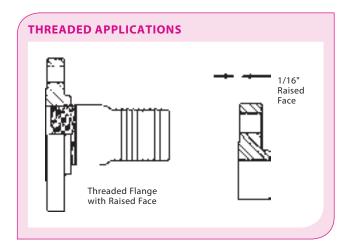


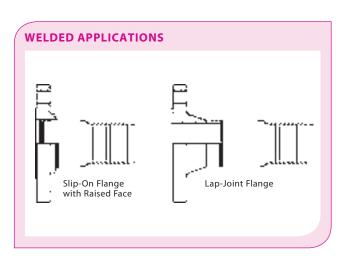
12 BOLT

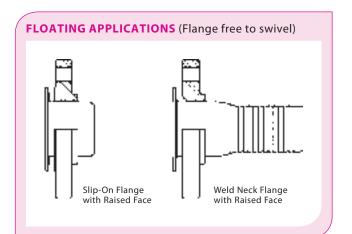
4 BOLT

8 BOLT

FLANGE DIAGRAMS









GENERAL PROPERTIES OF RUBBER AND THERMOPLASTICS

PROPERTIES OF RUBBER/PVC/THERMOPLASTIC HOSE

POLYMER	ETHYLENE PROPYLENE DIENE MONOMER	NATURAL	NEOPRENE	NITRILE	STYRENE BUTADIENE	VITON	SILICONE	
ABBREVIATION	EPDM	NR	CR	NBR	SBR	FKM	SI	
Hardness Range ° Shore A	20-90	30-98	25-90	20-98	25-95	60-90	30-85	
Tensile Strength	В	А	В	В	В	С	D	
Elongation	В	А	В	В	В	В	С	
Abrasion	С	В	В	В	В	С	D	
Tear	В	А	В	С	С	С	D	
Compression Set @ 20°C	В	В	В	В	В	А	А	
Compression Set @ 100°C	В	D	С	B-C	С	А	А	
Compression Set @ 150°C	С	Х	Х	Х	Х	А	А	
Denting	D	А	В	С	С	В	А	
Service Temperature Range	-56 to 177°C (-70 to 350°F)	-56 to 82°C (-70 to 180°F)	-50 to 121°C (-60 to 250°F)	-55 to 100°C (-65 to 212°F)	-55 to 100°C (-65 to 212°F)	-40 to 287°C (-40 to 550°F)	-115 to 315℃ (-178 to 600°F)	
Maximum Continuous Service Temperature	100°C (212°F)	70°C (158°F)	90°C (194°F)	80°C (176°F)	80°C (176°F)	220°C (428°F)	220°C (428°F)	
Ozone - UV	А	D	В	D	D	А	А	
Resiliency	С	А	В	С	D	С	В	
Acids	А	С	С	D	D	А	В	
Alcohol	А	А	В	А	А	D	В	
Aromatic Hydrocarbons	Х	Х	Х	С	Х	А	Х	
Caustics	А	В	В	С	С	В	В	
Chlorine	D	D	D	D	D	А	С	
Esters	А	А	С	D	А	А	С	
Ketones	A	А	С	D	Х	Х	D	
Oils	Х	Х	С	А	Х	А	С	
Petrol	Х	Х	С	А	Х	А	D	
Water	А	А	D	В	В	С	В	'

Ratings: A = Excellent; B = Above Average; C = Average; D = Fair; X = Unsuitable

TECHNICAL GENERAL PROPERTIES OF RUBBER AND THERMOPLASTICS

RUBBERS USED IN HOSE

ASTM DESIGNATION D1418	COMMON NAME	COMPOSITION	GENERAL PROPERTIES
ABR	Acrylics	Acrylate-butadiene	Excellent for high temperature oil and air resistance. Poor cold flow and low temperature resistance. Not recommended for water service.
AEM	Ethylene acrylic	Ethylene methyl acrylate copolymer	Excellent high temperature, ozone, and oil resistance.
AU	Urethane	Polyester	Excellent abrasion, tear and solvent resistance, good aging. Poor high temperature properties.
BIIR	Bromobutyl	Brominated isobutylene-isoprene	Same general properties as Butyl (see IIR below).
BR	Polybutadiene	Butadiene	Excellent low temperature and abrasion properties. High resilience.
CIIR	Chlorobutyl	Chlorinated isobutylene-isoprene	Same general properties as Butyl (see IIR below).
СМ	Chlorinated	Chlorinated	Good long-term resistance to UV and weathering. Good oil polyethylene polyethylene and chemical resistance. Excellent flame resistance. Good low temperature impact resistance.
со	Epichlorohydrin Rubber	Polychloromethyl oxirane	Excellent oil and ozone resistance. Good flame resistance and low permeability to gases. Fair low temperature properties.
CR	Neoprene	Polychloroprene	Good weathering resistance, flame retarding. Moderate resistance to petroleum based fluids. Good physical properties.
CSM	Hypalon	Chlorosulfonyl- Polyethylene	Excellent ozone, weathering and acid resistance. Good abrasion and heat resistance. Good resistance to petroleum-based fluids.
EAM	Ethylene vinyl	Ethylene vinyl acetate	Excellent high temperature and ozone resistance. Good acetate copolymer resistance to petroleum-based fluids as vinyl acetate content increases.
ECO	Epichlorohydrin copolymer	Ethylene oxide and chloromethyloxirane	Excellent oil and ozone resistance. Fair flame resistance and low permeability to gases. Good low temperature properties.
EPDM	Ethylene Propylene Rubber	Ethylene-propylene diene-terpolymer	Excellent ozone, chemical and aging characteristics. Good heat resistance. Poor resistance to petroleum-based fluids.
ЕРМ	Ethylene Propylene Rubber	Ethylene-propylene copolymer	Excellent ozone, chemical and aging characteristics. Good heat resistance. Poor resistance to petroleum-based fluids.
EU	Urethane	Polyether	Excellent abrasion, tear and solvent resistance, good aging. Poor high temperature properties.
FKM	Fluoroelastomer	Fluorocarbon rubber	Excellent high temperature resistance, particularly in air or oil. Very good chemical resistance.
HNBR	Hydrogenated nitrile	Hydrogenated acrylonitrile- butadiene	Excellent high temperature and oil resistance.
IIR	Butyl	Isobutylene-isoprene	Very good weathering resistance. Low permeability to air. Good physical properties. Poor resistance to petroleum-based fluids.
IR	Polyisoprene	Polyisoprene, synthetic	Same properties as natural rubber (see NR below).
MQ	Silicone	Dimethylpolysiloxane	Excellent high and low temperature resistance. Fair physical properties.
NBR	Nitrile	Acrylonitrile- butadiene	Excellent resistance to petroleum-based fluids. Moderate resistance to aromatics. Good physical properties.
NR	Natural rubber	Polyisoprene, Natural	Excellent physical properties including abrasion and low temperature resistance. Poor resistance to petroleum-based fluids.
SBR	SBR	Styrene-butadiene	Good physical properties, including abrasion resistance. Poor resistance to petroleum-based fluids.
т	Thiokol	Organic polysulfide	Outstanding solvent resistance and weathering resistance. Other properties poor.
XLPE	Cross-linked polyethylene	Polyethylene and cross linking agent	Excellent chemical resistance with good heat and electrical properties.
XNBR	Carboxylated nitrile	Carboxylated acrylonitrile- butadiene	Excellent oil and abrasion resistance.

RYCO QUALITY



GENERAL PROPERTIES OF RUBBER AND THERMOPLASTICS

PLASTICS U	ISED IN HOSE			N N
ASTM DESIGNATION D1600	Matrion DOCOMMON NAMECOMPOSITIONGENERAL PROPERTIESNylonPolyamideGood abrasion, chemical and fatigue resistance. Good lom high temperature. Low gas permeation and low coefficierPolyethylenePolyethyleneExcellent dielectric properties. Excellent resistance to wat solvents. Good abrasion and weathering resistance.UHMWPEUltra high molecular weight polyethyleneExcellent resistance to a broad range of chemicals, excellerPVCPolyvinyl chlorideGood devathering, moisture and flame resistance. General and weak acids. Good abrasion resistance.PolyesterThermoplastic polyester resinGood flex fatigue and low temperature properties. High r 	GENERAL PROPERTIES	INTRODUCTION	
РА	Nylon	Polyamide	Good abrasion, chemical and fatigue resistance. Good long term resistance to high temperature. Low gas permeation and low coefficient of friction.	INTR
PE	Polyethylene	Polyethylene	Excellent dielectric properties. Excellent resistance to water, acids, alkalis and solvents. Good abrasion and weathering resistance.	
	UHMWPE		Excellent resistance to a broad range of chemicals, excellent abrasion resistance.	
PVC	PVC	Polyvinyl chloride	Good weathering, moisture and flame resistance. General resistance to alkalis and weak acids. Good abrasion resistance.	SE
	Polyester		Good flex fatigue and low temperature properties. High resistance to deformation. Good resistance to abrasion, chemicals, hydraulic fluids and aromatic fuels.	HO
		polyolefins and block copolymers	Good weather and aging resistance. Good for water and to dilute acids and	
	hubber		bases.	S
PTFE	Fluoropolymer	Fluorocarbon resin	Excellent high temperature properties and chemical resistance.	97
		RUB	BER HOSE MANUFACTURING TOLERANCES	COUPLING

RUBBER HOSE MANUFACTURING TOLERANCES

	RIGI	MANDRE	EL BUILT I	HOSE	
	INTERNAL ETER		TOLERAN	CE (±, mm)	
inch	mm	L.	D.	0.	D.
1/2" to 1"	12mm to 25mm	- 0.5	+0.5	- 1.0	+ 1.0
1.1/8" to 2"	28mm to 51mm	- 0.5	+0.5	- 1.5	+ 1.5
2.1/8" to 3.1/2"	54mm to 89mm	- 0.5	+1.0	- 2.0	+ 2.0
4" to 8"	102mm to 214mm	- 0.5	+1.5	- 2.5	+ 2.5
10" to 12"	252mm to 305mm	- 0.5	+1.5	- 3.0	+ 3.0
Over 12"	Over 305mm	- 0.5	+1.5	- 3.5	+ 3.5

	EX	TRUSION	BUILT HO	SE		
	INTERNAL		TOLERAN	CE (±, mm)		
inch	mm	١.	D.	0.	D.	
1/8" to 5/8"	3mm to 15mm	- 0.5	+ 0.5	- 0.5	+ 0.5	ORS
3/4" to 1"	19mm to 25mm	- 0.75	+0.75	- 0.75	+ 0.75	ADAPTORS
1.1/4" to 2"	32mm to 51mm	- 1.0	+1.0	- 1.5	+ 1.5	AD

CHEMICAL COMPATIBILITY CHART

CHEMICAL RESISTANCE CHART FOR RUBBER HOSE

KEY TO CHEMICAL GUIDE

- A Recommended, little or no effect on tube compound, suitable for continuous service.
- B Recommended, minor effect on tube compound may be suitable for continuous service, suitable for intermittent service.
- C Questionable, moderate to severe effect on tube, may be suitable for limited applications.
- D No data available, but not expected to perform better than rated compounds.
- X Not recommended.

