

DRIVEN BY POSSIBILITY"

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HYDRAULIC HOSES & COUPLINGS PRODUCT & APPLICATION GUIDE - 2024









DRIVEN BY POSSIBILITY^{**}

Gates Corporation is a leading manufacturer of application-specific fluid power and power transmission solutions. At Gates, we are driven to push the boundaries of materials science to engineer products that continually exceed industry expectations.We don't rest on our rich heritage of innovation. We leverage it to inspire solutions that will power the next hundred years.

We invest continually in R&D and technology, so our products not only outperform industry standards; they also exceed our customers' demanding expectations. We invest in our people, bringing real-world experience that enables us to solve our customers' diverse challenges of today and anticipate those of tomorrow. And We are constantly expanding our product catalogue and value-added service. offerings to support every facet of our customers' operations.

In the most extreme environments and those more familiar, Gates is there with the right product, in the right place at the right time. Whether building original equipment or maintaining products in the aftermarket, we enable companies in every industry to be more efficient, productive, and profitable.

We are Gates. For over 25+ years, Gates India has a leading presence in fluid power and power transmission solutions. As a part of Gates Corporation, we share the same DNA of pushing the boundaries of materials science to engineer products that continually exceed expectations

With a team of more than 1500 employees, four world class manufacturing facilities, two corporate offices and a countrywide network of 280+ Distributors. Gates in India is catering to the needs of all major industrial and automotive OEMs and aftermarket. As a leading manufacturer in Power Transmission and Fluid Power, Gates is well known for its superior quality, technology expertise and application engineering support in India, which is trusted by our esteemed customers from diversified industries.

As a system solution provider, Gates Corporation is dedicated to driving innovation through substantial investments in research and development. Our focus on continuous improvement ensures that our product offerings evolve to meet the everchanging needs of our clients. Backed by a team of experienced professionals, we possess the knowledge and skills to effectively tackle the diverse challenges encountered by our customers. Gates Corporation is committed to delivering customized solutions. Our unwavering dedication to excellence and client satisfaction enables us to enhance operational efficiency and promote success across a wide range of industries.

CONTINUALLY PUSH THE BOUNDARIES OF MATERIALS SCIENCE TO ADVANCE THE WAY THE WORLD MOVES."

Warning: All Hydraulic Hose assemblies have a limited life on a given application. Assuming the correct hose has been selected, this can be adversely affected by factors including external abuse, excessive pressures, high temperatures, misapplication, and internal abrasion. Should a hose assembly fail during use, serious injury or destruction could resultfrom propelled couplings, whipping hose, high pressure or high velocity discharge, chemical contact, high temperature materials, explosion, or fire.

Contacts Gates product Application for assistance and hose recommendations on specific applications.

** The products shown are Illustrative only and may not be an exact representation of the product.

Due to continual product improvements, Gates reserves the right to alter specifications and prices without prior notice. This Hydraulic hose catalog is the latest edition & supercedes all earlier Gates Hydraulic hose catalogs.



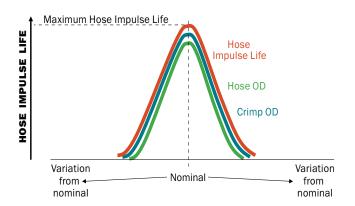
DON'T MIX & MATCH HYDRAULICS

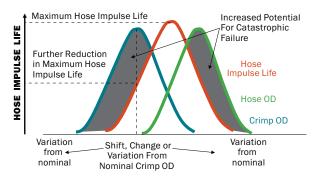
- A 3,000 psi coupling on a 3,000 psi hose doesn't always equal a 3,000 psi assembly.
- One of the most important and oftentimes overlooked factors in hydraulic hose assembly performance is the hose/coupling interface.
- You can't just design a hose. You can't just design a coupling. You must design a system (a MegaSystem).

Unless you have a hose and coupling specifically designed for each other, you may end up with a hose assembly with a lower pressure rating, reduced life, or even worse, a catastrophic failure.

Hose outside diameter and crimp outside diameter are only two of the variables affecting assembly performance.

As variation or tolerances increase even slightly for each component a significant reduction in hose assembly life is guaranteed and the risk for catastrophic failure increases.





THE NEXT TIME YOU GRAB ANY HOSE AND A COUPLING ASK YOURSELF:

- Who is the manufacturer of these components?
- Have these components been designed together?
- Validated together? And if not, what are the risks I am assuming?
- Am I willing to accept an assembly with a guarantee for reduced impulse life and performance?
- Am I willing to risk catastrophic failure?



2.3



Avoid injury to yourself and others by following these important hose assembly steps

WARNING 🛕

Never underestimate the power of a blown hydraulic assembly.

Wrong for application

Serious injury, death and destruction of property can result from rupture or blow-apart of a hydraulic hose assembly, that is:

- Damaged or worn out
- Assembled or installed incorrectly
- 1. **Receive hands-on training** with Gates recommended equipment.
- 2. Follow current Gates operating manuals and crimp data.
- 3. Use only new (unused) Gates recommended hose and couplings with Gates crimpers.
- 4. Wear safety glasses.

Select and Install Assemblies With Care

- 1. Select proper hose assemblies for the application. Many factors and conditions affecting the inside and outside diameter of the hose must be taken into account.
- 2. Hose assembly routing **must not** create an injury hazard or damage hose. Refer to the standards, regulations and directories that apply in the countries where the equipment is sold and used.
- 3. Select hydraulic components so that the application's temperature, pressure and bend radius **do not exceed** recommended component limits.

- 4. Hose must not be stretched, kinked, crushed or twisted during installation or use. Hose must not be bent to less than the minimum bend radius.
- 5. Use only non-conductive nonthermoplastic hose for non-conductive applications. For instance: cherry pickers. All other Gates hoses are electrically conductive, unless specified otherwise.
- 6. DO NOT use standard hydraulic hose to convey gases or steam over 500 PSI. Use only products rated for this service.
- 7. DO NOT use hydraulic hose in place of permanent piping.

Follow Good Maintenance Practices

- Establish a program of inspection, testing and replacement of hose assemblies from factors including:
- Severity of application
- Frequency of equipment use
- Past performance of hose assemblies

- 2. **Only** properly trained persons should inspect, test or service hose assemblies. Update training periodically.
- 3. **Document** maintenance, inspections and testing.
- 4. AVOID FLUID INJECTION INJURIES
- Fluid under pressure can cause serious injury. It can be almost invisible escaping from a pinhole, and it can pierce the skin into the body.
- Do not touch a pressurized hydraulic hose assembly or attempt to find a hydraulic system leak with any part of your body.
- If fluid punctures the skin, even if no pain is felt, a serious emergency exists. Obtain medical assistance immediately. Failure to do so can result in loss of the injured body part or death.
- 5. Stay out of hazardous areas while testing hose assemblies under pressure. Use proper safety protection.

OTHER SAFETY INFORMATION

Many factors affect the selection, crimping, installation and maintenance of hose assemblies. This catalog, Gates Corporation, the hydraulic equipment maker, the Society of Automotive Engineers Recommended Practice SAE J1273 and the International Organization for Standardization Practices for hydraulic hose assemblies ISO 17165-2 have useful information about selecting, crimping, installing and servicing hydraulic hose assemblies. For further information, please contact your local Gates representative or call Gates Corporation.

Gates recommends hose and coupling combinations in this catalog 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. Gates disclaims all liability for any hose assembly made in violation of Gates recommendations, procedures and current crimp data. Crimp data is updated on average every year. For the most up-todate crimp data, visit our website at www.gates.com/ecrimp.

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 Gates. In no event shall Gates be liable for any incidental or consequential damages whatsoever.



WARNING

${ m ilde{\Delta}}$ Hydraulic fluid under pressure is potentially dangerous!

Serious injury, death and destruction of property can result from the rupture or other failure of a hose assembly that is:

- damaged or worn out;
- assembled or installed incorrectly.

\triangle Protect yourself and others.

- Ensure you are properly trained in the use of Gates hose, couplings and assembly equipment.
- Use correct crimp information. Ensure your assembly equipment is properly maintained and calibrated.
- Use only (unused) Gates hose and coupling products and Gates assembly equipment.
- Never mix products from different manufacturers.
- Use safety glasses and safety protection.

\blacksquare Hose selection and installation.

- Basic notes and advice are included in this publication.
- Consult Gates Safe Hydraulics Manual (E2/50092) for detailed selection and installation advice.

\triangle Regularly inspect hose assemblies for defects or signs of wear or ageing.

- Product life will be influenced by:
- severity of application;
- frequency of equipment use.

Avoid injury.

- Always position a shield between yourself and any pressurised hydraulic lines when working close to hydraulic systems or shut off the pressure.
- Never touch or work on pressurised hydraulics or hose assemblies.
- Do not use hands to check for leaks.
- Stay out of hazardous areas, including machine operating areas, when testing hose assemblies.
- Remember that some hydraulic fluids are highly flammable.
- If an injury occurs, particularly one where hydraulic fluid may have punctured the skin, seek medical assistance immediately.
- frequency of equipment use.

A Nominal dimensions.

All dimensions are nominal, do not use for inspection. We reserve the right to amend dimensions without notice.

▲ Caution!

Gates recommends only those hose and coupling combinations specified in the Gates hydraulic products catalogues. Gates disclaims all liability for any hose assemblies which have not been produced in conformance with Gates assembly recommendations and correct crimp data charts, or are incorrectly installed. Extensive testing has been done to verify the recommendations shown.

Any claim for defects must follow the RR (Return Report) procedure (information from your sales coordinator), to enable Gates to assess, report and act upon any alleged defect.



WARNING

${ ilde{\Delta}}$ Hose Shelf Life

Hose in storage can deteriorate to the point where they fail immediately or prematurely after being taken out of storage. The storage conditions, along with the rubber materials, can change the shelf life limit.

Some hose materials such as EPDM have a tendency to last longer in storage due to the inherent resistance characteristics of the material. But there are many more variables affecting hose storage, making hose shelf life a value that is hard to quantify.

Standards SAE J517, SAE J1273, BS 5244, ISO 2230 and ISO 8331 provide guidelines for hose storage and age control. Refer to these specifications, and note that some storage precautions can support in the optimum shelf life.

Stored hose must not be subjected to damage that could reduce their expected service life and must be placed in a cool, dark and dry area with the ends capped. Stored hose must not be exposed to temperature extremes, ozone, oils, corrosive liquids or fumes, solvents, high humidity, rodents, insects, ultraviolet light, electromagnetic fields or radioactive materials.

The storage period should be kept to a minimum, rotation of stock is therefore essential. Hose must be stored in a manner that facilitates age control and first-in and first-out usage based on manufacturing date of the hose.

Before fitting, all hose should be subjected to visual examination for evidence of deterioration.

The shelf life of rubber Hydraulic hose that have passed visual inspection follow below recommendation scheme from the date of manufacture. The shelf life of thermoplastic Hydraulic hose is considered to be unlimited.

For non-hydraulic hose applications such as engine hoses and industrial hoses Gates shelf life recommendation is set at maximum 8 years from the date of manufacture.

| | Test recommendations for hoses |
|---------------|---|
| Age | Recommendations (if stored in accordance with ISO 8331) |
| Up to 4 years | Use without futher testing |
| 4 to 6 years | Use after representative samples subjected to a proof pressure test |
| 6 to 8 years | Use after representative samples subjected to proof, impulse and burst pressure tests, and cold bend and electrical tests |
| Over 8 years | Scrap |



WARNING

▲ LISTING OF GATES RESTRICTED APPLICATIONS

The purpose of this list is to identify applications for which Gates will not recommend product. These applications have been identified as having risk potential beyond that which is acceptable. In general, Gates does not make or sell products suitable for most of these uses. These applications involve potential for severe injury, loss of life and/or high damage. In most instances, they involve uses that cannot be monitored or serviced to control against catastrophic breaks and ruptures of

the hose assembly. This list also identifies recommended responses to inquiries involving these applications.

SCOPE AND APPLICABILITY

This list encompasses hose and hose assembly applications in industrial, hydraulic and automotive markets. It is not considered all-inclusive, but represents applications that exceed the maximum acceptable level of risk. Predicting new applications that could also exceed limits of risk is difficult; therefore, this list also identifies characteristics that should be considered in evaluating other inquiries.

RESPONSIBILITY

Gates personnel and distributors are expected to respond to inquiries with the information in this document. They should also help define and identify other applications that carry these risk factors. Sales associates consult with a product application engineer before handling inquiries about excessively risky applications.

PROCEDURE OR WORK INSTRUCTION

The table on the following page lists applications that have sufficiently high damage or safety risks so as to be avoided. This list is not inclusive. If an application is not specifically listed but has similar risk factors to those shown, no Gates product will be recommended without prior written approval by a member of Gates Product Application Engineering.

| APPLICATION | APPLICATION |
|---|---|
| Certain Types of Hazardous Materials Alkali Metals (Lithium, Sodium, Potassium) Nerve gases Anhydrous Ammonia Chlorine Gas Chlorosulfonic Acid Fluorine Gas Hydrogen Gas Hydrogen Sulfide Gas Maliec Acid Mercury Vapor Phosphous Cryogenic atmospheric gases (liquefied oxygen, nitrogen) | Death or serious injury can result from toxic exposure, burns, and suffocation of operator or bystanders. |
| Hydraulic brake systems that require the hose to meet the SAE J1401 standard. | Gates does not sell hydraulic brake hoses or fittings where liquid pressure is used to activate the brake system and stop the vehicle. Loss of braking from an improper hose can result in property damage, serious injury or death to operator, passengers and bystanders. |
| High Pressure gas or air (over 500 psi), unless steam. | Death or serious injury from explosive decompression. Reduced serviceability due to permeation and cover separations. |
| In-flight aircraft (airborne), manned and unmanned applications. | Death or serious injury from loss of flightworthiness caused by system failure. |
| Buried Applications | Hidden from regular inspection and maintenance. Environmental damage. Permeation of material conveyed to surface. |
| Underwater applications, such as submarine transfer and some dock to ship applications. | Hidden from regular inspection and maintenance. Environmental damage. Permeation of material conveyed to surface. |
| Any "permanent" installations. | Hose has limited service life. Hidden from regular inspection and maintenance. High replacement costs. Costly structural damage. |
| In-floor and in-wall radiant heat applications. | Hidden from regular inspection and maintenance. High replacement costs. Costly structural damage. |
| Out of sight applications, especially in commercial buildings, for which inspection is not convenient or possible. | Hidden from regular inspection/maintenance. High replacement costs. Costly structural damage. |
| "Mix and Match" Hydraulic Hose and Couplings. (Using coupling and hose combinations not specifically recommended by Gates.) | Component Compatibility – Unknown performance. Death or serious injury from ejected couplings. |
| Reusable couplings on LPG hose. | Death or serious injury from Fire and Suffocation risks. |



WARNING

DEFINITIONS

APPLICATION – The use of product for specific purposes. An application is defined by the size of hose, temperature range, the purpose it serves, the material conveyed, the operating pressure and cycles, the end terminations and fluid dynamics. Other environmental and operating conditions may also be specified as well.

BRAKE SYSTEMS – The use of hydraulic brake systems per SAE J1401 where liquid pressure is used to activate the brake systems are restricted. Hydraulic brake systems that use a liquid but not pressure (gravity etc.) are acceptable such as between the reservoir and cylinder. Air brake systems per SAE J1402 and SAE J844 where air pressure is used to activate the brake systems are acceptable. Vacuum brake systems per SAE J1403 where a vacuum is used to activate the brake systems are acceptable.

BURIED APPLICATION – An application that is underground or involves covering the hose assembly with earth, sand, gravel, mud, concrete or similar materials.

HOSE ASSEMBLY – The combination of a hose and its couplings (accessories such as sleeves, guards, and bend restrictors should also be considered where required or desirable).

IN-FLIGHT AIRCRAFT APPLICATION – Any application that involves any airborne system having both end connections on an aircraft while operating off of the ground whether manned or unmanned. This includes helicopters, drones, lighter than air craft (balloons), missiles, experimental aircraft, and gliders. This does not include aircraft servicing applications that are used and connected to ground based equipment while the aircraft, airborne equipment or machine is on the ground, for example, for refueling service.

IN-FLOOR AND IN-WALL RADIANT HEAT APPLICATION – Any application for providing heat through walls and floors of structures or roads and driveways by carrying fluids.

"MIX AND MATCH" – The use of unqualified or unsuitable hose, end-fitting or other coupling components with Gates components. For example, a competitor's stem and ferrule on a Gates hose, Gates end-fittings on a competitor's hose, or Gates end-fitting on a Gates hose in a way not recommended by Gates crimp data.

OUT OF SIGHT APPLICATION - Any application where the assembly is not visible for regular inspection or preventative maintenance.

PERMANENT INSTALLATION – Any application where the assembly is never expected to wear out or to be replaced. These can also be applications where the expected service life of the assembly is shorter than the application's reasonable inspection or maintenance interval.

PERMEATION – The migration or diffusion of fluids (liquids, gases) through the hose wall. Directions can be inward as well as outward. For example, a hose carrying LPG will allow diffusion of LPG through the hose wall into the environment. Also, water can migrate into an air conditioning system through the hose wall.

RISK ANALYSIS - A systematic evaluation of the business, safety and legal exposure of an application.

RISK FACTOR – An element contributing to the chance of injury or loss. A hazard or dangerous chance.

UNDERWATER APPLICATION – An application that is under the surface of a body of water or covered by water.



MegaSys® Constant Pressure Hose and ISO 18752

The progression of the Gates MegaSys® products spans over three decades, beginning in the 1980's with the innovative SAE halfbend radius MegaFlex® products M2T and M1T (now M3K). Gates MegaSys® evolved to Constant Pressure specifications and was the forerunner that drove SAE, EN and ISO to follow the Gates engineering lead.

ISO Standard 18752 released in 2006, differs from SAE J517 that reflects the design practices of users who construct hydraulic systems based on performance and pressure requirements.

ISO 18752 is the International Standard specifying requirements for nine classes, four grades and seven types of wire- or textile-reinforced hydraulic hoses and hose assemblies of nominal sizes. Each class has a single maximum working pressure for all sizes.

Hoses are classified according to their resistance to impulse into four grades: A, B, C and D. Each grade is classified by outside diameter into standard types (AS, BS and CS) and compact types (AC, BC, CC and DC). The MegaSys® products exceed the SAE and EN specifications and are aligned and exceed the performance matrix requirements of ISO 18752.

| PSI | 18752 ISO A | 18752 ISO B | 18752 ISO C | 18752 ISO D |
|----------|-------------|-------------|-------------|---------------|
| 3000 PSI | MЗK | MЗK | МЗКН | EFG3K |
| 4000 PSI | M4K | M4K | M4KH | MXG4K**/EFG4K |
| 5000 PSI | M5K | M5K | EFG5K | MXG5K**/EFG5K |
| 6000 PSI | M6K | M6K | EFG6K | 12EFG6K |

** Compact Type.

SIZE

The hose I.D. must minimize pressure loss and prevent damage from heat generation caused by excessive turbulence.

TEMPERATURE

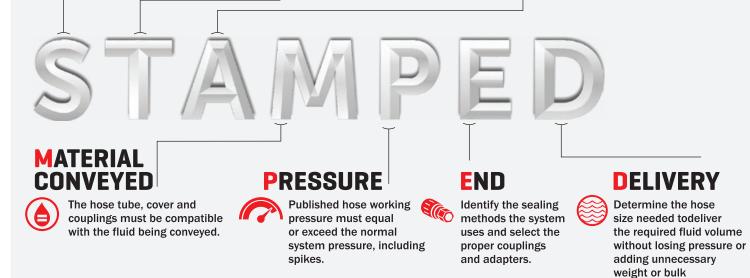
C

The hose must be capable of withstanding the system's minimum and maximum fluid and ambient temperatures.

APPLICATION



Determine where or how the hose assembly will be used.

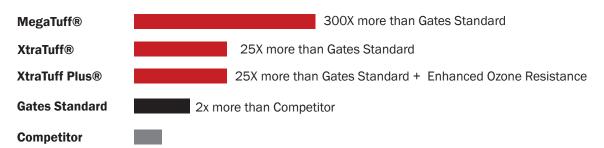




MEGATUFF®, XTRATUFF® PLUS & XTRATUFF® COVERS

Nothing is harder on hydraulic hose covers than constant abrasion. Rubbed against metal or other hose, most standard hydraulic hoses – even ones with spring guards or nylon sleeving – can't take the punishment. There's no industry standard for hose cover performance. Historically OUR COVERS, Gates leads the pack in establishing engineering specs, and hose covers are no exception.

JUDGE US BY OUR COVRES



MEGATUFF®

Gates MegaTuff hoses are exceptionally resistant to abrasion. The specially bonded cover stays put and won't peel as some competitive hose covers do.

- Maintain flexibility and minimum bend radius
- Resistant to oil, ozone and UV rays
- Tested to 1,000,000 IS06945 metal-to-hose rubbing cycles without failure

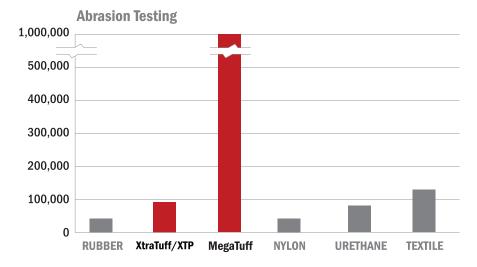
XTRATUFF®

Made of special hybrid compounds, Gates XtraTuff covers are versatile, flexible and easy to manage.

- Increase service life
- Lower maintenance
- Eliminate the need for costly hose protectors
- Lower installation friction

XTRATUFF® PLUS

- Enhanced 800+ hour ozone resistance- ideal for equipment operating oudoors
- No impact on flexibility
- Smooth cover easier to route





TUFFCOAT® PLATING

Just as hoses need a rubber cover to protect the metal reinforcement inside, hydraulic couplings need plating to prevent deterioration of the metal. When hydraulic fittings begin to rust, the base metal is being eaten away by oxidation.

Red rust can eventually damage a hydraulic system in several ways:

- Contaminate hydraulic fluids
- Create leak paths

- Compromise fitting connections and components
- Make maintenance more difficult

TuffCoat® plating sets the global standard in both corrosion resistance and environmental friendliness. Gates has removed all hexavalent chromium from its plating process. This metal, common in industrial plating, is toxic to the environment. Gates engineered TuffCoat plating to be stronger and more resistant to corrosion, without the toxicity of hexavalent chromium.

TuffCoat: One Tough Plating for All Gates Standard Couplings

All Gates couplings are protected, at the minimum, with TuffCoat plating. In ASTM B117 salt spray tests, TuffCoat plating resisted red rust formation for 500 hours. That's nearly 347% greater than the SAE 144-hour standard.



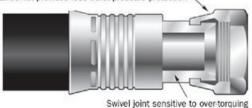
FULL-TORQUE NUT™ TECHNOLOGY

Over-Torque Protection

Robust swivel joint allows for maximum torque



Staked-nut provides less burst pressure protection



Gates has engineered a solution – Full-Torque Nut™ technology

coupling nut or seat due to over-torque.

which is standard on all MegaCrimp® and GlobalSpiral™ couplings.

One of the most common causes of hydraulic leaks is a cracked

Full-Torque Nut couplings are stronger and more durable than traditional staked-nut fittings.

A large holding shoulder evenly distributes stress forces at the nut for higher resistance against cracking, even when inadvertently over-torqued. Increase equipment uptime by eliminating damaged couplings and leaks from too much torque.





As advanced hydraulic systems are designed and engineered into more and more highpowered, high-pressure equipment, the importance of high-quality, flexible, durable hose assemblies that won't fail has never been more critical.

As the industry leader in hydraulic hose technology, Gates has developed an integrated solution to meet the expanding needs of today's hydraulic systems – and tomorrow's.

Gates MegaSys® hydraulic hose and coupling products offer a combination of technology, performance and flexibility that is unmatched by anything on the market today – or for the foreseeable future!

The fully integrated MegaSys® hose line is designed to provide maximum flexibility and performance in a wide range of high-pressure hydraulic applications while simplifying hose selection and assembly fabrication.

MegaSys® products and features save time, space and money. Color-coded laylines and constant pressure ratings through all sizes make hose identification and selection easier and faster while reducing inventory requirements.

Couplings provide leak-free performance. A bend radius up to one-third the SAE specification enables use of shorter hose lengths and savings of up to 64%. It all adds up to more value for your money.

CONSTANT PRESSURE HOSE

The MegaSys® line consists of constant pressure spiral-wire and wire-braid hose that can be bent up to one-third SAE specifications. Combined with innovative couplings specifically designed to crimp on these hose, leak-free performance is guaranteed up to maximum working pressures as high as 8,000 psi.

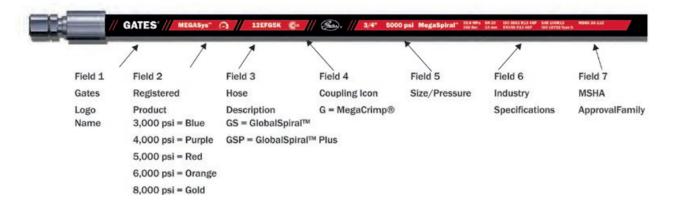
MegaSys® Benefits

- Gates Patent Awarded for Superpack construction. This patent covers the hose designs used for both MXG and MXT hose families.
- Superior impulses performance
- Light, compact and lower force to bend
- Simplifies hose selection with constant pressure ratings
- Bends up to one-third SAE bend radius specifications
- Saves overall hose assembly length
- Non skive hose and coupling design
- Facilitates easier routing in tight applications
- Requires fewer bent tube fittings
- Eases installation with higher flexibility
- Lowers inventory requirements
- Extends life in bending, flexing applications
- Available with abrasion-resistant XtraTuff® Plus, XtraTuff® & MegaTuff® covers





These newly developed laylines are used exclusively on MegaSys hose. Distinctive design and pressure color coding makes MegaSys hose easy to identify in stock or in service.



MEGASYS HOSES BEND, BEND - AND BEND SOME MORE

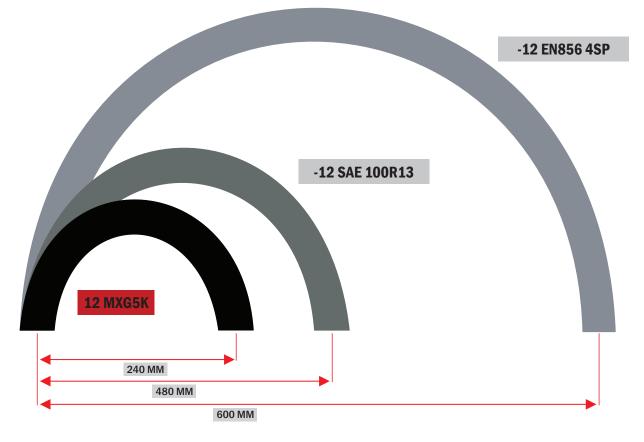
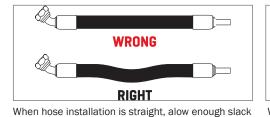


Illustration of hose flexibility and reduced hose length requirements



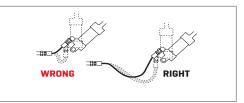
Proper hose installation is essential for satisfactory performance. If hose length is excessive, the appearance of the installation will be unsatisfactory and unnecessary cost of equipment will be involved. If hose assemblies are too short to permit adequate flexing and changes in length due to expansion or contraction, hose service life will be reduced. The following diagrams show proper hose installations which provide maximum performance and cost savings. Consider these examples in determining length of a specific assembly.



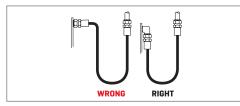
in hose line to provide for length change which will

occur when pressure is applied.

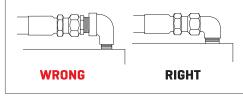
When radius is below the requiredminimum, use an angle adapter to avoid sharp bends



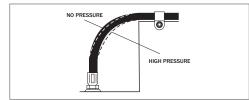
Adequate hose length is necessary to distribute movement on flexing applications and to avoid abrasion



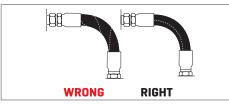
Use proper angle adaptor to avoid tight or bend in hose $% \left({{{\mathbf{x}}_{i}}} \right)$



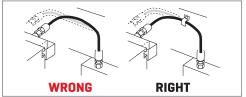
Reduce number of pipe thread joints by using hydraulic adaptors instead of pipe fittings.



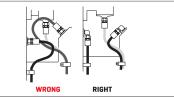
To allow for length change when hose is pressurized, do not clamp at bends so that curve will absorb changes. Do not clamp high and low pressure lines together.



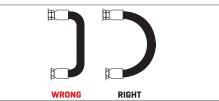
When installing hose, make sure it is not twisted. Pressure applied to a twisted hose can result in hose failure or loosening of connections.



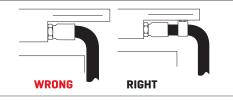
Avoid twisting of hose lines bent in two planes by clamping hose at change of plane



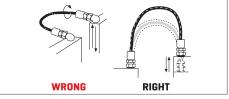
Route hose directly by using 45° and /or 90° adaptors and fittings Avoid excessive hose length to improve appearance



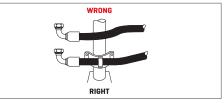
To avoid hose collapse and flow restriction keep hose bend radii as large as possible. Refer to hose specification tables for minimum bend radius



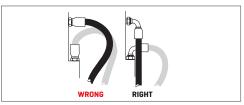
Run hose in the installation so that it avoids rubbing and abrasion Often, Clamps are required to support long hose runs or to keep hose away from moving parts. Use clamps of the correct size a clamp too large allows hose to move inside the clamp and cause abrasion



Prevent twisting and distortion by bending hose in same plane as the motion of the port to which hose in connected



High ambient temperatures shorten hose life, so make sure hose is kept away from hot parts. If this is not possible, insulate hose



Elbows and adapters should be used to relieve strain on the assembly, and to provide neater installations which will be more accessible for inspection and maintenance



Any bending of hose should not commence at a point less than 1.5 D (hose diameter) from an end



ADDITIONAL TEMPERATURE LIMITS FOR GATES HYDRAULIC HOSES

Caution : Water, Water/oil emulsions and water/glycol solutions must be kept below the temperatures listed in the tables below, relative to line pressures. Low pressure applications, i.e., in return lines require lower maximum temperatures as shown

| HOSE | PRESSURE LINES | RETURN LINES |
|---|-------------------|-----------------|
| EFG6K, EFG5K, EFG4K, C3, C6, G1, G2, M6K, M5K, M4K, M3K, CR1, CR2, 4XP-XTF, 4XP. 4XH-XTF, 4XH, MXT, MXT-XTP, MXG4K, MXG5K, LOL, ProFlex | +93°C | +82°C |
| G2H, G1H, MegaTech ACR, G2XH, GTH, G3H | +107°C | +82°C |

Maximum Temperature Limits For Water, Water/oil Emulsions and water/Glycol Solutions

Do not expose hose to maximum temperature and maximum rated working pressure at the same time.

Caution : The fluid manufacturer's recommended maximum operating temperature for any given fluid not be exceeded. If different than the above listed hose temperatures, the lower must precedence.

Actual service life at temperatures approaching the recommended limit will depend on the particular application and the fluid being used in the hose intermittent (up to 10% of operating time) refers to momentary temperatures surges.