CHEMICAL	EPDM	HYPALON	NATURAL (NR)	NITRILE (NBR)	NEOPRENE	STYRENE BUTADIENE (SBR)	VITON (FKM)	CROSS LINKED POLYETHYLENE (XLPE)	CPE
ACETALDEHYDE 50%	В	С	В	Х	С	С	Х	Α	D
ACETIC ACID-GLACIAL	В	С	В	С	Х	В	С	А	А
ACETIC ACID 30%	В	В	В	В	А	В	В	A	A
ACETIC ANHYDRIDE	C	A	B	C	B	B	Х	A	A
ACETONE ACETYL CHLORIDE	B X	B X	C X	X X	C X	C X	X	A B	A
ACETYLENE	B	B	B	A	B	B	A	A	D
ADIPIC ACID	B	D	A	A	A	A	D	D	D
ALUMINIUM ACETATE	В	A	А	В	В	В	Х	А	А
ALUMINIUM CHLORIDE	В	А	А	А	А	А	А	А	А
ALUMINIUM FLUORIDE	В	А	В	А	А	А	А	А	D
ALUMINIUM NITRATE	В	А	А	А	А	A	А	А	A
	В	A	A	A	A	A	A	A	A
AMMONIA ANHYDROUS AMMONIA GAS (COLD)	B	B	X	B	A	X	X	A X	A AD
AMMONIA GAS (COLD) AMMONIA GAS (HOT)	C	A B	X	X	B	X	X	A	D
AMMONIUM CARBONATE	B	D	A	Х	A	A	D	D	A
AMMONIUM CHLORIDE	В	A	A	A	A	A	A	A	A
AMMONIUM HYDROXIDE	В	А	Х	Х	А	Х	В	А	А
AMMONIUM NITRATE	В	А	С	А	А	В	D	А	D
AMMONIUM NITRITE	В	А	А	А	А	А	D	А	D
	В	A	A	A	A	A	D	A	A
	B	A X	A	A	A	A	X	A	A
AMYL ACETATE AMYL ALCOHOL	X B	A	X B	X B	X B	X B	X B	A A	C A
ANILINE	B	C	X	Х	Х	X	C	A	B
ANILINE DYNES	B	B	B	X	B	B	В	A	B
ANILINE HYDROCHLORIDE	С	Х	В	В	Х	Х	В	А	D
ANIMAL FATS	С	В	Х	А	В	Х	А	А	А
AQUA REGIA	Х	А	Х	Х	Х	Х	В	Х	В
ARSENIC ACID	В	А	В	А	А	A	А	A	А
ARSENICTRICHLORIDE	Х	D	X	A	A	D	D	X	D
ASPHALT BARIUM CHLORIDE	D B	B	X	B	B	X	A A	X	D
BARIUM SULFATE	B	A	A	A	A	A	A	A	A
BARIUM SULPHIDE	B	A	A	A	A	В	A	A	A
BEER	В	A	A	A	A	A	A	D	A
BENZENE	Х	Х	Х	Х	Х	Х	А	А	Х
BENZYL ALCOHOL	В	В	Х	Х	В	Х	А	А	D
BENZYL BENZOATE	С	Х	Х	Х	Х	Х	Х	А	D



CHEMICAL	EPDM	HYPALON	NATURAL (NR)	NITRILE (NBR)	NEOPRENE	STYRENE BUTADIENE (SBR)	VITON (FKM)	CROSS LINKED POLYETHYLENE (XLPE)	CPE	INTRODUCTION
BENZYL CHLORIDE	Х	Х	Х	Х	Х	Х	А	Α	Х]
BENZOIC ACID	Х	Х	Х	С	Х	Х	А	А	А	
BORDEAUX MIXTURE	В	А	В	В	В	В	А	Α	D	
BORIC ACID	В	А	А	А	А	А	А	Α	А	ш
BRINE	В	А	А	А	А	А	А	А	А	HOSE
BROMINE - ANHYDROUS	Х	Х	Х	Х	Х	Х	А	Х	D	ΗĔ
BROMINE TRIFLUORIDE	Х	Х	Х	Х	Х	Х	Х	Х	D	
BROMINE WATER	В	А	Х	Х	Х	Х	А	Х	D	
BROMOTOLUENE	Х	Х	Х	Х	Х	Х	А	С	Х	
BUNKER OIL	Х	Х	Х	А	Х	Х	А	Α	D	
BUTANE	Х	В	Х	А	А	Х	А	А	В	
BUTADIENE	Х	С	Х	Х	Х	Х	А	А	D	COUPLINGS
BUTTER	В	В	Х	А	В	Х	А	А	В	
BUTYL ACETATE	Х	Х	Х	Х	Х	Х	Х	Α	В	<u> </u>
BUTYL ALCOHOL	С	А	Α	А	Α	Α	А	Α	Α	0
BUTYL AMINE	В	Х	Х	С	Х	Х	Х	D	В	
BUTYL BENZOATE	С	Х	С	Х	Х	В	Α	Α	D	
BUTYL CELLOSOLVE	В	В	Х	С	С	Х	Х	A	Α	
BUTYL STEARATE	Х	Х	Х	В	Х	Х	А	Α	В	
BUTYRALDEHYDE	С	Х	Х	Х	С	Х	Х	A	В	SS
CALCIUM ACETATE	В	В	А	В	В	Х	Х	Α	Α	L E
CALCIUM BISULFITE	Х	А	Х	Х	А	Х	А	A	А	ADAPTORS
CALCIUM CHLORIDE	В	А	А	А	Α	А	А	Α	Α	
CALCIUM HYDROXIDE	В	А	A	А	Α	A	А	A	А	
CALCIUM HYPOCHLORITE	В	А	С	В	С	С	А	С	А	
CALCIUM NITRATE	А	А	А	А	Α	А	А	A		
CALCIUM SULFIDE	В	А	В	А	А	В	А	A	А	
CARBITOL	С	В	В	В	В	В	В	A	А	
CARBONIC ACID (PHENOL)	С	Х	Х	Х	С	Х	А	А	А	CLAMPS
CARBON BISULFIDE	Х	Х	Х	С	Х	Х	А	D	С	Δ
CARBON DIOXIDE	С	В	В	А	В	В	A	A	D	C
CARBONIC ACID	В	A	A	В	A	В	A	A	A	
CARBON MONOXIDE	В	В	В	A	В	В	А	A	D	
CARBON TETRACHLORIDE	Х	Х	Х	С	Х	Х	А	A	Х	1
CASTOR OIL	C	В	A	A	A	A	A	A	A	
CELLOSOLVE	С	Х	Х	Х	Х	Х	C	A	D	E S
	C	Х	X	Х	X	X	X	A	D	ACCESSORI
CHLORINE (DRY)	Х	B	Х	Х	C	X	A	C	D	l SC
CHLORINE (WET)	Х	C	Х	Х	C	Х	A	C	D	Ц Ц Ц
CHLORINE DIOXIDE	Х	C	X	X	X	X	A	C	D	
	B	С	X	Х	C	X	Х	A	X	
	B	A	X	Х	Х	X	X	A	D	1
CHLOROBENZENE	Х	Х	X	Х	X	X	A	A	X	
CHLOROBUTADIENE	Х	X	X	X	X	X	A	A	D	
CHLOROFORM	Х	X	X	X	X	X	A	B	X	SAL
CHLOROTOLUENE	Х	Х	X	X	X	X	A	B	X	N
CHROME PLATING SOLUTIONS	C	Х	X	X	X	X	A	D	D	동
	B	B	X	X	C	X	A	A	A	TECHNICAL
CITRIC ACID	В	A	A	A	A	A	A	A	D	

TECHNICAL CHEMICAL COMPATIBILITY CHART

	EPDM	HYPALON	NATURAL (NR)	NITRILE (NBR)	NEOPRENE	STYRENE BUTADIENE (SBR)	VITON (FKM)	CROSS LINKED POLYETHYLENE (XLPE)	CPE
CHEMICAL									
COBALT COCONUT OIL	B X	A C	A X	A	A B	A X	A	A A	D D
COD LIVER OIL	B	B	X	A	B	X	A	A	D
CORE OVEN GAS	X	C	X	X	Х	X	A	A	D
COPPER ACETATE	B	В	A	B	B	X	X	A	D
COPPER CHLORIDE	B	B	A	A	B	A	A	A	B
COPPER CYANIDE	B	A	A	A	A	A	A	A	D
COPPER SULFATE	B	A	В	A	A	В	A	A	A
CORNOIL	X	В	X	A	C	X	A	A	B
COTTONSEED OIL	C	B	Х	A	В	X	A	A	В
CREOSOTE (COAL TAR)	X	X	X	A	B	X	A	A	D
CRESOL	X	Х	Х	Х	C	X	A	A	A
CRESYLIC ACID	X	X	Х	Х	C	X	A	A	D
CUMENE	X	Х	Х	Х	X	X	A	A	C
CYCLOHEXANE	X	Х	Х	A	C	X	A	A	A
CYCLOHEXANOL	X	В	Х	C	A	X	A	A	A
CYCLOHEXANONE	В	X	Х	X	Х	X	Х	A	В
P-CYMENE	Х	Х	Х	Х	Х	Х	А	А	Х
DECALIN	Х	Х	Х	Х	Х	х	А	А	Х
DENATURED ALCOHOL	В	А	А	А	А	А	А	А	А
DETERGENT SOLUTION (NON-HYDROCARBON)	В	В	В	А	В	В	А	А	В
DIACETONE	В	Х	Х	Х	Х	Х	Х	А	D
DIACETONE ALCOHOL	В	В	Х	Х	В	Х	Х	А	А
DIBENZYL ETHER	С	Х	Х	Х	С	Х	Х	А	С
DIBUTYL AMINE	В	Х	Х	Х	Х	Х	Х	А	А
DIBUTYL ETHER	Х	Х	Х	Х	С	Х	С	А	A
DIBUTYL PHTHALATE	С	Х	Х	Х	Х	Х	С	A	С
DIBUTYL SEBECATE	С	Х	Х	Х	Х	Х	В	A	В
DICHLOROBENZENE	Х	Х	Х	Х	Х	Х	А	А	Х
DIESEL OIL	Х	С	Х	А	С	Х	А	A	D
DIETHLAMINE	В	С	В	В	В	В	Х	Α	В
DIETHALMINE BENZENE	Х	Х	Х	Х	Х	Х	А	A	Х
DIETHYL EITHER	Х	C	Х	Х	C	Х	Х	A	A
DIETHYLENE GLYCOL	В	А	А	А	A	A	А	А	A
DIETHYL SEBECATE	С	В	Х	В	Х	Х	В	A	В
	В	Х	Х	В	Х	Х	A	A	D
	Х	Х	Х	Х	Х	Х	A	A	D
DISOPROPYL KETONE	B	Х	Х	Х	X	X	Х	A	D
	B	Х	Х	B	C	Х	Х	A	D
DIMETHYL PHTHALATE	В	Х	Х	Х	Х	Х	В	A	A
	X	Х	X	X	X	X	A	A	X
	C	X	X	C	X	X	B	A	C
	C	X	X	X	X	X	B	A	Х
	X	X	X	B	X	X	A	A	B
PIPHENYL (PHENYLBENZENE)	X	X	X	X	X	X	A	A	D
DOWTHERM OIL	X	X	X	X	X	X	A	A	-
DRY CLEANING FLUIDS	X	X	X	C	X	X	A	D	D
	Х	B	Х	A	B	Х	A	A	D
ETHANOLAMINE	В	C	В	В	В	В	Х	A	A



CHEMICAL	EPDM	HYPALON	NATURAL (NR)	NITRILE (NBR)	NEOPRENE	STYRENE BUTADIENE (SBR)	VITON (FKM)	CROSS LINKED POLYETHYLENE (XLPE)	CPE	INTRODUCTION
ETHYL ACETATE	В	Х	Х	Х	С	Х	Х	Α	В	
ETHYL ACETOACETATE	B	X	C	X	C	C	X	A	A	
ETHYL ALCOHOL	B	A	A	A	A	A	C	A	A	
ETHYL BENZENE	Х	Х	Х	Х	Х	Х	A	A	Х	ш
ETHYL BENZOATE	В	Х	A	X	Х	A	A	В	Х)SE
ETHYL CELLULOSE	C	В	В	В	В	В	Х	A	D	HOS
ETHYL CHLORIDE	Х	X	X	A	X	X	A	A	D	
ETHYL ETHER	Х	Х	Х	С	С	Х	Х	А	А	
ETHYL FORMATE	С	В	Х	Х	В	х	А	А	А	
ETHYL PENTOCHLORO-BENZENE	Х	Х	Х	Х	Х	Х	А	Х	Х	
ETHYL SILICATE	В	В	В	А	А	В	А	А	А	
ETHYLENE	С	-	С	А	С	С	А	D	D	COUPLINGS
ETHYLENE CHLORIDE	Х	Х	Х	Х	Х	Х	А	А	D	
ETHYLENE CHLOROHYDRIN	С	В	В	Х	В	В	А	А	D	4
ETHYLENE DIAMINE	В	В	А	А	А	В	Х	А	В	0
ETHYLENE DICHLORIDE	Х	Х	Х	Х	Х	Х	А	А	С	
ETHYLENE GLYCOL	В	А	А	А	А	А	А	А	А	
ETHYLENE TRICHLORIDE	Х	Х	Х	Х	Х	Х	А	А	D	
FERRIC CHLORIDE	В	А	А	А	А	А	А	А	А	
FERRIC NITRATE	В	А	А	А	А	А	А	А	А	S
FERRIC SULFATE	В	А	А	А	А	А	А	А	А	0.1
FISH OIL	Х	D	Х	А	Х	Х	А	А	D	ADAPTORS
FLUOROBORIC ACID	В	А	А	А	Α	Α	D	А	А	Q
FLUOROBENZENE	Х	D	Х	Х	Х	Х	А	А	D	
FLUOROLUBE	В	А	В	А	В	С	В	D	D	
FLUOSILIC ACID	С	А	В	А	В	С	А	В	А	
FORMALDEHYDE	В	А	В	С	В	В	Х	А	А	
FORMIC ACID	В	Х	В	В	А	A	С	В	А	
FREON 12	С	А	В	А	А	Α	В	А	А	CLAMPS
FREON 13	А	А	А	А	А	A	А	А	А	Σ
FREON 21	Х	Х	Х	А	Х	Х	Х	А	Х	
FREON 22	В	А	В	А	А	A	Х	A	А	
FREON 114	В	A	A	А	A	A	В	А	D	
FUEL OIL	Х	В	Х	A	В	Х	A	A	A	
FURTURAL	В	С	Х	Х	C	X	Х	A	A	
GALLIC ACID	В	В	A	В	В	В	A	A	D	ES
GASOLINE	Х	C	Х	A	C	X	A	A	D	ACCESSORIE
GELATIN	В	A	A	A	A	A	A	A	D	SSC
GLUCOSE	B	A	A	A	A	A	A	A	D	
GLUE	В	A	B	A	A	B	A	A	A	
GLICERINE	B	A	A	A	A	A	A	A	A	
GLYCOLS	B	A	A	A	A	A	A	A	D	
GREEN SULFATE LIQUOR	B	B	B	B	B	B	A	A	B	
HEXANE	X	B	Х	A	B	X	A	B	B	
HELIX ALCOHOL	X	B	B	A	B	B	A	A	A	N N
HYDRAULIC ALCOHOL	Х	B	Х	A	B	X	A	A	A	Ĭ
	B	A	A	X	X	X	A	A	A	н
HYDROBROMIC ACID (HOT 37%)	Х	X	Х	X	Х	Х	B	A	D	TECHNICAL
HYDROCHLORIC ACID	В	A	В	C	В	В	A	A	A	

TECHNICAL CHEMICAL COMPATIBILITY CHART

CHEMICAL	EPDM	HYPALON	NATURAL (NR)	NITRILE (NBR)	NEOPRENE	STYRENE BUTADIENE (SBR)	VITON (FKM)	CROSS LINKED POLYETHYLENE (XLPE)	CPE
	В	A	В	В	В	В	A	С	D
HYDROFLUORIC ACID (CONC. HOT)	B	C	Х	X	Х	X	C	A	D
HYDROFLUORIC ACID (CONC. COLD)	B	A	X	X	X	X	A	A	A
HYDROFLUORIC ACID (ANHYDROUS)	B	A	X	X	X	X	Х	A	D
HYDROFLUOSILIC ACID	C	A	B	A	В	C	A	D	A
HYDROGEN GAS	В	A	В	A	A	A	A	A	A
IODINE	X	A	X	X	X	X	Х	A	A
ISOBUTYL ALCOHOL	В	А	А	В	А	В	А	А	А
ISOCTANE	Х	В	Х	А	В	Х	А	А	В
ISOPROPYL ACETATE	С	Х	Х	Х	Х	Х	Х	Α	D
ISOPROPYL ALCOHOL	В	А	А	В	В	В	А	А	А
ISOPROPYL CHLORIDE	Х	Х	Х	Х	Х	Х	А	Α	D
ISOPROPYL ETHER	Х	С	Х	В	С	Х	Х	Α	D
KEROSENE	Х	С	Х	А	В	Х	А	Α	А
LACTIC ACID (COLD)	В	А	А	А	А	А	А	А	D
LACTIC ACID (HOT)	В	А	Х	Х	Х	Х	А	А	D
LARD	С	Х	Х	А	В	Х	А	А	А
LAVENDER OIL	Х	Х	Х	В	Х	Х	А	В	D
LEAD ACETATE	В	Х	А	В	А	Х	Х	Α	А
LEAD NITRATE	В	А	А	А	А	D	А	Α	А
LEAD SULFAMATE	В	А	В	В	А	В	А	Α	D
LINSEED OIL	Х	В	Х	А	В	Х	А	A	А
LIQUEFIED PETROLEUM GAS	Х	В	Х	А	В	Х	А	Α	В
LUBRICATING OILS	Х	В	Х	А	В	Х	А	A	А
LYE	В	А	В	В	В	В	В	D	А
MAGNESIUM CHL	В	А	А	А	А	A	А	A	А
MAGNESIUM HYDROXIDE	В	А	В	В	А	В	А	А	А
MAGNESIUM SULFATE	В	А	В	А	А	В	А	A	A
MALEIC ACID	В	Х	C	Х	C	C	А	В	D
MALEIC ANHYDRIDE	С	А	С	Х	С	С	Х	D	D
MALIC ACID	В	В	C	А	C	C	А	D	D
MERCURY	В	A	A	A	A	A	А	A	A
MESITYL OXIDE	С	Х	Х	Х	Х	Х	Х	A	В
METHANE	Х	В	Х	A	В	Х	В	A	В
METHYL ACETATE	B	Х	C	Х	B	C	Х	A	A
METHYL ALCOHOL	B	A	A	A	A	A	Х	A	A
METHYL BROMIDE	C	Х	Х	B	X	X	A	D	D
METHYL BUTYL KETONE (PROPYLACETONE)	B	Х	X	Х	Х	X	Х	A	D
	C X	B X	X X	B	B X	X X	X	A B	A
METHYL CHLORIDE METHYL ETHYL KETONE (MEK)				X			A	_	Х
METHYL ETHYL KETONE (MEK) METHYL ISOBUTYL KETONE	C C	X X	X X	X X	C X	X X	X X	A	B
METHYL ISOBOTYL RETONE	C	X X	X X	X X	X X	X X	X B	A	B D
MILK	B	A	A	A	A	A	A	A	A
MILK MINERAL OIL	X	A B	A X	A	A B	A X	A	A	A
MONOCHLOROBENZEN	X	Х	X	X	Х	X	A	B	D
MONOCHLOROBENZEN	B	X	B	X	X	B	X	A	D
MONOMETHYLETHER	X	В	Х	A	C	X	A	D	B
	~	U	A		-	A		0	0



CHEMICAL	EPDM	HYPALON	NATURAL (NR)	NITRILE (NBR)	NEOPRENE	STYRENE BUTADIENE (SBR)	VITON (FKM)	CROSS LINKED POLYETHYLENE (XLPE)	CPE	INTRODUCTION
NAPHTHA	Х	Х	Х	В	С	Х	A	Α	A	1
NAPHTHALENE	Х	Х	Х	Х	Х	Х	A	A	A	
NAPTHENIC ACID	Х	X	X	В	X	X	A	A	A	1
NATURAL GAS	Х	А	В	А	А	В	А	А	А	ш
NICKEL ACETATE	В	Х	А	В	В	Х	Х	А	D	HOSE
NICKEL CHORIDE	В	А	А	А	А	А	А	А	А	ΗΞ
NICKEL SULFATE	В	А	В	А	А	В	А	А	А	
NITRIC ACID (CONC)	Х	В	Х	Х	Х	Х	С	В	Х	
NITRIC ACID (DILUTE)	Х	А	Х	Х	В	Х	Α	А	А	
NITROBENZENE	В	Х	Х	Х	Х	Х	В	А	С	
NITROETHANE	С	В	В	Х	С	В	Х	А	А	
NITROGEN	В	А	А	А	А	А	Α	А	А	COUPLINGS
OCTACHLOROFULUENE	Х	Х	Х	Х	Х	Х	А	D	Х	
OCTYL ALCOHOL	Х	В	В	В	Α	В	Α	А	А	
OLEIC ACID	Х	С	Х	С	С	Х	В	А	А	10
OLEUM	В	В	Х	В	С	Х	Α	D	D	
OLIVE OIL	С	В	Х	А	В	Х	Α	А	В	
O-DICHLOROBENZENE	Х	Х	Х	Х	Х	-	Α	D	Х	
OXALIC ACID	В	В	В	В	В	В	Α	А	А	
OXYGEN COLD	В	А	В	В	Α	В	Α	А	А	SS
OZONE	В	А	Х	Х	С	Х	Α	А	А	ЦЦ
PALMITRIC ACID	С	С	В	А	В	В	Α	В	А	ADAPTORS
PEANUT OIL	Х	В	Х	А	С	Х	Α	А	А	
PERCHLORIC ACID	С	В	Х	Х	В	Х	А	A	D	
PERCHLOROETHYLENE	Х	Х	Х	В	Х	Х	Α	А	Х	
PETROLEUM	Х	В	Х	А	В	Х	A	А	А	
PHENOL (CARBOLIC ACID)	В	В	Х	Х	С	D	Α	А	А	
PHENYLBENZENE	Х	Х	Х	Х	Х	Х	A	D	Х	
PHENYL HYDRAZINE	C	Х	A	Х	Х	В	A	A	Х	CLAMPS
PHORONE	Х	Х	Х	Х	Х	Х	Х	A	D	Δ
PHOSPHORIC ACID 20%	В	A	В	В	В	В	A	A	A	5
PHOSPHORIC ACID 80%	В	В	C	Х	В	C	A	A	A	
PHOSPHORUS TRICHLORIDE	В	Х	Х	Х	Х	X	A	D	Х	
PICRIC ACID	В	В	В	В	A	B	A	A	B	
	Х	X	X	A	X	X	A	A	A	
POLYVINYL ACETATE EMULSION	B	B	B	D	B	X	A	D	D	ES
	B	A	A	B	B	X	X	A	A	ACCESSORIES
POTASSIUM CHLORIDE	B	A	A	A	A	A	A	A	A	SS(
	A	A	A	A	A	A	A	A	A	
	B	A	A	A	A	A	A	A	A	
	B	A	B	A	A	B	A	B	A	
POTASSIUM HYDROXIDE POTASSIUM NITRATE	B B	A	B	B	B	B	X	A	A	1
	B	A B	A B	A	A		A	A	A	
POTASSIUM SULFATE PROPANE		B	Х	A	A B	A X	A	A	A B	
PROPANE PROPYL ACETATE	X C	X	X	A	-		A X	A		TECHNICAL
PROPYL ACCIAIE PROPYL ALCOHOL	B	X A	X A	X	X	X	X A	A	B	z
	B	A B						A X		Б
			X	X	X	X	XE		B	Ë
PROPYLENE	Х	Х	Х	Х	Х	Х	A	A	A	