Deterimental effects increase with increased exposure to elevated temperatures.

| | | HOSE ID (I | nches) | | | | |
|-------------|--------------------------|------------|-------------------------------|------|--|--|--|
| Dash No. | All except (C14 & Po | | C5 Series, C14 & Polarseal | | | | |
| | Inches | mm | Inches | mm | | | |
| -2 | 1/8 | 3.2 | - | - | | | |
| -3 | 3/16 | 4.8 | - | - | | | |
| -4 | 1/4 | 6.4 | 3/16 | 4.8 | | | |
| -5 | 5/16 | 7.9 | 1/4 | 6.4 | | | |
| -6 | 3/8 | 9.5 | 5/16 | 7.9 | | | |
| -8 | 1/2 | 12.7 | 13/32 | 10.3 | | | |
| -10 | 5/8 | 15.9 | 1/2 | 12.7 | | | |
| -12 | 3/4 | 19.0 | 5/8 | 15.9 | | | |
| -14 | 7/8 | 22.2 | - | - | | | |
| -16 | 1 | 25.4 | 7/8 | 22.2 | | | |
| -20 | 1-1/4 | 31.8 | 1-1/8 | 28.6 | | | |
| -24 | 1-1/2 | 38.1 | 1-3/8 | 34.9 | | | |
| -28 | 1-3/4 | 44.5 | - | - | | | |
| -32 | 2 | 50.8 | 1-13/16 | 46.0 | | | |
| -36 | 2-1/4 | 57.6 | - | - | | | |
| -40 | 2-1/2 | 63.5 | 2-3/8 | 60.3 | | | |
| -48 | 3 | 76.2 | - | - | | | |
| -56 | 3-1/2 | 88.9 | - | - | | | |
| -64 | 4 | 101.6 | - | - | | | |
| -72 | 4-1/2 | 115.2 | - | - | | | |

AGENCY SPECIFICATIONS AND HOSE SELECTION GUIDE INDUSTRY AGENCIES

- ABS American Bureau of Shipping
- DIN Ooutch Industry Norm, Germany
- DNV Det Norske Veritas
- EN European Norm/Standard
- IJS Industrial Jack Specification
- GL Germanischer Lloyd
- SAE Society Of Automotive Engineers

GOVERNMENT AGENCIES

MSHA U.S. Mine Safety & Health Administration

USCG U.S. Coast Guard

- DGMS Directorate General Of Mines & Safety, India
- DGQA Directorate General Of Quality Assurance, India
- This data is only representative of the Gates Hydraulic Hose range and not a comprehensive list of all sizes of Hydraulic Hoses manufactured by Gates. For types and sizes not mentioned here please contact Gates Customer Care.
- Due to continual product improvements, Gates reserves the right to alter specification and prices without prior notice. This Hydraulic Hose Catalog is the latest edition & supercedes all earlier Gates Hydraulic catalogs.

| Hose Type | ABS | ARAI | DNV | NK | ATEX | MSHA |
|--------------------------|-----|------|-----|--------------------|------|------|
| G1 | • | | • | • 40G1, 48G1 | | • |
| G1H | | | | | | • |
| CR1 | | | • | | | • |
| MXT | • | | • | | | • |
| MXT-XTP | • | | • | | | • |
| G2 | • | | • | | | • |
| CR2 | | | • | | | • |
| G2H | | | | | | • |
| G2XH | | | | | | • |
| BHL | | | | | | • |
| МЗК | • | | • | | | • |
| M3K-XTF | | | • | | | • |
| M4K | • | | • | | | • |
| M4K-XTF | | | • | | | • |
| M5K | | | • | | | • |
| M5K-XTF | | | • | | | • |
| EFG6K | • | | • | | | • |
| EFG4K | • | | • | | | • |
| MXG4K-XTP | • | | • | | | • |
| EFG5K | • | | • | | | • |
| MXG5K-XTP | • | | • | | | • |
| 4XP | | | | | | • |
| 4XH | | | | | | • |
| 4XH-XTF | | | | | | • |
| 4XP-XTF | | | | | | • |
| GTH | | | | | | • |
| C6 | | | | | | • |
| C3 | | | | | | • |
| G3H | | | | | | • |
| J2AT | | | | | | • |
| Fuel Master Curb Pump | | | | | • | |
| CNG | | • | | | | |
| IC5K | | | | | | • |
| PROFLEX | | | | | | • |



EFG6K MEGASYS SPIRAL WIRE HOSE – SAE 100R15



| PRODUCT DESCRIPTION | PRODUCT NO. | e | € | ĨO | | | | | ſ | Ĵ | 0 | TEMPERATURE RANGE |
|------------------------|----------------|------|------|------|-------|-------|-------|-------|------|-------|---------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 6 EFG6K | 46511396* | 0.38 | 9.5 | 20.3 | 6000 | 420 | 24000 | 1680 | 2.5 | 63.5 | - | -40°C to +121°C |
| 8 EFG6K | 46511680 | 0.50 | 12.7 | 24.1 | 6000 | 420 | 24000 | 1680 | 3.5 | 88.9 | - | -40°C to +121°C |
| 10 EFG6K | 46511672 | 0.63 | 15.9 | 27.6 | 6000 | 420 | 24000 | 1680 | 4.0 | 101.6 | - | -40°C to +121°C |
| 12 EFG6K | 46514909 | 0.75 | 19.1 | 31.4 | 6000 | 420 | 24000 | 1680 | 4.8 | 120.7 | - | -40°C to +121°C |
| 16 EFG6K | 46514910 | 1.00 | 25.4 | 38.7 | 6000 | 420 | 24000 | 1680 | 6.0 | 152.4 | - | -40°C to +121°C |
| 20 EFG6K | 46511400* | 1.25 | 31.8 | 50.0 | 6000 | 420 | 24000 | 1680 | 8.2 | 208.3 | - | -40°C to +121°C |
| 24 EFG6K | 46511572* | 1.50 | 38.1 | 57.4 | 6000 | 420 | 24000 | 1680 | 10 | 254.0 | - | -40°C to +121°C |

* Imported Range

Recommended Extremely high pressure, high-impulse action such as hydrostatic transmissions, EFG6K is designed to meet all requirements of SAE 100R15 specificationsand performance requirements of EN 856 4SP (-6, -8, -10 and For: -12) and EN856 4SH (-12, -16 and -20) and ISO 3862 Type R15 (-6, -8, -10, -12, -16, -24) Compatible with biodegradable hydraulic based fluids like polyolester, polyglycol and vegetable oil as well as standard petroleum based fluids. Superior impulse performance: tested to 1,000,000 impulse cycleswith Gates couplings. Tube: Black, oil resistant synthetic rubber [Nitrile]. **Reinforcement:** Four [Six for (-20, -24, -32)] alternating layers of spiraled, high tensile steel wire Cover: Black, oil resistant, synthetic rubber [Polychloroprene] with color coded layline. -40°C to +121°C Coupling: GS (Thru-6to -20) & GSM (Thru -24 &-32) Temp. Range:

MEETS FLAME RESISTANCE ACCEPTANCE DESIGNATION "MSHA 2G"

EFG5K MEGASYS SPIRAL WIRE HOSE – SAE 100R13

50.8

71.1

| PRODUCT DESCRIPTION | PRODUCT NO. | Θ | | 1 I O I | \odot | | | | ſ | Ĵ | \bigcirc | TEMPERATURE RANGE |
|------------------------|----------------|----------|------|------------------|---------|-------|-------|-------|------|-------|------------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 8 EFG5K | 46511679 | 0.50 | 12.7 | 24.1 | 5000 | 350 | 20000 | 1400 | 3.5 | 88.9 | - | -40°C to +121°C |
| 10 EFG5K | 46511675 | 0.63 | 15.9 | 27.6 | 5000 | 350 | 20000 | 1400 | 4.0 | 101.6 | - | -40°C to +121°C |
| 12 EFG5K | 46514903 | 0.75 | 19.1 | 31.4 | 5000 | 350 | 20000 | 1400 | 4.8 | 120.7 | - | -40°C to +121°C |
| 16 EFG5K | 46514904 | 1.00 | 25.4 | 38.7 | 5000 | 350 | 20000 | 1400 | 6.0 | 152.4 | - | -40°C to +121°C |
| 20EFG5K | 46511393* | 1.25 | 31.8 | 50.0 | 5000 | 350 | 20000 | 1400 | 8.2 | 208.3 | - | -40°C to +121°C |
| 24EFG5K | 46512208* | 1.50 | 38.1 | 57.4 | 5000 | 350 | 20000 | 1400 | 10 | 254.0 | - | -40°C to +121°C |
| | | | | | | | | | | | | |

350

20000

1400

25

635.0

-40°C to +121°C * Imported Range

| | | | ~ imp | | | | | | |
|-----------------------|---|---|-------|--|--|--|--|--|--|
| Recommended For: | Extremely high-pressure high-impulse applications. Exceeds all requirements of ISO 18752 Grade D (except for -24) and SAE 100R13 and performance requirements of EN 856 4SH (-16 and -20), EN 856 4SP (-10, and -12), EN 856 R13 and ISO 3862 Type R13 (-12, -16, -20, -24, -32). Compatible with biodegradable hydraulic fluids like polyolester, polyglycol and vegetable oil as well as standard petroleum-based fluids. Superior impulse performance: tested to 1,000,000 impulse cycles with Gates couplings | | | | | | | | |
| Tube: | Black, oil resistant synthe | Black, oil resistant synthetic rubber [Nitrile]. | | | | | | | |
| Reinforcement: | Four [Six for (-20, -24, -32 |)] alternating layers of spiraled, high tensile steel wire. | | | | | | | |
| Cover: | Black, oil resistant, synthetic rubber [Polychloroprene]. With color coded layline. Also availble in MegaTuff cover in import range. | | | | | | | | |
| Temp. Range: | -40°C to +121°C | Coupling: GS (-6 to -20) & GSM (-24 & -32) | | | | | | | |
| | | | | | | | | | |

5000

MEETS FLAME RESISTANCE ACCEPTANCE DESIGNATION "MSHA 2G"

2.00

32EFG5K

46510059*



MXG[™] 5K MEGASYS SPIRAL WIRE HOSE - SAE 100R13

MXG[™] 5K XTP XtraTuff[™] Plus 🛞

| PRODUCT DESCRIPTION | PRODUCT NO. | e | € | ĴΟ | 0 | | | | ſ | | \bigcirc | TEMPERATURE RANGE |
|------------------------|----------------|------|------|------|-------|-------|--------|-------|------|------|------------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 6 MXG 5K | - | 0.38 | 9.5 | 18.0 | 5,076 | 350 | 20,300 | 1400 | 2.5 | 65 | - | -40°C to +121°C |
| 8 MXG 5K | 46790008 | 0.50 | 12.7 | 21.6 | 5,076 | 350 | 20,300 | 1400 | 3.5 | 90 | - | -40°C to +121°C |
| 10 MXG 5K | 46790014 | 0.63 | 15.9 | 26.1 | 5,076 | 350 | 20,300 | 1400 | 3.9 | 100 | - | -40°C to +121°C |
| 12 MXG 5K | 46790006 | 0.75 | 19.1 | 29.6 | 5,076 | 350 | 20,300 | 1400 | 4.7 | 120 | - | -40°C to +121°C |

| Recommended For: | Extremely higjh-pressure, high-impulse applications. Exceeds all criteria of ISO 18752 350DC, exceeds performance criteria of SAE 100R13, EN856 R13, and ISO 3862 R13; sizes -10, -12. Also exceeds EN856 4SP performance requirements. Superior impulse performance: tested to 1,000,000 impulse cycles with Gates couplings |
|-----------------------|---|
| Tube: | Black, oil resistant synthetic rubber tube. |
| Reinforcement: | Xpiral [™] woven spiral construction with four layers of high-tensile steel wire reinforcement. |
| Cover: | Black, XtraTuff™ Plus abrasion resistant, ozone resistant, synthetic rubber; smooth cover. MSHA Flame Resistant |
| Temp. Range: | -40°C to +121°C |
| Coupling: | GS (GS1F-2 Ferrule for sizes -6,-8,-12) GSID1F -4 Ferrule for size -10 |

20 IC5K SPIRAL WIRE HOSE - SAE 100R13

| | Jutes // | IC5K | |
|--|----------|------|---|
| | | | , |

| PRODUCT DESCRIPTION | PRODUCT NO. | e | • | ÎO | \bigcirc | | | | \bigcirc | | \bigcirc | TEMPERATURE RANGE |
|------------------------|----------------|------|------|------|------------|-------|-------|-------|------------|-------|------------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 20 IC5K | 46515042 | 1.25 | 31.8 | 45.2 | 5000 | 345 | 20000 | 1380 | 16.5 | 420.0 | - | -40°C to +121°C |

| Recommended For: | Extremely high pressure and high impulse hydraulic applications, meets the performance requirements of ISO 3862/SAE 100R13. Recommended applications include underground mining, injection molding machines, backhoes, wheel loaders, forestry equipment, excavators, and crawlers. |
|-----------------------|---|
| Tube: | Black, oil resistant, synthetic rubber (Nitrile - type C). |
| Reinforcement: | Four alternating layers of spiraled, high tensile steel. |
| Cover: | Black, oil resistant, synthetic rubber (Neoprene - type A). |
| Temp. Range: | -40°C to +121°C |
| Coupling: | GS |
| | |



EFG4K MEGASYS SPIRAL WIRE HOSE – SAE 100R12



| PRODUCT DESCRIPTION | PRODUCT NO. | Θ | | ĨO | Õ | | | | \bigcirc | | \bigcirc | TEMPERATURE RANGE |
|------------------------|----------------|----------|------|------|-------|-------|-------|-------|------------|-------|------------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 6EFG4K | 46511810* | 0.38 | 9.5 | 20.3 | 4000 | 280 | 16000 | 1120 | 2.5 | 63.5 | - | -40°C to +121°C |
| 8 EFG4K | 46511678 | 0.50 | 12.7 | 23.9 | 4000 | 280 | 16000 | 1120 | 3.5 | 88.9 | - | -40°C to +121°C |
| 10 EFG4K | 46511674 | 0.63 | 15.9 | 27.6 | 4000 | 280 | 16000 | 1120 | 4.0 | 101.6 | - | -40°C to +121°C |
| 12 EFG4K | 46514901 | 0.75 | 19.1 | 30.7 | 4000 | 280 | 16000 | 1120 | 4.8 | 120.7 | - | -40°C to +121°C |
| 16 EFG4K | 46514902 | 1.00 | 25.4 | 38.1 | 4000 | 280 | 16000 | 1120 | 6.0 | 152.4 | - | -40°C to +121°C |
| 20 EFG4K | 46511683 | 1.25 | 31.8 | 47.0 | 4000 | 280 | 16000 | 1120 | 8.2 | 208.3 | - | -40°C to +121°C |

* Imported Range

| Recommended For: | Very high-pressure, high-impulse applications. Exceeds all requirements of ISO 18752 Grade D*, SAE 100R12, EN 856 R12 and ISO 3862 Type R12. *(Sizes 3/8", 1/2" and 5/8" exceed ISO 18752 Grade D performance but does not meet OD requirements). Compatible with biodegradable hydraulic fluids like polyolester, polyglycol and vegetable oil as well as standard petroleum-based fluids. Superior impulse performance: tested to 1,000,000 impulse cycles with Gates couplings. |
|-----------------------|--|
| Tube: | Black, oil resistant synthetic rubber [Nitrile]. |
| Reinforcement: | Four alternating layers of spiraled, high tensile steel wire. |
| Cover: | Black, oil resistant, synthetic rubber [Polychloroprene] with color coded layline. |
| Temp. Range: | -40°C to +121°C Coupling: GS (-6 to -20) |
| MEETS FLAME RE | ESISTANCE ACCEPTANCE DESIGNATION "MSHA 2G" |

MXG[™] 4K MEGASYS SPIRAL WIRE HOSE – SAE 100R12

12 MXG[™] 4K XTP XtraTuff[™] Plus

| PRODUCT DESCRIPTION | PRODUCT NO. | Θ | | | Ó | | | | \bigcirc | | \bigcirc | TEMPERATURE RANGE |
|------------------------|----------------|----------|------|------|-------|-------|--------|-------|------------|-------|------------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 6 MXG 4K | 46780017 | 0.38 | 9.5 | 17.7 | 4060 | 280 | 16,240 | 1120 | 2.5 | 65.0 | - | -40°C to +121°C |
| 8 MXG 4K | 46780018 | 0.50 | 12.7 | 20.7 | 4060 | 280 | 16,240 | 1120 | 3.5 | 90.0 | - | -40°C to +121°C |
| 10 MXG 4K | 46780019 | 0.63 | 15.9 | 25.2 | 4060 | 280 | 16,240 | 1120 | 3.9 | 100.0 | - | -40°C to +121°C |
| 12 MXG 4K | 46780020 | 0.75 | 19.1 | 28.9 | 4060 | 280 | 16,240 | 1120 | 4.7 | 120.0 | - | -40°C to +121°C |
| 16 MXG 4K | 46780021 | 1.00 | 25.4 | 38.0 | 4060 | 280 | 16,240 | 1120 | 5.9 | 150.0 | - | -40°C to +121°C |

Recommended For: Hydraulic applications, built with our proprietary wire-braid process technology, MegaSys™ MXG™ 4K hose is lightweight, highly flexible, and qualified to 1,000,000 impulse cycles with Gates couplings. MXG™ 4K exceed performance criteria of SAE 100R12, EN 856 R12, and ISO 3862 R12(Size-16 also exceeds EN856 4SP performance requirements), exceed all criteria of ISO 18752 280DC & SAE100R19. Tube: Black, oil resistant, synthetic rubber tube. **Reinforcement:** Two layers of braided, high-tensile steel wire reinforcements Black, XtraTuff™ Plus abrasion resistant, ozone resistant, synthetic rubber; smooth cover. MSHA Flame Cover: Resistant Temp. Range: -40°C to +121°C Coupling: GS (GS1F-2 Ferrule for sizes -6,-8,-10,-12 & GS1F-4 Ferrule for size -16)



4XH SPIRAL WIRE HOSE – EN856 4SH/ISO 3862



| PRODUCT DESCRIPTION | PRODUCT NO. | e | € | ĨO | C. | | | | ſ | | \bigcirc | TEMPERATURE RANGE |
|------------------------|----------------|------|------|------|-------|-------|-------|-------|------|-------|------------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 10 4XH | 46511685 | 0.63 | 15.9 | 27.9 | 6530 | 450 | 26100 | 1800 | 4.0 | 102.0 | - | -40°C to +100°C |
| 12 4XH | 46514907 | 0.75 | 19.1 | 31.5 | 6100 | 420 | 24400 | 1680 | 8.3 | 211.0 | - | -40°C to +100°C |
| 16 4XH | 46514908 | 1.00 | 25.4 | 37.8 | 5600 | 386 | 22400 | 1544 | 8.7 | 221.0 | - | -40°C to +100°C |
| 20 4XH | 46511775 | 1.25 | 31.8 | 45.2 | 5000 | 350 | 20300 | 1400 | 16.5 | 420.0 | - | -40°C to +100°C |
| 24 4XH | 46510831 | 1.50 | 38.1 | 53.3 | 4351 | 299 | 17404 | 1199 | 22.0 | 559.0 | - | -40°C to +100°C |

| Recommended For: | Extremely high hydraulic applications. Most flexible EN 856 4SH Hose in industry Compatible with biodegradable hydraulic fluids like synthetic ester, polyglycol and vegetable oil as well as standard petroleum based fluids. Superior impulse performance: tested to 1,000,000 impulse cycles with Gates couplings. |
|-----------------------|---|
| Tube: | Black, oil resistant synthetic rubber [Nitrile- Type C]. |
| Reinforcement: | Four alternating layers of spiraled, high tensile steel wire. |
| Cover: | Black, oil resistant, synthetic rubber [Neoprene -Type A]. |
| Temp. Range: | -40°C to +100°C |
| Coupling: | GS & GSP (-24 with 24 GSP1 F-4 Ferrule) |
| MEETS MSHA FLAME F | RESISTANCE ACCEPTANCE DESIGNATION "MSHA 2G" |

4XH-XTF SERIES SPIRAL WIRE HOSE



| PRODUCT DESCRIPTION | PRODUCT NO. | Θ | | ĨO | Q | | | | \square | | \bigcirc | TEMPERATURE RANGE |
|------------------------|----------------|----------|------|------|-------|-------|-------|-------|-----------|-------|------------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 12 4XH-XTF | 46510838 | 0.75 | 19.1 | 31.5 | 6091 | 420 | 24366 | 1680 | 8.3 | 210.8 | - | -40°C to +100°C |
| 16 4XH-XTF | 46510839 | 1.00 | 25.4 | 37.7 | 5598 | 386 | 22394 | 1544 | 8.7 | 221.0 | - | -40°C to +100°C |
| 20 4XH-XTF | 46510840 | 1.25 | 31.8 | 45.2 | 5004 | 345 | 20305 | 1400 | 16.5 | 419.1 | - | -40°C to +100°C |

Recommended For: Extremely high pressure and high impulse hydraulic applications. 4XH hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids. Superior impulse performance: tested to 1,000,000 impulse cycles with Gates couplings. Tube: Black, oil resistant synthetic rubber [Nitrile- Type C]. Four alternating layers of spiraled, high tensile steel. **Reinforcement:** Black, oil resistant, & weather resistant Xtratuff synthetic rubber Cover: [Modified Nitrile-Type C2]. -40°C to +100°C Temp. Range: GS **Coupling:** MEETS MSHA FLAME RESISTANCE ACCEPTANCE DESIGNATION "MSHA 2G"



4XP SPIRAL WIRE HOSE - EN 856 4SP/ISO 3862



| PRODUCT DESCRIPTION | PRODUCT NO. | Θ | | 10 | Õ | | | | \bigcirc | | \bigcirc | TEMPERATURE RANGE |
|------------------------|----------------|----------|------|------|-------|-------|-------|-------|------------|-------|------------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 8 4XP | 46511681 | 0.50 | 12.7 | 24.3 | 6150 | 425 | 24600 | 1700 | 4.7 | 119.4 | - | -40°C to +100°C |
| 10 4XP | 46511677 | 0.63 | 15.9 | 27.7 | 5800 | 400 | 23200 | 1600 | 5.5 | 139.7 | - | -40°C to +100°C |
| 12 4XP | 46514905 | 0.75 | 19.1 | 31.5 | 5500 | 380 | 23925 | 1650 | 6.7 | 170.2 | - | -40°C to +100°C |
| 16 4XP | 46514906 | 1.00 | 25.4 | 39.1 | 4650 | 320 | 20300 | 1400 | 13.4 | 340.4 | - | -40°C to +100°C |
| 20 4XP | 46511682 | 1.25 | 31.8 | 49.8 | 3050 | 210 | 18120 | 1250 | 18.1 | 459.7 | - | -40°C to +100°C |

Recommended For:Extremely high impulse hydraulic applications. Most flexible EN 856 4SP hose in industry. Superior impulse
performance, tested to 1,000,000 impulse cycles with Gates couplings at bend radius lower than EN 856
standard. Compatible with biodegradable hydraulic fluids like synthetic ester, polyglycol and vegetable oil
as well as standard petroleum based fluidsTube:Black, oil resistant synthetic rubber [Nitrile].Reinforcement:Four alternating layers of spiraled, high tensile steel wire.Cover:Black, oil resistant, synthetic rubber [Nitrile]Temp. Range:-40 °C to +100 °CCoupling:GS1F-4 (-8 TO -16) & GS1F-6 (-20)

MEETS FLAME RESISTANCE ACCEPTANCE DESIGNATION "MSHA 2G"

4XP-XTF SPIRAL WIRE HOSE

| Sate AXP-XTF | | |
|--------------|-------|--------|
| | JU JU | \cup |

| PRODUCT DESCRIPTION | PRODUCT NO. | e | € | ĨO | Q | | | | \bigcirc | | \bigcirc | TEMPERATURE RANGE |
|------------------------|----------------|------|------|------|-------|-------|-------|-------|------------|-------|------------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 8 4XP-XTF | 46510832 | 0.50 | 12.7 | 24.2 | 6164 | 425 | 24656 | 1700 | 4.7 | 119.4 | - | -40°C to +100°C |
| 10 4XP-XTF | 46510833 | 0.63 | 15.9 | 27.7 | 5801 | 400 | 23206 | 1600 | 5.5 | 139.7 | - | -40°C to +100°C |
| 12 4XP-XTF | 46510834 | 0.75 | 19.1 | 31.5 | 5511 | 380 | 23931 | 1650 | 6.7 | 170.2 | - | -40°C to +100°C |
| 16 4XP-XTF | 46510835 | 1.00 | 25.4 | 39.1 | 4641 | 320 | 20305 | 1400 | 13.4 | 340.4 | - | -40°C to +100°C |

| Recommended For: | Extremely high pressure and high impulse hydraulic applications, Superior impulse performance, tested to 1,000,000 impluse cycles with Gates couplings. 4XP hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids. |
|------------------|---|
| Tube: | Black, oil resistant, synthetic rubber (Nitrile -Type C). |
| Reinforcement: | Four alternating layer of spiraled high-tensile steel. |
| Cover: | Black, oil, abrasion and weather resistant Xtratuff synthetic rubber (Modified Nitrile-Type C2). |
| Temp. Range: | -40°C to +100°C |
| Coupling: | GS1F-4 (-8 to -16) |
| | |



GATES // MXT

MXT[™] MEGASYS WIRE BRAID HOSE - SAE 100R2/SAE 100R16

| PRODUCT DESCRIPTION | PRODUCT NO. | Θ | | ĨO | $\textcircled{\begin{tabular}{ c c c c } \hline \hline & \hline \hline & \hline $ | | | | \bigcirc | | \bigcirc | TEMPERATURE RANGE |
|------------------------|----------------|----------|------|------|---|-------|-------|-------|------------|-------|------------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 4MXT | 46579657 | 0.25 | 6.4 | 14.0 | 6000 | 414 | 24000 | 1655 | 1.5 | 38.1 | - | -40°C to +100°C |
| 5MXT | 46560062 | 0.31 | 8.3 | 15.4 | 5500 | 379 | 22000 | 1517 | 1.8 | 45.7 | - | -40°C to +100°C |
| 6 MXT | 46579831 | 0.38 | 9.8 | 17.2 | 4800 | 331 | 19200 | 1324 | 2.5 | 63.5 | - | -40°C to +100°C |
| 8 MXT | 46579753 | 0.50 | 12.7 | 20.7 | 4000 | 276 | 16000 | 1103 | 2.8 | 70.0 | - | -40°C to +100°C |
| 10 MXT | 46579754 | 0.63 | 15.9 | 24.3 | 3625 | 250 | 14500 | 1000 | 3.0 | 76.2 | - | -40°C to +100°C |
| 12 MXT | 46579755 | 0.75 | 19.1 | 27.9 | 3125 | 216 | 12500 | 862 | 4.8 | 121.0 | - | -40°C to +100°C |
| 16 MXT | 46579756 | 1.00 | 25.4 | 35.2 | 2400 | 166 | 9600 | 662 | 6.0 | 152.4 | - | -40°C to +100°C |

Recommended For:Recommended for High pressure hydraulic oil lines. Meets SAE 100R16 and 100R17* dimension and
performance. Meets SAE 100R2 and SAE 100R19* performance. Meets EN 853 2SN and EN 857 2SC
performance. *Applies only to sizes up to and including -12 for SAE 100R17 and -8 for SAE 100R19. Tested
to 6,00,000 impluse cycles with Gates couplings.Tube:Black, oil resistant, synthetic rubber tube.Reinforcement:Braided, high-tensile steel wire reinforcements.Cover:Black, abraision resistant, synthetic rubber; smooth coverTemp. Range:-40°C to +100°CCoupling:MegaCrimp®, PCK Couplings (-6 through -16) & GB (-8,-12 & -16) sizes

MEETS FLAME RESISTANCE ACCEPTANCE DESIGNATION "MSHA"

MXT[™]-XTP MEGASYS WIRE BRAID HOSE - SAE 100R2/SAE 100R16

// GATES' // MXT" XTP

| PRODUCT DESCRIPTION | PRODUCT NO. | Θ | | ĨO | C | | | | (|) | 0 | TEMPERATURE RANGE |
|------------------------|-------------|----------|------|------|-------|-------|--------|-------|------|-------|---------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 6MXT-XTP | 46560397 | 0.38 | 9.5 | 17.1 | 4,800 | 331 | 19,200 | 1324 | 2.5 | 63.5 | - | -40°C to +100°C |
| 8MXT-XTP | 46560398 | 0.50 | 12.7 | 20.2 | 4,000 | 276 | 16,000 | 1103 | 2.8 | 70.0 | - | -40°C to +100°C |
| 12MXT-XTP | 46560400 | 0.75 | 19.1 | 27.4 | 3,125 | 216 | 12,500 | 862 | 4.8 | 121.0 | - | -40°C to +100°C |
| 16MXT-XTP | 46560401 | 1.00 | 25.4 | 35.1 | 2,400 | 166 | 9,600 | 662 | 6.0 | 152.0 | - | -40°C to +100°C |

Recommended For:Recommended for High pressure hydraulic oil lines. Meets SAE 100R16 and 100R17* dimension and
performance. Meets SAE 100R2 and SAE100R19* performance. Meets EN 853 2SN and EN 857 2SC
performance. *Applies only to sizes up to and including -12 for SAE 100R17 and -8 for SAE 100R19. Tested
to 6,00,000 impluse cycles with Gates couplings.Tube:Black, oil resistant, synthetic rubber tube.Reinforcement:Braided, high-tensile steel wire reinforcements.Cover:Black, XtraTuff™ Plus abrasion resistant, ozone resistant, synthetic rubber; smooth coverTemp. Range:-40°C to +100°C

Coupling: MegaCrimp®, PCK Couplings (for sizes -6, -8, -12 & -16)



G2 2-WIRE BRAID HOSE - SAE 100R2 TYPE AT/EN 853 2SN



| PRODUCT DESCRIPTION | PRODUCT NO. | Θ | | ÎO | 0 | | | | \bigcap | | 0 | TEMPERATURE RANGE |
|------------------------|----------------|----------|------|------|-------|-------|-------|-------|-----------|-------|---------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 3 G2 | 46578750 | 0.19 | 5.1 | 13.2 | 6025 | 414 | 24000 | 1655 | 3.5 | 88.9 | - | -40°C to +100°C |
| 20 G2 | 46574900 | 1.25 | 31.8 | 47.5 | 1825 | 126 | 7300 | 504 | 16.5 | 419.1 | - | -40°C to +100°C |
| 24 G2 | 46574894 | 1.50 | 38.1 | 53.6 | 1300 | 90 | 5200 | 360 | 20.0 | 508.0 | - | -40°C to +100°C |
| 32 G2 | 46574895 | 2.00 | 50.8 | 66.5 | 1175 | 81 | 4700 | 324 | 25.0 | 635.0 | - | -40°C to +100°C |
| 40 G2 | 46547970* | 2.50 | 63.5 | 82.3 | 1000 | 69 | 4000 | 280 | 30.0 | 762.0 | - | -40°C to +100°C |
| 48 G2 | 46547727* | 3.00 | 76.2 | 96.5 | 625 | 43 | 2500 | 172 | 33.0 | 838.0 | - | -40°C to +100°C |

*Gates Proprietary Hose

| Recommended For: | High-pressure hydraulic oil lines. Meets or exceeds the requirements of SAE 100R2, ISO 1436 2SN R2 and EN 853 2SN. |
|---------------------|--|
| Tube: | Black, oil resistant, synthetic rubber (Nitrile). |
| Reinforcement: | Two braids of high tensile steel wire. |
| Cover: | Black, oil and abrasion resistant, synthetic rubber (Nitrile and PVC). |
| Temp. Range: | -40°C to +100°C |
| Coupling: | MegaCrimp (-20), GSP thru (-24 & -32) |
| MEETS FLAME RESISTA | NCE ACCEPTANCE DESIGNATION "MSHA 2G" |

ProFlex[™] Hose - SAE 100R2/ EN857 2SC/ EN853 2SN/SAE 100R16

GATES® PRO™ Series /

| PRODUCT DESCRIPTION | PRODUCT NO. | Ð | | ĨO | \bigcirc | | | | | | 0 | TEMPERATURE RANGE |
|------------------------|-------------|------|------|------|------------|-------|-------|-------|------|------|---------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 4 ProFlex | 46560671 | 0.25 | 6.4 | 13.1 | 5800 | 400 | 23200 | 1600 | 2.0 | 50 | - | -40°C to +100°C |
| 5 ProFlex | 46560635 | 0.31 | 7.9 | 14.7 | 5075 | 350 | 20300 | 1400 | 2.1 | 55 | - | -40°C to +100°C |
| 6 ProFlex | 46560672 | 0.37 | 9.4 | 16.6 | 4800 | 331 | 19200 | 1324 | 2.5 | 65 | - | -40°C to +100°C |
| 8 ProFlex | 46560606 | 0.50 | 12.7 | 20.2 | 4000 | 276 | 16000 | 1103 | 3.5 | 90 | - | -40°C to +100°C |
| 10 ProFlex | 46560607 | 0.63 | 16.0 | 24.0 | 3625 | 250 | 14500 | 1000 | 4.0 | 100 | - | -40°C to +100°C |
| 12 ProFlex | 46560608 | 0.75 | 19.1 | 27.4 | 3125 | 215 | 12500 | 862 | 4.7 | 120 | - | -40°C to +100°C |
| 16 ProFlex | 46560609 | 1.00 | 25.4 | 35.1 | 2400 | 165 | 9600 | 662 | 6 | 150 | - | -40°C to +100°C |

| Recommended For: | Meet or exceed performance requirement of SAE 100R2/EN 857 2SC/EN 853 2SN. Meets SAE 100R16, SAE 100R17 except 1" (-16 DN25) dimension & performance cycles. |
|-----------------------|--|
| Tube: | Black, oil resistant synthetic rubber tube. |
| Reinforcement: | Integrated two wire braided high tensile steel. |
| Cover: | Black, abrasion resistant, synthetic rubber |
| Temp. Range: | -40°C to +100°C |
| Coupling: | Megacrimp, PCK, GB (-8, -12 & -16) |



CR2 HOSE - SAE 100R2/EN 853 2SN



| PRODUCT DESCRIPTION | PRODUCT NO. | Θ | | ĨO | \bigcirc | | | | \bigcap | | 0 | TEMPERATURE RANGE |
|------------------------|-------------|----------|------|------|------------|-------|-------|-------|-----------|-------|---------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 4CR2 | 46579497 | 0.25 | 6.7 | 14.5 | 5800 | 400 | 23200 | 1600 | 4.0 | 101.6 | - | -40°C to +100°C |
| 5CR2 | 46579810 | 0.31 | 7.9 | 15.9 | 5100 | 352 | 20350 | 1403 | 4.5 | 114.0 | - | -40°C to +100°C |
| 6CR2 | 46579415 | 0.38 | 9.8 | 18.5 | 4800 | 331 | 19200 | 1324 | 5.1 | 129.8 | - | -40°C to +100°C |
| 8CR2 | 46579416 | 0.50 | 12.7 | 21.6 | 4000 | 276 | 16000 | 1103 | 7.1 | 179.8 | - | -40°C to +100°C |
| 10CR2 | 46579417 | 0.63 | 15.9 | 24.9 | 3625 | 250 | 14500 | 1000 | 7.9 | 199.9 | - | -40°C to +100°C |
| 12CR2 | 46579577 | 0.75 | 19.1 | 29.0 | 3125 | 215 | 12500 | 862 | 9.4 | 239.8 | - | -40°C to +100°C |
| 16CR2 | 46579579 | 1.00 | 25.4 | 37.1 | 2400 | 165 | 9600 | 662 | 11.8 | 300.0 | - | -40°C to +100°C |

| Recommended For: | Medium pressure hydraulics with low flexure/non-severe applications. Meets SAE 100R2 & EN 853 2SN standard requirement. Engineerred for less demading hydraulic applications. |
|-----------------------|---|
| Tube: | Black, oil resistant synthetic rubber tube. |
| Reinforcement: | Two braids of high-tensile steel wire. |
| Cover: | Black, oil and abrasion resistant synthetic rubber. MSHA flame resistant |
| Temp. Range: | -40°C to +100°C |
| Coupling: | PCK |
| | |

G2H HIGH TEMP 2 WIRE BRAID HOSE - SAE 100R2 TYPE AT



| PRODUCT DESCRIPTION | PRODUCT NO. | Θ | | ĨO | 0 | | | | \bigcirc | | 0 | TEMPERATURE RANGE |
|------------------------|----------------|----------|------|------|-------|-------|-------|-------|------------|-------|---------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 24 G2H | 46574842 | 1.50 | 38.1 | 53.6 | 1300 | 90 | 5200 | 360 | 20.0 | 508.0 | - | -40°C to +135°C |
| 32 G2H | 46574843 | 2.00 | 50.8 | 66.5 | 1175 | 81 | 4700 | 324 | 25.0 | 635.0 | - | -40°C to +135°C |

| Recommended For: | High-temperature high-pressure hydraulic oil lines. Meets or exceeds the requirements of SAE 100R2, ISO 1436 2SN R2 and EN 853 2SN. |
|------------------|---|
| Tube: | Black, oil resistant, synthetic rubber (Nitrile). |
| Reinforcement: | Two braids of high tensile steel wire. |
| Cover: | Black, oil resistant synthetic rubber (CSM). |
| Temp. Range: | -40°C to +135°C |
| Coupling: | GSP for -24 & -32 |
| | |



G2XH - 2 WIRE BRAID EXTREME HEAT HOSE - SAE 100R2 TYPE AT



| PRODUCT DESCRIPTION | PRODUCT NO. | Ð | | ĨO | Q | | | | | | 0 | TEMPERATURE RANGE |
|------------------------|-------------|------|------|------|-------|-------|-------|-------|------|-------|---------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 20 G2XH | 46574787 | 1.25 | 31.8 | 47.5 | 2250 | 155 | 9000 | 621 | 16.5 | 419.0 | - | -40°C to +149°C |
| 24 G2XH | 46574788 | 1.50 | 38.1 | 54.6 | 1800 | 124 | 7200 | 497 | 20.0 | 508.0 | - | -40°C to +149°C |
| 32 G2XH | 46574789 | 2.00 | 50.8 | 67.3 | 1500 | 103 | 6000 | 414 | 25.0 | 635.0 | - | -40°C to +149°C |

| Recommended For: | Extremely high-temperature high-pressure hydraulic applications where pressure or temperature requirements exceed SAE 100R2, ISO 1436 2SN R2 and EN 853 2SN or where resistance to either petroleum-base or phosphate ester fluids is required. Meets SAE J1942 requirements. Also used in Waterwell Rig applications |
|-----------------------|---|
| Tube: | Black, oil chemical resistant, synthetic rubber (CPE). |
| Reinforcement: | Two braid of high tensile steel wire. |
| Cover: | Blue, oil and abrasion resistant, thin synthetic rubber (CSM). |
| Temp. Range: | -40°C to +149°C |
| Coupling: | MegaCrimp for - 20 & GSP (-24 & -32) |

MEETS FLAME RESISTANCE ACCEPTANCE DESIGNATION "MSHA 2G"

MEGA TECH II - SAE 100R2 TYPE AT - ACP



| PRODUCT DESCRIPTION | PRODUCT NO. | Θ | | ΙO | Ó | | | | \bigcirc | | 0 | TEMPERATURE RANGE |
|------------------------|-------------|----------|------|------|-------|-------|-------|-------|------------|-------|---------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 24 ACP MEGATECH II | 46574785 | 1.50 | 38.1 | 54.1 | 1500 | 103 | 6000 | 414 | 20.0 | 508.0 | - | -40°C to +149°C |
| 32 ACP MEGATECH II | 46574993 | 2.00 | 50.8 | 66.3 | 1300 | 90 | 5200 | 359 | 25.0 | 635.0 | - | -40°C to +149°C |

Recommended For: Multi-purpose high-pressure, high-temperature, air compressor lines, petroleum-base or phosphate ester hydraulic fluid supply lines. Meets or exceeds the requirements of SAE 100R2.

| Tube: | Black, oil resistant, synthetic rubber (CPE). |
|----------------|--|
| Reinforcement: | Two braid of high-tensile steel wire. |
| Cover: | Blue, oil & abrasion resistant, polyester braid. |
| Temp. Range: | -40°C to +149°C |
| Coupling: | GSP for -24 & -32 |

Gates).