TECHNICAL CHEMICAL COMPATIBILITY CHART

			(NR)	(BR)	ш	STYRENE BUTADIENE (SBR)	Σ	CROSS LINKED POLYETHYLENE (XLPE)	
	EPDM	HYPALON	NATURAL (NR)	NITRILE (NBR)	NEOPRENE	/RENE 3R)	VITON (FKM)	OSS LIN LYETHY	ш
CHEMICAL	H	Ϋ́Η	NA	ĪZ	NE	ST (SE	LIY	<u>ନ</u> ୍ଦୁ ମ	CPE
PYRANOL (TRANSFORMER OIL)	Х	С	Х	А	В	А	А	Х	А
PYRIDINE	В	В	Х	Х	Х	Х	Х	A	D
SAL AMMONIAC	В	A	A	A	A	A	А	A	А
SALICYCLIC ACID	В	-	A	В	A	В	A	A	А
SALT WATER	В	A	A	A	A	Α	A	A	А
SEWERAGE	В	A	В	A	В	B	A	A	A
SILICONE GREASES	В	A	A	A	A	A	A	A	A
SILICONE OILS	B	A	A	A	A	A	A	A	A
SILVER NITRATE	B	A	A	B	A	A	A	A	A
SKYDROL 500	B	X	X	X	X	X	Х	A	B
SKYDROL 7000	B	X	Х	X	Х	X	B	A	B
SOAP SOLUTIONS	B	A	B	A	B	A	A	A	A
SODA ASH SODIUM ACETATE	B	A A	A	A B	A B	A X	A X	A	A A
SODIUM ACETATE SODIUM BICARBONATE	B		A	A	_	A	A	A	
SODIUM BICARBONATE	B	A A	A	A	A A	B	A	A	A A
SODIUM BISULPHATE	B	A	A	A	A	A	A	A	A
SODIUM BORATE	B	A	A	A	A	A	A	A	A
SODIUM CHLORIDE	B	A	A	A	A	A	A	A	A
SODIUM HYDROXIDE	B	A	A	В	A	A	В	A	A
SODIUM HYPOCHLORITE	C	A	X	B	A	X	A	B	A
SODIUM METAPHOSPATE	В	В	A	A	В	A	A	A	A
SODIUM NITRATE	B	A	В	В	B	A	D	A	A
SODIUM PERBORATE	B	В	B	B	B	B	A	A	D
SODIUM PEROXIDE	B	В	B	B	B	B	A	A	B
SODIUM PHOSPHATE	В	A	A	A	В	A	A	A	A
SODIUM SILICATE	В	А	А	А	А	А	А	А	А
SODIUM SULFATE	В	А	В	А	А	В	А	А	А
SODIUM THIOSULFATE	В	А	В	В	А	В	А	А	А
SOYBEAN OIL	Х	С	Х	А	В	Х	А	А	D
STANNIC CHLORIDE	В	А	А	А	В	А	А	А	А
STEAM	В	Х	Х	Х	С	Х	Х	Х	Х
STEARIC ACID	В	В	В	В	В	В	D	А	А
STYRENE	Х	Х	Х	Х	Х	Х	В	В	С
SUCROSE SOLUTION	В	В	А	А	В	А	А	Α	А
SULFUR	В	А	Х	Х	А	Х	А	A	D
SULFUR CHLORIDE	Х	В	Х	С	С	Х	А	A	D
SULFUR DIOXIDE	В	В	В	Х	Х	В	А	А	D
SULFURIC TRIOXIDE	С	Х	В	Х	Х	В	А	В	Х
SULFURIC ACID 10%	В	А	С	С	В	С	А	А	А
SULFURIC ACID 10%-75%	В	С	Х	Х	Х	Х	А	A	Х
SULFUROUS ACID	В	А	В	В	В	В	A	A	А
TANNIC ACID	В	А	Α	А	Α	Α	Α	A	А
TAR BITUMINOUS	Х	Х	Х	В	С	Х	A	D	D
	С	A	C	A	В	Х	A	A	A
TERPINEOL	Х	Х	Х	В	Х	X	A	B	A
	B	B	B	B	В	B	A	A	B
TETRACHLOROETHYLENE	X	Х	X	Х	Х	X	A	A	C
TETRAETHYL LEAD	Х	Х	Х	В	В	Х	A	D	D



CHEMICAL	EPDM	HYPALON	NATURAL (NR)	NITRILE (NBR)	NEOPRENE	STYRENE BUTADIENE (SBR)	VITON (FKM)	CROSS LINKED POLYETHYLENE (XLPE)	CPE	INTRODUCTION
TOLUENE	Х	Х	Х	Х	Х	Х	А	Α	С	
TRANSFORMER OIL	Х	С	Х	А	В	Х	А	Α	А	
TRANSMISSION FLUID	Х	В	Х	А	В	Х	А	А	А	
TRICHLOROETHANE	Х	Х	Х	Х	Х	Х	А	Α	С	ш
TRICHLOROACETIC ACID	С	Х	С	В	Х	В	С	А	D	HOSI
TRICHLOROETHYLENE	Х	Х	Х	Х	Х	Х	А	А	Х	Ξ
TRICRESYL PHOSPHATE	Х	Х	Х	Х	Х	С	А	А	А	
TRIETHANOL AMINE	В	В	В	В	А	В	Х	А	А	
TRINITROTOLUENE	Х	В	Х	Х	В	Х	А	Α	В	
TURBINE OIL	Х	Х	Х	В	Х	Х	А	А	D	
TURPENTINE	Х	Х	Х	А	Х	Х	А	А	D	S
VEGETABLE OILS	Х	В	Х	А	С	Х	А	А	А	190
VINEGAR	В	А	В	В	В	В	А	Α	А	
VINYL CHLORIDE	Х	Х	Х	Х	Х	Х	А	А	С	COUPLING
WATER	В	А	А	А	А	А	А	А	А	0
WHISKEY, WINES	В	А	А	А	Α	А	А	Α	А	
WHITE OIL	Х	Х	Х	А	В	Х	А	Α	А	
WOOD OIL	Х	С	Х	А	В	Х	А	А	А	
XYLENE	Х	Х	Х	Х	Х	Х	А	А	А	
ZINC CHLORIDE	В	А	А	А	А	А	А	А	А	SS
ZINC SULFATE	В	А	В	А	А	В	А	А	А	TORS

ADAPTOF

CHEMICAL COMPATIBILITY CHART

CHEMICAL RESISTANCE CHART FOR PVC HOSE

Plasticisers are incorporated in PVC compounds so as to confer flexibility and softness. Plasticised compounds can cover a very wide range of flexibility and softness and will also differ in other respects ie tensile strength and resilience, according to the type and/or amount of plasticiser/s used. For example, the type of plasticiser used will affect chemical resistance, but in this note it has been assumed that a commonly used, fairly resistant plasticiser such as dioctyl phthalate (DOP) would be present.

The amount of plasticiser incorporated will also effect the chemical resistance, an increase in plasticiser content leading to a deterioration in chemical resistance because the plasticiser is less resistant to attack than is the PVC. The chemical resistance to be expected from plasticised PVC when D.O.P is used as the plasticiser is summarised in the following paragraphs.

ACIDS AND ALKALIS

Diluted acids and alkalis have little effect at room temperature, but at elevated temperatures some hydrolysis and extraction of plasticiser may occur. Concentrated acids and alkalis hydrolyse plasticisers slowly in the cold and more rapidly when heated. The main effect of organic liquids on plasticised PVC is to extract the plasticiser and this results in some hardening, particularly when the PVC is removed from contact with the liquid. The compound may become rigid and less tough.

Most organic solvents will extract plasticiser and give rise to these effects, but with aromatic and chlorinated hydrocarbons, aliphatic and cyclic ethers, this plasticiser extraction is accompanied by a softening of the PVC and the overall effect is difficult to predict. With certain solvents too, plasticiser extracted is replaced by the solvent so that the compound remains flexible provided it remains in contact with that liquid. On allowing the solvent to evaporate the material will stiffen and will not soften on re-immersion.

The undesirable effects previously mentioned which can occur with PVC compounds containing a monomeric ester type plasticiser, such as DOP, can be prevented or reduced by the use instead of a polyermic type of plasticiser which affords a higher resistance to extraction. Such plasticisers include polypropylene adipate (PPA) and polypropylene sebacate (PPS), the former being of value in contact with oils and fuels and the latter showing a high degree of resistance to soap and detergent solutions.

For materials which have been rated as having Limited Life or Unsatisfactory, the material should only be considered for use when alternative materials are unsatisfactory and where limited life is accepted. When PVC is to be used with such chemicals, full scale trials under realistic conditions are particularly necessary.

It may be safely assumed that chemical resistance decreases with both increasing temperature and with increasing concentration of re-agent, and that the reverse is also true. No valid assumptions can be made; however, if the temperature and concentration move in compensating directions.

The following Chemical Resistance Chart is not intended to be complete. Any chemicals missing from this chart is not an indication of unsuitability.

KEY TO CHEMICAL GUIDES:

A - Satisfactory.

- B Recommended for the service and conditions for oil hoses.
- C The material may be considered for use when alternative materials are unsatisfactory, and when limited life is acceptable.
- D When PVC is to be used with such chemicals, full-scale trials under realistic conditions are particularly necessary.
- X Unsatisfactory.



			TIONS
CHEMICAL	CONCENTRATION	20°C (68°F)	60°C (140°F)
	10%	A	C
ACETIC ACID	60%	A	c
	Glacial	Х	Х
ACETIC ANHYDRIDE		Х	Х
ACETONE	Traces	X	X
ADIPIC ACID	100%	X D	X
ALCOHOL ALLYL		X	X
	40% w/w water	A	D
ALCOHOL ETHYL	100%	A	D
ALCOHOL ISOPROPYL		А	D
ALCOHOL METHYL	6% aq. solution	А	А
	100%	С	D
ALLYL CHLORIDE		Х	Х
ALUMINIUM SALTS		A	A
	s.g. = 0.88 aq. solution	А	Х
AMMONIA	Dry gas	D	D
	Liquid	D	D
AMMONIUM HYDROXIDE		A	D
AMMONIUM SALTS		А	А
AMMONIUM SULFIDE		А	Х
ANILINE		Х	Х
ANIMAL OIL		A	D
BARIUM SALTS		A	A
BEER	Treese	A X	D X
BENZALDEHYDE	Traces 100%	X	X X
BENZENE	100%	X	X
BORAX		A	D
BRINE		A	A
	Gas, traces	X	X
BROMINE	100% dry gas	Х	Х
	Liquid	Х	Х
BUTANE		D	D
BUTANOL		A	D
BUTYL ACETATE	2004	X	X
BUTYRIC ACID	20% aq. solution	A	D
CALCIUM HYDROXIDE	Concentrate	X	X D
CALCIUM HYDROXIDE		A	D
CALCIUM SALTS		A	A
CARBON DIOXIDE		A	A
CARBON DISULPHIDE		X	X
CARBON MONOXIDE		А	А
CARBON TETRACHLORIDE		Х	Х
CASEIN		A	А
CHLORINE WATER	Saturated solution	C	Х
CHLOROBENZENE	100/ ()	X	X
	10% (dry gas)	D	D
CHLORINE	100% (dry gas) 10% (most gas)	D D	D D
CHLOROFORM	10% (most gas)	X	X
CHLOROFORM CHLOROSULFONIC ACID		X	X
	Plating solution	X	X
CHROMIC ACID	Conc	D	D
CITRIC ACID		A	D
COPPER SALTS		A	A
CUCLOEXANOL		X	X
CYCLOEXANONE		Х	Х
	1		

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TECHNICAL CHEMICAL COMPATIBILITY CHART

		COND	TIONS
		20°C	60°C
CHEMICAL	CONCENTRATION	(68°F)	(140°F)
MIXED ACIDS (SULPHURIC/ NITIRIC)	Various proportions	D	Х
MOLASSES		А	А
NAPHTHA		Х	Х
NAPHTHALENE		Х	Х
NICKEL SALTS		А	А
	10%	А	D
	25%	A	D
NITRIC ACID	50%	A C	C X
	70% 95%	X	X
NITROBENZENE	5570	X	X
NITROGEN FERTILIZERS		A	D
NITROUS FUMES	Moist	D	Х
OLEIC ACID		А	D
OXALIC ACID		А	D
OXYGEN		А	А
OZONE		А	D
PALMITIC ACID		А	D
PARAFFIN		C	D
PETROL	00.20	B	B
PETROL BENZENE MIXTURE PHENOL	80:20	X D	X X
	20% aq. solution	A	A
PHOSPHORIC ACID	30% aq. solution	A	A
PHOSPHORIC DEVELOPERS		A	A
PHOTOGRAPHIC EMULSIONS		А	А
PHOTO FIXING SOLUTION		А	А
PICRIC ACID	1% w/w in water	А	А
T ICHIC ACID	10% w/w in alcohol	А	D
	1% aq. solution	A	A
POTASSIUM HYDROXIDE	10% aq solution	A	A
POTASSIUM SALTS	conc. aq. solution	A A	X
PROPANE		В	B
PROPYLENE DICHLORIDE		X	X
SALICYLIC ACID		D	D
SEA WATER		А	А
SOAP SOLUTION		А	D
	1% aq. solution	А	D
SODIUM HYDROXIDE	10% aq. solution	А	C
	40% aq. solution	A	X
	Conc. aq. solution	A	X
SODIUM HYPOCHLORITE SODIUM SALTS	15% act. cl	A A	C A
	Dry	A	A
SULPHUR DIOXIDE	Moist	D	X
	Liquid	D	X
	10%	A	А
	45%	А	А
SULPHURIC ACID	50%	А	С
	60%	С	С
	98%	Х	Х
	Fuming	X	X
SULPHUROUS ACID	30%	A	D
TALLOW TANNIC ACID		A	D
		A	D
TANNING EXTRACTS			
TANNING EXTRACTS TARTARIC ACIDS		А	D
		A A	D D

		COND	TIONS
CHEMICAL	CONCENTRATION	20°C (68°F)	60°C (140°F)
TETRALIN		Х	Х
TOLUENE		Х	Х
TRANSFORMER OIL		В	Х
TRICHLOROETHANE		Х	Х
TRIETHANOLAMINE		А	А
TRICHLOROETHYLENE		Х	Х
TRIETHYLAMINE		D	D
TURPENTINE		D	D
UREA		А	D
VEGETABLE OIL		А	D
VINEGAR		А	D
VINYL ACETATE		Х	Х
WATER		А	А
WETTING AGE		А	А
WINES AND SPIRITS	All concentrates	А	D
XYLENE		Х	Х
ZINC SALTS		Α	A

Ryco

GENERAL TEMPERATURE CONVERSION CHART

TEMPERATURE CONVERSIONS

C	°F/°C	°F	°C	°F/°C	۴F	°C	°F/°C	°F
'3	-100	-148	5.0	41	105.8	33.3	92	197
58	-90	-130	5.6	42	107.6	33.9	93	199
52	-80	-112	6.1	43	109.4	34.4	94	201
57	-70	-94	6.7	44	111.2	35.0	95	203
51	-60	-76	7.2	45	113.0	35.6	96	204
6	-50	-58	7.8	46	114.8	36.1	97	206
10	-40	-40	8.3	47	116.6	36.7	98	208
34	-30	-22	8.9	48	118.4	37.2	99	210
.9	-20	-4	9.4	49	120.2	37.8	100	212
23	-10	14	10.0	50	122.0	43	110	230
7.8	0	32	10.6	51	123.8	49	120	248
7.2	1	33.8	11.1	52	125.6	54	130	266
5.7	2	35.6	11.7	53	127.4	60	140	284
5.1	3	37.4	12.2	54	129.2	66	150	302
5.6	4	39.2	12.8	55	131.0	71	160	320
5.0	5	41.0	13.3	56	132.8	77	170	338
1.4	6	42.8	13.9	57	134.6	82	180	356
3.9	7	44.6	14.4	58	136.4	88	190	374
3.3	8	46.4	15.0	59	138.2	93	200	392
2.8	9	48.2	15.6	60	140.0	99	210	410
2.2	10	50.0	16.1	61	141.8	100	212	413
1.7	11	51.8	16.7	62	143.6	104	220	42
1.1	12	53.6	17.2	63	145.4	110	230	446
0.6	13	55.4	17.8	64	147.2	116	240	464
0.0	14	57.2	18.3	65	149.0	121	250	482
.4	15	59.0	18.9	66	150.8	127	260	500
.9	16	60.8	19.4	67	152.6	132	270	518
.3	17	62.6	20.0	68	154.4	138	280	536
.8	18	64.4	20.6	69	156.2	143	290	554
.2	19	66.2	21.1	70	158.0	149	300	572
.7	20	68.0	21.7	71	159.8	154	310	59
.1	21	69.8	22.2	72	161.6	160	320	60
.6	22	71.6	22.8	73	163.4	166	320	62
.0	23	73.4	23.3	74	165.2	170	338	640
.4	24	75.2	23.9	75	167.0	171	340	644
.9	25	77.0	24.4	76	168.8	177	350	662
.3	26	78.8	25.0	77	170.6	182	360	680
.8	27	80.6	25.6	78	172.4	186	366	691
.2	28	82.4	26.1	79	174.2	188	370	698
.7	29	84.2	26.7	80	176.0	193	380	716
.1	30	86.0	27.2	81	177.8	198	388	730
.6	31	87.8	27.8	82	179.6	199	390	734
)	32	89.6	28.3	83	181.4	204	400	752
.6	33	91.4	28.9	84	183.2	208	406	763
.1	34	93.2	29.4	85	185.0	210	410	770
.7	35	95.0	30.0	86	186.8	216	420	788
.2	36	96.8	30.6	87	188.6	221	430	806
.8	37	98.6	31.1	88	190.4	227	440	824
.3	38	100.4	31.7	89	192.2	232	450	842
.9	39	102.2	32.2	90	194.0			

TECHNICAL TEMPERATURE LIMITS FOR STEAM

				AM TEMPER							
TEMPE		TEMPERATU BAR	JRE - PRESS PSI	URE EQUIVA		RATED STE	AM GAUGE P PSI	1	' SEA LEVEL RATURE	BAR	PSI
		DAK	PSI			DAK	FJI			DAK	FSI
° C	° F	0.00	0.0	° C	° F	2 71	20.4	° C	° F	6 70	07.1
100.0 101.1	212 214	0.00 0.04	0.0 0.6	141.1 141.7	286 287	2.71 2.78	39.4 40.3	168.9 169.4	336 337	6.70 6.80	97.1 98.7
101.1	214	0.04	1.2		287		40.5	170.0		6.91	100.2
102.2	218	0.08	1.2	142.2 142.8	289	2.83 2.89	41.1	170.0	338 339	7.02	100.2
103.3	218	0.12	2.5	142.8	289	2.89	42.0	170.0	340	7.12	101.8
104.4	220	0.17	3.2	143.5	290	3.02	42.9	171.1	340	7.12	105.0
105.8	222	0.22	3.2	145.9	291	3.02	43.0	171.7	341	7.24	105.0
107.8	224	0.27	3.9 4.6	144.4	292	3.14	44.7	172.2	342	7.34	108.2
107.8	228	0.32	5.3	145.6	293		45.0	172.8	343	7.40	108.2
110.0	228	0.36	5.5 6.1	145.6	294	3.20 3.27	40.5	173.5	345	7.68	109.8
111.1	230	0.42	6.9	146.1	295	3.34	47.5	173.9	345	7.00	113.1
111.1	232	0.47	7.7	140.7	296	3.40	40.4	174.4	340	7.9	113.1
112.2	234	0.53	8.5	147.2	297	3.40	50.3	175.6	348	8.03	114.0
113.5	238	0.58	8.5 9.4	147.8	298	3.54	50.5	175.6	340	8.05	118.2
114.4	238	0.85	9.4 10.3	148.9	300		51.5	176.1	350	8.26	110.2
115.6	240	0.71	10.5		300	3.60	52.5	176.7	350	8.51	123.5
117.8	242	0.77		149.4 150.0	301	3.68		177.8	352	8.76	125.5
117.8	244	0.83	12.1 13.1	150.0	302	3.75 3.82	54.4 55.4	178.9	356	9.02	127.1
120.0	240	0.90	13.1		303	3.89	56.4		358	9.02	130.8
120.0	240	1.04	14.1	151.1 151.7	304	3.96	57.5	181.1 182.2	358	9.27	134.5
121.1	250	1.12	16.2	151.7	305	4.04	57.5	183.3	362	9.55	136.5
122.2	252	1.12	17.3	152.2	300	4.04	59.7	184.4	364	10.08	142.3
123.3	256	1.19	17.5	153.3	307	4.12	60.7	185.6	366	10.08	140.2
124.4	258	1.27	19.6	153.9	309	4.18	61.9	185.0	368	10.50	150.5
125.0	260	1.43	20.7	154.4	310	4.20	63.0	180.7	370	10.94	154.4
120.7	261	1.47	20.7	155.0	311	4.43	64.2	188.9	370	11.23	163.0
127.8	262	1.51	22.0	155.6	312	4.50	65.3	190.0	372	11.54	167.4
127.0	263	1.56	22.6	155.0	313	4.58	66.5	191.1	374	11.85	171.9
128.9	264	1.60	23.2	156.7	314	4.66	67.6	192.2	378	12.16	176.4
129.4	265	1.65	23.9	150.7	315	4.74	68.8	193.3	380	12.50	181.1
130.0	266	1.70	24.5	157.8	316	4.82	70.0	194.4	382	12.81	185.8
130.6	267	1.74	25.2	157.8	317	4.91	71.3	195.6	384	13.14	190.6
131.1	268	1.78	25.8	158.9	318	4.99	72.5	196.7	386	13.48	195.6
131.7	269	1.83	26.5	159.4	319	5.08	73.7	197.8	388	13.83	200.6
132.2	270	1.87	27.2	160.0	320	5.17	75.0	197.0	390	14.18	205.7
132.8	270	1.92	27.9	160.6	321	5.26	76.3	200.0	392	14.54	210.9
133.3	272	1.97	28.6	161.1	322	5.34	77.5	201.1	394	14.90	216.2
133.9	273	2.02	29.3	161.7	323	5.43	78.8	202.2	396	15.27	221.5
134.4	274	2.07	30.0	162.2	324	5.52	80.1	203.3	398	15.65	227.0
135.0	275	2.12	30.8	162.8	325	5.62	81.5	204.4	400	16.04	232.6
135.6	276	2.12	31.5	163.3	326	5.71	82.8	205.5	402	16.41	238.0
136.1	277	2.23	32.3	163.9	327	5.80	84.2	206.7	404	16.82	244.0
136.7	278	2.27	33.0	164.4	328	5.90	85.6	207.8	406	17.23	250.0
137.2	279	2.33	33.8	165.0	329	5.99	87.0	208.9	408	17.65	256.0
137.8	280	2.38	34.5	165.6	330	6.09	88.4	210.0	410	18.06	262.0
138.3	281	2.43	35.3	166.1	331	6.19	89.8	211.1	412	18.47	268.0
138.9	282	2.49	36.1	166.7	332	6.29	91.2	212.2	414	18.96	275.0
139.4	283	2.54	36.9	167.2	333	6.39	92.7	213.3	416	19.37	281.0
140.0	284	2.60	37.7	167.8	334	6.48	94.1	214.4	418	19.85	288.0
140.6	285	2.66	38.6	168.3	335	6.59	95.6	215.6	420	20.27	294.0



VACUUM CONVERSION TABLE

VACUUM	CONVERS	SION TABI	_E					NO
			WA	TER	MER	CURY	PERCENTAGE %	UCTIO
АТМ	BAR	PSI	m	ft	mm	inch		
0.1	0.09	1.4	1	3' 3 3/8"	73.6	2.9	10	TR(
0.2	0.19	2.8	2	6'63/4"	147.1	5.8	20	Ξ
0.3	0.29	4.2	3	9′ 10 1/8″	220.7	8.7	30	
0.4	0.39	5.7	4	13′11/2″	294.2	11.6	40	
0.5	0.49	7.1	5	16′413/16″	367.8	14.5	50	
0.6	0.58	8.5	6	19'8 3/16"	441.3	17.4	60	
0.7	0.69	10.0	7	22'11 9/16"	514.9	20.3	70	ш
0.8	0.78	11.4	8	26' 2 15/16"	588.4	23.2	80	0S
0.9	0.88	12.8	9	29' 6 3/8"	662.0	26.0	90	T
1.0	0.98	14.2	10	32'911/16"	735.5	29.0	100	

FEET OF WATER TO INCHES OF MERCURY CONVERSION TABLE

FEET OF WATER	1	2	4	6	8	10	12	14	16	20	22	24	26	28	30	32	34
INCHES OF MERCURY	0.9	1.8	3.5	5.3	7.1	8.8	10.6	12.4	14.1	17.7	19.4	21.2	23.0	24.8	26.5	28.3	30.0

PRESSURE CONVERSIONS

100 psi = 6.9 Bar	5 Bar = 72.5 psi
250 psi = 17.25 Bar	10 Bar = 145 psi
600 psi = 41.4 Bar	25 Bar = 362.5 psi

MEASUREMENT INFORMATION

MEASURES OF PRESSURE:

1 Pound Per Square Inch = 144 Pounds Per Square Foot = 0.068 Atmosphere = 2.042 Inches of Mercury at 62°F = 27.7 Inches of Water at $62^{\circ}F = 2.31$ Feet of Water at $62^{\circ}F$.