MINING HOSE

|--|--|

| PRODUCT DESCRIPTION | PRODUCT NO. | • | € | ΙO | | Õ | | | | | \bigcirc | | \bigcirc | TEMPERATURE RANGE |
|------------------------|----------------|------|-------|------|-------|-------|-------|-------|-------|-------|------------|-------|------------|----------------------|
| | | (in) | (mm) | (mm) | | (psi) | (Bar) | | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| DN 6 | 46547961 | 0.25 | 6.3 | 17.0 | | 6525 | 450 | | 26100 | 1800 | 4.0 | 101.6 | - | -40°C to +100°C |
| DN 10 | 46547962 | 0.37 | 9.4 | 21.3 | psi) | 5500 | 380 | (bar) | 22000 | 1520 | 5.1 | 129.5 | - | -40°C to +100°C |
| DN 12 | 46547963 | 0.50 | 12.7 | 26.5 | mic (| 5250 | 362 | mic | 21000 | 1448 | 6.0 | 152.4 | - | -40°C to +100°C |
| DN 20 | 46547964 | 0.75 | 19.0 | 33.6 | Dynai | 4000 | 276 | Dynai | 16000 | 1104 | 9.1 | 231.4 | - | -40°C to +100°C |
| DN 25 | 46547965 | 1.0 | 25.4 | 40.7 | WP | 3125 | 215 | WPI | 12500 | 861 | 12.0 | 304.8 | - | -40°C to +100°C |
| DN 32 | 46547966 | 1.25 | 31.75 | 47.2 | 1 | 2500 | 172 | 1 | 10000 | 689 | 15.1 | 383.5 | - | -40°C to +100°C |
| DN 40 | 46547967 | 1.50 | 38.1 | 54.0 | | 2118 | 146 | | 8472 | 584 | 18.0 | 457.2 | - | -40°C to +100°C |

Recommended For:High pressure hydraulic lines in longwall mining equipment and roof support system: petroleum based
or water emulsion fluidsTube:Black, oil resistant, synthetic rubber (Nitrile).Reinforcement:Two braids of high tensile steel wire.Cover:Black, oil resistant abraision resistant, synthetic rubber (Modified Nitrile).Temp. Range:-40°C to +100°C

Coupling: Mining coupling as per BCS 174 Standard

MEETS BCS 174: 1992 PERFORMANCE | MEETS FLAME RESISTANCE ACCEPTANCE DESIGNATION "MSHA 2G"

M5K MEGA5000™ HOSE



| PRODUCT DESCRIPTION | PRODUCT NO. | Θ | | ĴΟ | Q | | | | | | \bigcirc | TEMPERATURE RANGE |
|------------------------|-------------|----------|------|------|-------|-------|-------|-------|------|------|------------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 4 M5K | 46575072 | 0.25 | 6.7 | 14.0 | 5000 | 350 | 20000 | 1400 | 2.0 | 50.8 | - | -40°C to +100°C |
| 6 M5K | 46575073 | 0.38 | 9.5 | 17.8 | 5000 | 350 | 20000 | 1400 | 2.5 | 63.5 | - | -40°C to +100°C |

Recommended For:High-pressure hydraulic applications. Exceeds ISO 18752 Grade B. Provides tighter than standard
minimum bend radius and greater flexibility for easier plumbing.Tube:Black, oil resistant, synthetic rubber (Nitrile).Reinforcement:Two braid of high-tensile steel wire.Cover:Black, oil, abrasion and weather resistant, synthetic rubber (Nitrile and PVC with color coded layline.Temp. Range:-40°C to +100°CCoupling:G (MegaCrimp), PCK (-6)



M5K MEGA5000™ HOSE - XTRATUFF™ COVER



| PRODUCT DESCRIPTION | PRODUCT NO. | • | Θ IO | | 0 | | | | \bigcirc | | \bigcirc | TEMPERATURE RANGE |
|------------------------|----------------|------|-------------|------|-------|-------|-------|-------|------------|------|------------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 4 M5K-XTF | 46575058 | 0.25 | 6.7 | 14.0 | 5000 | 350 | 20000 | 1400 | 2.0 | 50.8 | - | -40°C to +100°C |
| 5 M5K-XTF | 46575103 | 0.31 | 7.9 | 15.5 | 5000 | 350 | 20000 | 1400 | 2.2 | 55.9 | - | -40°C to +100°C |
| 6 M5K-XTF | 46575074 | 0.38 | 9.5 | 17.8 | 5000 | 350 | 20000 | 1400 | 2.5 | 63.5 | - | -40°C to +100°C |

| Recommended For: | High-pressure hydraulic applications. Exceeds ISO 18752 Grade B. Provides tighter than standard minimum bend radius and greater flexibility for easier plumbing. |
|-----------------------|--|
| Tube: | Black, oil resistant, synthetic rubber (Nitrile). |
| Reinforcement: | Two braids of high-tensile steel wire. |
| Cover: | Black, oil, abrasion and weather resistant, synthetic rubber (XtraTuff) with color coded layline. |
| Temp. Range: | -40°C to +100°C |
| Coupling: | G (MegaCrimp) |
| MEETS FLAME RESIST | ANCE ACCEPTANCE DESIGNATION "MSHA 2G". |

M4K MEGA4000™ HOSE - SAE 100R19



| PRODUCT DESCRIPTION | PRODUCT NO. | • | € | ĴΟ | Ó | | | | | | \bigcirc | | 0 | TEMPERATURE RANGE |
|------------------------|----------------|------|------|------|-------|-------|-------|-------|------|------|------------|-----------------|---|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | | | |
| 4 M4K | 46574776 | 0.25 | 6.7 | 14.0 | 4000 | 280 | 16000 | 1120 | 1.5 | 38.1 | - | -40°C to +100°C | | |
| 6 M4K | 46574777 | 0.38 | 9.5 | 17.8 | 4000 | 280 | 16000 | 1120 | 2.0 | 50.8 | - | -40°C to +100°C | | |
| 8 M4K | 46574793 | 0.50 | 12.7 | 20.8 | 4000 | 280 | 16000 | 1120 | 2.8 | 71.1 | - | -40°C to +100°C | | |
| 10 M4K | 46575056 | 0.63 | 15.9 | 25.1 | 4000 | 280 | 16000 | 1120 | 3.0 | 76.2 | - | -40°C to +100°C | | |
| 12 M4K | 46575060 | 0.75 | 19.1 | 29.7 | 4000 | 280 | 16000 | 1120 | 3.8 | 96.5 | - | -40°C to +100°C | | |

Recommended For: High-pressure hydraulic applications. Exceeds ISO 18752 Grade B, SAE 100R19 and ISO 11237 R19. Allows for tighter minimum bend radius, increased working pressure and improved impulse cycles than industry standards. Provides greater performance, flexibility, easier routing and plumbing of mobile and stationary hydraulic platforms.

Tube: Black, oil resistant, synthetic rubber (Nitrile).

Reinforcement: Two braids of high-tensile steel wire.

Cover:Black, oil, abrasion and weather resistant, synthetic rubber (Nitrile and
PVC), with color coded layline.

Temp. Range: -40°C to +100°C

Coupling: G (MegaCrimp®), GB (-4 to -12), PCK (-4 to -8)

MEETS FLAME RESISTANCE ACCEPTANCE DESIGNATION "MSHA 2G" AND ISO 11237 R19.



M4K MEGA4000™ HOSE – SAE 100R19 - XTRATUFF® COVER



| PRODUCT DESCRIPTION | RODUCT NO. | • | Θ | | | | | | \bigcirc | | 0 | TEMPERATURE RANGE |
|------------------------|---------------|------|----------|------|-------|-------|-------|-------|------------|------|---------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 4 M4K-XTF | 46574790 | 0.25 | 6.7 | 14.0 | 4000 | 280 | 16000 | 1120 | 1.5 | 38.1 | - | -40°C to +100°C |
| 6 M4K-XTF | 46574791 | 0.38 | 9.5 | 17.8 | 4000 | 280 | 16000 | 1120 | 2.0 | 50.8 | - | -40°C to +100°C |
| 8 M4K-XTF | 46574794 | 0.50 | 12.7 | 20.8 | 4000 | 280 | 16000 | 1120 | 2.8 | 71.1 | - | -40°C to +100°C |
| 10 M4K-XTF | 46575057 | 0.63 | 15.9 | 25.1 | 4000 | 280 | 16000 | 1120 | 3.0 | 76.2 | - | -40°C to +100°C |
| 12 M4K-XTF | 46575059 | 0.75 | 19.1 | 29.7 | 4000 | 280 | 16000 | 1120 | 3.8 | 96.5 | - | -40°C to +100°C |

Recommended For: High-pressure hydraulic applications. Exceeds ISO 18752 Grade B, SAE 100R19 and ISO 11237 R19. Allows for tighter minimum bend radius, increased working pressure and improved impulse cycles than industry standards. Provides greater performance, flexibility, easier routing and plumbing of mobile and stationary hydraulic platforms.

| Tube: | Black, oil resistant, synthetic rubber (Nitrile). |
|-----------------------|--|
| Reinforcement: | Two braids of high-tensile steel wire. |
| Cover: | Black, oil, abraision and weather resistant, synthetic rubber (XtraTuff® Nitrile), with color coded layline. |
| Temp. Range: | -40°C to +100°C |
| Coupling: | G (MegaCrimp®) |
| | |

MEETS FLAME RESISTANCE ACCEPTANCE DESIGNATION "MSHA 2G".

M3K MEGA3000® HOSE - SAE 100R17



| PRODUCT DESCRIPTION | PRODUCT NO. | • | € | ĴΟ | $\textcircled{\textbf{O}}$ | | | | | | \bigcirc | TEMPERATURE RANGE |
|------------------------|----------------|------|------|------|----------------------------|-------|-------|-------|------|-------|------------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 4 M3K | 46574778 | 0.25 | 6.7 | 12.2 | 3250 | 225 | 13000 | 900 | 1.5 | 38.1 | - | -40°C to +100°C |
| 6 M3K | 46574779 | 0.38 | 9.5 | 16.0 | 3250 | 225 | 13000 | 900 | 2.0 | 50.8 | - | -40°C to +100°C |
| 8 M3K | 46574780 | 0.50 | 12.7 | 20.2 | 3250 | 225 | 13000 | 900 | 2.8 | 71.1 | - | -40°C to +100°C |
| 10 M3K | 46574782 | 0.63 | 15.9 | 25.1 | 3250 | 225 | 13000 | 900 | 3.0 | 76.2 | - | -40°C to +100°C |
| 12 M3K | 46574781 | 0.75 | 19.1 | 29.2 | 3250 | 225 | 13000 | 900 | 3.8 | 96.5 | - | -40°C to +100°C |
| 16 M3K | 46575061 | 1.00 | 25.4 | 37.6 | 3250 | 225 | 13000 | 900 | 4.5 | 114.3 | - | -40°C to +100°C |

| Recommended For: | High-pressure hydraulic oil lines. Exceeds ISO 18752 Grade B, SAE 100R17 and ISO 11237 R17 working pressure, minimum bend radius requirements and performance requirements of EN 857 1SC. M3K hose has smaller exterior dimensions and significantly tighter bend radius than other SAE 100R1 and 100R2 hose. | | | | |
|---|---|--|--|--|--|
| Tube: | Black, oil resistant, synthetic rubber (Nitrile). | | | | |
| Reinforcement: | Braided, high-tensile steel wire4, -6 and -8 sizes are one braid; -10, -12 and -16 sizes are two braid. | | | | |
| Cover: | Black, oil, abrasion and weather resistant, synthetic rubber (Nitrile and PVC), with color coded layline. | | | | |
| Temp. Range: | -40°C to +100°C | | | | |
| Coupling: | G (MegaCrimp®), GB (-4 to -16) | | | | |
| MEETS ELAME DESISTANCE ACCEDTANCE DESIGNATION "MSHA 2C" | | | | | |



M3K MEGA3000® HOSE - SAE 100R17 - XTRATUFF® COVER



| PRODUCT DESCRIPTION | PRODUCT NO. | 6 | € | ΙO | C | | | 5 | 6 | Ĵ | \bigcirc | TEMPERATURE RANGE |
|------------------------|----------------|------|------|------|-------|-------|-------|-------|------|-------|------------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 4 M3K-XTF | 46574792 | 0.25 | 6.7 | 12.2 | 3250 | 225 | 13000 | 900 | 1.5 | 38.1 | - | -40°C to +100°C |
| 6 M3K-XTF | 46574795 | 0.38 | 9.5 | 16.0 | 3250 | 225 | 13000 | 900 | 2.0 | 50.8 | - | -40°C to +100°C |
| 8 M3K-XTF | 46574799 | 0.50 | 12.7 | 20.3 | 3250 | 225 | 13000 | 900 | 2.8 | 71.1 | - | -40°C to +100°C |
| 10 M3K-XTF | 46574800 | 0.63 | 15.9 | 25.1 | 3250 | 225 | 13000 | 900 | 3.0 | 76.2 | - | -40°C to +100°C |
| 12 M3K-XTF | 46574796 | 0.75 | 19.1 | 29.2 | 3250 | 225 | 13000 | 900 | 3.8 | 96.5 | - | -40°C to +100°C |
| 16 M3K-XTF | 46575062 | 1.00 | 25.4 | 37.6 | 3250 | 225 | 13000 | 900 | 4.5 | 114.3 | - | -40°C to +100°C |

| Recommended For: | High-pressure hydraulic oil lines. Exceeds ISO 18752 Grade B, SAE 100R17 and ISO 11237 R17 working pressure, minimum bend radius requirements and performance requirements of EN 857 1SC. M3K hose has smaller exterior dimensions and significantly tighter bend radius than other SAE 100R1 and SAE 100R2 hose | | | | |
|---|--|--|--|--|--|
| Tube: | Black, oil resistant, synthetic rubber (Nitrile). | | | | |
| Reinforcement: | Braided, high-tensile steel wire; -4, -6, -8 have one braid, -10, -12, -16 have two braids | | | | |
| Cover: | Black, oil, abrasion and weather resistant, synthetic rubber (XtraTuff® Nitrile), with color coded layline. | | | | |
| Temp. Range: | -40°C to +100°C | | | | |
| Coupling: | G (MegaCrimp®) | | | | |
| MEETS FLAME RESISTANCE ACCEPTANCE DESIGNATION "MSHA 2G" | | | | | |

BHL X-TRA HOSE

| _ | _ | | 100 | 177 | - |
|-----------|------------|-------|-----|-----|---|
| HL 'RA | BH X-TI | Jates | | | |
| l | В Х- | Jates | | | |

| PRODUCT DESCRIPTION | PRODUCT NO. | Θ | | 10 | Ô | | | | \bigcirc | | \bigcirc | TEMPERATURE RANGE |
|------------------------|----------------|----------|------|------|-------|-------|-------|-------|------------|------|------------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 4 BHL | 46578743 | 0.25 | 6.7 | 15.1 | 5075 | 350 | 20300 | 1400 | 2.0 | 50.8 | - | -40°C to +100°C |
| 6 BHL | 46578744 | 0.38 | 9.5 | 17.7 | 4785 | 330 | 19140 | 1320 | 2.4 | 60.0 | - | -40°C to +100°C |
| 8 BHL | 46578745 | 0.50 | 12.7 | 20.6 | 3987 | 275 | 15950 | 1100 | 3.0 | 75.0 | - | -40°C to +100°C |
| 10 BHL | 46578746 | 0.63 | 15.9 | 24.8 | 3987 | 275 | 15950 | 1100 | 3.5 | 90.0 | - | -40°C to +100°C |

Recommended For:

d For: Hose for high impulse and tight bend radius application. Mainly used for backhoe loader, other construction and earth moving application

| Tube: | Nitrile Black |
|-----------------------|---------------------------------------|
| Reinforcement: | Two braids of high-tensile steel wire |
| Cover: | Specially modified synthetic rubber |
| Temp. Range: | -40°C to +100°C |
| Coupling: | РСК |



Sa J2AT

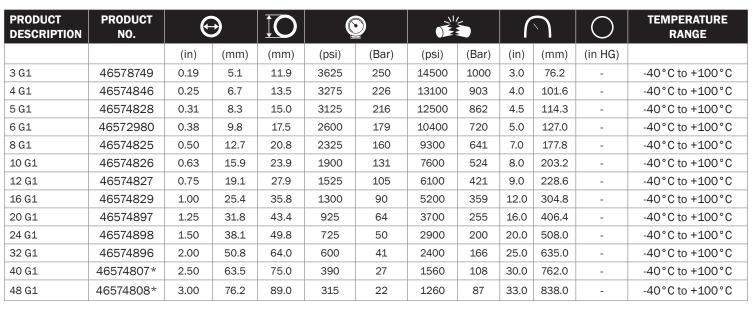
J2AT 2 - WIRE BRAID JACK HOSE

| PRODUCT DESCRIPTION | PRODUCT NO. | Θ | | ÎΟ | | | | | $\square \square$ | | 0 | TEMPERATURE RANGE |
|------------------------|----------------|----------|------|------|-------|-------|-------|-------|-------------------|------|---------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 4 J2AT | 46578737 | 0.25 | 6.7 | 15.0 | 10000 | 690 | 20000 | 1380 | 2.0 | 50.8 | - | -40°C to +49°C |
| 6 J2AT | 46578751 | 0.38 | 9.5 | 18.8 | 10000 | 690 | 20000 | 1380 | 2.5 | 63.5 | - | -40°C to +49°C |

| Recommended For: | Hydraulic jack applications. Meets Material handling Institute specification IJ 100 for hydraulic hose and assemblies used with jacking systems. 10,000 static presssure only. |
|-----------------------|--|
| Tube: | Black, oil resistant, synthetic rubber (Nitrile). |
| Reinforcement: | Two braids of high-tensile steel wire. |
| Cover: | Black, oil and abrasion resistant, synthetic rubber (Nitrile and PVC) |
| Temp. Range: | -40°C to +49°C |
| | |

MEETS FLAME RESISTANCE ACCEPTANCE DESIGNATION "MSHA 2G" MEETS IJ 100 JACK HOSE SPEC.

G1 1-WIRE BRAID HOSE - SAE 100R1 TYPE AT/EN 853 1SN



*GATES PROPRIETARY HOSE

| Recommended For: | Medium-pressure hydraulic lines. Meets or exceeds the requirements of SAE 100R1, ISO 1436 1SNR1 and EN 853 1SN. | | | | |
|---|---|--|--|--|--|
| Tube: | Black, oil resistant, synthetic rubber (Nitrile). | | | | |
| Reinforcement: | One braid of high-tensile steel wire. | | | | |
| Cover: | Black, oil and abrasion resistant, synthetic rubber (Nitrile and PVC). | | | | |
| Temp. Range: | -40°C to +100°C | | | | |
| Coupling: | G (thru -4 to -20) ,GSP (thru -24 &-32), GB (-4, 6, -8, -10, -12, -16) & PCK (-4 to -16) | | | | |
| MEETS FLAME RESISTANCE ACCEPTANCE DESIGNATION "MSHA 2G" | | | | | |





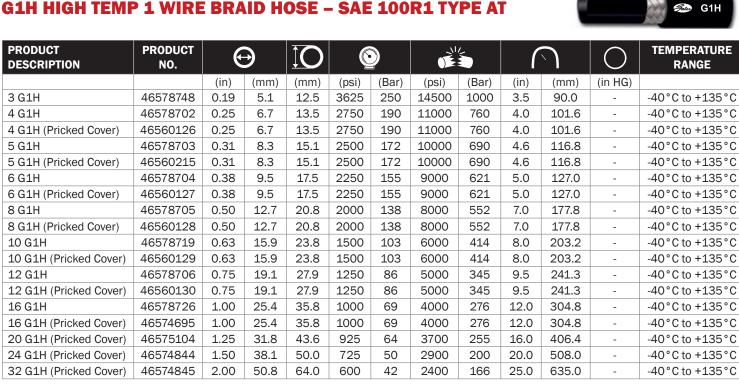
Fates CR1

CR1 HOSE - SAE 100R1/EN 853 1SN

| PRODUCT DESCRIPTION | PRODUCT NO. | 6 | € | ĮΟ | C | | | 5 | (| | \bigcirc | TEMPERATURE RANGE |
|------------------------|----------------|------|------|------|-------|-------|-------|-------|------|-------|------------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 4CR1 | 46579398 | 0.25 | 6.7 | 13.2 | 3275 | 225 | 13100 | 900 | 4.0 | 101.6 | - | -40°C to +100°C |
| 5CR1 | 46579498 | 0.31 | 8.3 | 15.1 | 3125 | 216 | 12500 | 860 | 4.5 | 114.3 | - | -40°C to +100°C |
| 6CR1 | 46579499 | 0.38 | 9.8 | 16.8 | 2600 | 180 | 10400 | 720 | 5.0 | 127.0 | - | -40°C to +100°C |
| 8CR1 | 46579399 | 0.50 | 12.7 | 19.8 | 2325 | 160 | 9300 | 640 | 7.0 | 177.8 | - | -40°C to +100°C |
| 10CR1 | 46579400 | 0.63 | 15.9 | 23.1 | 1900 | 130 | 7600 | 520 | 8.0 | 203.2 | - | -40°C to +100°C |
| 12CR1 | 46579602 | 0.75 | 19.1 | 27.2 | 1525 | 105 | 6100 | 420 | 9.5 | 241.3 | - | -40°C to +100°C |
| 16CR1 | 46579578 | 1.00 | 25.4 | 35.1 | 1250 | 87 | 5000 | 345 | 12.0 | 305.0 | - | -40°C to +100°C |

| Recommended For: | Medium pressure hydraulics with low flexure/non-severe applications. Meets SAE 100R1 & EN 853 1SN standard requirement. Engineerred for less demading hydraulic applications. |
|-----------------------|---|
| Tube: | Black, oil resistant synthetic rubber tube. |
| Reinforcement: | One braid of high-tensile steel wire. |
| Cover: | Black, oil and abrasion resistant synthetic rubber. MSHA flame resistant. |
| Temp. Range: | -40°C to +100°C |
| Coupling: | PCK |

G1H HIGH TEMP 1 WIRE BRAID HOSE – SAE 100R1 TYPE AT



| Recommended For: | High-temperature medium-pressure hydraulic oil lines. Meets or exceeds requirements of SAE 100R1 Type AT. |
|--------------------|---|
| Tube: | Black, oil resistant, synthetic rubber (Nitrile). |
| Reinforcement: | One braid of high-tensile steel wire. |
| Cover: | Black, oil, and abrasion resistant synthetic rubber (CSM) |
| Temp. Range: | -40°C to +135°C |
| Coupling: | PCK |
| MEETS FLAME RESIST | ANCE ACCEPTANCE DESIGNATION "MSHA 2G" |

WWW.GATES.COM/IN



MEGATECH™ ACR HIGH TEMP – OIL-AIR RETURN

| PRODUCT DESCRIPTION | PRODUCT NO. | 6 | € | <u>IO</u> | | | | Í | ſ | Ĵ | \bigcirc | TEMPERATURE RANGE |
|------------------------|----------------|------|------|-----------|-------|-------|-------|-------|------|-------|------------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 12 ACR | 46560076 | 0.75 | 19.4 | 29.0 | 1000 | 69 | 4000 | 276 | 4.8 | 120.7 | - | -40°C to +149°C |
| 16 ACR | 46560077 | 1.00 | 25.4 | 34.0 | 1000 | 69 | 4000 | 276 | 6.0 | 152.4 | - | -40°C to +149°C |
| 20 ACR | 46560078 | 1.25 | 32.1 | 41.5 | 1000 | 69 | 4000 | 276 | 8.5 | 215.9 | - | -40°C to +149°C |
| 24 ACR | 46560079 | 1.50 | 38.1 | 49.4 | 500 | 35 | 2000 | 140 | 15.0 | 381.0 | - | -40°C to +149°C |
| 32 ACR | 46560080 | 2.00 | 50.8 | 62.9 | 500 | 35 | 2000 | 140 | 18.0 | 457.2 | - | -40°C to +149°C |
| 40 ACR | 46560081 | 2.50 | 63.5 | 75.3 | 500 | 35 | 2000 | 140 | 22.0 | 558.8 | - | -40°C to +149°C |
| 48 ACR | 46574909 | 3.00 | 76.2 | 88.9 | 500 | 35 | 2000 | 140 | 24.0 | 609.6 | - | -40°C to +149°C |

| Recommended For: | Pressurized hot oil return lines and rotary oil/air compressor lines. |
|-------------------------|---|
| Tube: | Black, specifically compounded for temperature and chemical resistance (CPE). |
| Reinforcement: | One braid of high-tensile steel wire. |
| Cover: | Oil and mildew resistant, textile braid, impregnated with synthetic rubber. |
| Temp. Range: | -40°C to +149°C |
| Coupling: | G(Thru -12 to -20) & GSP (Thru -24 & -32) |
| | |

PILOT LINE HOSE

| PRODUCT DESCRIPTION | PRODUCT NO. | e | € | <u>I</u> O | | 0 | | | | | | TEMPERATURE RANGE |
|------------------------|----------------|------|------|------------|-------|-------|-------|-------|------|------|---------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 4 P1T | 46578796 | 0.25 | 6.4 | 11.0 | 1740 | 120 | 6960 | 480 | 1.0 | 25.4 | - | -40°C to +100°C |
| 6 P1T | 46578797 | 0.38 | 9.5 | 14.0 | 1740 | 120 | 6960 | 480 | 1.6 | 40.0 | - | -40°C to +100°C |

Recommended
 Designed for hydraulic pilot control applications in confined spaces in industrial, construction and agricultural equipment. This top quality hose features superior flexibility providing a very tight bend radius as well as resistance to expansion, kinking and abrasion. P1 T pilot control hose has been fully tested to meet all possible pilot control applications. It has been engineered as an assembly to ensure maximum trouble free life and avoid replacement in difficult and often inaccessible areas.
 Tube:

| 10001 | |
|-----------------------|---------------------------------|
| Reinforcement: | Single high-tensile steel wire. |
| Cover: | Chloroprene (CR) |
| Temp. Range: | -40°C to +100°C |
| Coupling: | P1T |





GTH HIGH TEMP 1 - FIBER BRAID HOSE - SAE 100R6



| PRODUCT DESCRIPTION | PRODUCT NO. | 6 | € | 10 | | | | | | | 0 | TEMPERATURE RANGE |
|------------------------|----------------|------|------|------|-------|-------|-------|-------|------|-------|---------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 3 GTH | 33198999 | 0.19 | 4.8 | 11.2 | 500 | 34 | 2000 | 138 | 2.0 | 50.8 | - | -40°C to +135°C |
| 4 GTH | 33198970 | 0.25 | 6.4 | 12.7 | 400 | 28 | 1600 | 110 | 2.5 | 63.5 | - | -40°C to +135°C |
| 5 GTH | 33198971 | 0.31 | 7.9 | 14.2 | 400 | 28 | 1600 | 110 | 3.0 | 76.2 | - | -40°C to +135°C |
| 6 GTH | 33198978 | 0.38 | 9.5 | 16.0 | 400 | 28 | 1600 | 110 | 3.0 | 76.2 | - | -40°C to +135°C |
| 8 GTH | 33198979 | 0.50 | 12.7 | 19.8 | 400 | 28 | 1600 | 110 | 4.0 | 101.6 | - | -40°C to +135°C |
| 10 GTH | 33198980 | 0.63 | 15.9 | 23.1 | 350 | 24 | 1400 | 97 | 5.0 | 127.0 | - | -40°C to +135°C |
| 12 GTH | 33198987 | 0.75 | 19.1 | 27.0 | 300 | 21 | 1200 | 83 | 5.5 | 139.7 | - | -40°C to +135°C |

| Recommended For: |
|-----------------------|
| Tube: |
| Reinforcement: |
| Cover: |

Hydraulic oil lines, heavy duty transmission oil cooler lines and glycol anti freeze solution. Meets or exceeds requirements of SAE 100R6 & EN 854 R6. Specially resistant to diesel permeation.

| Tube: | Black, specially compounded synthetic rubber (Nitrile). |
|-----------------------|--|
| Reinforcement: | One fiber braid. |
| Cover: | Black, oil & abrasion resistant synthetic rubber (Polychloroprene) |
| Temp. Range: | -40°C to +135°C |
| Coupling: | G (MegaCrimp®), [PCK (-5, to -10), -16] & GB (-4, -8, -10) |
| | |

MEETS FLAME RESISTANCE ACCEPTANCE DESIGNATION "MSHA 2G"

C6 1 - FIBER BRAID HOSE - SAE 100R6

| Sales C6 | |
|----------|--|
|----------|--|

| PRODUCT DESCRIPTION | PRODUCT NO. | € | • | | (| 0 | | | | | \bigcirc | TEMPERATURE RANGE |
|------------------------|----------------|------|------|------|-------|-------|-------|-------|------|-------|------------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 4 C6 | 33198957 | 0.25 | 6.4 | 12.7 | 400 | 28 | 1600 | 112 | 2.6 | 66.0 | - | -40°C to +100°C |
| 5 C6 | 33198958 | 0.31 | 7.9 | 14.2 | 400 | 28 | 1600 | 112 | 3.0 | 76.2 | - | -40°C to +100°C |
| 6 C6 | 33198959 | 0.38 | 9.5 | 16.0 | 400 | 28 | 1600 | 112 | 3.0 | 76.2 | - | -40°C to +100°C |
| 8 C6 | 33198960 | 0.50 | 12.7 | 19.7 | 400 | 28 | 1600 | 112 | 4.0 | 101.6 | - | -40°C to +100°C |
| 10 C6 | 33198961 | 0.63 | 15.9 | 23.0 | 350 | 24 | 1400 | 97 | 5.0 | 127.0 | - | -40°C to +100°C |
| 12 C6 | 33198968 | 0.75 | 19.1 | 27.0 | 300 | 21 | 1200 | 83 | 6.0 | 152.4 | - | -40°C to +100°C |
| 16 C6 | 33198962 | 1.00 | 25.4 | 34.9 | 200 | 14 | 800 | 55 | 8.0 | 203.2 | - | -40°C to +100°C |

Recommended For: Hydraulic oil lines, heavy duty transmission anti freeze solution. Meets or exceeds requirements of SAE 100R6/EN 854 R6. Tube: Specially compounded, oil-resistant, synthetic rubber (Nitrile) Black. **Reinforcement:** One braid of high tenacity yarn. Cover: Oil & abrasion resistant synthetic rubber (Modified Nitrile) -40°C to +100°C Temp. Range: Coupling: PCK (-4 to -10) & GB (-6, -12, -16)



C3 - TWO FIBER BRAID HOSE - SAE 100R3



| PRODUCT DESCRIPTION | PRODUCT NO. | • | € | ĨO | (C | | | | | | | TEMPERATURE RANGE |
|------------------------|----------------|------|------|------|-------|-------|-------|-------|------|-------|---------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 4 C3 | 33198950 | 0.25 | 6.4 | 14.5 | 1250 | 86 | 5000 | 345 | 3.0 | 76.2 | - | -40°C to +100°C |
| 5 C3 | 33198951 | 0.31 | 7.9 | 17.5 | 1200 | 83 | 4800 | 332 | 4.0 | 101.6 | - | -40°C to +100°C |
| 6 C3 | 33198952 | 0.38 | 9.5 | 19.1 | 1125 | 78 | 4500 | 312 | 4.0 | 101.6 | - | -40°C to +100°C |
| 8 C3 | 33198953 | 0.50 | 12.7 | 23.9 | 1000 | 69 | 4000 | 276 | 5.0 | 127.0 | - | -40°C to +100°C |
| 10 C3 | 33198975 | 0.63 | 15.9 | 27.0 | 875 | 61 | 3500 | 244 | 5.5 | 139.7 | - | -40°C to +100°C |
| 12 C3 | 33198954 | 0.75 | 19.1 | 31.8 | 750 | 52 | 3000 | 208 | 6.0 | 152.4 | - | -40°C to +100°C |
| 16 C3 | 33198955 | 1.00 | 25.4 | 38.1 | 565 | 39 | 2250 | 156 | 8.0 | 203.2 | - | -40°C to +100°C |

Recommended For:Hydraulic oil lines, anti-freeze solution or water. Meets or exceeds requirements of SAE 100R3/EN 854 R3.Tube:Black, synthetic rubber (Nitrile).Reinforcement:Two braid of high tenacity synthetic textile yarn.Cover:Black, oil & abrasion resistant synthetic rubber (Modified Nitrile)Temp. Range:-40 °C to +100 °CCoupling:G (MegaCrimp®), PCK (-4, -8, -10)MEETS FLAME RESISTANCE ACCEPTANCE DESIGNATION "MSHA 2G"

G3H HIGH-TEMP 2 FIBER BRAID HOSE - SAE 100R3



| PRODUCT DESCRIPTION | PRODUCT NO. | e | Θ \Box | | 0 | | | | \bigcirc | | \bigcirc | TEMPERATURE RANGE |
|------------------------|----------------|------|-----------------|------|-------|-------|-------|-------|------------|-------|------------|----------------------|
| | | (in) | (mm) | (mm) | (psi) | (Bar) | (psi) | (Bar) | (in) | (mm) | (in HG) | |
| 20 G3H | 33198997 | 1.25 | 31.8 | 44.5 | 375 | 26 | 1500 | 103 | 10.0 | 254.0 | - | -40°C to +135°C |
| 24 G3H | 33198998 | 1.50 | 38.1 | 51.0 | 300 | 21 | 1200 | 83 | 12.0 | 304.8 | - | -40°C to +135°C |

Recommended
For:High temperature, low pressure hydraulic oil lines and glycol anti-freez solutions. Meets or exceeds
equirements of SAE 100R3/EN 854 R3. Specially resistant to diesel permeationTube:Black, synthetic rubber (Nitrile).Reinforcement:Two braids of high tenacity yarn.Cover:Black, oil & abrasion resistant, synthetic rubber (Polychloroprene)Temp. Range:-40°C to +135°C

Coupling:

COUPLINGS



YOU NEED

TO SELL

VALUE

START CONCENTRIC REMAIN CONCENTRIC



ONE STEM IS ALL YOU NEED

END TO END SOLUTIONS FROM GATES

COUPLINGS



SOLID, LEAK-FREE COUPLINGS

The majority of hydraulic hose failures occur at the couplings due to blow-offs or leaks. Gates has designed and engineered innovative, robust couplings for MegaSys hose that provide connections you can count on for superior performance – guaranteed.

Ges GlobalSpiral[™] Couplings

Key Features

- "Bite-the-wire" crimp for improved coupling retention
- Over 90 thread configurations
- Tested to an industry-leading 1,000,000 impulse cycles
- 6,000 psi working pressure for easy to manage inventory
- +250°F temperature capability for longer assembly life
- Environmentally-friendly TuffCoat® plating for 347% better corrosion resistance SAE Standard
- Qualified on wire braid hoses for maximum inventory coverage

GlobalSpiral Couplings No-Skive Convenience, Reduced Inventory

GlobalSpiral[™] couplings are specially engineered to provide superior performance for extreme highpressure, highimpulse spiral-wire hydraulic hose applications. They can be used with all Gates MegaSys[®] four- and six-spiral wire hose up to 6,000 psi.

The innovative, two-piece, no-skive design reduces assembly time, labor, fabrication errors and contamination of the fluid power system. The work area stays clean, and the odors, dust, and fire hazard normally created by skiving are eliminated. In addition, the two-piece design reduces parts inventory by 30 percent because only one stem is required for all spiral-wire hose types.