1 Atmosphere = 30 Inches of Mercury at $62^{\circ}F = 14.7$ Pounds Per Square Inch = 2116.3 Pounds Per Square Foot = 33.95 Feet of Water at 62°F.

1 Foot of Water at 62°F = 62.355 Pounds Per Square Foot = 0.433 Pounds Per Square Inch.1 Inch of Mercury at 62°F = 1.132 Feet of Water = 13.58 Inches of Water = 0.491 Pounds Per Square Inch.

Column of Water 12 Inches High, 1 Inch in Diameter = .341 Pounds

LENGTH CONVERSION CONSTANTS:							
Millimeters x .039370 = Inches	Inches x 25.4001 = Millimeters						
Meters x 39.370 = Inches	Inches x .0254 = Meters						
Meters x 3.2808 = Feet	Feet x .30480 = Meters						
Meters x 1.09361 = Yards	Yards x .91440 = Meters						
Kilometers x 3,280.8 = Feet	Feet x .0003048 = Kilometers						
Kilometers x .62137 = Statute Mile	Statute Miles x 1.60935 = Kilometers						
Kilometers x .53959 = Nautical Miles	Nautical Miles x 1.85325 = Kilometers						

WEIGHT CONVERSION CONSTANTS:							
Grams x .03527 = Ounces (Avd.)	Ounces (Avd.) x 28.35 = Grams						
Grams x .033818 = Fluid Ounces (Water)	Fluid Ounces (Water) x 29.57 = Grams						
Kilograms x 35.27 = Ounces (Avd.)	Ounces (Avd.) x .02835 = Kilograms						
Kilograms x 2.20462 = Pounds (Avd.)	Pounds (Avd.) x .45359 = Kilograms						

TECHNICAL RYCO TERMS OF SALE ("RTS")

These RTS are the terms and conditions of each of RYCO HYDRAULICS PTY LTD ABN No 96 085 527 724; RYCO 24.7 Pty Ltd ABN 97 054 946 173 and each is referred to, severally, as "RYCO".

- Unless otherwise expressly agreed in writing, the products and services supplied by RYCO ("RPS") are supplied upon the following RTS to the exclusion of any (written or verbal) terms and conditions of the purchaser and no agent or representative of RYCO has any authority to vary or omit any of these terms in relation to a specific purchaser.
- 2. Before purchasing any RPS the purchaser:
 - a) agrees that they have read and understood these RTS, the safety information, notes, warnings and instructions contained in RYCO's current relevant catalogues, product technical manuals, manuals and published technical data ("Documents"); and
 - b) holds themselves as a responsible, competent and appropriately skilled user or reseller of RPS and that they comprehend and understand the dangers of incorrect use, installation or assembly of such products. Documents are available on the RYCO website **www.RYCO.com.au**.
- 3. Each request for RPS (whether in writing or verbally) which sets out the quantity, price and a description of the RPS required, including a date and address for delivery (or, in the case of services, date for performance) ("Order") placed by the purchaser amounts to an offer by it to acquire from RYCO the RPS described in the Order upon these RTS. RYCO may, in its discretion, accept an offer by doing one of the following within 30 days after the date that RYCO receives the Order:
 - a) deliver the RPS (or perform the services) to the address for delivery set out in the Order; or
 - b) provide express written acceptance of the Order to the purchaser giving an estimated date for delivery.
 - Failure of RYCO to accept the order in accordance with this clause 3 will be a rejection of the Order.
- 4. Each Order that is accepted by RYCO under clause 3 constitutes a separate contract between RYCO and the purchaser which the parties agree is governed by these RTS.
- 5. RYCO may, in its discretion, refuse to sell or supply RPS to the purchaser, and may, but is not obliged to, give written notice to that effect. RYCO is not required to give reasons for its refusal.
- 6. Any Order, including any order for special production runs under clause 17, that has been accepted by RYCO may not be reduced or cancelled by the purchaser after acceptance without the agreement of RYCO in writing.
- 7. The purchaser agrees that all RPS it orders are for the purposes of business and the purpose of re-supply or transforming them in the process of trade or commerce, and not for personal, domestic or household use or consumption, and that the Australian Consumer Law does not apply to the supply of RPS to the purchaser to the extent permitted by that Act. The purchaser acknowledges and agrees that RYCO relies upon this representation in agreeing to deliver or provide the RPS.
- 8. All products supplied by RYCO must be examined by the purchaser at the time of delivery and any deficiency in quantity or quality of or damage to product delivered ("Defect") must be notified to RYCO within 5 business days of the date of delivery to the purchaser. If the purchaser does not provide such notification to RYCO then this shall be deemed to be an acknowledgment by the purchaser that the:
 - a) quantities as set out by the invoice are correct; and
 - b) products are of an acceptable quality; and
 - c) the products are not damaged and will not be returned.
- 9. Subject to clauses 11 and 13 below, RYCO warrants to the purchaser that the RPS will be of an acceptable quality on delivery and for twelve months from issue of invoice by RYCO ("Warranty"). The purchaser agrees that it will not provide any express warranty in respect of the RPS to any customer other than the Warranty as provided here, and releases and indemnifies RYCO from any liability for any representation made by the purchaser to a customer that exceeds the Warranty. RYCO will not provide any warranty whatsoever on items manufactured, built or acquired wholly or partially to the purchaser's designs or specifications.
- 10. If the purchaser provides notification of a Defect to RYCO pursuant to clause 8 and lodges a Warranty claim in relation to RPS, RYCO's liability will be limited as set out in clause 13.
- 11. To the extent permitted by law, RYCO will not be liable for a breach of the Warranty set out in clause 9 for any of the following:
 - a) the purchaser not providing notification to RYCO pursuant to clause 8;
 - b) the purchaser or the user of the RPS has not used the RPS in accordance with the instructions or specifications set out in the Documents;
 - c) use of the RPS that is contrary to the instructions contained in RYCO's Documents, as this may result in an unsatisfactory or even dangerous product;
 - d) defects caused by normal or accelerated deterioration; physical, chemical, electrochemical or environmental conditions; insufficient maintenance or incorrect repair; failure to follow correct storage, user and operating instructions; use of unsuitable materials;
 - e) products that have been incorrectly assembled in accordance with the assembly operations specified in RYCO's Documents;
 - f) the modification of RPS, other than in accordance with RYCO's written approval;
 - g) the performance of any RPS that are welded (except if the welding is carried out by RYCO, its servants or its agents) by a person who is not suitably qualified including, but not limited to, weldons, salvage, life saver or any other components. These welded products should be tested and proved fit for the use intended; and
 - h) the claimant does not extend to RYCO a reasonable opportunity to fully inspect the product, the subject of the claim and the circumstances giving rise to the claim.
- 12. Subject to clause 9 and except as conferred by law, no express warranty or guarantee is given with respect to any of the characteristics or quality of RPS supplied.
- 13. Where any law or statute implies in these RTS, any term, condition or warranty and that Act, law or statute avoids or prohibits a contract excluding or modifying the application of or exercise of or liability under such term, condition or warranty, such term, condition or warranty will be deemed to be included in these RTS. The liability of RYCO to the purchaser for any breach of such term, condition or warranty, or any breach of the Warranty will be limited, at the option of RYCO, to:
 - a) if the breach relates to goods:
 - i) the replacement of the goods or the supply of the equivalent goods;
 - ii) repair of the goods
 - iii) the payment of the cost of replacing the goods or of acquiring equivalent goods or having the goods repaired; or
 - b) if the breach relates to services:
 - i) the resupply of the services (or part of them); or
 - ii) the payment of the cost of having the services supplied again.
- 14. RYCO sets out, in its Documents and other product material, suggestions as to the use, installation and care of its products on the understanding that those suggestions are made solely to assist the purchaser to obtain the best results from their purchase and those suggestions do not constitute warranties or otherwise add to or vary these terms in any way.
- 15. Unless otherwise stated to the contrary by the purchaser on a written Order, RYCO will supply products on the understanding that they will be used in hydraulic applications with mineral oil within the limits shown in RYCO's current Documents.

RYCO QUALITY

RYCO TERMS OF SALE ("RTS")

- 16. RYCO will use its best endeavours to deliver at the time stated in the Order, but all delivery dates shall be regarded as estimates only. The purchaser must accept the actual delivery date and RYCO shall not be liable for any losses, costs, damages or expenses suffered by the purchaser or any other party as a result of any delay in delivery.
- 17. Where Orders are accepted by RYCO for special production runs, unless otherwise agreed to in writing, RYCO reserves the right to make delivery and charge for plus or minus 20 units or 15% of the order quantity, which ever is greater. RYCO will not accept any restriction of its right to manufacture or sell or offer to any other purchaser products which may have been manufactured specially for a specific purchaser or purchasers.
- 18. Payment is to be made in cash, cheque or by direct debit within 30 days of invoice date. If:
 - a) the purchaser fails to make any payments that are due to RYCO on or before the due date stipulated in the invoice, under this or any other contract, RYCO may delay, suspend or cancel deliveries in whole or in part at its sole discretion;
 - b) the payment is not made within these RTS, interest will be calculated and charged at the interest rate fixed from time to time in section 2 of the Penalty Interest Rates Act 1983 (Vic) plus an additional 2% per month, and will be charged monthly and accrue from the date of invoice until all overdue amounts are paid in full; and
 - c) any amount becomes overdue, all amounts recorded on the purchaser's account will be deemed to be immediately due and payable. The purchaser agrees to pay all costs and expenses incurred by RYCO, its agents and its servants in the recovery of the overdue amounts, including but not limited to all legal costs, debt recovery costs and debt recovery agency costs.
- 19. The RPS remain the property of RYCO and title in the RPS only passes from RYCO to the purchaser once RYCO has received all amounts due to it from the purchaser for those RPS. Risk in the RPS passes to the purchaser when the RPS leave RYCO's premises for delivery to the purchaser and the purchaser must indemnify RYCO against any loss to the RPS occurring after delivery. The purchaser must store the RPS separately from any other goods of its own or other suppliers and in a way that enables the RPS to be clearly identifiable as RYCO's. While RYCO retains title to the RPS, the purchaser holds the RPS as RYCO's fiduciary and the purchaser is authorised to sell the RPS as RYCO's agent and fiduciary and the proceeds of any sale of RPS or insurance claim regarding RPS must be held on trust for RYCO until title to the RPS passes to the purchaser. The parties acknowledge that under this arrangement, when the purchaser receives the RPS the purchaser is deemed to grant RYCO a security interest (as that term is defined in section 12 of the Personal Property Securities Act 2009) (PPSA) in the RPS securing the purchaser's obligation to return the goods to RYCO or pay the purchase price.
- 20. At any time after the due date for payment of any account owing from the purchaser to RYCO, or if the purchaser is subject to an insolvency event (ie in relation to a body corporate, a winding up, the appointment of a voluntary administrator, receiver, manager or similar insolvency administrator to a party or any substantial part of its assets, or in relation to an individual, becoming bankrupt or entering into a scheme or arrangement with creditors or, in relation to a body corporate or an individual, the occurrence of any event that has a substantially similar effect to any of the above events) and has not paid any outstanding amount owing to RYCO, and so long as such amounts have not been received by RYCO in full, RYCO at the purchaser's expense, may recover possession of these, or any other RPS that RYCO has previously delivered to the purchaser which are of an equivalent value. If this occurs, the purchaser grants a licence to RYCO to enter any premises where such RPS are situated to search for, inspect and/or repossess such RPS. RYCO has the right to resell any RPS repossessed and is not liable to the purchaser or any person claiming through the purchaser arising from any repossession of RPS (or any other act or omission by RYCO or its agents engaged in by RYCO or them pursuant to the licence granted under this clause).
- 21. The purchaser acknowledges and agrees that these RTS constitute a Security Agreement which creates a Security Interest (a Purchase Money Security Interest) under the PPSA in favour of RYCO. RYCO holds a Security Interest in all RPS previously supplied by RYCO to the purchaser, and will hold a Security Interest in all after acquired RPS supplied on the terms set out in clauses 19 and 20, notwithstanding anything express or implied to the contrary contained in the purchaser's purchase order.