PCK Power Crimp Couplings



Key Features

- Innovative, two-piece, no-skive design
- Fully tested to 2x SAE impulse requirements
- Leak free solution



SPIRAL COUPLINGS



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|----------|-------------|---------------------------|--------|--------------|------------------|--|
| 1 | 734760026 | 6GS-8HFBSPORX | BSPP | -6 | GS | 3/8" X 1/2" BSPP straight with O ring with Backup Hex |
| 2 | 734760106 | 6GS-6HFBSPORX | BSPP | -6 | GS | 3/8" X 3/8" BSPP straight with O ring with Backup Hex |
| 3 | 734792356 | 6GS-6FBSPORX90-32 | BSPP | -6 | GS | 3/8" X 3/8" BSPP, 90 degree elbow with 0 ring, Drop height: 32mm |
| 4 | 734724146 | 6GS-6FJX | JIC | -6 | GS | 3/8" X 9/16-18, straight |
| 5 | 734724146-2 | 6GS-6FJX-2W | JIC | -6 | GS | 3/8" X 9/16-18, straight, with MXG4K & MXG5K hose |
| 6 | 734792436 | 6GS-12FDHORX90 | METRIC | -6 | GS | 3/8", M20X1.5, TUBE OD: 12, 90 degree elbow with 0 ring |
| 7 | 734792436-2 | 6GS-12FDH0RX90- 37-2W | METRIC | -6 | GS | 3/8", M20X1.5, TUBE OD: 12, 90 degree elbow with 0 ring, with MXG4K & MXG5K hose |
| 8 | 734792646 | 6GS-12FDHORX-WF | METRIC | -6 | GS | 3/8", M20X1.5, TUBE OD: 12, straight with O ring |
| 9 | 734791406 | 8GS-8FBSPORX | BSPP | -8 | GS | 1/2" X 1/2" BSPP straight with O ring |
| 10 | 734795546 | 8GS-8HFBSPORX | BSPP | -8 | GS | 1/2" X 1/2" BSPP straight with O ring with Backup Hex |
| 11 | 734791416 | 8GS-8FBSPORX45 | BSPP | -8 | GS | 1/2" X 1/2" BSPP 45 degree elbow with O ring |
| 12 | 734791426 | 8GS-8FBSPORX90M | BSPP | -8 | GS | 1/2" X 1/2" BSPP 90 degree elbow with 0 ring |
| 13 | 734793546 | 8GS-8MBSPPSP | BSPP | -8 | GS | 1/2" X 1/2" BSPP male straight _JCB |
| 14 | 734791366 | 8GS-8MBSPP | BSPP | -8 | GS | 1/2" X 1/2" BSPP male straight |
| 15 | 734791366-2 | 8GS-8MBSPP-2W | BSPP | -8 | GS | 1/2" X 1/2" BSPP male straight, with MXG4K & MXG5K hose |
| 16 | 734791406-2 | 8GS-8FBSPORX-2W | BSPP | -8 | GS | 1/2" X 1/2" BSPP straight with O ring, with MXG4K & MXG5K hose |
| 17 | 734791416-2 | 8GS-8FBSPORX45-2W | BSPP | -8 | GS | 1/2" X 1/2" BSPP 45 degree elbow with O ring, with MXG4K & MXG5K hose |
| 18 | 734791426-2 | 8GS-8FBSPORX90M-2W | BSPP | -8 | GS | 1/2" X 1/2" BSPP 45 degree elbow with O ring, with MXG4K & MXG5K hose, with MXG4K & MXG5K hose |
| 19 | 734793546-2 | 8GS-8MBSPPSP-2W | BSPP | -8 | GS | 1/2" X 1/2" BSPP male straight _JCB, with MXG4K & MXG5K hose |
| 20 | 734795546-2 | 8GS-8HFBSPORX-2W | BSPP | -8 | GS | 1/2" X 1/2" BSPP straight with O ring with Backup Hex, with MXG4K & MXG5K hose |
| 21 | 734789496 | 8GS-8FJISX | FJISX | -8 | GS | 1/2" X 1/2" JIS or C TYPE BSPP straight |
| 22 | 734789496-2 | 8GS-8FJISX-2W | FJISX | -8 | GS | 1/2" X 1/2" JIS or C TYPE BSPP straight, with MXG4K & MXG5K hose |
| 23 | 734741246 | 8GS-8FL | FLANGE | -8 | GS | 1/2" X FLANGE OD: 30.18mm, Straight |
| 24 | 734774246 | 8GS-8FL90M | FLANGE | -8 | GS | 1/2" X FLANGE OD: 30.18mm, 90 degree elbow |
| 25 | 734741246-2 | 8GS-8FL-2W | FLANGE | -8 | GS | 1/2" X FLANGE OD: 30.18mm, Straight, with MXG4K & MXG5K hose |
| 26 | 734774246-2 | 8GS-8FL90M-2W | FLANGE | -8 | GS | 1/2" X FLANGE OD: 30.18mm, Straight, with MXG4K & MXG5K hose |
| 27 | 734789656 | 8GS-8FJXAM | JIC | -8 | GS | 1/2" X 3/4-16, straight |
| 28 | 734789736 | 8GS-10FJX-4W | JIC | -8 | GS | 1/2" X 7/8-14, straight |
| 29 | 734760146 | 8GS-10FJX-2W | JIC | -8 | GS | 1/2" X 7/8-14, straight, with MXG4K & MXG5K hose |
| 30 | 734789656-2 | 8GS-8FJX-2W | JIC | -8 | GS | 1/2" X 3/4-16, straight, with MXG4K & MXG5K hose |
| 31 | 734760196 | 8GS-8FJX90M | JIC | -8 | GS | 1/2" X 3/4-16, 90 degree elbow |
| 32 | 734760266 | 8GS-10FJX90M | JIC | -8 | GS | 1/2" X 7/8-14, 90 degree elbow |
| 33 | 734790636 | 8GS-16FDHORX-SP | METRIC | -8 | GS | 1/2", M24X1.5 TUBE OD: 16mm, Straight with O ring |
| 34 | 734791346 | 8GS-16FDHORX45 | METRIC | -8 | GS | 1/2", M24X1.5 TUBE OD: 16mm, 45 degree elbow with 0 ring |
| 35 | 734789236 | 8GS-16FDHORX25 | METRIC | -8 | GS | 1/2", M24X1.5 TUBE OD: 16mm, 25 degree elbow with 0 ring |
| 36 | 734789296 | 8GS-16FDHORX90-70 | METRIC | -8 | GS | 1/2", M24X1.5 TUBE OD: 16mm, 90 degree elbow with 0 ring, Drop height: 70mm |
| 37 | 734795196 | 8GS-12FDHORX | METRIC | -8 | GS | 1/2", M20X1.5 TUBE OD: 12, straight with 0 ring |
| 38 | 734791486 | 8GS-16FDHORX90 | METRIC | -8 | GS | 1/2", M24X1.5 TUBE OD: 16mm, 90 degree elbow with 0 ring |
| 39 | 734789236-2 | 8GS-16FDH0RX25- 12-2W | METRIC | -8 | GS | 1/2", M24X1.5 TUBE OD: 16mm, 25 degree elbow with O ring, with MXG4K & MXG5K hose |
| 40 | 734789296-2 | 8GS-16FDH0RX90- 70-2W | METRIC | -8 | GS | 1/2", M24X1.5 TUBE OD: 16mm, 90 degree elbow with 0 ring, Drop height: 70mm, with MXG4K & MXG5K hose |
| 41 | 734789636-2 | 8GS-16HFDHORX90- 44-2W | METRIC | -8 | GS | 1/2", M24X1.5 TUBE OD: 16mm, 90 degree elbow with 0 ring with backup hex option, with MXG4K & MXG5K hose |
| 42 | 734790636-2 | 8GS-16FDH0RX-SP-2W | METRIC | -8 | GS | 1/2",M24X1.5 TUBE OD: 16mm, Straight with O ring, with MXG4K & MXG5K hose |



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|----------|-------------|----------------------------|--------|--------------|------------------|---|
| 43 | 734791346-2 | 8GS-16FDH0RX45- 21.6-2W | METRIC | -8 | GS | 1/2", M24X1.5 TUBE OD: 16mm, 45 degree elbow with O ring, with MXG4K & MXG5K hose |
| 44 | 734791486-2 | 8GS-16FDH0RX90- 44.0-2W | METRIC | -8 | GS | 1/2", M24X1.5 TUBE OD: 16mm, 90 degree elbow with 0 ring, with MXG4K & MXG5K hose |
| 45 | 734795196-2 | 8GS-12FDHORX-2W | METRIC | -8 | GS | 1/2", M20X1.5 TUBE OD: 12, straight with O ring, with MXG4K & MXG5K hose |
| 46 | 734790596 | 8GS-15FDLORX | METRIC | -8 | GS | 1/2", M22x1.5, TUBE OD: 15, straight with O ring |
| 47 | 734790606 | 8GS-15FDLORX45 | METRIC | -8 | GS | 1/2", M22x1.5, TUBE OD: 15, 45 degree elbow with O ring |
| 48 | 734730246 | 8GS-8FFORX | ORFS | -8 | GS | 1/2" X 13/16-16, straight |
| 49 | 734731246 | 8GS-8FFORX45S | ORFS | -8 | GS | 1/2" X 13/16-16, 45 degree elbow |
| 50 | 734732246 | 8GS-8FFORX90S- DH-29MM | ORFS | -8 | GS | 1/2" X 13/16-16, 90 degree elbow, Drop height: 29mm |
| 51 | 734769096 | 8GS-10MFFOR | ORFS | -8 | GS | 1/2" X 1-14, Male straight |
| 52 | 734730256 | 8GS-10FFORX | ORFS | -8 | GS | 1/2" X 1-14, straight |
| 53 | 734733256 | 8GS-10FFORX90M COUPLING | ORFS | -8 | GS | 1/2" X 1-14, 90 degree elbow |
| 54 | 734730246-2 | 8GS-8FFORX-2W | ORFS | -8 | GS | 1/2" X 13/16-16, straight, with MXG4K & MXG5K hose |
| 55 | 734730256-2 | 8GS-10FF0RX-2W | ORFS | -8 | GS | 1/2" X 1-14, straight, with MXG4K & MXG5K hose |
| 56 | 734731246-2 | 8GS-8FFORX45S-2W | ORFS | -8 | GS | 1/2" X 13/16-16, 45 degree elbow, with MXG4K & MXG5K hose |
| 57 | 734732246-2 | 8GS-8FF0RX90S-2W | ORFS | -8 | GS | 1/2" X 13/16-16, 90 degree elbow, Drop height: 29mm, with MXG4K & MX-G5K hose |
| 58 | 734733256-2 | 8GS-10FF0RX90M-2W | ORFS | -8 | GS | 1/2" X 1-14, 90 degree elbow, with MXG4K & MXG5K hose |
| 59 | 734769096-2 | 8GS-10MFFOR-2W | ORFS | -8 | GS | 1/2" X 1-14, Male straight, with MXG4K & MXG5K hose |
| 60 | 734793966 | 10GS-12FBSPORX | BSPP | -10 | GS | 5/8" X 3/4" BSPP straight with 0 ring |
| 61 | 734793986 | 10GS-12FBSP0X90 | BSPP | -10 | GS | 5/8" X 3/4" BSPP 90 degree elbow with 0 ring |
| 62 | 734769026 | 10GS-10FBSPORX 180 | BSPP | -10 | GS | 5/8" X 5/8" BSPP 180 degree bend with 0 ring |
| 63 | 734792406 | 10GS-10FBSPORX-WF | BSPP | -10 | GS | 5/8" X 5/8" BSPP straight with 0 ring |
| 64 | 734795556 | 10GS-10HFBSPORX-WF | BSPP | -10 | GS | 5/8" X 5/8" BSPP straight with 0 ring th Backup hex |
| 65 | 734769026-2 | 10GS-10FBSPORX 180-2W | BSPP | -10 | GS | 5/8" X 5/8" BSPP 180 degree bend with 0 ring , with MXG4K hose |
| 66 | 734789306-2 | 10GS-12HFBSPORX-2W | BSPP | -10 | GS | 5/8" X 3/4" BSPP straight with 0 ring withbackup hex, with MXG4K hose |
| 67 | 734792406-2 | 10GS-10FBSPORX-2W | BSPP | -10 | GS | 5/8" X 5/8" BSPP straight with 0 ring , with MXG4K hose |
| 68 | 734793966-2 | 10GS-12FBSPORX-2W | BSPP | -10 | GS | 5/8" X 3/4" BSPP straight with 0 ring, with MXG4K hose |
| 69 | 734793986-2 | 10GS-12FBSP0X90- 60-2W | BSPP | -10 | GS | 5/8" X 3/4" BSPP 90 degree elbow with 0 ring , with MXG4K hose |
| 70 | 734795556-2 | 10GS-10HFBSPORX-2W | BSPP | -10 | GS | 5/8" X 5/8" BSPP straight with 0 ring th Backup hex, with MXG4K hose |
| 71 | 734775336 | 10GS-8FLH90M-40 | FLANGE | -10 | GS | 5/8" XFLANGE OD: 31.75mm, 90 degree elbow, Drop height: 40mm |
| 72 | 734769116 | 10GS-8FL90-130 | FLANGE | -10 | GS | 5/8" XFLANGE OD: 30.18mm, 90 degree elbow, Drop height: 130mm |
| 73 | 734911386 | 10GS-12FLH | FLANGE | -10 | GS | 5/8" XFLANGE OD: 41.28mm, straight |
| 74 | 734769116-2 | 10GS-8FL90-130-2W | FLANGE | -10 | GS | 5/8" XFLANGE OD: 30.18mm, 90 degree elbow, Drop height: 130mm, with MXG4K hose |
| 75 | 734775336-2 | 10GS-8FLH90M-2W | FLANGE | -10 | GS | 5/8" XFLANGE OD: 31.75mm, 90 degree elbow, Drop height: 40mm, with MXG4K hose |
| 76 | 734911386-2 | 10GS-12FLH-2W | FLANGE | -10 | GS | 5/8" XFLANGE OD: 41.28mm, straight, with MXG4K hose |
| 77 | 734760206 | 10GS-8FLH45-61 | FLANGE | -10 | GS | 5/8" XFLANGE OD: 31.75mm, 45 degree elbow, Drop height: 61mm |
| 78 | 734760236 | 10GS-12FLH90-62 | FLANGE | -10 | GS | 5/8" XFLANGE OD: 41.28mm, 90 degree Elbow, Drop Height: 62mm |
| 79 | 734760246 | 10GS-8FLH45-38 | FLANGE | -10 | GS | 5/8" XFLANGE OD: 31.75mm, 45 degree elbow, Drop height: 38mm |
| 80 | 734748336 | 10GS-8FLH | FLANGE | -10 | GS | 5/8" XFLANGE OD: 31.75mm, Straight |
| 81 | 734760006 | 10GS-12FLH45-30 | FLANGE | -10 | GS | 5/8" XFLANGE OD: 41.28mm, 45 degree Elbow, Drop Height: 30mm |
| 82 | 734760156 | 10GS-8FLH90-100 | FLANGE | -10 | GS | 5/8" XFLANGE OD: 31.75mm, 90 degree elbow, Drop height: 100mm |
| 83 | 734782176 | 10GS-10FJX | JIC | -10 | GS | 5/8" X 7/8-14, straight |



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|----------|-------------|-------------------------------|--------|--------------|------------------|---|
| 84 | 734725356 | 10GS-12FJX 45 | JIC | -10 | GS | 5/8" X 1 1/16-12, 45 degree elbow |
| 85 | 734728356 | 10GS-12FJX90M | JIC | -10 | GS | 5/8" X 1 1/16-12, 90 degree elbow |
| 86 | 734725356-2 | 10GS-12FJX 45-21-2W | JIC | -10 | GS | 5/8" X 1 1/16-12, 45 degree elbow, with MXG4K hose |
| 87 | 734728356-2 | 10GS-12FJX90M-2W | JIC | -10 | GS | 5/8" X 1 1/16-12, 45 degree elbow, with MXG4K hose |
| 88 | 734782176-2 | 10GS-10FJX-2W | JIC | -10 | GS | 5/8" X 7/8-14, straight, with MXG4K hose |
| 89 | 734792106 | 10GS-18FDLORX | METRIC | -10 | GS | 5/8", M26X 1.5, TUBE OD: 18mm, Straight with 0 ring |
| 90 | 734792506 | 10GS-18FDLORX 45 | METRIC | -10 | GS | 5/8" , M26X 1.5, TUBE OD: 18mm, 45 degree elbow with 0 ring |
| 91 | 734792516 | 10GS-18FDLORX90 | METRIC | -10 | GS | 5/8" , M26X 1.5, TUBE OD: 18mm, 90 degree elbow with 0 ring |
| 92 | 734792116 | 10GS-20FDHORX | METRIC | -10 | GS | 5/8", M30X 2.0, TUBE OD: 20mm, Straight with 0 ring |
| 93 | 734789286 | 10GS-20FDH0RX90-65 | METRIC | -10 | GS | 5/8" , M30X 2.0, TUBE OD: 20mm, 90 degree elbow with 0 ring, Drop height:65mm |
| 94 | 734789556 | 10GS-20FDH0RX90-60 | METRIC | -10 | GS | 5/8" , M30X 2.0, TUBE OD: 20mm, 90 degree elbow with 0 ring, Drop height:60mm |
| 95 | 734769166 | 10GS-20FDH0RX 45-29 | METRIC | -10 | GS | 5/8" , M30X 2.0, TUBE OD: 20mm, 45 degree elbow with 0 ring |
| 96 | 734789506 | 10GS-16FDHORX | METRIC | -10 | GS | 5/8" , M24X 1.5 , TUBE OD: 16mm, Straight with O ring |
| 97 | 734789616 | 10GS-20HFDHORX | METRIC | -10 | GS | 5/8" , M30X 2.0, TUBE OD: 20mm, Straight with 0 ring with backup hex option |
| 98 | 734789626 | 10GS-20HFDHORX 45-32.5 | METRIC | -10 | GS | 5/8" , M30X 2.0, TUBE OD: 20mm, 45 degree elbow with O ring with backup hex option |
| 99 | 734769166-2 | 10GS-20FDH0RX 45- 29-2W | METRIC | -10 | GS | 5/8" , M30X 2.0, TUBE OD: 20mm, 45 degree elbow with O ring, with MXG4K hose |
| 100 | 734789286-2 | 10GS-20FDH0RX90- 65-2W | METRIC | -10 | GS | 5/8" , M30X 2.0, TUBE OD: 20mm, 90 degree elbow with 0 ring, Drop height:65mm, with MXG4K hose |
| 101 | 734789506-2 | 10GS-16FDHORX-2W | METRIC | -10 | GS | 5/8" , M24X 1.5 , TUBE OD: 16mm, Straight with 0 ring, with MXG4K $$ hose |
| 102 | 734789556-2 | 10GS-20FDH0RX90- 60-2W | METRIC | -10 | GS | 5/8" , M30X 2.0, TUBE OD: 20mm, 90 degree elbow with 0 ring, Drop height:60mm, with MXG4K hose |
| 103 | 734789616-2 | 10GS-20HFDHORX-2W | METRIC | -10 | GS | 5/8" , M30X 2.0, TUBE OD: 20mm, Straight with O ring with backup hex option, with MXG4K hose |
| 104 | 734789626-2 | 10GS-20HFDH0RX 45- 32.5-2W | METRIC | -10 | GS | 5/8" , M30X 2.0, TUBE OD: 20mm, 45 degree elbow with O ring with backup hex option, with MXG4K hose |
| 105 | 734792106-2 | 10GS-18FDLORX-2W | METRIC | -10 | GS | 5/8" , M26X 1.5, TUBE OD: 18mm, Straight with 0 ring, with MXG4K $$ hose |
| 106 | 734792116-2 | 10GS-20FDHORX-2W | METRIC | -10 | GS | 5/8" , M30X 2.0, TUBE OD: 20mm, Straight with 0 ring, with MXG4K $$ hose |
| 107 | 734792506-2 | 10GS-18FDLORX 45- 25-2W | METRIC | -10 | GS | 5/8" , M26X 1.5, TUBE OD: 18mm, 45 degree elbow with O ring, with MXG4K hose |
| 108 | 734792516-2 | 10GS-18FDLORX90- 51.5-2W | METRIC | -10 | GS | 5/8" , M26X 1.5, TUBE OD: 18mm, 90 degree elbow with 0 ring, with MXG4K hose |
| 109 | 734730346 | 10GS-10FFORX | ORFS | -10 | GS | 5/8" X 1-14, straight |
| 110 | 734731346 | 10GS-10FFORX 45-16 | ORFS | -10 | GS | 5/8" X 1-14, 45 degree elbow |
| 111 | 734732346 | 10GS-10FFORX90S, DH-32mm | ORFS | -10 | GS | 5/8" X 1-14, 90 degree elbow, Drop height: 32mm |
| 112 | 734733346 | 10GS-10FF0RX90M-47 | ORFS | -10 | GS | 5/8" X 1-14, 90 degree elbow, Drop height: 47mm |
| 113 | 734723876 | 10GS-10MFFOR | ORFS | -10 | GS | 5/8" X 1-14, Male straight |
| 114 | 734789146 | 10GS-10MFFORBKH- DLN | ORFS | -10 | GS | 5/8" X 1-14, Male straight bulk head with locknut |
| 115 | 734730356 | 10GS-12FFORX | ORFS | -10 | GS | 5/8" X 1 3/16-12, straight |
| 116 | 734732356 | 10GS-12FFORX90-48 | ORFS | -10 | GS | 5/8" X 1 3/16-12, 90 degree elbow, Drop height: 48 |
| 117 | 734723886 | 10GS-12MFFOR | ORFS | -10 | GS | 5/8" X 1 3/16-12, Male straight |
| 118 | 734723876-2 | 10GS-10MFFOR-2W | ORFS | -10 | GS | 5/8" X 1-14, Male straight, with MXG4K hose |
| 119 | 734723886-2 | 10GS-12MFFOR-2W | ORFS | -10 | GS | 5/8" X 1 3/16-12, Male straight, with MXG4K hose |
| 120 | 734730346-2 | 10GS-10FFORX-2W | ORFS | -10 | GS | 5/8" X 1-14, straight, with MXG4K hose |
| 121 | 734730356-2 | 10GS-12FFORX-2W | ORFS | -10 | GS | 5/8" X 1 3/16-12, straight, with MXG4K hose |



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|----------|-------------|-----------------------------------|--------|--------------|------------------|--|
| 122 | 734731346-2 | 10GS-10FFORX 45- 16-2W | ORFS | -10 | GS | 5/8" X 1-14, 45 degree elbow, with MXG4K hose |
| 123 | 734732346-2 | 10GS-10FFORX90S-2W | ORFS | -10 | GS | 5/8" X 1-14, 90 degree elbow, Drop height: 32mm, with MXG4K hose |
| 124 | 734732356-2 | 10GS-12FF0RX90-48- 2W | ORFS | -10 | GS | 5/8" X 1 3/16-12, 90 degree elbow, Drop height: 48, with MXG4K hose |
| 125 | 734733346-2 | 10GS-10FF0RX90M-2W | ORFS | -10 | GS | 5/8" X 1-14, 90 degree elbow, Drop height: 47mm, with MXG4K hose |
| 126 | 734789146-2 | 10GS-10MFFORBKH- DLN-2W | ORFS | -10 | GS | 5/8" X 1-14, Male straight bulk head with locknut, with MXG4K hose |
| 127 | 734793996 | 12GS-12FBSPORX | BSPP | -12 | GS | 3/4" X 3/4" BSPP straight with 0 ring |
| 128 | 734795566 | 12GS-12HFBSPORX | BSPP | -12 | GS | 3/4" X 3/4" BSPP straight with 0 ring with backup hex |
| 129 | 734794006 | 12GS-12FBSPORX45M | BSPP | -12 | GS | 3/4" X 3/4" BSPP 45 degree elbow with 0 ring |
| 130 | 734794016 | 12GS-12FBSPORX90M | BSPP | -12 | GS | 3/4" X 3/4" BSPP 90 degree elbow with 0 ring |
| 131 | 734794496 | 12GS-12MBSPPSP | BSPP | -12 | GS | 3/4" X 3/4" Male straight_JCB |
| 132 | 734792206 | 12GS-12MBSPP | BSPP | -12 | GS | 3/4" X 3/4" Male straight |
| 133 | 734789326 | 12GS-12BKHDMBSPP | BSPP | -12 | GS | 3/4" X 3/4" Male straight bulkhead |
| 134 | 734789986 | 12GS-12FBSPORX180_ SPL | BSPP | -12 | GS | 3/4" X 3/4" BSPP 180 degree elbow with 0 ring |
| 135 | 734794486 | 12GS-16MBSPP | BSPP | -12 | GS | 3/4" X 1" Male straight |
| 136 | 734769136 | 12GS-16FBSPORX45-32 | BSPP | -12 | GS | 3/4" X 1" BSPP 45 degree elbow with O ring |
| 137 | 734760136 | 12GS-12FBSPORX-2W | BSPP | -12 | GS | 3/4" X 3/4" BSPP straight with O ring, with MXG4K & MXG5K hose |
| 138 | 734769136-2 | 12GS-16FBSPORX45- 32-2W | BSPP | -12 | GS | 3/4" X 1" BSPP 45 degree elbow with 0 ring, with MXG4K & MXG5K hose |
| 139 | 734789326-2 | 12GS-12BKHDMBSPP- 2W | BSPP | -12 | GS | 3/4" X 3/4" Male straight bulkhead, with MXG4K & MXG5K hose |
| 140 | 734789986-2 | 12GS-12FBSPORX180_ SPL-2W | BSPP | -12 | GS | 3/4" X 3/4" BSPP 180 degree elbow with O ring, with MXG4K & MXG5K hose |
| 141 | 734792206-2 | 12GS-12MBSPP-2W | BSPP | -12 | GS | 3/4" X 3/4" Male straight, with MXG4K & MXG5K hose |
| 142 | 734794006-2 | 12GS-12FBSPORX45M- 2W | BSPP | -12 | GS | 3/4" X 3/4" BSPP 45 degree elbow with O ring, with MXG4K & MXG5K hose |
| 143 | 734794016-2 | 12GS-12FBSPORX90M- 2W | BSPP | -12 | GS | 3/4" X 3/4" BSPP 90 degree elbow with 0 ring, with MXG4K & MXG5K hose |
| 144 | 734794486-2 | 12GS-16MBSPP-2W | BSPP | -12 | GS | 3/4" X 1" Male straight, with MXG4K & MXG5K hose |
| 145 | 734794496-2 | 12GS-12MBSPPSP-2W | BSPP | -12 | GS | 3/4" X 3/4" Male straight_JCB, with MXG4K & MXG5K hose |
| 146 | 734795566-2 | 12GS-12HFBSPORX-2W | BSPP | -12 | GS | 3/4" X 3/4" BSPP straight with 0 ring with backup hex, with MXG4K & MXG5K hose |
| 147 | 734776196 | 12GS-12FJISX | FJISX | -12 | GS | 3/4" X 3/4" JIS or C TYPE BSPP straight |
| 148 | 734776196-2 | 12GS-12FJISX-2W | FJISX | -12 | GS | 3/4" X 3/4" JIS or C TYPE BSPP straight, with MXG4K & MXG5K hose |
| 149 | 734741446 | 12GS-12FL. | FLANGE | -12 | GS | 3/4" X FLANGE OD: 38.10mm, straight |
| 150 | 734743446 | 12GS-12FL30M | FLANGE | -12 | GS | 3/4" X FLANGE OD: 38.10mm, 30 degree elbow |
| 151 | 734744446 | 12GS-12FL45M | FLANGE | -12 | GS | 3/4" X FLANGE OD: 38.10mm, 45 degree elbow |
| 152 | 734745446 | 12GS-12FL60M | FLANGE | -12 | GS | 3/4" X FLANGE OD: 38.10mm, 60 degree elbow |
| 153 | 734773906 | 12GS-12FL90-100COU- PLING | FLANGE | -12 | GS | 3/4" X FLANGE OD: 38.10mm, 90 degree elbow, Drop height: 100mm |
| 154 | 734774446 | 12GS-12FL90M | FLANGE | -12 | GS | 3/4" X FLANGE OD: 38.10mm, 90 degree elbow, Drop height: Medium |
| 155 | 734748446 | 12GS-12FLH | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, straight |
| 156 | 734751446 | 12GS-12FLH45M | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, 45 degree elbow |
| 157 | 734775446 | 12GS-12FLH90M | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: Medium |
| 158 | 734778726 | 12GS-12FLH90-67 | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: 67mm |
| 159 | 734789036 | 12GS-12FLH90-90 STE- MASSEMBLY | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: 90mm |



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|----------|-------------|-------------------------------------|--------|--------------|------------------|---|
| 160 | 734773836 | 12GS-12FLH90-100 | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: 100mm |
| 161 | 734776416 | 12GS-12FLH90-122 | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: 122mm |
| 162 | 734789386 | 12GS-12FLH67.5-45 | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, 67 degree elbow |
| 163 | 734769106 | 12GS-12FLH45-100 | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, 45 degree elbow |
| 164 | 734789716 | 12GS-12FLH100-67 | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, 100 degree elbow |
| 165 | 734741466 | 12GS-16FL(PART- NO. G20300-1216) | FLANGE | -12 | GS | 3/4" X FLANGE OD: 44.45mm, straight |
| 166 | 734773136 | 12GS-16FL45 | FLANGE | -12 | GS | 3/4" X FLANGE OD: 44.45mm, 45 degree elbow |
| 167 | 734773916 | 12GS-16FL90S | FLANGE | -12 | GS | 3/4" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: Small |
| 168 | 734773926 | 12GS-16FL90M | FLANGE | -12 | GS | 3/4" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: Medium |
| 169 | 734776276 | 12GS-16FL90-100 | FLANGE | -12 | GS | 3/4" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 100mm |
| 170 | 734776286 | 12GS-16FL90-150 | FLANGE | -12 | GS | 3/4" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 150mm |
| 171 | 734779366 | 12GS-16FL90-130DH | FLANGE | -12 | GS | 3/4" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 130mm |
| 172 | 734789366 | 12GS-16FL90-210 | FLANGE | -12 | GS | 3/4" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 210mm |
| 173 | 734748466 | 12GS-16FLH | FLANGE | -12 | GS | 3/4" X FLANGE OD: 47.63mm, straight |
| 174 | 734751466 | 12GS-16FLH45M-32 | FLANGE | -12 | GS | 3/4" X FLANGE OD: 47.63mm, 45 degree elbow |
| 175 | 734753466 | 12GS-16FLH67M | FLANGE | -12 | GS | 3/4" X FLANGE OD: 47.63mm, 67 degree elbow |
| 176 | 734754466 | 12GS-16FLH90S | FLANGE | -12 | GS | 3/4" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: Small |
| 177 | 734776296 | 12GS-16FLH90-100 | FLANGE | -12 | GS | 3/4" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 100mm |
| 178 | 734762446 | 12GS-12FLC | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, straight |
| 179 | 734773946 | 12GS-12FLC90-68 | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, 90 degree elbow |
| 180 | 734762466 | 12GS-16FLC | FLANGE | -12 | GS | 3/4" X FLANGE OD: 47.63mm, straight |
| 181 | 734778356 | 12GS-12FL90-140 COUPLING | FLANGE | -12 | GS | 3/4" X FLANGE OD: 38.10mm, 90 degree elbow, Drop height: 140mm |
| 182 | 734779026 | 12GS-16FL90-178-WF | FLANGE | -12 | GS | 3/4" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 178mm |
| 183 | 734789046 | 12GS-12FL45-100 COUPLING | FLANGE | -12 | GS | 3/4" X FLANGE OD: 38.10mm, 45 degree elbow, Drop height: 100mm |
| 184 | 734741446-2 | 12GS12FL-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 38.10mm, straight, with MXG4K & MXG5K hose |
| 185 | 734741466-2 | 12GS-16FL-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 44.45mm, straight, with MXG4K & MXG5K hose |
| 186 | 734743446-2 | 12GS-12FL30M-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 38.10mm, 30 degree elbow, with MXG4K & MXG5K hose |
| 187 | 734744446-2 | 12GS-12FL45M-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 38.10mm, 45 degree elbow, with MXG4K & MXG5K hose |
| 188 | 734745446-2 | 12GS-12FL60M-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 38.10mm, 60 degree elbow, with MXG4K & MXG5K hose |
| 189 | 734748446-2 | 12GS-12FLH-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, straight, with MXG4K & MXG5K hose |
| 190 | 734748466-2 | 12GS-16FLH-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 47.63mm, straight, with MXG4K & MXG5K hose |
| 191 | 734751446-2 | 12GS-12FLH45M-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, 45 degree elbow, with MXG4K & MXG5K hose |
| 192 | 734751466-2 | 12GS-16FLH45M-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 47.63mm, 45 degree elbow, with MXG4K & MXG5K hose |
| 193 | 734753466-2 | 12GS-16FLH67M-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 47.63mm, 67 degree elbow, with MXG4K & MXG5K hose |
| 194 | 734754466-2 | 12GS-16FLH90S-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: Small, with MXG4K & MXG5K hose |
| 195 | 734762446-2 | 12GS-12FLC-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, straight, with MXG4K & MXG5K hose |
| 196 | 734762466-2 | 12GS-16FLC-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 47.63mm, straight, with MXG4K & MXG5K hose |
| 197 | 734769106-2 | 12GS-12FLH45-100-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, 45 degree elbow, with MXG4K & MXG5K hose |
| 198 | 734773136-2 | 12GS-16FL45-28-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 44.45mm, 45 degree elbow, with MXG4K & MXG5K hose |
| 199 | 734773836-2 | 12GS-12FLH90-100-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: 100mm, with MXG4K & MXG5K hose |
| 200 | 734773906-2 | 12GS-12FL90-100-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 38.10mm, 90 degree elbow, Drop height: 100mm, with MXG4K & MXG5K hose |
| 201 | 734773916-2 | 12GS-16FL90S-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: Small, with MXG4K & MXG5K hose |



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|----------|-------------|--------------------------|--------|--------------|------------------|--|
| 202 | 734773926-2 | 12GS-16FL90M-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: Medium, with MXG4K & MXG5K hose |
| 203 | 734773946-2 | 12GS-12FLC90-68-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, 90 degree elbow, with MXG4K & MXG5K hose |
| 204 | 734774446-2 | 12GS-12FL90M-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 38.10mm, 90 degree elbow, Drop height: Medium, with MXG4K & MXG5K hose |
| 205 | 734775446-2 | 12GS-12FLH90M-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: Medium, with MXG4K & MXG5K hose |
| 206 | 734776276-2 | 12GS-16FL90-100-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 100mm, with MXG4K & MXG5K hose |
| 207 | 734776286-2 | 12GS-16FL90-150-2W | FLANGE | -12 | GS | 3/4"X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 150mm, with MXG4K & MXG5K hose |
| 208 | 734776296-2 | 12GS-16FLH90-100-2W | FLANGE | -12 | GS | 3/4"X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 100mm, with MXG4K & MXG5K hose |
| 209 | 734776416-2 | 12GS-12FLH90-122-2W | FLANGE | -12 | GS | 3/4"X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: 122mm, with MXG4K & MXG5K hose |
| 210 | 734778356-2 | 12GS-12FL90-140-2W | FLANGE | -12 | GS | 3/4"X FLANGE OD: 38.10mm, 90 degree elbow, Drop height: 140mm, with MXG4K & MXG5K hose |
| 211 | 734778726-2 | 12GS-12FLH90-67-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: 67mm, with MXG4K & MXG5K hose |
| 212 | 734779026-2 | 12GS-16FL90-178-2W | FLANGE | -12 | GS | 3/4"X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 178mm, with MXG4K & MXG5K hose |
| 213 | 734779366-2 | 12GS-16FL90-130-2W | FLANGE | -12 | GS | 3/4"X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 130mm, with MXG4K & MXG5K hose |
| 214 | 734789036-2 | 12GS-12FLH90-90-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: 90mm, with MXG4K & MXG5K hose |
| 215 | 734789046-2 | 12GS-12FL45-100-2W | FLANGE | -12 | GS | 3/4"X FLANGE OD: 38.10mm, 45 degree elbow, Drop height: 100mm, with MXG4K & MXG5K hose |
| 216 | 734789366-2 | 12GS-16FL90-210-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 210mm, with MXG4K & MXG5K hose |
| 217 | 734789386-2 | 12GS-12FLH67.5-45- 2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, 67 degree elbow, with MXG4K & MXG5K hose |
| 218 | 734789716-2 | 12GS-12FLH100-67-2W | FLANGE | -12 | GS | 3/4" X FLANGE OD: 41.28mm, 100 degree elbow, with MXG4K & MXG5K hose |
| 219 | 734778076 | 12GS-16FLH90-120 | FLANGE | -12 | GS | 3/4" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 120mm |
| 220 | 734760076 | 12GS-16FLH90-80 | FLANGE | -12 | GS | 3/4" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 80mm |
| 221 | 734724446 | 12GS-12FJX | JIC | -12 | GS | 3/4" X 1 1/16-12, straight |
| 222 | 734725446 | 12GS-12FJX45 | JIC | -12 | GS | 3/4" X 1 1/16-12, 45 degree elbow |
| 223 | 734728446 | 12GS-12FJX90M | JIC | -12 | GS | 3/4" X 1 1/16-12, 90 degree elbow, Drop : Medium |
| 224 | 734729446 | 12GS-12FJX90L | JIC | -12 | GS | 3/4" X 1 1/16-12, 90 degree elbow, Drop : Long |
| 225 | 734722446 | 12GS-12MJ | JIC | -12 | GS | 3/4" X 1 1/16-12, Male straight |
| 226 | 734722446-2 | 12GS-12MJ-2W | JIC | -12 | GS | 3/4" X 1 1/16-12, Male straight, with MXG4K & MXG5K hose |
| 227 | 734724446-2 | 12GS-12FJX-2W | JIC | -12 | GS | 3/4" X 1 1/16-12, straight, with MXG4K & MXG5K hose |
| 228 | 734725446-2 | 12GS-12FJX45-21-2W | JIC | -12 | GS | 3/4" X 1 1/16-12, 45 degree elbow, with MXG4K & MXG5K hose |
| 229 | 734728446-2 | 12GS-12FJX90M-2W | JIC | -12 | GS | 3/4" X 1 1/16-12, 90 degree elbow, Drop : Medium, with MXG4K & MXG5K hose |
| 230 | 734729446-2 | 12GS-12FJX90L-2W | JIC | -12 | GS | 3/4" X 1 1/16-12, 90 degree elbow, Drop : Long, with MXG4K & MXG5K hose |
| 231 | 734792126 | 12GS-22FDLORX | METRIC | -12 | GS | 3/4", M30X2.0, TUBE OD: 22mm, straight with 0 ring |
| 232 | 734792136 | 12GS-22FDLORX90M | METRIC | -12 | GS | 3/4", M30X2.0, TUBE OD: 22mm, 90 degree elbow with 0 ring |
| 233 | 734792146 | 12GS-20FDHORX | METRIC | -12 | GS | 3/4", M30X2.0, TUBE 0D: 20mm, Straight with 0 ring |
| 234 | 734769076 | 12GS-25FDHORX-SP | METRIC | -12 | GS | 3/4", M36X2.0, TUBE 0D: 25mm, straight with 0 ring |
| 235 | 734792176 | 12GS-25FDHORX45-31 | METRIC | -12 | GS | 3/4", M36X2.0, TUBE 0D: 25mm, 45 degree elbow with 0 ring |
| 236 | 734792196 | 12GS-25FDHORX90 | METRIC | -12 | GS | 3/4", M36X2.0, TUBE OD: 25mm, 90 degree elbow with 0 ring |