The purchaser agrees:

h)

- a) that RYCO may effect a registration of its Security Interest on the Personal Properties Securities Register (PPSR) at its sole discretion;
- b) to provide RYCO with all information (which information the purchaser warrants to be complete, accurate and up to date in all respects) and execute any document or do anything that RYCO may reasonably require to enable perfection of its Security Interest or registration of a Financing Statement or Financing Change Statement on the PPSR;
- c) not to register a Financing Change Statement or an amendment demand without the prior written consent of RYCO;
- d) to provide to RYCO not less than fourteen days prior written notice of any proposed change in the purchaser's name or any other change in its details (including but not limited to change in the address, facsimile, email, trading name or business practice);
- e) if requested by RYCO, and to the extent permissible under the PPSA, pay all reasonable costs incurred by RYCO to register a Financing Statement and to maintain up-to-date registration of its Security Interest on the PPSR;
- f) reimburse RYCO the full cost incurred by RYCO (including legal costs and disbursements on an indemnity basis) in obtaining an order pursuant to section 182 of the PPSA;
- g) as between the purchaser and RYCO, where RYCO has rights under this Agreement in addition to those in Chapter 4 of the PPSA, those rights will continue to apply and will not be limited by s125 of the PPSA;
 - to the extent permitted by law, to waive any rights that the purchaser may have to:
 - receive notice of removal of an accession under section 95 of the PPSA, and not to have the RPS damaged when RYCO removes the accession;
 reinstatement of the security agreement pursuant to s143 of the PPSA;
 - (iii) receive any notice required under the PPSA, including but not limited to a notice of retention or a notice of disposal or a statement of account on enforcement of the Security Interest in accordance with s115 of the PPSA;
- (iv) receive a Verification Statement in respect of any Financing Statement relating to the Security Interest pursuant to section 157 of the PPSA, For the purposes of this clause 21, capitalised terms have the meaning of those terms in the PPSA.
- 22. RYCO will not be liable for breach of contract arising from or caused by, directly or indirectly, fire, flood, earthquake, storm or tempest; the action of any government or any public authority or corporation; the lack of labour, supplies or equipment, from whatever cause; or any other cause beyond RYCO's control.
- 23. This contract shall be governed by and construed by the laws of the State of Victoria, Australia.
- 24. If any of these RTS or any part thereof is held by a court to be void or unenforceable such provision shall be read down to such extent as may be necessary to ensure that it does not so infringe and as may be reasonable in all circumstance so as to give it valid operation of a partial character and in the event that the infringing condition cannot be so read down it will be severed from the other provisions.
- 25. RYCO may amend these RTS from time to time, but those amendments will not take effect until RYCO has notified the purchaser in writing of those amendments. The applicable version will be those RTS attached to or forming part of the relevant Order and will take precedence over any earlier version contained in the Documents.
- 26. RYCO may cancel these RTS at any time by giving written notice to the purchaser of the cancellation. RYCO will supply any Order that has been accepted by it (under clause 3) on or before the date of that cancellation notice.
- 27. RPS are designed for use in static equipment, mobile ground vehicles, mobile ground equipment and marine applications. RPS are not designed for use in flight applications. RYCO does not recommend use of its products on aircraft and has no liability to the purchaser if the purchaser supplies the goods to consumers for use on aircraft.
- 28. The purchaser may not assign, transfer or otherwise dispose of any of the rights or obligations of this or any other contract with RYCO that is subject to these RTS without the prior written consent of RYCO.

CONNECTING PARTNERSHIPS

TECHNICAL

GLOSSARY

A/F	Across Flats	Clamp	A metal fitting, band or wire used around the
Abrasion	A wearing away by friction.		outside of a hose end to secure a coupling, fitting or nipple.
ABS, Abs.	Absolute	Cold Flow	Continued deformation or movement of rubber
ABS	American Bureau of Shipping		under stress.
ABL	Alternate Buckle Locations	Compression Set	The deformation that remains in rubber after it has
AC	Air Conditioning		been subjected to and released from stress such
Acid Resistant	Having the ability to withstand the action of identified acids within specified limits of		as a clamp. The longer the stress is maintained the more definitive the deformation.
	concentration and temperature.	Conductive	A rubber having qualities of conducting or
Adaptor	The accessory part which can complete the	conductive	transmitting heat or electricity. Most generally,
	connection between a hose fitting and another		applied to rubber products capable of conducting
	fluid system component. Often, a tube fitting		static electricity.
	connected to a hose assembly rather than a tube assembly.	Copolymer	A polymer formed from two or more types of monomers.
Adhesion	The strength of bond between cured rubber	Corrugated Cover	A longitudinally ribbed or grooved exterior.
	surfaces or between a cured rubber surface and a	Corrugated Hose	Hose with a carcass fluted radially or helically to
	non-rubber surface.	confugated hose	enhance its flexibility or reduce its weight.
Adhesion Failure:	(1) the separation of two bonded surfaces at an	Coupling	A device at the end or ends of a length of hose that
	interface by a force less than specified in a test method; (2) the separation of two adjoining		allows a connection to be made.
	surfaces owing to service conditions.	Cover Wear	The loss of material during use due to abrasion,
AGA	Australian Gas Association	C 1 //	cutting or gouging.
Ageing	Changes in physical properties over a period of	CrVI	Chromium 6
	time.	Cracking	A sharp break or fissure in the surface. Generally caused by strain and environmental conditions.
Ambient Temperature	The temperature of the atmosphere or medium	Crimping	The act of forming the metal sleeve or ferrule of
Anadica	surrounding an object under consideration.	chinping	a hose fitting with a surrounding series of die
Anodise	A process for aluminium, similar to zinc or chrome plating steel, in which an aluminium part		segments to compress the hose within the fitting.
	is electrically charged then, dipped in various		The crimping process changes the shape of the entire circumference and length simultaneously.
	chemicals to produce various colours and/or		Often interchanged with the term "swaged".
	surface hardness.	cSt	Centistoke
ANSI	American National Standards Institute, Inc.	Cure	The act of vulcanisation. See also: vulcanisation.
API	American Petroleum Institute	C/W	Complete With
Armoured Hose	A hose with a protective covering, applied as a braid or helix, to protect from physical abuse.	DIA, DIAM	Diameter
ASME	American Society of Mechanical Engineers	DIN	Deutsche Industrie Normen (German Industrial
ASTM	American Society for Testing and Materials		Standard)
AS	Australian Standard	DKL	Dicht Kegel Leicht (Metric Light Series 24° Cone)
ATM	Atmosphere (pressure)	DKM	Dicht Kegel Metric (Metric 60° Cone)
AV	Average	DKO	Dicht Kegel O Ring (Metric O Ring Seal 24° Cone)
	A two-piece hose fitting comprised of a barbed	DKOL	Dicht Kegel O Ring Leicht (Metric Light O Ring
	nipple and ferrule, normally with peripheral ridges	DKOC	Series 24° Cone)
	or backward-slanted barbs, for inserting into a hose	DKOS	Dicht Kegel O Ring Schwer (Metric Heavy O Ring Series 24° Cone)
BCS	and a ferrule, usually crimped, outside. British Coal Standard	DKS	Dicht Kegel Schwer (Metric Heavy Series 24° Cone)
Bend Radius	The radius of a bent section of hose measured to	DL	Drop Length
Dena nadias	the innermost surface of the curved portion.	DN	Diameter Nominal (mm)
BH	Bulkhead	DNV	Det Norske Veritas
Bore	(1) an internal cylindrical passageway, as of a tube,	DoT	Department of Transportation (USA)
	hose or pipe; (2) the internal diameter of a tube,	Durometer	An instrument for measuring the hardness of
	hose, or pipe.		rubber.
BP	Burst Pressure	Durometer Hardness	A numerical value which indicates the resistance to
Braid	A continuous sleeve of interwoven single or multiple strands of yarn or wire.	550	indentation of the blunt indentor of the durometer.
Braided Hose	Hose in which the reinforcing material has been	EEC	Evaporative Emission Control
	applied as interlaced spiral strands.	Elastomer ELB	Any of various elastic substances resembling rubber. Elbow
Braided Ply	A layer of braided reinforcement.		
BS	British Standard	Elongation	The increase in length expressed numerically as a fraction or percentage of the initial length.
BSP	British Standard Pipe	EPDM	Ethylene Propylene Diene Monomer
BSPP	British Standard Pipe Parallel Thread	Expansion Ring	Typically refers to a type of fire hose couplings that
BSPPFS	British Standard Pipe Parallel Female Swivel		are attached by expanding a sleeve (usually brass)
BSPPMBH	British Standard Pipe Parallel Male Bulkhead		outward to compress the hose against the wall of
BSPPOM	British Standard Pipe Parallel O Ring Male	EXT	the bowl of the coupling. Extended
BSPPOM EXT	British Standard Pipe Parallel O Ring Male Extended	External Swage	A ferrule is passed through a reducing die,
BSPT	British Standard Pipe Taper Thread	(Swaging)	usually split, to bring the ferrule O.D. down to a
BSPTFF	British Standard Pipe Taper Female Fixed		predetermined size (Swaging) (for proper coupling
BSPTM	British Standard Pipe Taper Male		retention) forcing the hose tube down into the stem serrations.
BSW	British Standard Whitworth	Extruded	Forced through the shaping die of an extruder.
Burst Pressure	The pressure at which rupture occurs.	Extruceu	The extrusion may be solid or hollow cross section.
CA	Cut-off Allowance	F, FEM	Female
CAT	Caterpillar, Inc. Registered Trademark	Fabric Impression	A pattern in the rubber surface formed by contact
CATERPILLAR	Caterpillar, Inc. Registered Trademark		with fabric during vulcanisation.
Chamfer	To cut an angle on the hose tube to aid in stem insertion and to prevent the hose end from flaring	Ferrule	A collar placed over a hose end to attach the fitting
	when a stem is inserted.		to the hose. The ferrule may be crimped or swaged, forcing the hose against the shank of the coupling,
CL, C/L	Cut Length		or the shank may be expanded, forcing the hose
			out against the ferrule, or both.