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|----------|-------------|----------------------------|--------|--------------|------------------|--|
| 237 | 734789206 | 12GS-25FD- HORX90-130 | METRIC | -12 | GS | 3/4", M36X2.0, TUBE OD: 25mm, 90 degree elbow with 0 ring, Drop Height: 130mm |
| 238 | 734769076-2 | 12GS-25FDHORX-SP- 2W | METRIC | -12 | GS | 3/4", M36X2.0, TUBE OD: 25mm, straight with 0 ring, with MXG4K & MXG5K hose |
| 239 | 734789206-2 | 12GS-25FDHORX90- 130-2W | METRIC | -12 | GS | 3/4", M36X2.0, TUBE OD: 25mm, 90 degree elbow with 0 ring, Drop Height: 130mm, with MXG4K & MXG5K hose |
| 240 | 734789576-2 | 12GS-25FDHORX90- 70-2W | METRIC | -12 | GS | 3/4", M36X2.0, TUBE OD: 25mm, 90 degree elbow with 0 ring, Drop Height: 70mm, with MXG4K & MXG5K hose |
| 241 | 734792126-2 | 12GS-22FDLORX-2W | METRIC | -12 | GS | 3/4",M30X2.0,TUBE OD: 22mm, straight with 0 ring, with MXG4K & MXG5K hose |
| 242 | 734792136-2 | 12GS-22FDLORX90M- 2W | METRIC | -12 | GS | 3/4", M30X2.0, TUBE OD: 22mm, 90 degree elbow with 0 ring, with MXG4K $\&$ MXG5K hose |
| 243 | 734792146-2 | 12GS-20FDHORX-2W | METRIC | -12 | GS | 3/4",M30X2.0,TUBE OD: 20mm, Straight with 0 ring, with MXG4K & MXG5K hose |
| 244 | 734792176-2 | 12GS-25FDHORX45- 31-2W | METRIC | -12 | GS | 3/4", M36X2.0, TUBE OD: 25mm, 45 degree elbow with 0 ring, with MXG4K $\&$ MXG5K hose |
| 245 | 734792186 | 12GS-20FDHORX90 | METRIC | -12 | GS | 3/4", M30X2.0, TUBE 0D: 20mm, 90 degree elbow with 0 ring |
| 246 | 734792526 | 12GS-22FDLORX45M | METRIC | -12 | GS | 3/4", M30X2.0, TUBE OD: 22mm, 45 degree elbow with 0 ring |
| 247 | 734760216 | 12GS-30FDHORX | METRIC | -12 | GS | 3/4", M42X2.0, TUBE OD: 30mm, straight with 0 ring |
| 248 | 734792266 | 12GS-25MDH | METRIC | -12 | GS | 3/4", M36X2.0, TUBE OD: 25mm, Male straight |
| 249 | 734730446 | 12GS-12FFORX | ORFS | -12 | GS | 3/4" X 1 3/16-12, straight |
| 250 | 734731446 | 12GS-12FFORX45 | ORFS | -12 | GS | 3/4" X 1 3/16-12, 45 degree elbow |
| 251 | 734732446 | 12GS-12FFORX90S | ORFS | -12 | GS | 3/4" X 1 3/16-12, 90 degree elbow, Drop Height: Small |
| 252 | 734733446 | 12GS-12FFORX90M | ORFS | -12 | GS | 3/4" X 1 3/16-12, 90 degree elbow, Drop Height: Medium |
| 253 | 734734446 | 12GS-12FFORX90L | ORFS | -12 | GS | 3/4" X 1 3/16-12, 90 degree elbow, Drop Height: Long |
| 254 | 734789276 | 12GS-12FFORX90-155 | ORFS | -12 | GS | 3/4" X 1 3/16-12, 90 degree elbow, Drop Height: 155mm |
| 255 | 734789156 | 12GS-12MFFORBKH- DLN | ORFS | -12 | GS | 3/4" X 1 3/16-12, Male Straight bulkhead with locknut |
| 256 | 734723836 | 12GS-12MFFOR | ORFS | -12 | GS | 3/4" X 1 3/16-12, Male Straight |
| 257 | 734730466 | 12GS-16FFORX | ORFS | -12 | GS | 3/4" X 1 7/16-12, Straight |
| 258 | 734733466 | 12GS-16FFORX90M | ORFS | -12 | GS | 3/4" X 1 7/16-12, 90 degree elbow |
| 259 | 734732436 | 12GS-10FFORX90S | ORFS | -12 | GS | 3/4" X 1-14, 90 degree elbow |
| 260 | 734730436 | 12GS-10FFORX-WF | ORFS | -12 | GS | 3/4" X 1–14, straight |
| 261 | 734723836-2 | 12GS-12MFFOR-2W | ORFS | -12 | GS | 3/4" X 1 3/16-12, Male Straight, with MXG4K & MXG5K hose |
| 262 | 734730436-2 | 12GS-10FFORX-2W | ORFS | -12 | GS | 3/4" X 1–14, straight, with MXG4K & MXG5K hose |
| 263 | 734730446-2 | 12GS-12FFORX-2W | ORFS | -12 | GS | 3/4" X 1 3/16-12, straight, with MXG4K & MXG5K hose |
| 264 | 734730466-2 | 12GS-16FFORX-2W | ORFS | -12 | GS | 3/4" X 1 7/16-12, Straight, with MXG4K & MXG5K hose |
| 265 | 734731446-2 | 12GS-12FFORX45-21- 2W | ORFS | -12 | GS | 3/4" X 1 3/16-12, 45 degree elbow, with MXG4K & MXG5K hose |
| 266 | 734732436-2 | 12GS-10FFORX90S-2W | ORFS | -12 | GS | 3/4" X 1-14, 90 degree elbow, with MXG4K & MXG5K hose |
| 267 | 734732446-2 | 12GS-12FFORX90S-2W | ORFS | -12 | GS | 3/4" X 1 3/16-12, 90 degree elbow, Drop Height: Small, with MXG4K & MX- G5K hose |
| 268 | 734733446-2 | 12GS-12FFORX90M-2W | ORFS | -12 | GS | 3/4" X 1 3/16-12, 90 degree elbow, Drop Height: Medium, with MXG4K & MXG5K hose |
| 269 | 734733466-2 | 12GS-16FFORX90M-2W | ORFS | -12 | GS | 3/4" X 1 7/16-12, 90 degree elbow, with MXG4K & MXG5K hose |
| 270 | 734734446-2 | 12GS-12FFORX90L-2W | ORFS | -12 | GS | 3/4" X 1 3/16-12, 90 degree elbow, Drop Height: Long, with MXG4K & MXG5K hose |
| 271 | 734789156-2 | 12GS-12MFFORBKH- DLN-2W | ORFS | -12 | GS | 3/4" X 1 3/16-12, Male Straight bulkhead with locknut, with MXG4K & MXG5K hose |
| 272 | 734789276-2 | 12GS-12FFORX90-155- 2W | ORFS | -12 | GS | 3/4" X 1 3/16-12, 90 degree elbow, Drop Height: 155mm, with MXG4K & MXG5K hose |



| 277 734790816 1663-L6FBSP0RX 6SPP -16 GS 1*X 1* SSPP straight with 0 ring 276 734705576 16GS-L6FBSP0RX BSPP -16 GS 1*X 1* SSPP straight with 0 ring 276 734702576 16GS-L6FBSP0RX BSPP -16 GS 1*X 1* SSPP straight with 0 ring 277 73470376 16GS-L6FBSP0RX BSPP -16 GS 1*X 1* SSPP diaget bend with 0 ring 278 73470360 16GS-L6MSEPSP BSPP -16 GS 1*X 1* SSPP diaget bend with 0 ring 278 73470826 16GS-L6MSEPSP BSPP -16 GS 1*X 1* SSPP Male straight LGB 280 73476836 16GS-L6FL FLANGE -16 GS 1*X FLANGE 00: 44.45mm, straight 281 734747555 16GS-L6FL9OS FLANGE -16 GS 1*X FLANGE 00: 44.45mm, 90 degree elbow, Drop height: Small 284 734774555 16GS-L6FL9OS FLANGE -16 GS 1*X FLANGE 00: 44.45mm, 90 degree elbow, Drop height: 120mm 285 73477356 16GS-L6FL9O-20 | |
|---|------------|
| 275 73479276 1665-16FBSPORX- 00MP BSPP -16 GS 1' X 1' BSPP 45 degree bend with 0 ring 276 734790786 1665-16FBSPORX- 00MP BSPP -16 GS 1' X 1' BSPP 40 degree bend with 0 ring 277 734780196 1665-16FBSPORX- 00MP BSPP -16 GS 1' X 1' BSPP 40 degree bend with 0 ring 278 734793066 1665-16MSSPP BSPP -16 GS 1' X 1' BSPP Male straight_UGB 279 734749356 1665-16FLS FLANGE -16 GS 1' X 1' BSPP Male straight_UGB 280 734749356 1665-16FLS FLANGE -16 GS 1' X FLANGE 00: 44.45mm, 90 degree ellow 281 734747555 1665-16FL9O FLANGE -16 GS 1' X FLANGE 00: 44.45mm, 90 degree ellow. Drop height: Small 288 734773166 1665-16FL9O FLANGE -16 GS 1' X FLANGE 00: 44.45mm, 90 degree ellow. Drop height: 120mr 286 734773166 1665-16FL9O-10 FLANGE -16 GS 1' X FLANGE 00: 44.45mm, 90 degree ellow. Drop height: 120mr | |
| 276 734790786 166S 16FBS pORX- BOMM BSPP 1.6 GS 1* X 1* BSPP 90 degree bend with 0 ring 277 734789196 166S 16FB SPORK90.64.35 BSPP 1.6 GS 1* X 1* BSPP 90.845 degree bend with 0 ring 278 7479306 166S 16MBSPPP BSPP 1.6 GS 1* X 1* BSPP Male straight_UCB 279 734790826 166S 16FL FLANGE 1.6 GS 1* X 1* BSPP Male straight_With 0 ring with backup hex 281 734749356 16GS 16FL FLANGE 1.6 GS 1* X 1* MSPP Male straight_With 0 ring with backup hex 283 734743556 16GS 16FL FLANGE 1.6 GS 1* X FLANGE 00: 44.45mm, 90 degree elbow, Drop height: Small 284 73477356 16GS 16FL000* FLANGE 1.6 GS 1* X FLANGE 00: 44.45mm, 90 degree elbow, Drop height: 120mm 287 734778366 16GS 16FL00 FLANGE 1.6 GS 1* X FLANGE 00: 44.45mm, 90 degree elbow, Drop height: 120mm 288 734778376 16GS 16FL00.120 FLANGE 1.6 GS 1* X FLANGE 00: 44.45mm, 90 degree | |
| 216 134/90/86 90MP BSPP 1.6 GS 1'X 1' BSPP 90.64/5 degree how with 0 mg 277 734789196 166G3.16FB- SP070x80a.45 BSPP 1.6 GS 1'X 1' BSPP Male straight_UCB 278 734790826 16G5.16MBSPPS BSPP 1.6 GS 1'X 1' BSPP Male straight_UCB 278 734740826 16G5.12HEBSP0RX BSPP 1.6 GS 1'X 1' BSPP Male straight_UCB 280 73475651 16G5.16HSP0RX BSPP 1.6 GS 1'X FLANED CD: 44.45mm, 90 degree elbow, Drop height: Small 281 73447556 16G5.16FL90 FLANGE 1.6 GS 1'X FLANED CD: 44.45mm, 90 degree elbow, Drop height: Medur 285 734773166 16G5.16FL90.120CUU FLANGE 1.6 GS 1'X FLANED CD: 44.45mm, 90 degree elbow, Drop height: 120mr 286 734778376 16G5.16FL90.120 FLANGE 1.6 GS 1'X FLANGE CD: 44.45mm, 90 degree elbow, Drop height: 120mr 287 73477876 16G5.16FL90.120 FLANGE 1.6 GS 1'X FLANGE CD: 44.45mm, 90 degree elbow, Drop height: 120mr < | |
| 277 73478319 SPORXB00245 BSPP 1-5 GS 1* X 1* ISSPP 90245 degree bend with 0 ring 278 734793606 16GS-16MBSPPP BSPP 1-6 GS 1* X 1* ISSPP Male straight_LCB 280 73476360 16GS-16MBSPP BSPP 1-6 GS 1* X 1* ISSPP Male straight 281 73474556 16GS-16FL45 FLANGE 1-6 GS 1* X FLANGE 0-14 4.5mm, 45 degree elbow 282 73474556 16GS-16FL45 FLANGE 1-6 GS 1* X FLANGE 00-14 4.5mm, 90 degree elbow, Drop height: Small 284 734747556 16GS-16FL900 FLANGE 1-6 GS 1* X FLANGE 00- 44.45mm, 90 degree elbow, Drop height: Mediun 285 734773166 16GS-16FL90-120COUL FLANGE 1-6 GS 1* X FLANGE 00: 44.45mm, 90 degree elbow, Drop height: 120mm 286 73477876 16GS-16FL90-130 FLANGE 1-6 GS 1* X FLANGE 00: 44.45mm, 90 degree elbow, Drop height: 120mm 287 73477876 16GS-16FL90-130 FLANGE 1-6 GS 1* X FLANGE 00: 44.45mm, 90 degree elbow, Drop height: 120mm | |
| 279 734790826 1665-16HBSPP BSPP -16 GS 1*X 1* BSPP Male straight 280 734769336 1665-12HFESPORX BSPP -16 GS 1*X 2/4* BSPP Straight With 0ring with backup hex 281 73474556 1665-16FL45 FLANGE -16 GS 1*X FLANGE 00: 44.45mm, straight 283 734747556 1665-16FL45 FLANGE -16 GS 1*X FLANGE 00: 44.45mm, 90 degree elbow, Drop height: Small 284 73477356 1665-16FL90 FLANGE -16 GS 1*X FLANGE 00: 44.45mm, 90 degree elbow, Drop height: 120mm 285 734773166 1665-16FL90-2100 FLANGE -16 GS 1*X FLANGE 00: 44.45mm, 90 degree elbow, Drop height: 120mm 286 734778376 1665-16FL90-210 FLANGE -16 GS 1*X FLANGE 00: 44.45mm, 90 degree elbow, Drop height: 120mm 287 734778376 1665-16FL90-210 FLANGE -16 GS 1*X FLANGE 00: 44.45mm, 90 degree elbow, Drop height: 120mm 298 734778376 1665-16FL45M FLANGE -16 GS 1*X FLANGE 00: 44.45mm, 90 degree e | |
| 280 734769336 166S.12HFBSPORX BSPP 1.6 GS 1" X 3/4" BSP straight with 0 ring with backup hex 281 734741556 16GS.16FL FLANGE 1.6 GS 1" X FLANGE 0D: 44.45mm, straight 282 734747556 16GS.16FL90 FLANGE 1.6 GS 1" X FLANGE 0D: 44.45mm, 90 degree ellow, Drop height: Small 284 734774556 16GS.16FL90 FLANGE 1.6 GS 1" X FLANGE 0D: 44.45mm, 90 degree ellow, Drop height: 120mm 286 734773166 16GS.16FL90 FLANGE 1.6 GS 1" X FLANGE 0D: 44.45mm, 90 degree ellow, Drop height: 120mm 286 734778376 16GS.16FL90.100 FLANGE 1.6 GS 1" X FLANGE 0D: 44.45mm, 90 degree ellow, Drop height: 120mm 288 734778376 16GS.16FL90.100 FLANGE 1.6 GS 1" X FLANGE 0D: 44.45mm, 90 degree ellow, Drop height: 120mm 290 734778376 16GS.16FL90.100 FLANGE 1.6 GS 1" X FLANGE 0D: 44.45mm, 90 degree ellow, Drop height: 120mm 291 7347478576 16GS.16FL90.100 FLANGE 1.6 GS | |
| 28. 734741556 16GS-16FL FLANGE -16 GS 1* X FLANGE 0D: 44.45mm, straight 28. 734744556 16GS-16FL45 FLANGE -16 GS 1* X FLANGE 0D: 44.45mm, 90 degree elbow, Drop height: Small 28. 734747556 16GS-16FL900S FLANGE -16 GS 1* X FLANGE 0D: 44.45mm, 90 degree elbow, Drop height: Medlun 28. 734774556 16GS-16FL9002000 FLANGE -16 GS 1* X FLANGE 0D: 44.45mm, 90 degree elbow, Drop height: 120mm 28. 734773166 16GS-16FL90-00 FLANGE -16 GS 1* X FLANGE 0D: 44.45mm, 90 degree elbow, Drop height: 120mm 28. 734778706 16GS-16FL90-10 FLANGE -16 GS 1* X FLANGE 0D: 44.45mm, 90 degree elbow, Drop height: 120mm 28. 7347787376 16GS-16FL90-10 FLANGE -16 GS 1* X FLANGE 0D: 44.45mm, 90 degree elbow, Drop height: 130mm 29. 734789886 16GS-16FL90-10 FLANGE -16 GS 1* X FLANGE 0D: 44.45mm, 90 degree elbow, Drop height: 130mm 29. 734778556 16GS-16FLH450M FLANGE -16 | |
| 282 734744556 16GS 16FL45 FLANGE 16 GS 1* X FLANGE OD: 44.45mm, 45 degree elbow 283 734747556 16GS 16FL90S FLANGE 16 GS 1* X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: Small 284 734774556 16GS 16FL90-0120C0U- PLING FLANGE 16 GS 1* X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 120mm 286 734778396 16GS 16FL90-90 FLANGE 16 GS 1* X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 120mm 287 734778706 16GS 16FL90-10 FLANGE 16 GS 1* X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 130mr 287 734778706 16GS 16FL90-10 FLANGE 16 GS 1* X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 130mr 289 73477976 16GS 16FL90-10 FLANGE 16 GS 1* X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 130mr 290 73478556 16GS 16FL10 FLANGE 16 GS 1* X FLANGE OD: 47.63mm, 90 degree elbow 291 73478566 16GS 16FLH90 FLANGE 16 GS | |
| 283 734747556 16GS-16FL90S FLANGE -16 GS 1* X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: Small 284 734774556 16GS-16FL90MCOU- PLING FLANGE -16 GS 1* X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: Medium 285 734773166 16GS-16FL90-120COU- PLING FLANGE -16 GS 1* X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 120mm 286 734778706 16GS-16FL90-120 FLANGE -16 GS 1* X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 120mm 288 73477876 16GS-16FL90-210 FLANGE -16 GS 1* X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 120mm 290 734778876 16GS-16FL10 FLANGE -16 GS 1* X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 120mm 291 734748556 16GS-16FLH30 FLANGE -16 GS 1* X FLANGE OD: 47.63mm, straight 292 734751556 16GS-16FLH30011 FLANGE -16 GS 1* X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 120mm 295 73478964 16GS-16FLH90110 FLANGE | |
| 284 734774556 16GS-16FL90MCOU- PLING FLANGE -16 GS 1" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: Mediun 285 734773166 16GS-16FL90-120COU- PLING FLANGE -16 GS 1" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 120mm 286 734778396 16GS-16FL90-90 FLANGE -16 GS 1" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 150mm 287 734778706 16GS-16FL90-130 FLANGE -16 GS 1" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 210mm 288 734778706 16GS-16FL90-130 FLANGE -16 GS 1" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 130mm 298 734779736 16GS-16FLH3TEMASSY FLANGE -16 GS 1" X FLANGE OD: 44.45mm, 90 degree elbow Drop height: 130mm 290 73478986 16GS-16FLH45M FLANGE -16 GS 1" X FLANGE OD: 44.45mm, 90 degree elbow 291 291 73476556 16GS-16FLH45M FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 292 73477726 16GS-16FLH45M < | |
| 284 734/74555 PLING FLANGE -16 GS 1" X FLANGE UD: 44.45mm, 90 degree elbow, Drop height: Medium 285 7347773166 PLING FLANGE -16 GS 1" X FLANGE DD: 44.45mm, 90 degree elbow, Drop height: 120mm 286 734778306 166S-16FL90-90 FLANGE -16 GS 1" X FLANGE DD: 44.45mm, 90 degree elbow, Drop height: 150mm 287 73477876 166S-16FL90-130 FLANGE -16 GS 1" X FLANGE DD: 44.45mm, 90 degree elbow, Drop height: 10mm 289 734778376 166S-16FL90-130 FLANGE -16 GS 1" X FLANGE DD: 44.45mm, 90 degree elbow, Drop height: 10mm 290 73478986 166S-16FLH3EMASSY FLANGE -16 GS 1" X FLANGE DD: 47.63mm, straight 292 73471556 166S-16FLH45M FLANGE -16 GS 1" X FLANGE DD: 47.63mm, 90 degree elbow 294 734777526 166S-16FLH90M FLANGE -16 GS 1" X FLANGE DD: 47.63mm, 90 degree elbow, Drop height: 120mm 297 734778506 166S-16FLH90-120 FLANGE -16 GS 1" X | |
| 285 734773166 PLING FLANGE -16 GS 1" X FLANGE 00: 44.45mm, 90 degree ellow, Drop height: 120mm 286 734778306 16GS:16F190-30 FLANGE -16 GS 1" X FLANGE 00: 44.45mm, 90 degree ellow, Drop height: 90mm 287 734778706 16GS:16F190-120 FLANGE -16 GS 1" X FLANGE 00: 44.45mm, 90 degree ellow, Drop height: 120mr 288 734778376 16GS:16F190-130 FLANGE -16 GS 1" X FLANGE 00: 44.45mm, 90 degree ellow, Drop height: 130mr 290 734778376 16GS:16F1H30 FLANGE -16 GS 1" X FLANGE 00: 44.45mm, 90 degree ellow, Drop height: 130mr 290 734778356 16GS:16F1H30 FLANGE -16 GS 1" X FLANGE 00: 47.63mm, straight 292 73477556 16GS:16F1H45M FLANGE -16 GS 1" X FLANGE 00: 47.63mm, 90 degree ellow 293 73477526 16GS:16F1H400.120 FLANGE -16 GS 1" X FLANGE 00: 47.63mm, 90 degree ellow, Drop height: 100mr 296 73478906 16GS:16F1H40.120 FLANGE -16 GS | ium |
| 287 734778706 16GS-16FL90-150 FLANGE -16 GS 1* X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 150mm 288 734778876 16GS-16FL90-210 FLANGE -16 GS 1* X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 130mm 289 734778376 16GS-16FL90-130 FLANGE -16 GS 1* X FLANGE OD: 44.45mm, 10 degree elbow, Drop height: 130mm 290 734788986 16GS-16FLHSTEMASSY FLANGE -16 GS 1* X FLANGE OD: 44.45mm, 10 degree elbow 291 734778556 16GS-16FLHSTEMASSY FLANGE -16 GS 1* X FLANGE OD: 47.63mm, straight 292 73475556 16GS-16FLH90M FLANGE -16 GS 1* X FLANGE OD: 47.63mm, straight 294 73477526 16GS-16FLH90.110 FLANGE -16 GS 1* X FLANGE OD: 47.63mm, 90 degree elbow 294 734778906 16GS-16FLH90.120 FLANGE -16 GS 1* X FLANGE OD: 53.98mm, straight 295 734789064 16GS-12FLH90.120 FLANGE -16 GS 1* X FLANGE OD: 53.98mm, straight | mm |
| 288 734778876 16GS-16FL90-210 FLANGE -16 GS 1" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 210mm 289 734779376 16GS-16FL90-130 FLANGE -16 GS 1" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 130mm 290 734789886 16GS-16FLH3TEMASSY FLANGE -16 GS 1" X FLANGE OD: 44.45mm, 110 degree elbow 291 734775556 16GS-16FLHSTEMASSY FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 292 734775256 16GS-16FLH90M FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 90 degree elbow 294 734777226 16GS-16FLH90-110 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 100mm 294 734778966 16GS-16FLH90-120 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 120mm 296 73478966 16GS-16FLH90-120 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 120mm 297 73474556 16GS-16FLH90-120 FLANGE -16 GS | ım |
| 289 734779376 16GS 16FL90-130 FLANGE -16 GS 1" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 130mm 290 734789886 16GS-16FL110 FLANGE -16 GS 1" X FLANGE OD: 44.45mm, 110 degree elbow 291 73478956 16GS-16FLHSTEMASSY FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 292 734775556 16GS-16FLH45M FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 90 degree elbow 293 734775556 16GS-16FLH90M FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 110mm 294 73477226 16GS-16FLH90-110 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 120mm 295 734789006 16GS-16FLH60-44 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 120mm 296 734789564 16GS-12FLH90120 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 120mm 297 73478556 16GS-12FLH90-120 FLANGE -16 GS 1" X | mm |
| 290 734789886 16GS-16FL10 FLANGE -16 GS 1* X FLANGE 0D: 44.45mm, 110 degree elbow 291 734748556 16GS-16FLHSTEMASSY FLANGE -16 GS 1* X FLANGE 0D: 47.63mm, straight 292 734751556 16GS-16FLH45M FLANGE -16 GS 1* X FLANGE 0D: 47.63mm, straight 293 734775556 16GS-16FLH90M FLANGE -16 GS 1* X FLANGE 0D: 47.63mm, 90 degree elbow 294 734777226 16GS-16FLH90-110 FLANGE -16 GS 1* X FLANGE 0D: 47.63mm, 90 degree elbow, Drop height: 100mm 295 734789066 16GS-16FLH90-120 FLANGE -16 GS 1* X FLANGE 0D: 47.63mm, 90 degree elbow, Drop height: 120mm 296 734789646 16GS-16FLH60-44 FLANGE -16 GS 1* X FLANGE 0D: 47.63mm, 90 degree elbow, Drop height: 120mm 297 734748566 16GS-12FLH90 FLANGE -16 GS 1* X FLANGE 0D: 41.28mm, 90 degree elbow, Drop height: 120mm 300 73476856 16GS-12FLH90-120 FLANGE -16 GS 1* X FLANGE 0D: 38.10mm, 45 degr | nm |
| 291 734748556 166S-16FLHSTEMASSY FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 292 734751556 16GS-16FLH45M FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 45 degree elbow 293 734775556 16GS-16FLH9OM FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 90 degree elbow 294 734775556 16GS-16FLH9O-110 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 110mm 295 734789006 16GS-16FLH9O-120 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 120mm 296 734789646 16GS-16FLH9O-120 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 120mm 296 734789646 16GS-12FLH9OM FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 120mm 297 73478566 16GS-12FLH9OM FLANGE -16 GS 1" X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: 120mm 300 73478926 16GS-12FLH9O-120 FLANGE -16 GS 1" X FLANGE OD: 41.28mm, 90 degree elbow 300 301 734768 | mm |
| 292 734751556 16GS-16FLH45M FLANGE -16 GS 1* X FLANGE DD: 47.63mm, 45 degree elbow 293 734775556 16GS-16FLH90M FLANGE -16 GS 1* X FLANGE DD: 47.63mm, 90 degree elbow 294 734775556 16GS-16FLH90-110 FLANGE -16 GS 1* X FLANGE DD: 47.63mm, 90 degree elbow, Drop height: 110mm 295 734789006 16GS-16FLH90-120 FLANGE -16 GS 1* X FLANGE DD: 47.63mm, 90 degree elbow, Drop height: 120mm 296 734789646 16GS-16FLH90-120 FLANGE -16 GS 1* X FLANGE DD: 47.63mm, 90 degree elbow, Drop height: 120mm 297 73478566 16GS-02FLH FLANGE -16 GS 1* X FLANGE DD: 47.63mm, 90 degree elbow, Drop height: 120mm 298 734754506 16GS-12FLH90.120 FLANGE -16 GS 1* X FLANGE DD: 41.28mm, 90 degree elbow, Drop height: 120mm 300 734785456 16GS-12FL45-29 FLANGE -16 GS 1* X FLANGE DD: 38.10mm, 45 degree elbow 301 73476256 16GS-16FLC FLANGE -16 GS 1* X F | |
| 293 734775556 16GS-16FLH90M FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 90 degree elbow 294 734777226 16GS-16FLH90-110 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 110mm 295 734789006 16GS-16FLH90-120 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 120mm 296 734789646 16GS-16FLH60-44 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 120mm 297 734789646 16GS-16FLH60-44 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 60 degree elbow, Drop height: 120mm 298 734754536 16GS-12FLH90 FLANGE -16 GS 1" X FLANGE OD: 41.28mm, 90 degree elbow 299 734754506 16GS-12FLH90-120 FLANGE -16 GS 1" X FLANGE OD: 38.10mm, 45 degree elbow 300 73476866 16GS-12FLH5-29 FLANGE -16 GS 1" X FLANGE OD: 38.10mm, 90 degree elbow, Drop height: 100mm 302 73476256 16GS-16FLC FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 303 734760186 16GS-16 | |
| 294 734777226 16GS-16FLH90-110 FLANGE -16 GS 1" X FLANGE 0D: 47.63mm, 90 degree elbow, Drop height: 110mm 295 734789006 16GS-16FLH90-120 FLANGE -16 GS 1" X FLANGE 0D: 47.63mm, 90 degree elbow, Drop height: 120mm 296 734789064 16GS-16FLH60-44 FLANGE -16 GS 1" X FLANGE 0D: 47.63mm, 90 degree elbow, Drop height: 120mm 297 734748566 16GS-20FLH FLANGE -16 GS 1" X FLANGE 0D: 47.63mm, 90 degree elbow, Drop height: 44mm 298 734754536 16GS-12FLH90M FLANGE -16 GS 1" X FLANGE 0D: 41.28mm, 90 degree elbow 299 734754506 16GS-12FLH90-120 FLANGE -16 GS 1" X FLANGE 0D: 41.28mm, 90 degree elbow, Drop height: 120mm 300 73476856 16GS-12FL45-29 FLANGE -16 GS 1" X FLANGE 0D: 38.10mm, 45 degree elbow 301 73476256 16GS-16FLC FLANGE -16 GS 1" X FLANGE 0D: 47.63mm, 45 degree elbow 302 734760186 16GS-20FLC FLANGE -16 GS 1" X FLANGE | |
| 295 734789006 166S-16FLH90-120 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 120mm 296 734789646 166S-16FLH60-44 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 60 degree elbow, Drop height: 144mm 297 734748566 16GS-20FLH FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 60 degree elbow, Drop height: 44mm 298 734754536 16GS-12FLH90M FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 90 degree elbow 299 734754536 16GS-12FLH90-120 FLANGE -16 GS 1" X FLANGE OD: 41.28mm, 90 degree elbow 300 734789926 16GS-12FLH90-120 FLANGE -16 GS 1" X FLANGE OD: 38.10mm, 45 degree elbow 301 73476866 16GS-16FLC FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 302 73476256 16GS-16FLC45-037 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 303 734760186 16GS-20FLC FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight | |
| 296 734789646 16GS-16FLH60-44 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 60 degree elbow, Drop height: 44mm 297 734748566 16GS-20FLH FLANGE -16 GS 1" X FLANGE OD: 53.98mm, straight 298 734754536 16GS-12FLH90M FLANGE -16 GS 1" X FLANGE OD: 41.28mm, 90 degree elbow 299 734754506 16GS-12FLH90-120 FLANGE -16 GS 1" X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: 120mm 300 734789926 16GS-12FL45-29 FLANGE -16 GS 1" X FLANGE OD: 38.10mm, 45 degree elbow 301 73476866 16GS-12FL90-100 FLANGE -16 GS 1" X FLANGE OD: 38.10mm, 90 degree elbow, Drop height: 100mm 302 734762566 16GS-16FLC FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 303 734760186 16GS-16FLC45-037 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 45 degree elbow 304 734762566 16GS-20FLC FLANGE -16 GS 1" X FLANGE OD: 53.98mm, straight | nm |
| 297 734748566 16GS-20FLH FLANGE -16 GS 1" X FLANGE 0D: 53.98mm, straight 298 734754536 16GS-12FLH90M FLANGE -16 GS 1" X FLANGE 0D: 41.28mm, 90 degree elbow 299 734754536 16GS-12FLH90-120 FLANGE -16 GS 1" X FLANGE 0D: 41.28mm, 90 degree elbow, Drop height: 120mm 300 734754506 16GS-12FL45-29 FLANGE -16 GS 1" X FLANGE 0D: 38.10mm, 45 degree elbow 301 734776866 16GS-12FL90-100 FLANGE -16 GS 1" X FLANGE 0D: 38.10mm, 90 degree elbow, Drop height: 100mm 302 734762556 16GS-16FLC FLANGE -16 GS 1" X FLANGE 0D: 47.63mm, straight 303 734760186 16GS-20FLC FLANGE -16 GS 1" X FLANGE 0D: 53.98mm, straight 305 734786176 16GS-12FLH90-90-4W FLANGE -16 GS 1" X FLANGE 0D: 53.98mm, straight 305 734786176 16GS-12FLH90-90-4W FLANGE -16 GS 1" X FLANGE 0D: 53.98mm, straight 306 734760296 16GS-20FLH90-75 FLANGE -16 GS 1" X F | nm |
| 298 734754536 16GS-12FLH90M FLANGE -16 GS 1" X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: 120mm 300 734754506 16GS-12FLH90-120 FLANGE -16 GS 1" X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: 120mm 300 734789926 16GS-12FL45-29 FLANGE -16 GS 1" X FLANGE OD: 38.10mm, 45 degree elbow 301 73476866 16GS-12FL90-100 FLANGE -16 GS 1" X FLANGE OD: 38.10mm, 90 degree elbow, Drop height: 100mm 302 73476256 16GS-16FLC FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 303 734760186 16GS-16FLC45-037 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 303 734762566 16GS-12FLH90-90-4W FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 305 734786176 16GS-12FLH90-90-4W FLANGE -16 GS 1" X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: 90mm 306 734760296 16GS-12FLH90-90-4W FLANGE -16 GS 1" X FLANGE OD: 53.98mm, 90 degree elbow, Drop height: 75mm 306 734760296 16GS-16FJX </td <td>m</td> | m |
| 299 734754506 16GS-12FLH90-120 FLANGE -16 GS 1" X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: 120mm 300 734789926 16GS-12FL45-29 FLANGE -16 GS 1" X FLANGE OD: 38.10mm, 45 degree elbow 301 734776866 16GS-12FL90-100 FLANGE -16 GS 1" X FLANGE OD: 38.10mm, 90 degree elbow, Drop height: 100mm 302 73476256 16GS-16FLC FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 303 734760186 16GS-16FLC FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 303 734760186 16GS-16FLC45-037 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 304 734762566 16GS-20FLC FLANGE -16 GS 1" X FLANGE OD: 53.98mm, straight 305 734786176 16GS-12FLH90-90-4W FLANGE -16 GS 1" X FLANGE OD: 53.98mm, straight 306 734760296 16GS-20FLH90-75 FLANGE -16 GS 1" X FLANGE OD: 53.98mm, 90 degree elbow, Drop height: 75mm 307 734724556 16GS-16FJX JIC -16 GS | |
| 300 734789926 16GS-12FL45-29 FLANGE -16 GS 1" X FLANGE OD: 38.10mm, 45 degree elbow 301 734776866 16GS-12FL90-100 FLANGE -16 GS 1" X FLANGE OD: 38.10mm, 90 degree elbow, Drop height: 100mm 302 734762556 16GS-16FLC FLANGE -16 GS 1" X FLANGE OD: 38.10mm, 90 degree elbow, Drop height: 100mm 303 734762556 16GS-16FLC45-037 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 303 734760186 16GS-20FLC FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 304 734762566 16GS-20FLC FLANGE -16 GS 1" X FLANGE OD: 53.98mm, straight 305 734786176 16GS-12FLH90-90-4W FLANGE -16 GS 1" X FLANGE OD: 53.98mm, 90 degree elbow, Drop height: 90mm 306 734760296 16GS-20FLH90-75 FLANGE -16 GS 1" X FLANGE OD: 53.98mm, 90 degree elbow, Drop height: 75mm 307 734724556 16GS-16FJX JIC -16 GS 1" X 1 5/16-12, 90 degree elbow 308 734728556 16GS-16FJX45-35 JIC -16 | |
| 300 734789926 16GS-12FL45-29 FLANGE -16 GS 1" X FLANGE OD: 38.10mm, 45 degree elbow 301 734776866 16GS-12FL90-100 FLANGE -16 GS 1" X FLANGE OD: 38.10mm, 90 degree elbow, Drop height: 100mm 302 734762556 16GS-16FLC FLANGE -16 GS 1" X FLANGE OD: 38.10mm, 90 degree elbow, Drop height: 100mm 303 734762556 16GS-16FLC45-037 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 304 734762566 16GS-20FLC FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 305 73476176 16GS-20FLC FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 306 734760296 16GS-20FLH90-90-4W FLANGE -16 GS 1" X FLANGE OD: 53.98mm, 90 degree elbow, Drop height: 90mm 306 734760296 16GS-20FLH90-75 FLANGE -16 GS 1" X 1 5/16-12, straight 307 734724556 16GS-16FJX JIC -16 GS 1" X 1 5/16-12, 90 degree elbow 308 734 | mm |
| 302 734762556 16GS-16FLC FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 303 734760186 16GS-16FLC45-037 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 45 degree elbow 304 734762566 16GS-20FLC FLANGE -16 GS 1" X FLANGE OD: 53.98mm, straight 305 734760296 16GS-12FLH90-90-4W FLANGE -16 GS 1" X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: 90mm 306 734760296 16GS-20FLH90-75 FLANGE -16 GS 1" X FLANGE OD: 53.98mm, 90 degree elbow, Drop height: 75mm 307 734724556 16GS-16FJX JIC -16 GS 1" X 1 5/16-12, straight 308 734789256 16GS-16FJX45-35 JIC -16 GS 1" X 1 5/16-12, 90 degree elbow 309 734789256 16GS-16FJX45-35 JIC -16 GS 1" X 1 5/16-12, 45 degree elbow 310 734724566 16GS-20FJX-WF JIC -16 GS 1" X 1 5/8-12, straight 311 734790806 16GS-30FDHORX METRIC -16 GS 1" M42X2.0, TUBE OD: 30mm, straight with 0 ring | |
| 302 734762556 16GS-16FLC FLANGE -16 GS 1" X FLANGE OD: 47.63mm, straight 303 734760186 16GS-16FLC45-037 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 45 degree elbow 304 734762566 16GS-20FLC FLANGE -16 GS 1" X FLANGE OD: 53.98mm, straight 305 734760296 16GS-12FLH90-90-4W FLANGE -16 GS 1" X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: 90mm 306 734760296 16GS-20FLH90-75 FLANGE -16 GS 1" X FLANGE OD: 53.98mm, 90 degree elbow, Drop height: 75mm 307 734724556 16GS-16FJX JIC -16 GS 1" X 1 5/16-12, straight 308 734789256 16GS-16FJX45-35 JIC -16 GS 1" X 1 5/16-12, 45 degree elbow 309 734789256 16GS-16FJX45-35 JIC -16 GS 1" X 1 5/16-12, 45 degree elbow 310 734724566 16GS-20FJX-WF JIC -16 GS 1" X 1 5/8-12, straight 311 734790806 16GS-30FDHORX METRIC -16 GS 1" M42X2.0, TUBE OD: 30mm, straight with 0 ring | nm |
| 303 734760186 16GS-16FLC45-037 FLANGE -16 GS 1" X FLANGE OD: 47.63mm, 45 degree elbow 304 734762566 16GS-20FLC FLANGE -16 GS 1" X FLANGE OD: 53.98mm, straight 305 734760296 16GS-12FLH90-90-4W FLANGE -16 GS 1" X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: 90mm 306 734760296 16GS-20FLH90-75 FLANGE -16 GS 1" X FLANGE OD: 53.98mm, 90 degree elbow, Drop height: 75mm 307 734724556 16GS-16FJX JIC -16 GS 1" X 1 5/16-12, straight 308 734789256 16GS-16FJX45-35 JIC -16 GS 1" X 1 5/16-12, 45 degree elbow 309 734789256 16GS-16FJX45-35 JIC -16 GS 1" X 1 5/16-12, 45 degree elbow 310 734724566 16GS-20FJX-WF JIC -16 GS 1" X 1 5/16-12, 45 degree elbow 310 734724566 16GS-30FDHORX METRIC -16 GS 1" X 1 5/8-12, straight 311 734790806 16GS-30FDHORX METRIC -16 GS 1" M42X2.0, TUBE OD: 30mm, straight with 0 ring | |
| 304 734762566 16GS-20FLC FLANGE -16 GS 1" X FLANGE OD: 53.98mm, straight 305 734786176 16GS-12FLH90-90-4W FLANGE -16 GS 1" X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: 90mm 306 734760296 16GS-20FLH90-75 FLANGE -16 GS 1" X FLANGE OD: 53.98mm, 90 degree elbow, Drop height: 90mm 306 734760296 16GS-20FLH90-75 FLANGE -16 GS 1" X FLANGE OD: 53.98mm, 90 degree elbow, Drop height: 75mm 307 734724556 16GS-16FJX JIC -16 GS 1" X 1 5/16-12, straight 308 734728556 16GS-16FJX45-35 JIC -16 GS 1" X 1 5/16-12, 45 degree elbow 309 734789256 16GS-16FJX45-35 JIC -16 GS 1" X 1 5/16-12, 45 degree elbow 310 734724566 16GS-20FJX-WF JIC -16 GS 1" X 1 5/8-12, straight 311 734790806 16GS-30FDHORX METRIC -16 GS 1" M42X2.0, TUBE OD: 30mm, straight with 0 ring | |
| 305 734786176 16GS-12FLH90-90-4W FLANGE -16 GS 1" X FLANGE OD: 41.28mm, 90 degree elbow, Drop height: 90mm 306 734760296 16GS-20FLH90-75 FLANGE -16 GS 1" X FLANGE OD: 53.98mm, 90 degree elbow, Drop height: 90mm 307 734724556 16GS-16FJX JIC -16 GS 1" X 1 5/16-12, straight 308 734728556 16GS-16FJX90M JIC -16 GS 1" X 1 5/16-12, 90 degree elbow 309 734724566 16GS-16FJX45-35 JIC -16 GS 1" X 1 5/16-12, 45 degree elbow 310 734724566 16GS-20FJX-WF JIC -16 GS 1" X 1 5/8-12, straight 311 734790806 16GS-30FDHORX METRIC -16 GS 1", M42X2.0, TUBE OD: 30mm, straight with 0 ring | |
| 306 734760296 16GS-20FLH90-75 FLANGE -16 GS 1" X FLANGE OD: 53.98mm, 90 degree elbow, Drop height: 75mm 307 734724556 16GS-16FJX JIC -16 GS 1" X 1 5/16-12, straight 308 734728556 16GS-16FJX90M JIC -16 GS 1" X 1 5/16-12, straight 309 734789256 16GS-16FJX45-35 JIC -16 GS 1" X 1 5/16-12, 45 degree elbow 310 734724566 16GS-20FJX-WF JIC -16 GS 1" X 1 5/16-12, 45 degree elbow 310 734724566 16GS-30FDHORX METRIC -16 GS 1" X 1 5/8-12, straight 311 734790806 16GS-30FDHORX METRIC -16 GS 1", M42X2.0, TUBE OD: 30mm, straight with 0 ring | m |
| 307 734724556 16GS-16FJX JIC -16 GS 1" X 1 5/16-12, straight 308 734728556 16GS-16FJX90M JIC -16 GS 1" X 1 5/16-12, 90 degree elbow 309 734789256 16GS-16FJX45-35 JIC -16 GS 1" X 1 5/16-12, 45 degree elbow 310 734724566 16GS-20FJX-WF JIC -16 GS 1" X 1 5/16-12, 45 degree elbow 311 734790806 16GS-30FDHORX METRIC -16 GS 1", M42X2.0, TUBE OD: 30mm, straight with 0 ring | |
| 308 734728556 16GS-16FJX90M JIC -16 GS 1" X 1 5/16-12, 90 degree elbow 309 734789256 16GS-16FJX45-35 JIC -16 GS 1" X 1 5/16-12, 45 degree elbow 310 734724566 16GS-20FJX-WF JIC -16 GS 1" X 1 5/8-12, straight 311 734790806 16GS-30FDHORX METRIC -16 GS 1", M42X2.0, TUBE OD: 30mm, straight with 0 ring | |
| 309 734789256 16GS-16FJX45-35 JIC -16 GS 1" X 1 5/16-12, 45 degree elbow 310 734724566 16GS-20FJX-WF JIC -16 GS 1" X 1 5/16-12, 45 degree elbow 311 734790806 16GS-30FDHORX METRIC -16 GS 1", M42X2.0, TUBE OD: 30mm, straight with 0 ring 11 M42X2.0, TUBE OD: 30mm, 45 degree elbow with 0 ring 1", M42X2.0, TUBE OD: 30mm, 45 degree elbow with 0 ring | |
| 310 734724566 16GS-20FJX-WF JIC -16 GS 1" X 1 5/8-12, straight 311 734790806 16GS-30FDH0RX METRIC -16 GS 1", M42X2.0, TUBE OD: 30mm, straight with 0 ring 1" M42X2.0, TUBE OD: 30mm, 45 degree elbow with 0 ring 1", M42X2.0, TUBE OD: 30mm, 45 degree elbow with 0 ring | |
| 311 734790806 16GS-30FDHORX METRIC -16 GS 1", M42X2.0, TUBE OD: 30mm, straight with 0 ring 1" M42X2.0, TUBE OD: 30mm, 45 degree elbow with 0 ring 1", M42X2.0, TUBE OD: 30mm, 45 degree elbow with 0 ring | |
| 1" M/2Y2 0, TUBE OD: 30mm, 45 degree elbow with 0 ring. Dron l | |
| 312 734789096 16GS-30FDHORX45-60 METRIC -16 GS 60mm | op Height: |
| 313 734769006 16GS-30FDH0RX45-38 METRIC -16 GS 1", M42X2.0, TUBE OD: 30mm, 45 degree elbow with 0 ring, Drop H 38mm | op Height: |
| 314 734790776 16GS-30FDH0RX90 METRIC -16 GS 1", M42X2.0, TUBE OD: 30mm, 90 degree elbow with 0 ring | |
| 315 734791536 16GS-25FDHORX METRIC -16 GS 1", M36X2.0, TUBE OD: 25mm, straight with 0 ring | |



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|----------|-----------|--|--------|--------------|------------------|--|
| 316 | 734730556 | 16GS-16FFORX | ORFS | -16 | GS | 1" X 1 7/16-12, Straight |
| 317 | 734731556 | 16GS-16FFORX45 | ORFS | -16 | GS | 1" X 1 7/16-12, 45 degree elbow |
| 318 | 734732556 | 16GS-16FFORX90 | ORFS | -16 | GS | 1" X 1 7/16-12, 90 degree elbow |
| 319 | 734730566 | 16GS-20FFORX | ORFS | -16 | GS | 1" X 1 11/16-12, straight |
| 320 | 734723926 | 16GS-20MFFOR | ORFS | -16 | GS | 1" X 1 11/16-12, Male straight |
| 321 | 734789026 | 16GS-16FFORX90-120 COUPLING | ORFS | -16 | GS | 1" X 1 7/16-12, 90 degree elbow, Drop height: 120mm |
| 322 | 734793376 | 20GS-20FBSPORX | BSPP | -20 | GS | 1 1/4" X 1 1/4" BSPP straight with 0 ring, 4 Wire Spiral |
| 323 | 734795586 | 20GS-20HFBSPORX | BSPP | -20 | GS | 1 1/4" X 1 1/4" BSPP straight with O ring with backup hex, 4 Wire Spiral |
| 324 | 734793396 | 20GS-20FB- SPORX45-37.5 | BSPP | -20 | GS | 1 1/4" X 1 1/4" BSPP 45 degree elbow with 0 ring, 4 Wire Spiral |
| 325 | 734793406 | 20GS-20FBSPORX90M | BSPP | -20 | GS | 1 1/4" X 1 1/4" BSPP 90 degree elbow with 0 ring, 4 Wire Spiral |
| 326 | 734789336 | 20GS-20FBSPPX | BSPP | -20 | GS | 1 1/4" X 1 1/4" BSPP straight without 0 ring, 6 Wire Spiral |
| 327 | 734789346 | 20GS-20FBSPX90 | BSPP | -20 | GS | 11/4" X 1 1/4" BSPP 90 degree elbow without 0 ring , 4 Wire Spiral |
| 328 | 734789426 | 20GS-20FBSPX90-115 | BSPP | -20 | GS | 1 1/4" X 1 1/4" BSPP 90 degree elbow without 0 ring, Drop height: 115mm, 6 Wire Ferrule |
| 329 | 734789706 | 20GS-20FBSPX90-100 | BSPP | -20 | GS | 1 1/4" X 1 1/4" BSPP 90 degree elbow without O ring, Drop height: 100mm, 4 Wire Spiral |
| 330 | 734793526 | 20GS-20MBSPPSP | BSPP | -20 | GS | 1 1/4" X 1 1/4" BSPP Male straight_JCB, 4 Wire Spiral |
| 331 | 734793366 | 20GS-20MBSPP | BSPP | -20 | GS | 1 1/4" X 1 1/4" BSPP Male straight, 6 Wire Ferrule |
| 332 | 734789466 | 20GS-20FBSPORX-6W | BSPP | -20 | GS | 1 1/4" X 1 1/4" BSPP straight with 0 ring, 6 Wire Spiral |
| 333 | 734789746 | 20GS-20FBSPORX90- 6W-WF | BSPP | -20 | GS | 1 1/4" X 1 1/4" BSPP 90 degree elbow with 0 ring, 6 Wire Spiral |
| 334 | 734760116 | 20GS-20HFBSPORX-6W | BSPP | -20 | GS | 1 1/4" X 1 1/4" BSPP straight with 0 ring with backup hex, 6 Wire Spiral |
| 335 | 734760086 | 20GS-20FBSPX90-100- WF-6W | BSPP | -20 | GS | 1 1/4" X 1 1/4" BSPP 90 degree elbow without 0 ring, Drop height: 100mm, 6 Wire Spiral |
| 336 | 734769126 | 20GS-20FBSPX-4W | BSPP | -20 | GS | 1 1/4" X 1 1/4" BSPP Straight, without O ring, 4 Wire Ferrule |
| 337 | 734769186 | 20GS-20FBSPX90-115- 4W | BSPP | -20 | GS | 1 1/4" X 1 1/4" BSPP 90 degree elbow without 0 ring, Drop height: 115mm, 4 Wire Ferrule |
| 338 | 734776236 | 20GS-20FJISX-4W | FJISX | -20 | GS | 11/4" X 1 1/4" JIS or C TYPE BSPP straight |
| 339 | 734741646 | 20GS-20FL | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 50.80mm, straight, 4 Wire Spiral |
| 340 | 734747646 | 20GS-20FL90S(PART- NO. G20314-2020) | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 50.80mm, 90 degree elbow, 4 Wire Spiral |
| 341 | 734773566 | 20GS-20FL45S | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 50.80mm, 45 degree elbow, 4 Wire Spiral |
| 342 | 734789676 | 20GS-20FL90-128 | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 50.80mm, 90 degree elbow, Drop height: 128mm, 4 Wire Spiral |
| 343 | 734789136 | 20GS-20FLH-6W | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 53.98mm, straight, 6 Wire Spiral |
| 344 | 734776136 | 20GS-20FLH90-120 | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 53.98mm, 90 degree elbow, 6 Wire Spiral, Drop height: 120mm |
| 345 | 734776486 | 20GS-20FLH90-150 | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 53.98mm, 90 degree elbow, 6 Wire Spiral, Drop height: 150mm |
| 346 | 734778436 | 20GS-20FLH90-200 | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 53.98mm, 90 degree elbow, 6 Wire Spiral, Drop height: 200mm |
| 347 | 734748646 | 20GS-20FLH-4W | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 53.98mm, straight, 4 Wire Spiral |
| 348 | 734769016 | 20GS-20FLH90-180-4W | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 53.98mm, 90 degree elbow, 4 Wire Spiral, Drop height: 180mm |
| 349 | 734775646 | 20GS-20FLH90M | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 53.98mm, 90 degree elbow, 4 Wire Spiral, Drop height: Medium |
| 350 | 734748636 | 20GS-16FLH | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 47.63mm, straight, 4 Wire Spiral |
| 351 | 734774636 | 20GS-16FL90M | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 44.45mm, 90 degree elbow, , 4 Wire Spiral |



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|----------|-----------|----------------------------|--------|--------------|------------------|--|
| 352 | 734778886 | 20GS-16FL90-215 | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 215mm, 6 Wire Ferrule |
| 353 | 734789016 | 20GS-16FL90-185 | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 185mm, 6 Wire Ferrule |
| 354 | 734789406 | 20GS-16FL90-150 | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 150mm, 4 Wire Spiral |
| 355 | 734789866 | 20GS-16FL90-120 | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 120mm, 4 Wire Spiral |
| 356 | 734762646 | 20GS-20FLC | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 53.98mm, straight, 4 Wire Spiral |
| 357 | 734789186 | 20GS-20FLC-6W | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 53.98mm, straight, 6 Wire Spiral |
| 358 | 734776186 | 20GS-16FLH90-100 | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 100mm, 6 Wire Ferrule |
| 359 | 734775636 | 20GS-16FLH90M | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: Medium, 6 Wire Ferrule |
| 360 | 734748656 | 20GS-24FLH | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 63.50mm, straight, 4 Wire Spiral |
| 361 | 734747656 | 20GS-24FL90S | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 60.33mm, 90 degree elbow, 4 Wire Spiral |
| 362 | 734789166 | 20GS-20FLH90M - 6W | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 53.98mm, 90 degree elbow, 6 Wire Spiral, Drop height: Medium |
| 363 | 734789476 | 20GS-20FL-6W | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 50.80mm, straight, 6 Wire Spiral |
| 364 | 734789666 | 20GS-20FL45-32-6W- WF | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 50.80mm, 45 degree elbow, 6 Wire Spiral |
| 365 | 734789686 | 20GS-20FLH45-42- WF-4W | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 53.98mm, 45 degree elbow, 4 Wire Spiral |
| 366 | 734789696 | 20GS-20FLH45-42- WF-6W | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 53.98mm, 45 degree elbow, 6 Wire Spiral |
| 367 | 734789726 | 20GS-16FL90-150-6W | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 150mm, 6 Wire Spiral |
| 368 | 734789756 | 20GS-24FL90S-6W | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 60.33mm, 90 degree elbow, 6 Wire Spiral |
| 369 | 734789876 | 20GS-16FL90-120- WF-6W | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 120mm, 6 Wire Spiral |
| 370 | 734789936 | 20GS-20FLH90-120- WF-4W | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 53.98mm, 90 degree elbow, 4 Wire Spiral, Drop height: 120mm |
| 371 | 734789946 | 20GS-20FLC45-37-6W | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 53.98mm, 45 degree elbow, 6 Wire Spiral |
| 372 | 734790006 | 20GS-16FL90M-6W-WF | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 44.45mm, 90 degree elbow, 6 Wire Spiral |
| 373 | 734790056 | 20GS-20FLH90-180-6W | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 53.98mm, 90 degree elbow, 6 Wire Spiral, Drop height: 180mm |
| 374 | 734790086 | 20GS-20FLH90-150- 4W-WF | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 53.98mm, 90 degree elbow, 4 Wire Spiral, Drop height: 150mm |
| 375 | 734790096 | 20GS-20FLH90-200- 4W-WF | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 53.98mm, 90 degree elbow, 4 Wire Spiral, Drop height: 200mm |
| 376 | 734769216 | 20GS-16FL90-215-4W | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 215mm, 4 Wire Ferrule |
| 377 | 734769226 | 20GS-16FL90-185-4W | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 44.45mm, 90 degree elbow, Drop height: 185mm, 4 Wire Ferrule |
| 378 | 734769236 | 20GS-16FLH90-100-4W | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: 100mm, 4 Wire Ferrule |
| 379 | 734769246 | 20GS-16FLH90M-4W | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 47.63mm, 90 degree elbow, Drop height: Medium, 4 Wire Ferrule |
| 380 | 734769256 | 20GS-20FL90-68-6W- WF | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 50.80mm, 90 degree elbow, 6 Wire Spiral |
| 381 | 734760016 | 20GS-20FLH75-107 | FLANGE | -20 | GS | 1 1/4" X FLANGE OD: 53.98mm, 75 degree elbow, 4 Wire Spiral, Drop height: 107mm |
| 382 | 734724646 | 20GS-20FJX | JIC | -20 | GS | 1 1/4" X 1 5/8-12, Straight, 4 Wire Spiral |



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|----------|-----------|----------------------------|--------|--------------|------------------|---|
| 383 | 734727646 | 20GS-20FJX90S | JIC | -20 | GS | 1 1/4" X 1 5/8-12, 90 degree elbow, 6 Wire Ferrule |
| 384 | 734789516 | 20GS-20FJX45-27 | JIC | -20 | GS | 1 1/4" X 1 5/8-12, 45 degree elbow, 6 Wire Ferrule |
| 385 | 734789636 | 20GS-20FJX-6W | JIC | -20 | GS | 1 1/4" X 1 5/8-12, Straight, 6 Wire Spiral |
| 386 | 734769196 | 20GS-20FJX90S-4W | JIC | -20 | GS | 1 1/4" X 1 5/8-12, 90 degree elbow, 4 Wire Ferrule |
| 387 | 734769206 | 20GS-20FJX45-27-4W | JIC | -20 | GS | 1 1/4" X 1 5/8-12, 45 degree elbow, 4 Wire Ferrule |
| 388 | 734789816 | 20GS-38FDH0RX45-4W | METRIC | -20 | GS | 1 1/4", M52X2.0, Tube OD: 38mm, 45 elbow with 0 ring, 4 Wire Spiral |
| 389 | 734789826 | 20GS-38FDH0RX45-6W | METRIC | -20 | GS | 1 1/4", M52X2.0, Tube OD: 38mm, 45 elbow with 0 ring, 6 Wire Spiral |
| 390 | 734793316 | 20GS-38FDH0R90 | METRIC | -20 | GS | 1 1/4", M52X2.0, Tube OD: 38mm, 90 degree elbow with 0 ring, 4 Wire Spiral |
| 391 | 734793306 | 20GS-38FDHORX | METRIC | -20 | GS | 1 1/4", M52X2.0, Tube OD: 38mm, straight with 0 ring, 4 Wire Spiral |
| 392 | 734789486 | 20GS-38FDHORX-6W | METRIC | -20 | GS | 1 1/4", M52X2.0, Tube OD: 38mm, straight with 0 ring, 6 Wire Spiral |
| 393 | 734730646 | 20GS-20FFORX-4W | ORFS | -20 | GS | 1 1/4" X 1 11/16-12, Straight, 4 Wire Spiral |
| 394 | 734789416 | 20GS-20FF0RX45-25.4 | ORFS | -20 | GS | 1 1/4" X 1 11/16-12, 45 degree elbow, 6 Wire Spiral |
| 395 | 734733646 | 20GS-20FF0RX90M | ORFS | -20 | GS | 1 1/4" X 1 11/16-12, 90 degree elbow, 4 Wire Spiral |
| 396 | 734789116 | 20GS-20FFORX -6W | ORFS | -20 | GS | 1 1/4" X 1 11/16-12, Straight, 6 Wire Spiral |
| 397 | 734789126 | 20GS-20FF0RX90M - 6W | ORFS | -20 | GS | 1 1/4" X 1 11/16-12, 90 degree elbow, 6 Wire Spiral |
| 398 | 734767066 | 24GSP-24FB- SPORX45-55 | BSPP | -24 | GSP | 1 1/2" X 1 1/2" BSPP 45 degree elbow with O ring, 4 Wire Spiral |
| 399 | 734789376 | 24GSP-24FB- SPORX90-111 | BSPP | -24 | GSP | 1 1/2" X 1 1/2" BSPP 90 degree elbow with 0 ring , 4 Wire Spiral |
| 400 | 734790496 | 24GSP-24FBSPORX | BSPP | -24 | GSP | 1 1/2" X 1 1/2" BSPP straight with 0 ring , 4 Wire Spiral |
| 401 | 734790316 | 24GSP-24FL-4W | FLANGE | -24 | GSP | 1 1/2" X FLANGE OD: 60.3mm, Straight, For 4 Wire Spiral |
| 402 | 73410225 | 24GSH-24FLH | FLANGE | -24 | GSH | 1 1/2", FLANGE OD: 63.50mm, straight, 6 Wire Spiral |
| 403 | 73412114 | 24GSM-16FL90-170 | FLANGE | -24 | GSM | 1 1/2", FLANGE OD: 44.45mm, 90 degree elbow, 6 Wire Spiral, Drop height: 170mm |
| 404 | 73412115 | 24GSM-20FLH90-100 | FLANGE | -24 | GSM | 1 1/2", FLANGE OD: 53.98mm, 90 degree elbow, 6 Wire Spiral, Drop height: 100mm |
| 405 | 73412212 | 24GSM-16FL90-150 | FLANGE | -24 | GSM | 1 1/2", FLANGE OD: 44.45mm, 90 degree elbow, 6 Wire Spiral, Drop height: 150mm |
| 406 | 73412213 | 24GSM-16FLH90-100 | FLANGE | -24 | GSM | 1 1/2", FLANGE OD: 47.63mm, 90 degree elbow, 6 Wire Spiral, Drop height: 100mm |
| 407 | 73410701 | 24GSM-24FBSPORX | FLANGE | -24 | GSM | 1 1/2" X 1 1/2" BSPP straight with 0 ring , 6 Wire Spiral |
| 408 | 734782456 | 24GSP-24FJX | JIC | -24 | GSP | 1 1/2" X1 7/8-12, straight, 4 Wire Spiral |
| 409 | 734784746 | 24GSP-24FJX90-89 | JIC | -24 | GSP | 1 1/2" X1 7/8-12, 90 degree elbow, 4 Wire Spiral |
| 410 | 734789596 | 24GSP-42FD- LORX90-110 | METRIC | -24 | GSP | 1 1/2", M52X2.0, Tube OD: 42mm, 90 degree elbow with 0 ring, 4 Wire Spiral, Drop height: 110mm |
| 411 | 734795066 | 24GSP-38FDHORX | METRIC | -24 | GSP | 1 1/2", M52X2.0, Tube OD: 38mm, straight with 0 ring, 4 Wire Spiral |
| 412 | 734767076 | 24GSP-42FDLORX-4W- WF | METRIC | -24 | GSP | 1 1/2", M52X2.0, Tube OD: 42mm, straight with 0 ring, 4 Wire Spiral |
| 413 | 734767166 | 24GSP-42FDLORX45-50 | METRIC | -24 | GSP | 1 1/2", M52X2.0, Tube OD: 42mm, 45 degree elbow with O ring, Drop height: 50mm, 4 Wire Braid, |



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|----------|-----------|---------------------|--------|--------------|------------------|--|
| 1 | 737200646 | PCK0302NU | BSPP | -3 | PCK | 3/16" X 1/8"straight without O ring |
| 2 | 737210356 | PCK0302NU90S | BSPP | -3 | PCK | 3/16" X 1/8" 90 degree elbow without 0 ring |
| 3 | 737217646 | P0302MU | BSPP | -3 | PCK | 3/16" x 1/8, Male Straight |
| 4 | 737214386 | PCK0306FDLORX | METRIC | -3 | PCK | 3/16", M12 X 1.5, TUBE OD: 6MM, straight with 0 ring |
| 5 | 737214396 | PCK0306FDL0RX90-35 | METRIC | -3 | PCK | 3/16", M12 X 1.5, TUBE OD: 6MM, 90 degree elbow with 0 ring |
| 6 | 737219376 | PCK0312FDLORX90-32 | METRIC | -3 | PCK | 1/4", M18 X 1.5, TUBE OD: 12MM, 90 degree elbow with 0 ring, Drop height: 32mm |
| 7 | 737219546 | PCK0308FDLORX | METRIC | -3 | PCK | 1/2", M26 X 1.5, TUBE OD: 18MM, Straight with 0 ring |
| 8 | 737215596 | PCK0412DBJ | BANJO | -4 | PCK | 1/4" X Banjo ID:12mm, Straight |
| 9 | 737209836 | PCK0404FBSPORX | BSPP | -4 | PCK | 1/4" X 1/4" BSPP straight with 0 ring |
| 10 | 737209866 | PCK0404FBSPORX45 | BSPP | -4 | PCK | 1/4" X 1/4" BSPP 45 degree elbow with 0 ring |
| 11 | 737209876 | PCK0404FBSPORX90 | BSPP | -4 | PCK | 1/4" X 1/4" BSPP 90 degree elbow with 0 ring |
| 12 | 737213266 | PCK0404FBSPORX90-29 | BSPP | -4 | PCK | 1/4" X 1/4" BSPP 90 degree elbow with 0 ring drop height 29mm |
| 13 | 737200656 | PCK0404FBSPX | BSPP | -4 | PCK | 1/4" X 1/4" BSPP straight without O ring |
| 14 | 737200746 | PCK0404FBSPX45-11.5 | BSPP | -4 | PCK | 1/4" X 1/4" BSPP 45 degree elbow without O ring |
| 15 | 737200786 | PCK0404FBSPX90-23.5 | BSPP | -4 | PCK | 1/4" X 1/4" BSPP 90 degree elbow without O ring |
| 16 | 737215206 | PCK0404FBSPX90-29 | BSPP | -4 | PCK | 1/4" X 1/4" BSPP 90 degree elbow without O ring drop height 29mm |
| 17 | 737210186 | PCK0406FBSPORX | BSPP | -4 | PCK | 1/4" X 3/8" BSPP straight with 0 ring |
| 18 | 737200186 | PCK0406FBSP0RX90 | BSPP | -4 | PCK | 1/4" X 3/8" BSPP 90 degree elbow with 0 ring |
| 19 | 737216246 | PCK0404BSPBJ | BSPP | -4 | PCK | 1/4" X 1/4 BANJO straight |
| 20 | 737401076 | P1T0404FBSPORX | BSPP | -4 | P1T | 1/4" X 1/4" BSPP straight with O ring for Pilot Line Hose |
| 21 | 737401096 | PIT0404FBSP0RX90-23 | BSPP | -4 | P1T | 1/4" X 1/4" BSPP 90 degree elbow with O ring for Pilot Line Hose |
| 22 | 737401956 | P1T0404FBSPORX90-29 | BSPP | -4 | P1T | 1/4" X 1/4" BSPP 90 degree elbow with 0 ring drop height 29mm for Pilot Line Hose |
| 23 | 737401996 | P1T0404FBSPORX45-15 | BSPP | -4 | P1T | 1/4" X 1/4" BSPP 45 degree elbow with O ring for Pilot Line Hose |
| 24 | 737212146 | PCK0404MTSP | BSPP | -4 | PCK | 1/4" X 1/4" Male taper |
| 25 | 737215286 | PCK0404HFBSPX | BSPP | -4 | PCK | 1/4" X 1/4" BSPP straight without O ring with Back up Hex option |
| 26 | 720480906 | 4GB-4FJISX | FJISX | -4 | GB | 1/4" X 1/4" JIS or C TYPE BSPP straight |
| 27 | 737213456 | PCK0404FKX | FKX | -4 | PCK | 1/4"X M14 X 1.5, straight |
| 28 | 737215346 | PCK0404FKX90-38-WF | FKX | -4 | PCK | 1/4" X M14 X 1.5, 90 degree elbow |
| 29 | 737210996 | PCK0404FJX | JIC | -4 | PCK | 1/4" X 7/16-20, straight |
| 30 | 737213336 | PCK0404FJX90S | JIC | -4 | PCK | 1/4" X 7/16-20, 90 degree elbow |
| 31 | 737213406 | PCK0404FJX45S | JIC | -4 | PCK | 1/4" X 7/16-20 , 45 degree elbow |
| 32 | 737211346 | PCK0405FJX | JIC | -4 | PCK | 1/4" X 1/2-20, straight |
| 33 | 737215546 | PCK0405FJX90M | JIC | -4 | PCK | 1/4" X 1/2-20, 90 degree elbow |
| 34 | 737215466 | PCK0406FJX-NEW | JIC | -4 | PCK | 1/4" X 9/16-18, straight |
| 35 | 737213286 | PCK0406FJX90S | JIC | -4 | PCK | 1/4" X 9/16-18, 90 degree elbow |
| 36 | 737213376 | PCK0406FJX90L | JIC | -4 | PCK | 1/4" X 9/16-18, 90 degree elbow, Drop Height: Long |
| 37 | 737213316 | PCK0406FJX45S | JIC | -4 | PCK | 1/4" X 9/16-18, 45 degree elbow |
| 38 | 737211016 | PCK0404F-JXME90-028 | JIC | -4 | PCK | 1/4" X 7/16-20, 90 degree elbow, Drop height: 28mm |
| 39 | 737211256 | PCK0406MJ | JIC | -4 | PCK | 1/4" X 9/16-18, Male straight |
| 40 | 737401526 | P1T0404FJX | JIC | -4 | P1T | 1/4" X 7/16-20, straight for pilot Line hoses |
| 41 | 737401536 | P1T0404FJX45S | JIC | -4 | P1T | 1/4" X 7/16-20, 45 degree elbow for pilot Line hoses |
| 42 | 737401546 | P1T0404FJX90S | JIC | -4 | P1T | 1/4" X 7/16-20, 90 degree elbow for pilot Line hoses |
| | | | + | -4 | P1T | 1/4" X 7/16-20, 90 degree elbow for pilot Line hoses, Dop height: Long |