RYCO QUALITY



FF	Female Fixed	KOBELCO	Kobe Steel, Ltd. Registered Trademark
FIX	Fixed	KOMATSU	Komatsu Ltd./Komatsu Industries Corporation
Flange-Fitting	A circular ring at the end of a hose or hose		Registered Trademark
	assembly for joining to another circular ring,	kPa	KiloPascal
	generally by bolting; may be a rubber member	kW	Kilowatt
	integral with the hose or a metal ring attached to a pipe nipple.	LNG	Long
Flexible Mandrel	A long, round, smooth rod capable of being coiled	L	Litre
Trexible Manarer	in a small diameter. It is used for support during	lb	Pound
	the manufacture of certain types of hose. (The	LP	Low Pressure
	mandrel is made of rubber or plastic material	LPG	Liquified Petroleum Gas
	and may have a core of flexible wire to prevent stretching.)	LPM	Litres Per Minute
FLNG	5,	LR	Lloyd's Register
	Flange	М	Male
FOS	Factor Of Safety	m	Metre
Free Length	The lineal measurement of hose between fittings or couplings.	Mandrel Built	A hose fabricated and/or vulcanised on a mandrel.
FS	Female Swivel	MAX	Maximum
ft	Foot	MBP	Minimum Burst Pressure
		MED	Marine Equipment Directive
ft.lbf	Foot Pound force	MED	Minimum Free Length
g	Gram	MIC, Mic.	5
GHT	Garden Hose Thread		Micron (μm)
GL	Germanischer Lloyd	MIL	Military Specification (USA)
GPM	Gallons Per Minute	MIN	Minimum
Gripping Finger	The part of the clamp that goes over and behind	Minimum Burst Pressure	The lowest pressure at which rupture occurs under prescribed conditions.
	the stem collar to aid in clamp retention.		
Hand-Built Hose	A hose made by hand on a mandrel, reinforced by textile or wire or combination of both.	mm	Millimetre
Used Cost		mmHg	Millimetres of Mercury
Hard Coat	An anodising process in which the surface hardness of aluminium becomes similar to or	MP	Medium Pressure
	greater than that of case hardened steel.	MPa	MegaPascal
HD	Hardened Steel	MSHA	USA Department of Labor, Mine Safety and Health
Heat Resistance	The property or ability to resist the deteriorating	1.000	Administration
	effects of elevated temperatures.	MWP	Maximum Working Pressure
Helix	In hose, a shape formed by spiraling a wire or other	NA, N/A	Not Applicable
	reinforcement around the cylindrical body of a	NAHAD	National Association of Hose and Accessories
	hose.		Distributors (USA)
Hose Assembly	A length of hose with a coupling attached to one	NATA	National Association of Testing Authorities (Aus.)
	or each end.	NB	Nominal Bore
Hose Clamp	A collar, band or wire used to hold hose on to a	NCB	National Coal Board
	fitting.	NCS	NATA Certification Services
HP	High Pressure	NFPA	National Fluid Power Association (USA)
hp	Horse Power	NH	American Standard Fire Hose Coupling Thread
HTS	High Tensile Steel		(National Hose Thread also known as National
HW	Heavy Wall	Minula	Standard Thread). See NST.
ID	Inside Diameter	Nipple	The section of the fitting that is inserted into the hose. Also known as the shank of a coupling.
IDF	Inside diameter of the female	Nm	Newton Metre
IMP	Imperial	NOM, Nom.	Nominal
Impression, Fabric	Impression formed on the rubber surface during	Nominal	A dimensional value assigned for the purpose of
	vulcanisation by contact with fabric jacket or	NUTITIA	convenient designation.
	wrapper.	NPS	National Pipe Straight Thread
inHg	Inches of Mercury	NPSH	American Standard Straight Pipe for Hose
Internal Expansion	A plug (or bullet) is pulled through a stem	NI SIT	Couplings (National Pipe Straight Hose)
(I.X.)	or a set of blades (fingers) increase the stem I.D. to the plug O.D. or a predetermined setting when	NPSM	National Pipe Straight Mechanical
	using expansion blades (fingers). This forces the	NPSMFS	National Pipe Straight Mechanical Female Swivel
	stem serrations into the hose tube and the hose	NPT	National Pipe Taper Thread
	cover into the serrations of the ferrule.	NPTF	National Pipe Taper for Fuel
INV	Inverted	NPTFF	National Pipe Taper Female Fixed
IPS	Iron Pipe Straight Thread	NPTM	National Pipe Taper Male
IPT	The abbreviation for standard iron pipe thread.	NST	American Standard Fire Hose Coupling Thread
ISO	International Organization	ICH	(National Hose Thread also known as National
	for Standardization		Standard Thread). See NH.
JIC	Joint Industries Council (Thread UN)	OA, O/A	Overall
JIC Thread	Typically refers to the threads on hydraulic fittings	OD	Outside Diameter
UCEC	having 37° conical sealing surfaces.	ODM	Outside diameter of the male
JICFS	JIC Female Swivel	Oil Swell	The change in volume of a rubber article resulting
JICM	JIC Male		from contact with oil.
JICMBH	JIC Male Bulkhead	Operating Pressure	The pressure at which system functions. Also
JICMEXT	JIC Male Extended		known as Working Pressure.
JIS	Japanese Industrial Standard	ORB Thread	O-Ring Boss Thread
JSEAL™	RYCO Proprietary High Performance JIC	ORFS	O Ring Face Seal
Kinking	A temporary or permanent distortion of the hose	ORFSFS	ORFS Female Swivel
	induced by bending beyond the minimum bend radius.	ORFSM	ORFS Male
ka	Kilogram	Ozone Cracking	The surface cracks, checks, or crazing caused by
kg kg.m	Kilogram Metres		exposure to an atmosphere containing ozone.
	grun menes		

GLOSSARY

		CF	
Ozone Resistance	The ability to withstand the deteriorating effects of ozone (generally cracking).	SF	Swivel Female (Union)
PCD	Pitch Circle Diameter	Shank	The section of the fitting or coupling that is inserted into the hose.
PCV	Positive Crankcase Ventilation	Sintered	Process in which powdered metal is formed in a
Permanent Set	The amount by which an elastic material fails to return to its original form after deformation.		mold under extreme pressure to form a finished part.
Plasticiser	A compounding ingredient which can change the hardness, flexibility, or plasticity of an elastomer.	SIPT Spring Guard	Straight Iron Pipe Thread A helically wound wire applied internally or
Ply	(1) A layer or rubberised fabric; (2) A layer formed		externally to reinforce the end of a hose.
	by a single pass through a single deck of a yarn,	SS	Stainless Steel
	cord, or wire braiding machine; (3) A layer formed by a single pass through a single head of yarn,	Static Bonding	Use of a grounded conductive material to eliminate
	cord, or wire knitting machine; (4) A seamless		static electrical charges.
	woven jacket consisting of warp and filler yarns and/or wire; (5) A layer consisting of multiple	Static Conductive	Having the capability of furnishing a path for a flow of static electricity.
	strands of cord or wire closely spaced; (6) A layer	Static Wire	A wire incorporated in a hose to conduct static electricity.
	formed by winding a single strand of cord or wire closely spaced; (7) A single yarn in a composite	STD	Standard
	yarn; (8) A layer of unvulcanised rubber.	STPL	Staple
Ply Adhesion	The force required to separate two adjoining	Surge	A rapid rise and decrease of internal pressure.
	reinforcing members of a hose.	SWIV	Swivel
Ply Separation	A loss of adhesion between plies.	T/NESS	Thickness
P/N, P/NO	Part Number	TBA	To Be Advised
PREV	Previous	TEFLON	DuPont (E. I. du Pont de Nemours and Company)
psi	Pounds per Square Inch		Registered Trademark
PSIG	Pounds per square inch gauge	THRD	Thread
Permanent Fitting	The type of fitting which, after it is applied, cannot	TIPT	Tapered Iron Pipe Thread
	be removed for reuse.	Torque	Amount of force required to turn an object. Usually
Polymer	A macromolecular material formed by the chemical combination of monomers having the same or different chemical composition.		measured in inch pounds (in. lbs.) or foot pounds (ft. lbs.)
Pressure, Burst	The pressure at which rupture occurs.	ТР	Test Pressure
Pressure, Working	The maximum pressure to which a hose will	TPI	Threads Per Inch
Flessure, working	be subjected, including the momentary surges	Tube	The innermost part of the hose that's purpose is
	in pressure which can occur during service.		to contain the media being transported. Usually, rubber compounds or plastics are blended to give
	Abbreviated as WP.		the tube specific properties so that it is compatible
Pressure, Proof	A specified pressure which exceeds the		with certain media.
	manufacturer's recommended working pressure applied to a hose to indicate its reliability at normal	TW	Tube Weld
	working pressure. Proof pressure is usually twice	UHMW	Ultra High Molecular Weight. Next generation of
	the working pressure.		chemical hoses after cross-linked polyethylene
PTFE	Polytetrafluoroethylene		having a thin tube liner made from extremely dense material giving it excellent chemical
Pure Gum	A rubber compound containing only those		resistance properties.
	ingredients necessary for vulcanisation; particularly applicable to natural rubber.	UN	Unified National Thread
PW	Pressure Washer	UNO	UN O Ring (O Ring Boss)
QA	Quality Assurance	UNOM	UNO Male (O Ring Boss Male)
QC	Quality Control	UNOMEXT	UNO Male Extended
ORC	Quick Release Coupling		(O Ring Boss Male Extended)
RED	Reducing	USCG	United States Coast Guard
Reinforcement	(1) The strengthening members, consisting of	WOG	Water, Oil, Gas. Pressure rating for valves handling
	either fabric, cord, and/or metal, of a hose; (2) The	14/50	these products. This does not include steam.
	non-rubber elements of a hose.	WEO	Cjen AB Registered Trademark
Reusable Fitting	The type of fitting that is designed to be removed	WP	Working Pressure
RMA	from a hose and recoupled on another hose. Rubber Manufacturers Association	Working Pressure	The maximum pressure to which a hose assembly will be subjected to including pressure surges.
RPM	Revolutions Per Minute	XLPE	Cross-Linked Polyethylene. Tube material that has good chemical resistance properties.
RQP	RYCO Quality Product	Yarn	A generic term for continuous strands of textile
SAE	Society of Automotive Engineers (USA)	Turri	fibers or filaments in a form suitable for knitting,
SAE Threads	Similar to JIC except 45° conical sealing surfaces.		weaving, or otherwise interwining to form a textile
SAEFS	SAE Female Swivel		fabric. It may comprise: (a) a number of fibers
SAEM	SAE Male		twisted together, (b) a number of filaments laid together without twist (a zero-twist yarn), (c) a
SCFM	Standard Cubic Feet per Minute. Typically refers to the amount of compressed air a compressor can		number of filaments laid together with more or less twist, (d) a single filament with or without twist
C () E (produce.		(a mono-filament), or (e) one or more strips made
Safety Factor	A ratio used to establish the working pressure of a hose based upon the burst pressure. Typical Safety		by the lengthwise division of a sheet of material, such as a natural or synthetic polymer, a paper or
	Factors are as follows:		metal foil used with or without twist in a textile
	1. Water hose up to 150 psi; working pressure 3:1.		construction.
	2. Hose for all other liquids, solid materials	°C	Degrees Celcius
	suspended in liquids or air and water hose over	°F	Degrees Farenheit
	150 psi; working pressure 4:1.	β	Beta (filtration)
	3. Hose for compressed air and other gases: 4 to 1.	μ	Micron
	 Hose for liquid media that immediately changes into gas under standard atmospheric conditions; 		
	into gas under standard atmospheric conditions: 5:1.		
	5. Steam hose: 10:1.		
Serration	The part of the shank (stem) that grips the hose		
	tube.		

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