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|----------|-----------|------------------------------|--------|--------------|------------------|---|
| 44 | 737214666 | РСКО404НЈХ | JIC | -4 | PCK | 1/4" X 7/16-20, straight with backup hex option |
| 45 | 737215106 | PCK0404HFJX90S | JIC | -4 | PCK | 1/4" X 7/16-20, 90 degree elbow with backup hex option |
| 46 | 737215116 | PCK0404HFJX45-10 | JIC | -4 | PCK | 1/4" X 7/16-20, 45 degree elbow with backup hex option |
| 47 | 737214116 | PCK0406FDLX | METRIC | -4 | PCK | 1/4", M12 X 1.5, TUBE OD: 6MM, Straight without O ring |
| 48 | 737214126 | PCK0406FDLX90-25 | METRIC | -4 | PCK | 1/4", M12 X 1.5, TUBE OD: 6MM, 90 degree elbow without O ring |
| 49 | 737215216 | PCK0406FDLX45-26 | METRIC | -4 | PCK | 1/4", M12 X 1.5, TUBE OD: 6MM, 45 degree elbow without O ring |
| 50 | 737218046 | PCK0406FDLORX | METRIC | -4 | PCK | 1/4", M12 X 1.5, TUBE OD: 6MM, Straight with O ring |
| 51 | 737216766 | PCK0408FDLORX | METRIC | -4 | PCK | 1/4", M14 X 1.5, TUBE OD: 8MM, Straight with O ring |
| 52 | 737213856 | PCK0408FDL0RX90-32 | METRIC | -4 | PCK | 1/4", M14 X 1.5, TUBE OD: 8MM, 90 degree elbow with 0 ring |
| 53 | 737214336 | PCK0408FDL0RX45 | METRIC | -4 | PCK | 1/4", M14 X 1.5, TUBE OD: 8MM, 45 degree elbow with 0 ring |
| 54 | 737214716 | PCK0410FDHORX | METRIC | -4 | PCK | 1/4", M18 X 1.5, TUBE OD-10MM, Straight with O ring |
| 55 | 737214726 | PCK0410FDHORX90 | METRIC | -4 | PCK | 1/4", M18 X 1.5, TUBE OD-10MM, 90 degree elbow with 0 ring |
| 56 | 737218316 | PCK0408FDH0RX | METRIC | -4 | PCK | 1/4", M16 X 1.5-TUBE OD-8MM, straight with O ring |
| 57 | 737218566 | PCK0405FDLX | METRIC | -4 | PCK | 1/4", M10X1, TUBE OD-5MM, straight without O ring |
| 58 | 737218606 | PCK0405MDL | METRIC | -4 | PCK | 1/4", M10X1, TUBE OD-5MM, Male straight |
| 59 | 720480126 | 4GB-14x1.5EXTENDED- MALE | METRIC | -4 | GB | 1/4", M14 X 1.5, Male Straight |
| 60 | 737400866 | P1T0408FDLORX90 | METRIC | -4 | P1T | 1/4", M14 X 1.5, TUBE OD: 8MM, 90 degree elbow with 0 ring for Pilot Line Hoses |
| 61 | 737402056 | P1T0408FDLORX | METRIC | -4 | P1T | 1/4", M14 X 1.5, TUBE OD: 8MM, straight with O ring for Pilot Line Hoses |
| 62 | 737402306 | P1T0408FDLORX45 | METRIC | -4 | P1T | $1/4"\!,\text{M14}$ X 1.5, TUBE OD: 8MM, 45 degree elbow with O ring for Pilot Line Hoses |
| 63 | 737214476 | PCK0408FDH0RX90-WF | METRIC | -4 | PCK | 1/4", M16 X 1.5-TUBE OD-8MM, 90 degree elbow with 0 ring |
| 64 | 737216776 | PCK0410FDLORX-SP-WF | METRIC | -4 | PCK | 1/4", M16 X 1.5, TUBE OD: 10MM, Straight with O ring |
| 65 | 737219306 | PCK0410FD- LORX90-36.5-WF | METRIC | -4 | PCK | 1/4", M16 X 1.5, TUBE OD: 10MM, 90 degree elbow with 0 ring |
| 66 | 737219166 | PCK0412FDLORX | METRIC | -4 | PCK | 1/4", M18 X 1.5, TUBE OD: 12MM, straight with O ring |
| 67 | 737219216 | PCK0408MDL | METRIC | -4 | PCK | 1/4", M14 X 1.5, TUBE OD: 8MM, Male Straight |
| 68 | 737219236 | PCK0412FDLORX45-18 | METRIC | -4 | PCK | $1/4"\!,\text{M18}$ X 1.5, TUBE OD: 12MM, 45 degree elbow with O ring, Drop height: 18mm |
| 69 | 737219246 | PCK0412FDLORX90-36 | METRIC | -4 | PCK | $1/4"\!,\text{M18}$ X 1.5, TUBE OD: 12MM, 90 degree elbow with 0 ring, Drop height: 36mm |
| 70 | 737214466 | PCK0404FFORX | ORFS | -4 | PCK | 1/4" X 9/16-18 straight |
| 71 | 737211186 | PCK0404FF0RX45S | ORFS | -4 | PCK | 1/4" X 9/16-18 45 degree elbow |
| 72 | 737211196 | PCK0404FF0RX90S | ORFS | -4 | PCK | 1/4" X 9/16-18 90 degree elbow |
| 73 | 737211206 | PCK0404FF0RX90M-32 | ORFS | -4 | PCK | 1/4" X 9/16-18 90 degree elbow, Drop Height:32mm |
| 74 | 737216926 | PCK0408FF0RX | ORFS | -4 | PCK | 1/4" X 13/16-16 straight |
| 75 | 737214656 | PCK0408FF0RX90S | ORFS | -4 | PCK | 1/4" X 13/16-16 elbow |
| 76 | 737217506 | PCK0404MFF0R | ORFS | -4 | PCK | 1/4" X 9/16-18 Male straight |
| 77 | 720450066 | 4GB-4MFFORBKHD | ORFS | -4 | GB | 1/4" X 9/16-18 Male straight Bulhead |
| 78 | 737214506 | PCK0406FFORX | ORFS | -4 | PCK | 1/4" X 11/16-16 straight |
| 79 | 737216566 | PCK0406FF0RX90-63 | ORFS | -4 | PCK | 1/4" X 11/16-16 90 degree elbow, Drop Height:63mm |
| 80 | 737216556 | PCK0406FF0RX90-35 | ORFS | -4 | PCK | 1/4" X 11/16-16 90 degree elbow, Drop Height:35mm |
| 81 | 737213436 | PCK0406FF0RX45-11 | ORFS | -4 | PCK | 1/4" X 11/16-16 45 degree elbow |
| 82 | 737214626 | PCK0406FF0RX90S-23 | ORFS | -4 | PCK | 1/4" X 11/16-16 90 degree elbow |
| | | P1T0404FF0RX90-26 | ORFS | -4 | P1T | 1/4" X 9/16-18, 90 degree elbowfor pilot line Hose |



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|----------|-----------|----------------------------|--------|--------------|------------------|---|
| 84 | 737401266 | P1T0404FF0RX45-11 | ORFS | -4 | P1T | 1/4" X 9/16-18 45 degree elbow for pilot line Hose |
| 85 | 737402206 | P1T0404FFORX | ORFS | -4 | P1T | 1/4" X 9/16-18 straight for pilot line Hose |
| 86 | 737402266 | P1T0406FFORX | ORFS | -4 | P1T | 1/4" X 11/16-16 straight for pilot line Hose |
| 87 | 737219476 | PCK0406MFFORBKHDLN | ORFS | -4 | PCK | 1/4" X 11/16"-16 UNF Male Bulk head with Locknut |
| 88 | 737215636 | PCK0518DBJ | BANJO | -5 | PCK | 5/16" X Banjo ID:18mm, Straight |
| 89 | 737216886 | PCK0512DBJ | BANJO | -5 | PCK | 5/16" X Banjo ID:12mm, Straight |
| 90 | 737213536 | PCK0506FBSPORX | BSPP | -5 | PCK | 5/16" X 3/8" BSPP straight with O-ring |
| 91 | 737215536 | PCK0506BSPBJ | BSPP | -5 | PCK | 5/16" X 3/8" BSPP BANJO straight |
| 92 | 737215606 | PCK0508FJX | JIC | -5 | PCK | 5/16" X 3/4-16, straight |
| 93 | 737215566 | PCK0506FJX90L-WF | JIC | -5 | PCK | 5/16" X 9/16-18, 90 degree elbow, Drop height: Long |
| 94 | 737215576 | PCK0506FJX90M-WF | JIC | -5 | PCK | 5/16" X 9/16-18, 90 degree elbow, Drop height: Medium |
| 95 | 737213656 | PCK0506FJX-WF | JIC | -5 | PCK | 5/16" X 9/16-18, straight |
| 96 | 737219766 | PCK0505FJX90-34 | JIC | -5 | PCK | 5/16" X 1/2-20, 90 degree elbow |
| 97 | 737214686 | PCK0510FDLX | METRIC | -5 | PCK | 5/16", M16 X 1.5, TUBE OD: 10MM, straight without O ring |
| 98 | 737214976 | PCK0510FDLX90-35 | METRIC | -5 | PCK | 5/16", M16 X 1.5, TUBE OD: 10MM, 90 degree elbow without 0 ring |
| 99 | 737202946 | PCK0510FDLORX | METRIC | -5 | PCK | 5/16", M16 X 1.5, TUBE OD: 10MM, straight with O ring |
| 100 | 737214006 | PCK0510FDL0RX90-50 | METRIC | -5 | PCK | 5/16", M16 X 1.5, TUBE OD: 10MM, 90 degree elbow with 0 ring, Drop height:50mm |
| 101 | 737215646 | PCK0512FDLX | METRIC | -5 | PCK | 5/16", M18 X 1.5, TUBE OD: 12MM, straight without O ring |
| 102 | 737215556 | PCK0512FDLX90-36 | METRIC | -5 | PCK | 5/16", M18 X 1.5, TUBE OD: 12MM, 90 degree elbow without O ring |
| 103 | 737214406 | PCK0512FDLORX | METRIC | -5 | PCK | 5/16", M18 X 1.5, TUBE OD: 12MM, straight with O ring |
| 104 | 737214416 | PCK0512FDL0RX90-36 | METRIC | -5 | PCK | 5/16", M18 X 1.5, TUBE OD: 12MM, 90 degree elbow with 0 ring |
| 105 | 737214426 | PCK0512FDL0RX45-18 | METRIC | -5 | PCK | 5/16", M18 X 1.5, TUBE OD: 12MM, 45 degree elbow with O ring |
| 106 | 737218026 | PCK0510FDHORX | METRIC | -5 | PCK | 5/16", M18 X 1.5, TUBE OD: 10MM, straight with 0 ring |
| 107 | 737218036 | PCK0512FDHORX | METRIC | -5 | PCK | 5/16", M20 X 1.5, TUBE OD: 12MM, straight with 0 ring |
| 108 | 737219316 | PCK0512FD- HORX90-36-WF | METRIC | -5 | PCK | 5/16", M20 X 1.5, TUBE OD: 12MM, 90 degree elbow with O ring |
| 109 | 737219356 | PCK0510FDLORX90-36 | METRIC | -5 | PCK | 5/16", M16 X 1.5, TUBE OD: 10MM, 90 degree elbow with 0 ring, Drop height:36mm |
| 110 | 737219726 | PCK0510FDH0RX45-18 | METRIC | -5 | PCK | 5/16", M18 X 1.5, TUBE OD: 10MM, 45 degree elbow with 0 ring, Drop height:18mm |
| 111 | 737219736 | PCK0510FDH0RX90-36 | METRIC | -5 | PCK | 5/16",M18 X 1.5, TUBE OD: 10MM, 90 degree elbow with 0 ring, , Drop height:36mm |
| 112 | 737219346 | PCK0510FDLORX45-18 | METRIC | -5 | PCK | 5/16", M16 X 1.5, TUBE OD: 10MM, 45 degree elbow with 0 ring, Drop height:18mm |
| 113 | 737219826 | PCK0508FDLORX | METRIC | -5 | PCK | 5/16", M26 X 1.5, TUBE OD: 18MM, Straight with O ring |
| 114 | 737214546 | PCK0506FFORX | ORFS | -5 | PCK | 5/16" X 11/16-16 straight |
| 115 | 737214556 | PCK0506FF0RX45-11 | ORFS | -5 | PCK | 5/16" X 11/16-16 45 degree elbow |
| 116 | 737216576 | PCK0506FF0RX90-55 | ORFS | -5 | PCK | 5/16" X 11/16-16 90 degree elbow, Drop height:55mm |
| 117 | 737216586 | PCK0506FF0RX90-63 | ORFS | -5 | PCK | 5/16" X 11/16-16 90 degree elbow, Drop height:63mm |
| 118 | 737217356 | PCK0506FFORX90 | ORFS | -5 | PCK | 5/16" X 11/16-16 90 degree elbow |
| 119 | 737214936 | PCK0504FFORX | ORFS | -5 | PCK | 5/16" X 9/16-18 straight |
| 120 | 737214916 | PCK0504FF0RX90S | ORFS | -5 | PCK | 5/16" X 9/16-18 90 degree elbow |
| 121 | 737214596 | PCK0616DBJ | BANJO | -6 | PCK | 3/8" X Banjo ID:16mm, Straight |
| 122 | 737215266 | PCK0614DBJ | BANJO | -6 | PCK | 3/8" X Banjo ID:14mm, Straight |
| 123 | 737215616 | PCK0610DBJ | BANJO | -6 | PCK | 3/8" X Banjo ID:10mm, Straight |
| 124 | 737217136 | PCK0618DBJ | BANJO | -6 | PCK | 3/8" X Banjo ID:18mm, Straight |



| 125 | | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|-----|--|---------------------------------------|-----------------------------|--------------|------------------|---|
| | 73515006 | 6GLP-12DBJ | BANJO | -6 | GLP | 3/8" X Banjo ID:12mm, Straight for yarn braid Hose |
| 126 | 73515017 | 6GLP-14DBJ90-70, BAN- JOAT40DEGREE | BANJO | -6 | GLP | 3/8" X Banjo ID:14mm, 40 degree elbow, for yarn braid Hose, Drop Height: 70mm |
| 127 | 73515020 | 6GLP-14DBJ90-70 | BANJO | -6 | GLP | 3/8" X Banjo ID:14mm, 90 degree elbow, for yarn braid Hose, Drop Height: 70mm |
| 128 | 73515021 | 6GLP-14DBJ90-70BAN- JOAT320DEGREE | BANJO | -6 | GLP | 3/8" X Banjo ID:14mm, 320 degree elbow, for yarn braid Hose, Drop Height: 70mm |
| 129 | 73518001 | 6GLP1-14DBJ | BANJO | -6 | GLP | 3/8" X Banjo ID:14mm, Straight for yarn braid Hose |
| 130 | 737200696 | PCK0606FBSPX | BSPP | -6 | PCK | 3/8" X 3/8 " BSPP straight without 0 ring |
| 131 | 737200756 | PCK0606FBSPX45-15.5 | BSPP | -6 | PCK | 3/8" X 3/8 " BSPP 45 degree elbow without 0 ring |
| 132 | 737200816 | PCK0606FBSPX90-32 | BSPP | -6 | PCK | 3/8" X 3/8 " BSPP 90 degree elbow without 0 ring |
| 133 | 737209846 | PCK0606FBSPORX | BSPP | -6 | PCK | 3/8" X 3/8 " BSPP straight with 0 ring |
| 134 | 737209886 | PCK0606FBSPORX45 | BSPP | -6 | PCK | 3/8" X 3/8 " BSPP 45 degree elbow with 0 ring |
| 135 | 737209896 | PCK0606FBSP0RX90S | BSPP | -6 | PCK | 3/8" X 3/8 " BSPP 90 degree elbow with 0 ring |
| 136 | 737217296 | PCK0606FBSPORX90-55 | BSPP | -6 | PCK | 3/8" X 3/8 " BSPP 90 degree elbow with 0 ring, Drop height :55mm |
| 137 | 737217986 | PCK0608FBSPORX90-37.5 | BSPP | -6 | PCK | 3/8" X 1/2 " BSPP 90 degree elbow with 0 ring, Drop height :37mm |
| 138 | 737218246 | PCK0606FBSPORX60-23 | BSPP | -6 | PCK | 3/8" X 3/8 " BSPP 60 degree elbow with 0 ring, Drop height :23mm |
| 139 | 737200016 | PCK0606MBSPPBKHD | BSPP | -6 | PCK | 3/8" X 3/8 " BSPP Male bulkhead |
| 140 | 737215316 | PCK0606MBSPB- KHD90-72 | BSPP | -6 | PCK | 3/8" X 3/8 " BSPP Male bulkhead 90 degree elbow |
| 141 | 737216236 PCK0606BSPBJ BSPP -6 PCK 3/8" X 3/8 " BANJO straight | | 3/8" X 3/8 " BANJO straight | | | |
| 142 | 73515007 | 6GLP-6FBSPORX | BSPP | -6 | GLP | 3/8" X 3/8 " BSPP straight with O ring for yarn braid Hose |
| 143 | 73518002 | 6GLP1-6FBSPORX90 | BSPP | -6 | GLP | 3/8" X 3/8 " BSPP elbow with 0 ring for yarn braid Hose |
| 144 | 737401216 | P1T0606FBSPORX | BSPP | -6 | P1T | 3/8" X 3/8 " BSPP straight with O ring for pilot line Hose |
| 145 | 737401236 | P1T0606FBSPORX90-STE- MASSEMBLY | BSPP | -6 | P1T | 3/8" X 3/8 " BSPP 90 degree elbow with 0 ring for pilot line Hose |
| 146 | 737402286 | P1T0606FBSP0RX45-16 | BSPP | -6 | P1T | 3/8" X 3/8 " BSPP 45 degree elbow with O ring for pilot line Hose |
| 147 | 737210366 | PCK0608FBSPORX-WF | BSPP | -6 | PCK | 3/8" X 1/2 " BSPP straight with O ring |
| 148 | 737218836 | PCK0608MBSPP | BSPP | -6 | PCK | 3/8" X 1/2" BSPP male Straight |
| 149 | 720480536 | 6GB-6FJISX | FJISX | -6 | GB | 3/8" X 3/8" JIS or C TYPE BSPP straight |
| 150 | 737215026 | PCK0606FKX | FKX | -6 | PCK | 3/8"xM18 X 1.5, straight |
| 151 | 737215336 | PCK0606FKX90-28-WF | FKX | -6 | PCK | 3/8"xM18 X 1.5, 90 degree elbow |
| 152 | 737215476 | PCK0606FJX-NEW | JIC | -6 | PCK | 3/8" X 9/16-18, straight |
| 153 | 737213346 | PCK0606FJX90S | JIC | -6 | PCK | 3/8" X 9/16-18, 90 degree elbow |
| 154 | 737213896 | PCK0606FJX90M | JIC | -6 | PCK | 3/8" X 9/16-18, 90 degree elbow, Drop height: Medium |
| 155 | 737214266 | PCK0606FJX90L | JIC | -6 | PCK | 3/8" X 9/16-18, 90 degree elbow, Drop height: Long |
| 156 | 737213356 | PCK0606FJX45S | JIC | -6 | PCK | 3/8" X 9/16-18, 45 degree elbow |
| 157 | 737211056 | PCK0608FJX | JIC | -6 | PCK | 3/8" X 3/4-16, straight |
| 158 | 737213416 | PCK0608FJX45S | JIC | -6 | PCK | 3/8" X 3/4-16, 45 degree elbow |
| 159 | 737213296 | PCK0608FJX90S | JIC | -6 | PCK | 3/8" X 3/4-16, 90 degree elbow |
| 160 | 737213446 | PCK0610FJX | JIC | -6 | PCK | 3/8" X 7/8-14, straight |
| 161 | 737402186 | P1T0606FJX90-26 | JIC | -6 | P1T | 3/8" X 9/16-18, 90 degree elbow, for pilot Line hoses |
| 162 | 737402196 | P1T0606FJX90L | JIC | -6 | P1T | 3/8" X 9/16-18, 90 degree elbow, Drop height: Longfor pilot Line hoses |
| 163 | 737402216 | P1T0605FJX | JIC | -6 | P1T | 3/8" X 1/2-20, straight for pilot Line hoses |
| 164 | 737402296 | P1T0606FJX-NEW | JIC | -6 | P1T | 3/8" X 9/16-18, straight for pilot Line hoses |
| 165 | 73515019 | 6GLP-5FJX | JIC | -6 | GLP | 3/8" X 1/2-20, straight for yarn braid Hose |



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION | |
|----------|-----------|-----------------------|--|--------------|------------------|--|--|
| 166 | 737214956 | PCK0610FDLX | METRIC | -6 | PCK | 3/8", M16 X 1.5, TUBE OD: 10MM, Straight without O ring | |
| 167 | 737214966 | PCK0610FDLX90-35 | METRIC | -6 | PCK | 3/8", M16 X 1.5, TUBE OD: 10MM, 90 degree elbow without O ring | |
| 168 | 737202956 | PCK0610FDLORX | METRIC | -6 | PCK | 3/8", M16 X 1.5, TUBE OD: 10MM, Straight with 0 ring | |
| 169 | 737203046 | PCK0610FDLORX90 | METRIC | -6 | PCK | 3/8", M16 X 1.5, TUBE OD: 10MM, 90 degree elbow with 0 ring | |
| 170 | 737203636 | PCK0612FDLX | METRIC | -6 | PCK | 3/8", M18 X 1.5, TUBE OD: 12MM, Straight without O ring | |
| 171 | 737203706 | PCK0612FDLX90-36 | METRIC | -6 | PCK | 3/8", M18 X 1.5, TUBE OD: 12MM, 90 degree elbow without O ring | |
| 172 | 737216806 | PCK0612FDLORX | METRIC | -6 | PCK | 3/8", M18 X 1.5, TUBE OD: 12MM, Straight with 0 ring | |
| 173 | 737203186 | PCK0612FDLORX90 | METRIC | -6 | PCK | 3/8", M18 X 1.5, TUBE OD: 12MM, 90 degree elbow with 0 ring | |
| 174 | 737214356 | PCK0612FDL0RX45 | METRIC | -6 | PCK | 3/8", M18 X 1.5, TUBE OD: 12MM, 45 degree elbow with 0 ring | |
| 175 | 737203226 | PCK0612FDHORX | METRIC | -6 | PCK | 3/8", M20 X 1.5, TUBE OD: 12, Straight with 0 ring | |
| 176 | 737214256 | PCK0612FDH0RX90-39 | METRIC | -6 | PCK | 3/8", M20 X 1.5, TUBE OD: 12, 90 degree elbow with 0 ring | |
| 177 | 737214676 | PCK0615FDLORX | METRIC | -6 | PCK | 3/8", M22 X 1.5, TUBE OD: 15MM, Straight with 0 ring | |
| 178 | 737217976 | PCK0615FDL0RX90-42 | METRIC | -6 | PCK | 3/8", M22 X 1.5, TUBE OD: 15MM, 90 degree elbow with 0 ring | |
| 179 | 737218236 | PCK0610FDHORX | METRIC | -6 | PCK | 3/8", M18 X 1.5, TUBE OD: 10MM, Straight with 0 ring | |
| 180 | 737203176 | PCK0610FDH0RX90 | 90 METRIC -6 PCK 3/8", M18 X 1.5, TUBE OD: 10MM, 90 degree elbor | | | | |
| 181 | 737202626 | PCK0610MDL | 0610MDL METRIC -6 PCK 3/8" X M16 X 1.5, TUBE OD: 10MM, Male straight | | | | |
| 182 | 73515031 | 6GLP-12FDLORX | METRIC | -6 | GLP | $3/8^{"},M18$ X 1.5, TUBE OD: 12MM, Straight with O ring for yarn braid Hose | |
| 183 | 737219696 | PCK0616FDH0RX90-47 | METRIC | -6 | PCK | 3/8", M24 X 1.5 TUBE OD: 16MM, 90 degree elbow with 0 ring, Drop height:47mm | |
| 184 | 737219706 | PCK0616FDHORX | METRIC | -6 | PCK | 3/8", M24 X 1.5 TUBE OD: 16MM, straight with 0 ring | |
| 185 | 737219186 | PCK0612MDL | METRIC | -6 | PCK | 3/8" X M18 X 1.5, TUBE OD: 12MM, Male straight | |
| 186 | 737402326 | P1T0612FDL0RX90-37 | METRIC | -6 | P1T | 3/8", M18 X 1.5, TUBE OD: 12MM, 90 degree elbow with 0 ring, Pilot line Hose | |
| 187 | 737219436 | PCK0606FP | NPTF | -6 | PCK | 3/8" X 3/8"-18 NPTF | |
| 188 | 737214486 | PCK0606FFORX | ORFS | -6 | PCK | 3/8" X 11/16-16, Straight | |
| 189 | 737204926 | PCK0606MFFOR | ORFS | -6 | PCK | 3/8", 11/16-16, Male straight | |
| 190 | 737211216 | PCK0606FF0RX45-11 | ORFS | -6 | PCK | 3/8", 11/16-16, 45 degree bend | |
| 191 | 737211236 | PCK0606FF0RX90L | ORFS | -6 | PCK | 3/8", 11/16-16, 90 degree bend, Drop Height: Long | |
| 192 | 737212176 | PCK0606FF0RX90M-38 | ORFS | -6 | PCK | 3/8", 11/16-16, 90 degree bend, Drop Height: 38mm | |
| 193 | 737213686 | PCK0606FF0RX90-30 | ORFS | -6 | PCK | 3/8", 11/16-16, 90 degree bend, Drop Height: 30mm | |
| 194 | 737213816 | PCK0606FF0RX90S | ORFS | -6 | PCK | 3/8", 11/16-16, 90 degree bend, Drop Height: Small | |
| 195 | 737214836 | PCK0606MFFMMBKHD | ORFS | -6 | PCK | 3/8" X 11/16-16, Male Bulk head Straight | |
| 196 | 737216906 | PCK0608FFORX-NEW | ORFS | -6 | PCK | 3/8"x 13/16-16, Straight | |
| 197 | 737217146 | PCK0608FF0RX45 | ORFS | -6 | PCK | 3/8"x 13/16-16, 45 degree bend | |
| 198 | 737211476 | PCK0608FF0RX90S | ORFS | -6 | PCK | 3/8"x 13/16-16, 90 degree bend, Drop Height: Small | |
| 199 | 737212586 | PCK0608FF0RX90M | ORFS | -6 | PCK | 3/8"x 13/16-16, 90 degree bend, Drop Height: Medium | |
| 200 | 737212596 | PCK0608FF0RX90L-64 | ORFS | -6 | PCK | 3/8"x 13/16-16, 90 degree bend, Drop Height: Long | |
| 201 | 737215756 | PCK0608MFFOR-NEW | ORFS | -6 | PCK | 3/8"x 13/16-16, Male straight | |
| 202 | 737214316 | PCK0604FF0RX90-21-0LD | ORFS | -6 | PCK | 3/8"x 9/16-18, 90 degree bend | |
| 203 | 737401966 | P1T0606FF0RX90S | ORFS | -6 | P1T | 3/8", 11/16-16, 90 degree bend for Pilot Line hoses | |
| 204 | 737401976 | P1T0606FFORX90M | ORFS | -6 | P1T | 3/8", 11/16-16, 90 degree bend for Pilot Line hoses, Drop height: Medium | |
| 205 | 737402026 | P1T0606FF0RX45-21 | ORFS | -6 | P1T | 3/8", 11/16-16, 45 degree bend for pilot line Hose | |
| 206 | 737402256 | P1T0606FFORX | ORFS | -6 | P1T | 3/8", 11/16-16, straight for pilot line Hose | |
| 207 | 737215626 | PCK0818DBJ | BANJO | -8 | PCK | 1/2" X Banjo ID:18mm, Straight | |



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|----------|-----------|----------------------------|--------|--------------|------------------|---|
| 208 | 737200716 | PCK0808FBSPX | BSPP | -8 | PCK | 1/2" X 1/2" BSPP straight without O ring |
| 209 | 737200766 | PCK0808FBSPX45-17 | BSPP | -8 | PCK | 1/2" X 1/2" BSPP 45 degree elbow without O ring |
| 210 | 737200846 | PCK0808FBSPX90-37.5 | BSPP | -8 | PCK | 1/2" X 1/2" BSPP 90 degree elbow without 0 ring |
| 211 | 737209856 | PCK0808FBSPORX | BSPP | -8 | PCK | 1/2" X 1/2" BSPP straight with 0 ring |
| 212 | 737209906 | PCK0808FBSPORX90 | BSPP | -8 | PCK | 1/2" X 1/2" BSPP 90 degree elbow with 0 ring |
| 213 | 737213196 | PCK0808FBSPORX45 | BSPP | -8 | PCK | 1/2" X 1/2" BSPP 45 degree elbow with 0 ring |
| 214 | 737212136 | PCK0808FBSPORX- 90SP-50 | BSPP | -8 | PCK | 1/2" X 1/2" BSPP 90 degree elbow with 0 ring, Drop height: 50mm |
| 215 | 737214296 | PCK0806FBSPORX | BSPP | -8 | PCK | 1/2" X 3/8" BSPP straight with 0 ring |
| 216 | 737214086 | PCK0806FBSPORX90-44 | BSPP | -8 | PCK | 1/2" X 3/8" BSPP 90 degree elbow with 0 ring |
| 217 | 737214456 | PCK0808FBSPORX37-16 | BSPP | -8 | PCK | 1/2" X 1/2" BSPP 37 degree elbow with 0 ring |
| 218 | 737210236 | PCK0810FBSPORX | BSPP | -8 | PCK | 1/2" X 5/8" BSPP straight with 0 ring |
| 219 | 737210486 | PCK0808MBSPPBKHD | BSPP | -8 | PCK | 1/2" X 1/2" BSPP male bulk head straight |
| 220 | 737214876 | PCK0808BSPBJ-AC | BSPP | -8 | PCK | 1/2" X 1/2" BANJO straight |
| 221 | 737217566 | PCK0812BSPBJ-SPL | BSPP | -8 | PCK | 1/2" X 3/4" BANJO straight |
| 222 | 737219556 | PCK0806BSPBJ | BSPP | -8 | PCK | 1/2" X 3/8 BANJO straight |
| 223 | 720480546 | 8GB-8FJISX | FJISX | -8 | GB | 1/2" X 1/2" JIS or C TYPE BSPP straight |
| 224 | 737215036 | PCK0808FKX | FKX | -8 | PCK | 1/2" X M22 X 1.5, straight |
| 225 | 737215076 | PCK0808FKX90-37 | FKX | -8 | PCK | 1/2" X M22 X 1.5, 90 degree elbow |
| 226 | 737219156 | PCK0812FL | FLANGE | -8 | PCK | 1/2" X FLANGE OD: 38.10MM, straight |
| 227 | 737219176 | PCK0812FL90-58 | FLANGE | -8 | PCK | 1/2" X FLANGE OD: 38.10MM, 90 degree, Drop height:58mm |
| 228 | 737211316 | PCK0808FJX | JIC | -8 | PCK | 1/2" X 3/4-16, straight |
| 229 | 737211326 | PCK0808FJX45-16 | JIC | -8 | PCK | 1/2" X 3/4-16, 45 degree elbow |
| 230 | 737213906 | PCK0808FJX90M | JIC | -8 | PCK | 1/2" X 3/4-16, 90 degree elbow |
| 231 | 737211086 | PCK0810FJXME | JIC | -8 | PCK | 1/2" X 7/8-14, straight |
| 232 | 737213276 | PCK0810FJX45S | JIC | -8 | PCK | 1/2" X 7/8-14, 45 degree elbow |
| 233 | 737213306 | PCK0810FJX90S | JIC | -8 | PCK | 1/2" X 7/8-14, 90 degree elbow |
| 234 | 737213366 | PCK0810FJX90L | JIC | -8 | PCK | 1/2" X 7/8-14, 90 degree elbow, Drop height:Long |
| 235 | 737215686 | PCK0806FJX90M-38 | JIC | -8 | PCK | 1/2" X 9/16-18, 90 degree elbow, Drop height:38mm |
| 236 | 737201626 | PCK0810MJ | JIC | -8 | PCK | 1/2" X 7/8-14, Male straight |
| 237 | 737215186 | PCK0815FDLX90-45 | METRIC | -8 | PCK | 1/2", M22x1.5, TUBE OD: 15, 90 degree elbow without O ring |
| 238 | 737215196 | PCK0815FDLX45-26 | METRIC | -8 | PCK | 1/2", M22x1.5, TUBE OD: 15, 45 degree elbow without O ring |
| 239 | 737215276 | PCK0815FDLX | METRIC | -8 | PCK | 1/2", M22x1.5, TUBE OD: 15, Straight without O ring |
| 240 | 737216786 | PCK0815FDLORX | METRIC | -8 | PCK | 1/2", M22x1.5, TUBE OD: 15, Straight with O ring |
| 241 | 737214376 | PCK0815FDL0RX45-22 | METRIC | -8 | PCK | 1/2", M22x1.5, TUBE OD: 15, 45 degree elbow with O ring |
| 242 | 737214366 | PCK0815FDL0RX90-44.5 | METRIC | -8 | PCK | 1/2", M22x1.5, TUBE OD: 15, 90 degree elbow with 0 ring |
| 243 | 737218186 | PCK0815FDLORX90-80 | METRIC | -8 | PCK | 1/2", M22x1.5, TUBE OD: 15, 90 degree elbow with O ring, Drop height:80mm |
| 244 | 737218196 | PCK0815FDL0RX90-130 | METRIC | -8 | PCK | 1/2", M22x1.5, TUBE OD: 15, 90 degree elbow with O ring, Drop height:130mm |
| 245 | 737207706 | PCK0816FDHORX | METRIC | -8 | PCK | 1/2", M24 X 1.5 TUBE OD: 16MM, Straight with O ring |
| 246 | 737203396 | PCK0816FDH0RX90 | METRIC | -8 | PCK | 1/2", M24 X 1.5 TUBE OD: 16MM, 90 degree elbow with 0 ring |
| 247 | 737213676 | PCK0816FDH0RX90-90 | METRIC | -8 | PCK | 1/2", M24 X 1.5 TUBE OD: 16MM, 90 degree elbow with 0 ring, Drop height:90mm |
| 248 | 737213666 | PCK0816FDH0RX90-125 | METRIC | -8 | PCK | 1/2", M24 X 1.5 TUBE OD: 16MM, 90 degree elbow with 0 ring, Drop height:125mm |



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|----------|-----------|----------------------------|--------|--------------|------------------|--|
| 249 | 737214156 | PCK0812FDLX | METRIC | -8 | PCK | 1/2", M18 X 1.5, TUBE OD: 12, straight without O ring |
| 250 | 737214176 | PCK0812FDLX90-48 | METRIC | -8 | PCK | 1/2", M18 X 1.5, TUBE OD: 12, 90 degree elbow without O ring, Drop height:48mm |
| 251 | 737215486 | PCK0812FDLX90-36 | METRIC | -8 | PCK | 1/2", M18 X 1.5, TUBE OD: 12, 90 degree elbow without O ring, Drop height:36mm |
| 252 | 737215496 | PCK0812FDLX90-90 | METRIC | -8 | PCK | 1/2", M18 X 1.5, TUBE OD: 12, 90 degree elbow without O ring, Drop height:90mm |
| 253 | 737215386 | PCK0812FDHORX | METRIC | -8 | PCK | 1/2", M20 X 1.5 TUBE OD: 12, straight with 0 ring |
| 254 | 737214706 | PCK0812FDH0RX45-18 | METRIC | -8 | PCK | 1/2", M20 X 1.5 TUBE OD: 12, 45 degree elbow with O ring |
| 255 | 737214866 | PCK0812FDH0RX90-36 | METRIC | -8 | PCK | 1/2", M20 X 1.5 TUBE OD: 12, 90 degree elbow with 0 ring |
| 256 | 73515026 | 8GLP-15FDLORX45-22 | METRIC | -8 | GLP | 1/2",M22 X 1.5, TUBE OD: 15, 45 degree elbow with O ring for yarn braid Hose |
| 257 | 73515027 | 8GLP-15FDLORX | METRIC | -8 | GLP | 1/2", M22 X 1.5, TUBE OD: 15, straight with O ring for yarn braid Hose |
| 258 | 737219366 | PCK0816FD- HORX45-24-WF | METRIC | -8 | PCK | 1/2", M24 X 1.5 TUBE OD: 16MM, 45 degree elbow with 0 ring |
| 259 | 737219626 | PCK0816FDH0RX90-55 | METRIC | -8 | PCK | 1/2", M24 X 1.5 TUBE OD: 16MM, 90 degree elbow with 0 ring, Drop height:55mm |
| 260 | 737219846 | PCK0818FDLORX | METRIC | -8 | PCK | 1/2", M26 X 1.5, TUBE OD: 18MM, Straight with O ring |
| 261 | 737219196 | PCK0815MDL | METRIC | -8 | PCK | 1/2", M22 X 1.5, TUBE OD: 15, Male straight |
| 262 | 737219836 | | | | | |
| 263 | 737219106 | PCK0808MP | NPTF | -8 | PCK | 1/2" X 1/2"-14 NPTF |
| 264 | 737216916 | PCK0808FFORX-NEW | ORFS | -8 | PCK | 1/2" X 13/16-16, straight |
| 265 | 737211496 | PCK0808FF0RX90S | ORFS | -8 | PCK | 1/2" X 13/16-16, 90 degree elbow, Drop height:Small |
| 266 | 737211506 | PCK0808FF0RX90M | ORFS | -8 | PCK | 1/2" X 13/16-16, 90 degree elbow, Drop height:Medium |
| 267 | 737211736 | PCK0808FF0RX90L | ORFS | -8 | PCK | 1/2" X 13/16-16, 90 degree elbow, Drop height:Medium |
| 268 | 737215326 | PCK0808FF0RX90-96 | ORFS | -8 | PCK | 1/2" X 13/16-16, 90 degree elbow, Drop height:96mm |
| 269 | 737214926 | PCK0808FF0RX90-186 | ORFS | -8 | PCK | 1/2" X 13/16-16, 90 degree elbow, Drop height:186mm |
| 270 | 737211486 | PCK0808FF0RX45M-15.5 | ORFS | -8 | PCK | 1/2" X 13/16-16, 45 degree elbow |
| 271 | 737209986 | PCK0808MFF0R | ORFS | -8 | PCK | 1/2" X 13/16-16, Male Straight |
| 272 | 737213556 | PCK0808MFFORBKHD | ORFS | -8 | PCK | 1/2" X 13/16-16, Male Straight Bulkhead |
| 273 | 737204276 | PCK0806FF0RX | ORFS | -8 | PCK | 1/2" x11/16-16, Straight |
| 274 | 737217366 | PCK0806FF0RX90-75 | ORFS | -8 | PCK | 1/2" x11/16-16, 90 degree elbow, Drop Height: 75mm |
| 275 | 737204296 | PCK0810FFORX | ORFS | -8 | PCK | 1/2" X 1-14, straight |
| 276 | 737213806 | PCK0810FF0RX90-35 | ORFS | -8 | PCK | 1/2" X 1-14, 90 degree elbow, Drop height:35mm |
| 277 | 737215016 | PCK0810FF0RX90-46 | ORFS | -8 | PCK | 1/2" X 1-14, 90 degree elbow, Drop height:46mm |
| 278 | 737215826 | PCK0810FF0RX45-18 | ORFS | -8 | PCK | 1/2" X 1-14, 45 degree elbow |
| 279 | 737213796 | PCK0810MFF0R90-50 | ORFS | -8 | PCK | 1/2" X 1-14, Male 90 degree elbow |
| 280 | 737214526 | PCK0810MFFOR | ORFS | -8 | PCK | 1/2" X 1-14, Male straight |
| 281 | 737204306 | PCK0812FFORX | ORFS | -8 | PCK | 1/2" X 1 3/16-12, straight |
| 282 | 737217306 | P0806FFORX90M | ORFS | -8 | PCK | 1/2" x11/16-16, 90 degree elbow, Drop Height: 75mm |
| 283 | 737219486 | PCK0808MFFORBKHDLN | ORFS | -8 | PCK | 1/2" X 13/16-16, Male Straight Bulkhead with Locknut |
| 284 | 737213496 | PCK1018DBJ | BANJO | -10 | PCK | 5/8" X Banjo ID: 18mm, Straight |
| 285 | 737215446 | PCK1022DBJ | BANJO | -10 | PCK | 5/8" X Banjo ID: 22mm, Straight |
| 286 | 737211686 | PCK1010FBSPORX. | BSPP | -10 | PCK | 5/8" X 5/8" BSPP straight with O ring |
| 287 | 737213156 | PCK1010FBSPORX45 | BSPP | -10 | PCK | 5/8" X 5/8" BSPP 45 degree elbow with 0 ring |
| 288 | 737211646 | PCK1010FBSPORX90 | BSPP | -10 | PCK | 5/8" X 5/8" BSPP 90 degree elbow with 0 ring |
| 289 | 737213246 | PCK1010FBSPORX90-60 | BSPP | -10 | PCK | 5/8" X 5/8" BSPP 90 degree elbow with 0 ring, Drop height: 60mm |



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|----------|-----------|----------------------------|--------|--------------|------------------|---|
| 290 | 737213256 | PCK1010FBSPORX90-120 | BSPP | -10 | PCK | 5/8" X 5/8" BSPP 90 degree elbow with 0 ring, Drop height: 120mm |
| 291 | 737213706 | PCK1012FBSPORX | BSPP | -10 | PCK | 5/8" X 3/4" BSPP straight with 0 ring |
| 292 | 737213716 | PCK1012FBSP0RX90 | BSPP | -10 | PCK | 5/8" X 3/4" BSPP 90 degree elbow with 0 ring |
| 293 | 737217826 | PCK1012FBSP0RX45-29 | BSPP | -10 | PCK | 5/8" X 3/4" BSPP 45 degree bend with 0 ring |
| 294 | 737215436 | PCK1008FBSP_FIXED- PORT | BSPP | -10 | PCK | 5/8" X 1/2" BSPP straight, Fixed port |
| 295 | 737215526 | PCK1006BSPBJ | BSPP | -10 | PCK | 5/8" X 3/8 BANJO straight |
| 296 | 737211666 | PCK1010MBSPPBKHDSP | BSPP | -10 | PCK | 5/8" X 5/8" BSPP male straight bulhead |
| 297 | 737211676 | PCK1010FBSPORX 180 | BSPP | -10 | PCK | 5/8" X 5/8" BSPP 180 degree bend with 0 ring |
| 298 | 737216096 | PCK1012FBSPX90 | BSPP | -10 | PCK | 5/8" X 3/4" BSPP 90 degree bend without 0 ring |
| 299 | 737217796 | PCK1010FBSPORX 15 | BSPP | -10 | PCK | 5/8" X 5/8" BSPP 15 degree elbow with 0 ring |
| 300 | 737218116 | PCK1008FBSPORX90-51.5 | BSPP | -10 | PCK | 5/8" X 1/2" BSPP 90 degree bend with 0 ring |
| 301 | 737215066 | PCK1010FKX | FKX | -10 | PCK | 5/8" X M24 X 1.5, straight |
| 302 | 737211116 | PCK1010FJX | JIC | -10 | PCK | 5/8" X 7/8-14, straight |
| 303 | 737211416 | PCK1010FJX90M | JIC | -10 | PCK | 5/8" X 7/8-14, 90 degree elbow |
| 304 | 737211406 | PCK1010FJX45-22 | JIC | -10 | PCK | 5/8" X 7/8-14, 45 degree elbow |
| 305 | 737211126 | PCK1012FJX | JIC | -10 | PCK | 5/8" X 1 1/16-12, straight |
| 306 | 737215586 | PCK1006FJX | JIC | -10 | PCK | 5/8" X 9/16-18 |
| 307 | 720409276 | 10GB-12FJX | JIC | -10 | GB | 5/8" X 1 1/16-12, straight |
| 308 | 720481166 | 10GB-12FJX45 | JIC | -10 | GB | 5/8" X 1 1/16-12, 45 degree elbow |
| 309 | 720481176 | 10GB-12FJX90S | JIC | -10 | GB | 5/8" X 1 1/16-12, 90 degree elbow |
| 310 | 737201646 | PCK1010MJ | JIC | -10 | PCK | 5/8" X 7/8-14, Male straight |
| 311 | 737214096 | PCK1018FDLX | METRIC | -10 | PCK | 5/8", M26 X 1.5, TUBE OD: 18mm, Straight without O ring |
| 312 | 737216056 | PCK1018FDLX45-26 | METRIC | -10 | PCK | 5/8", M26 X 1.5, TUBE OD: 18mm, 45 degree elbow without 0 ring |
| 313 | 737214106 | PCK1018FDLX90-54 | METRIC | -10 | PCK | 5/8", M26 X 1.5, TUBE OD: 18mm, 90 degree elbow without 0 ring |
| 314 | 737215226 | PCK1018FDLX90-122 | METRIC | -10 | PCK | 5/8", M26 X 1.5, TUBE OD: 18mm, 90 degree elbow without 0 ring, Drop height: 122 |
| 315 | 737216796 | PCK1018FDLORX-SP | METRIC | -10 | PCK | 5/8", M26 X 1.5, TUBE OD: 18mm, Straight with 0 ring |
| 316 | 737207746 | PCK1018FDLORX45 | METRIC | -10 | PCK | 5/8", M26 X 1.5, TUBE OD: 18mm, 45 degree elbow with 0 ring |
| 317 | 737207806 | PCK1018FDLORX90 | METRIC | -10 | PCK | 5/8", M26 X 1.5, TUBE OD: 18mm, 90 degree elbow with 0 ring |
| 318 | 737213996 | PCK1018FDLORX90-67.5 | METRIC | -10 | PCK | 5/8", M26 X 1.5, TUBE OD: 18mm, 90 degree elbow with O ring, Drop height: 67mm |
| 319 | 737215246 | PCK1016FDLLX90-90 | METRIC | -10 | PCK | 5/8", M24 X 1.5, TUBE OD: 16mm, 90 degree elbow without O ring, Drop height: 90mm |
| 320 | 737213646 | PCK1022FDLORX | METRIC | -10 | PCK | 5/8", M30X 2.0, TUBE OD: 22mm, Straight with 0 ring |
| 321 | 737219646 | PCK1018FDLX90-137 | METRIC | -10 | PCK | 5/8", M26 X 1.5, TUBE OD: 18mm, 90 degree elbow without 0 ring, Drop height: 137mm |
| 322 | 737219686 | PCK1016FDH0RX90-48 | METRIC | -10 | PCK | 5/8", M24 X 1.5 TUBE OD: 16mm, 90 degree elbow with 0 ring, Drop height: 48mm |
| 323 | 737219716 | PCK1016FDHORX | METRIC | -10 | PCK | 5/8", M24 X 1.5 TUBE OD: 16mm, straight with 0 ring |
| 324 | 737219206 | PCK1018MDL | METRIC | -10 | PCK | 5/8", M26 X 1.5, TUBE OD: 18mm, Male Straight |
| 325 | 737204316 | PCK1010FFORX | ORFS | -10 | PCK | 5/8" X 1-14, straight |
| 326 | 737213846 | PCK1010FF0RX45S | ORFS | -10 | PCK | 5/8" X 1-14, Female 45 degree elbow |
| 327 | 737213696 | PCK1010FF0RX90-34 | ORFS | -10 | PCK | 5/8" X 1-14, 90 degree elbow |
| 328 | 737212096 | PCK1010FF0RX90M-47 | ORFS | -10 | PCK | 5/8" X 1-14, 90 degree elbow, Drop height: 47mm |
| 329 | 737219466 | PCK1010FF0RX90-58 | ORFS | -10 | PCK | 5/8" X 1-14, 90 degree elbow, Drop height: 58mm |
| 330 | 737218256 | PCK1010FF0RX90-70 | ORFS | -10 | PCK | 5/8" X 1-14, 90 degree elbow, Drop height: 70mm |



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|----------|-----------|------------------------------|--------|--------------|------------------|--|
| 331 | 737217786 | PCK1010MFFORBKH- D90LN-86 | ORFS | -10 | PCK | 5/8" X 1-14, Male bulhead 90 degree elbow |
| 332 | 737204326 | PCK1012FFORX | ORFS | -10 | PCK | 5/8" X 1 3/16-12, straight |
| 333 | 737213726 | PCK1012FF0RX90-42 | ORFS | -10 | PCK | 5/8" X 1 3/16-12, 90 degree elbow, Drop height: 42 |
| 334 | 737215056 | PCK1012FF0RX90-52 | ORFS | -10 | PCK | 5/8" X 1 3/16-12, 90 degree elbow, Drop height: 52 |
| 335 | 737213546 | PCK1012FF0RX90M-58 | ORFS | -10 | PCK | 5/8" X 1 3/16-12, 90 degree elbow, Drop height: 58 |
| 336 | 737218266 | PCK1012FF0RX90-96 | ORFS | -10 | PCK | 5/8" X 1 3/16-12, 90 degree elbow, Drop height: 96 |
| 337 | 737217846 | PCK1012FF0RX45-21 | ORFS | -10 | PCK | 5/8" X 1 3/16-12, 45 degree elbow |
| 338 | 737218006 | PCK1008FFORX | ORFS | -10 | PCK | 5/8" X 13/16-16, straight |
| 339 | 737216146 | PCK1008FF0RX90 | ORFS | -10 | PCK | 5/8" X 13/16-16, 90 degree elbow |
| 340 | 737214536 | PCK1012MFFOR | ORFS | -10 | PCK | 5/8" X 1 3/16-12, Male straight |
| 341 | 737218626 | PCK1012MFFORB- KHD90-110 | ORFS | -10 | PCK | 5/8" X 1 3/16-12, Male, 90 degree elbow, Drop Height: 110mm |
| 342 | 737219496 | PCK1008FF0RX45-36 | ORFS | -10 | PCK | 5/8" X 13/16-16, 45 degree elbow, Drop Height: 36mm |
| 343 | 737213006 | PCK1212FBSPORX | BSPP | -12 | PCK | 3/4" X 3/4" BSPP straight with 0 ring |
| 344 | 737213026 | PCK1212FBSPORX90-64 | BSPP | -12 | PCK | 3/4" X 3/4" BSPP 90 degree elbow with 0 ring |
| 345 | 720496126 | 12GB-12FBSPORX | BSPP | -12 | GB | 3/4" X 3/4" BSPP straight with 0 ring |
| 346 | 720496136 | 12GB-12FBSPORX45X- BULK | BSPP | -12 | GB | 3/4" X 3/4" BSPP 45 degree elbow with 0 ring |
| 347 | 720496146 | 12GB-12FBSPORX90-50.5 | BSPP | -12 | GB | 3/4" X 3/4" BSPP 90 degree elbow with 0 ring |
| 348 | 720480806 | 12GB-12FBSPORX90-90 | BSPP | -12 | GB | 3/4" X 3/4" BSPP 90 degree elbow with 0 ring, Drop Height: 90mm |
| 349 | 720480866 | 12GB-12FBSPORX60-33 | BSPP | -12 | GB | 3/4" X 3/4" BSPP 60 degree elbow with 0 ring |
| 350 | 737214636 | PCK1212FBSPX | BSPP | -12 | PCK | 3/4" X 3/4" BSPP straight without O ring |
| 351 | 737214736 | PCK1212FBSPX90-52 | BSPP | -12 | PCK | 3/4" X 3/4" BSPP 90 degree elbow without 0 ring |
| 352 | 737214846 | PCK1212FBSPX45 | BSPP | -12 | PCK | 3/4" X 3/4" BSPP 45 degree elbow without O ring |
| 353 | 737214886 | PCK1212BSPBJ-AC | BSPP | -12 | PCK | 3/4" X 3/4" BANJO straight |
| 354 | 737216226 | PCK1212MBSPSP | BSPP | -12 | PCK | 3/4" X 3/4" Male straight |
| 355 | 737215506 | PCK1212FBSPX90BL | BSPP | -12 | PCK | 3/4" X 3/4" BSPP 90 degree block elbow without 0 ring |
| 356 | 720480276 | 12GB-16FBSPORX60-50 | BSPP | -12 | GB | 3/4" X 1" BSPP 60 degree elbow with 0 ring |
| 357 | 720480256 | 12GB-16FBSPORX90-60 | BSPP | -12 | GB | 3/4" X 1" BSPP 90 degree elbow with 0 ring, Drop Height: 60mm |
| 358 | 720480846 | 12GB-16FBSPORX90-72 | BSPP | -12 | GB | 3/4" X 1" BSPP 90 degree elbow with 0 ring, Drop Height: 72mm |
| 359 | 720480266 | 12GB-16FBSPORX90-90 | BSPP | -12 | GB | 3/4" X 1" BSPP 90 degree elbow with 0 ring, Drop Height: 90mm |
| 360 | 720480326 | 12GB-12MBSPPSP | BSPP | -12 | GB | 3/4" X 3/4" Male straight_JCB |
| 361 | 720480526 | 12GB-12FJISX | FJISX | -12 | GB | 3/4" X 3/4" JIS or C TYPE BSPP straight |
| 362 | 720480456 | 12GB-12FKX | FKX | -12 | GB | 3/4" X M30 X 1.5, straight |
| 363 | 720425256 | 12GB-16FL | FLANGE | -12 | GB | 3/4" X FLANGE OD: 44.45MM, Straight |
| 364 | 720429586 | 12GB-16FL90S | FLANGE | -12 | GB | 3/4" X FLANGE OD: 44.45MM, 90 degree elbow |
| 365 | 720429536 | 12GB-12FL90M | FLANGE | -12 | GB | 3/4" X FLANGE OD: 38.1MM, 90 degree elbow |
| 366 | 720482096 | 12GB-20FL90-75 | FLANGE | -12 | GB | 3/4" X FLANGE OD: 50.80MM, 90 degree elbow, Wire Braid, Drop Height: 75mm |
| 367 | 720482226 | 12GB-20FL | FLANGE | -12 | GB | 3/4" X FLANGE OD: 50.80 MM, Straight |
| 368 | 720409326 | 12GB-12FJX | JIC | -12 | GB | 3/4" X 1 1/16-12, straight |
| 369 | 720446426 | 12GB-12FJX45 | JIC | -12 | GB | 3/4" X 1 1/16-12, 45 degree elbow |
| 370 | 720471686 | 12GB-12FJXM- M3PD90S-048 | JIC | -12 | GB | 3/4" X 1 1/16-12, 90 degree elbow, Drop Height:48 |
| 371 | 720481316 | 12GB-12FJX90-52 | JIC | -12 | GB | 3/4" X 1 1/16-12, 90 degree elbow, Drop Height:52 |
| 372 | 737203446 | PCK1222FDLORX | METRIC | -12 | PCK | 3/4", M30 X 2.0, TUBE OD: 22MM, straight with O ring |



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|----------|-----------|---------------------------------------|--------|--------------|------------------|--|
| 373 | 737216116 | PCK1222FDLORX90-62 | METRIC | -12 | PCK | 3/4", M30 X 2.0, TUBE OD: 22MM, 90 degree elbow with 0 ring |
| 374 | 720480816 | 12GB-22FDLORX45-30 | METRIC | -12 | GB | 3/4", M30 X 2.0, TUBE OD: 22MM, 45 degree elbow with 0 ring |
| 375 | 720480396 | 12GB-22FDLORX90-90 | METRIC | -12 | GB | 3/4", M30 X 2.0, TUBE OD: 22MM, 90 degree elbow with 0 ring, Drop Height:90mm |
| 376 | 720481886 | 12GB-22FDLORX45-65 | METRIC | -12 | GB | 3/4", M30 X 2.0, TUBE OD: 22MM, 45 degree elbow with O ring, Drop Height:65mm |
| 377 | 737215296 | PCK1222FDLLX | METRIC | -12 | PCK | 3/4", M30 X 1.5, TUBE OD: 22MM, straight without O ring |
| 378 | 737215236 | PCK1222FDLLX90-57 | METRIC | -12 | PCK | 3/4", M30 X 1.5, TUBE OD: 22MM, 90 degree elbow without O ring |
| 379 | 737214986 | PCK1228FDLLX | METRIC | -12 | PCK | 3/4", M38 X 1.5, TUBE OD: 28MM, straight without O ring |
| 380 | 737214996 | PCK1228FDLLX90-60 | METRIC | -12 | PCK | 3/4", M38 X 1.5, TUBE OD: 28MM, 90 degree elbow without O ring |
| 381 | 737203506 | PCK1225FDHORX-WF | METRIC | -12 | PCK | 3/4", M36X 2.0, TUBE OD: 25MM, straight with 0 ring |
| 382 | 720482306 | 12GB-18FDLORX | METRIC | -12 | GB | 3/4", M26 X 1.5, TUBE OD: 18MM, Straight with O ring |
| 383 | 720482136 | 12GB-20FDH0RX90-62 | METRIC | -12 | GB | 3/4", M30 X 2.0, TUBE OD: 20MM, 90 degree elbow with 0 ring, Drop height:62mm |
| 384 | 720482146 | 12GB-20FDH0RX45-30 | METRIC | -12 | GB | 3/4", M30 X 2.0, TUBE OD: 20MM, 45 degree elbow with 0 ring, Drop height:30mm |
| 385 | 720482196 | 12GB-20FDHORX | METRIC | -12 | GB | 3/4", M30 X 2.0, TUBE OD: 20MM, straight with 0 ring |
| 386 | DOMC5885 | 3/4" NPT Reusable Cou- pling Brass | NPT | -12 | NPT | 3/4-14 Reusable coupling |
| 387 | 737204336 | PCK1212FFORX | ORFS | -12 | PCK | 3/4" X 1 3/16-12, straight |
| 388 | 737216106 | PCK1216FF0RX90S | ORFS | -12 | PCK | 3/4" X 1 7/16-12, 90 degree elbow |
| 389 | 720419256 | 12GB-12FFORX | ORFS | -12 | GB | 3/4" X 1 3/16-12, straight |
| 390 | 720480356 | 12GB-12FFORX90 | ORFS | -12 | GB | 3/4" X 1 3/16-12, 90 degree elbow |
| 391 | 720424656 | 12GB-12FFORX90-58 | ORFS | -12 | GB | 3/4" X 1 3/16-12, 90 degree elbow, Drop Height:58 |
| 392 | 720480246 | 12GB-12FFORX90-85 | ORFS | -12 | GB | 3/4" X 1 3/16-12, 90 degree elbow, Drop Height:85 |
| 393 | 720480216 | 12GB-12MFFORBKHD | ORFS | -12 | GB | 3/4" X 1 3/16-12, Male Bulk head Straight |
| 394 | 720480916 | 12GB-12FFORX90-160 | ORFS | -12 | GB | 3/4" X 1 3/16-12, 90 degree elbow, Drop Height:160 |
| 395 | 720422226 | 12GB-12FFORX45 | ORFS | -12 | GB | 3/4" X 1 3/16-12, 45 degree elbow |
| 396 | 720416186 | 12GB-12MFFOR | ORFS | -12 | GB | 3/4" X 1 3/16-12, Male Straight |
| 397 | 720419266 | 12GB-16FFORX | ORFS | -12 | GB | 3/4" X 1 7/16-12, Straight |
| 398 | 720480826 | 12GB-10FF0RX45-23 | ORFS | -12 | GB | 3/4" X 1-14, 45 degree elbow |
| 399 | 720481756 | 12GB-10FF0RX90-47 | ORFS | -12 | GB | 3/4" X 1-14, 90 degree elbow |
| 400 | 720419246 | 12GB-10FFORX-WF | ORFS | -12 | GB | 3/4" X 1–14, straight |
| 401 | 737218946 | PCK1210FF0RX45-25 | ORFS | -12 | PCK | 3/4" X 1-14, Female, 45 degree elbow |
| 402 | 737219266 | PCK1210FFORX | ORFS | -12 | PCK | 3/4" X 1-14, Female, straight |
| 403 | 737213016 | PCK1616FBSPORX | BSPP | -16 | PCK | 1" X 1" BSPP straight with O ring |
| 404 | 720496256 | 16GB-16FBSPORXSte- mASSY | BSPP | -16 | GB | 1" X 1" BSPP straight with O ring |
| 405 | 720481256 | 16GB-16FBSPORX45-NEW | BSPP | -16 | GB | 1" X 1" BSPP 45 degree bend with O ring |
| 406 | 720481266 | 16GB-16FBSPORX90-NEW | BSPP | -16 | GB | 1" X 1" BSPP 90 degree bend with 0 ring |
| 407 | 720480336 | 16GB-16FBSPORX90-76 | BSPP | -16 | GB | 1" X 1" BSPP 90 degree bend with 0 ring, Drop Height:76mm |
| 408 | 720480926 | 16GB-16MBSPP | BSPP | -16 | GB | 1" X 1" BSPP male straight |
| 409 | 737214646 | PCK1616FBSPX | BSPP | -16 | PCK | 1" X 1" BSPP straight without O ring |
| 410 | 737214746 | PCK1616FBSPX90-60 | BSPP | -16 | PCK | 1" X 1" BSPP 90 degree bend without 0 ring |
| 411 | 737214856 | PCK1616FBSPX45 | BSPP | -16 | PCK | 1" X 1" BSPP 45 degree bend without O ring |
| 412 | 737215126 | PCK1616FBSPX90-66 | BSPP | -16 | PCK | 1" X 1" BSPP 90 degree bend without O ring, Drop Height:66mm |
| 413 | 737215146 | PCK1616FBSPX90-80 | BSPP | -16 | PCK | 1" X 1" BSPP 90 degree bend without O ring, Drop Height:80mm |



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|----------|-----------|---|--------|--------------|------------------|--|
| 414 | 737215426 | PCK1612HFBSPX | BSPP | -16 | PCK | 1" X 3/4" BSPP straight without 0 ring |
| 415 | 720481866 | 16GB-20FBSPORX | BSPP | -16 | GB | 1" X 1 1/4" BSPP straight with O ring |
| 416 | 73515009 | 16GL-16FBSPORX90 | BSPP | -16 | GL | 1" X 1" BSPP 90 degree bend with 0 ring for Low Pressure Hose |
| 417 | 737213036 | PCK1616FB- SPORX90-60-WF | BSPP | -16 | PCK | 1" X 1" BSPP straight with 0 ring, 90 degree elbow |
| 418 | 720480796 | 16GB-16FJISX | FJISX | -16 | GB | 1" X 1" JIS or C TYPE BSPP straight |
| 419 | 720425306 | 16GB-16FL | FLANGE | -16 | GB | 1" X FLANGE OD: 44.45MM, Straight |
| 420 | 720427396 | 16GB-16FL45S | FLANGE | -16 | GB | 1" X FLANGE OD: 44.45MM, 45 degree elbow |
| 421 | 720429706 | 16GB-16FL90S | FLANGE | -16 | GB | 1" X FLANGE OD: 44.45MM, 90 degree elbow |
| 422 | 737215456 | PCK1616FJX90S | JIC | -16 | PCK | 1" X 1 5/16-12, 90 degree elbow |
| 423 | 720409396 | 16GB-16FJX-WF | JIC | -16 | GB | 1" X 1 5/16-12, straight |
| 424 | 737216046 | PCK1616FJX_SPL | JIC | -16 | PCK | 1" X 1 5/16-12, straight |
| 425 | 720446506 | 16GB-16FJX45 | JIC | -16 | GB | 1" X 1 5/16-12, 45 degree elbow |
| 426 | 720480446 | 16GB-16FJX90-66.5 | JIC | -16 | GB | 1" X 1 5/16-12, 90 degree elbow, Drop Height:66.5mm |
| 427 | 720409406 | 16GB-20FJX | JIC | -16 | GB | 1" X 1 5/8-12, straight |
| 428 | 720482326 | 16GB-16FJX70-50 | JIC | -16 | GB | 1" X 1 5/16-12, 70 degree elbow, Drop height: 50mm |
| 429 | 720481746 | 16GB-28FDLORX-SP | METRIC | -16 | GB | 1", M36X 2.0, TUBE OD: 28MM, straight with 0 ring |
| 430 | 720480736 | 16GB-28FDLORX45 | METRIC | -16 | GB | 1", M36X 2.0, TUBE OD: 28MM, 45 degree elbow with 0 ring |
| 431 | 720480836 | 16GB-28FDL0RX90-70 | METRIC | -16 | GB | 1", M36X 2.0, TUBE OD: 28MM, 90 degree elbow with 0 ring |
| 432 | 720480946 | 16GB-22FDLORX | METRIC | -16 | GB | 1", M30 X 2.0, TUBE OD: 22MM, straight with 0 ring |
| 433 | 720480956 | 16GB-22FDL0RX90-58 | METRIC | -16 | GB | 1", M30 X 2.0, TUBE OD: 22MM, 90 degree elbow with 0 ring |
| 434 | 737214186 | PCK1628FDLLX | METRIC | -16 | PCK | 1", M38 X 1.5, TUBE OD: 28MM, straight without O ring |
| 435 | 737214196 | PCK1628FDLLX90-63 | METRIC | -16 | PCK | 1", M38 X 1.5, TUBE OD: 28MM, 90 degree elbow without 0 ring |
| 436 | 737214206 | PCK1628FDLLX30-27 | METRIC | -16 | PCK | 1", M38 X 1.5, TUBE OD: 28MM, 30 degree elbow without O ring |
| 437 | 737214216 | PCK1628FDLLX45-53 | METRIC | -16 | PCK | 1", M38 X 1.5, TUBE OD: 28MM, 45 degree elbow without O ring |
| 438 | 737215136 | PCK1628FDLLX45-26 | METRIC | -16 | PCK | 1", M38 X 1.5, TUBE OD: 28MM, 45 degree elbow without O ring |
| 439 | 737215156 | PCK1628FDLLX90-92 | METRIC | -16 | PCK | 1", M38 X 1.5, TUBE OD: 28MM, 90 degree elbow without 0 ring, Drop Height:92mm |
| 440 | 737215166 | PCK1628FDLLX90-70 | METRIC | -16 | PCK | 1", M38 X 1.5, TUBE OD: 28MM, 90 degree elbow without 0 ring, Drop Height:70mm |
| 441 | 737215176 | PCK1628FDLLX90-294 | METRIC | -16 | PCK | 1", M38 X 1.5, TUBE OD: 28MM, 90 degree elbow without 0 ring, Drop Height:294mm |
| 442 | 737215256 | PCK1628FDLLX90-143 | METRIC | -16 | PCK | 1", M38 X 1.5, TUBE OD: 28MM, 90 degree elbow without O ring, Drop Height:143mm |
| 443 | 737215986 | PCK1628FDLLX90-75_SPL | METRIC | -16 | PCK | 1", M38 X 1.5, TUBE OD: 28MM, 90 degree elbow without O ring, Drop Height:75mm |
| 444 | 737216646 | PCK1628FDLLX74-51 | METRIC | -16 | PCK | 1", M38 X 1.5, TUBE OD: 28MM, 74 degree elbow without O ring |
| 445 | 737217736 | PCK1628FDLLX58-55 | METRIC | -16 | PCK | 1", M38 X 1.5, TUBE OD: 28MM, 58 degree elbow without O ring |
| 446 | 737217326 | PCK1628FDLLX40-57 BEFORE SOCKET WELD | METRIC | -16 | PCK | 1", M38 X 1.5, TUBE OD: 28MM, 40 degree elbow without 0 ring |
| 447 | 720481466 | 16GB-25FDHORX | METRIC | -16 | GB | 1", M36X 2.0, TUBE OD: 25MM, straight with 0 ring |
| 448 | 720481476 | 16GB-25FDHORX90-64 | METRIC | -16 | GB | 1", M36X 2.0, TUBE OD: 25MM, 90 degree elbow with 0 ring |
| 449 | 737215976 | P1628FDLLX57.5-62 | METRIC | -16 | PCK | 1", M38 X 1.5, TUBE OD: 28MM, 57 degree elbow without O ring |
| 450 | 737216976 | P1628FDLLX90-110 | METRIC | -16 | PCK | 1", M38 X 1.5, TUBE OD: 28MM, 90 degree elbow without O ring, Drop Height:110 |
| 451 | 737217346 | PCK1622FDLX-WF | METRIC | -16 | PCK | 1", M30 X 2.0, TUBE OD: 22MM, Straight without O ring |
| 452 | 720482206 | 16GB-30FDHORX-WF-2W | METRIC | -16 | GB | 1", M42X 2.0, TUBE OD: 30MM, straight with 0 ring |



| S. NO | AM CODE | DESCRIPTION | THREAD | HOSE SIZE | COUPLING TYPE | DESCRIPTION |
|----------|-----------|-----------------------------------|--------|--------------|------------------|--|
| 453 | DOMC5886 | 1" NPT Reusable Coupling Brass | NPT | -16 | NPT | 1-111/2 Reusable coupling |
| 454 | 720419306 | 16GB-16FFORX | ORFS | -16 | GB | 1" X 1 7/16-12, Straight |
| 455 | 720422266 | 16GB-16FFORX45 | ORFS | -16 | GB | 1" X 1 7/16-12, 45 degree elbow |
| 456 | 720424756 | 16GB-16FFORX90M | ORFS | -16 | GB | 1" X 1 7/16-12, 90 degree elbow |
| 457 | 720480496 | 16GB-16FF0RX90-115 | ORFS | -16 | GB | 1" X 1 7/16-12, 90 degree elbow, Drop Height:115mm |
| 458 | 720424746 | 16GB-16FF0RX90-56.1 | ORFS | -16 | GB | 1" X 1 7/16-12, 90 degree elbow, Drop Height:56mm |
| 459 | 720480436 | 16GB-12FFORX90-53 | ORFS | -16 | GB | 1" X 1 3/16-12, 90 degree elbow, Drop Height:53mm |
| 460 | 720481226 | 16GB-12FFORX90M | ORFS | -16 | GB | 1" X 1 3/16-12, 90 degree elbow |
| 461 | 737216126 | PCK1620FF0RX90-64 | ORFS | -16 | PCK | 1" X 1 11/16-12, 90 degree elbow |
| 462 | 720481706 | 20GB-20FBSPORX-SP | BSPP | -20 | GB | 1 1/4" X 1 1/4" BSPP straight with O ring, Single Wire Braid |
| 463 | 720481906 | 20GB-20FBSPX | BSPP | -20 | GB | 1 1/4" X 1 1/4" BSPP straight without 0 ring, Single Wire Braid |
| 464 | 720481396 | 20GB-20FBSPORX90-90- SP-2WB | BSPP | -20 | GB | 1 1/4" X 1 1/4" BSPP 90 degree elbow, with 0 ring , Wire Braid |
| 465 | 720482346 | 20GB-20FBSPORX45-45 | BSPP | -20 | GB | 1 1/4" X 1 1/4" BSPP 45 degree elbow, with O ring , Wire Braid |
| 466 | 720481796 | 20GB-20FJISX-2WB | FJISX | -20 | GB | 11/4" X 1 1/4" JIS or C TYPE BSPP straight |
| 467 | 720481066 | 20GB-20FJX-2WB | JIC | -20 | GB | 1 1/4" X 1 5/8-12, Straight |
| 468 | 720414596 | 20GB-20FJXMM90-089 | JIC | -20 | GB | 1 1/4" X 1 5/8-12, 90 degree elbow |
| 469 | 720480746 | 20GB-35FDLORX | METRIC | -20 | GB | 1 1/4", M45X 2.0, Tube OD: 35MM, straight with 0 ring |
| 470 | 720480856 | 20GB-35FDL0RX90-80 | METRIC | -20 | GB | 1 1/4", M45X 2.0, Tube OD: 35MM, 90 degree elbow with 0 ring |
| 471 | 720480756 | 20GB-35FDLORX45 | METRIC | -20 | GB | 1 1/4", M45X 2.0, Tube OD: 35MM, 45 degree elbow with O ring |
| 472 | 720481356 | 20GB-20FF0RX90-68-2WB | ORFS | -20 | GB | 1 1/4" X 1 11/16-12, 90 degree elbow |
| 473 | 720481376 | 20GB-20FFORX-2WB | ORFS | -20 | GB | 1 1/4" X 1 11/16-12, Straight |
| 474 | 737213636 | 24C2-24FBSPX | BSPP | -24 | C2 | 1 1/2" X 1 1/2" BSPP straight without O ring, Braided hose |
| 475 | 734767116 | 24GSP-24FBSPORX45- 55-2WB | BSPP | -24 | GSP | 1 1/2" X 1 1/2" BSPP 45 degree elbow with O ring, Wire Braid |
| 476 | 730580056 | 24C2-24FL-WF | FLANGE | -24 | C2 | 1 1/2" X FLANGE OD: 60.3MM, Straight, Braided hose |
| 477 | 737213486 | 24C2-24FL90-89-WF | FLANGE | -24 | C2 | 1 1/2" X FLANGE OD: 60.3MM, 90 degree elbow, Braided hose |
| 478 | 737213586 | 24C2-24FL45M-WF | FLANGE | -24 | C2 | 1 1/2" X FLANGE OD: 60.3MM, 45 degree elbow, Braided hose |
| 479 | 734741726 | 24GSP-24FL-WF | FLANGE | -24 | GSP | 1 1/2" X FLANGE OD: 60.3MM, Straight, For Wire Braid |
| 480 | 734789766 | 24GSP-24FJX-2WB | JIC | -24 | GSP | 1 1/2" X 1 7/8–12, straight, Wire Braid |
| 481 | 734789966 | 24GSP-24FJX90-89-WB | JIC | -24 | GSP | 1 1/2" X 1 7/8-12, 90 degree elbow, Wire Braid |
| 482 | 734767096 | 24GSP-38FDHORX-2W | METRIC | -24 | GSP | 1 1/2", M52X 2.0, Tube OD: 38MM, straight with 0 ring, Wire Braid |
| 483 | 734767126 | 24GSP-42FDLORX90-110- 2WB | METRIC | -24 | GSP | 1 1/2", M52X 2.0, Tube OD: 42MM, 90 degree elbow with 0 ring, Wire Braid, Drop height: 110mm |
| 484 | 734790046 | 24GSP-42FDLORX-WB | METRIC | -24 | GSP | 1 1/2", M52X 2.0, Tube OD: 42MM, straight with O ring, Wire Braid |



CHEMICAL RESISTANCE RATINGS FOR GATES HOSE POLYMERS, COUPLINGS AND ADAPTER MATERIALS

The Chemical Resistance Table lists the relative resistance of hose and coupling materials to more common chemicals. These ratings do not cover all possible variations of all factors, such as temperature, concentration, degradation or fluid contamination, etc. Testing under actual conditions is the best way to ensure chemical compatibility for critical applications.

For specific information, contact Gates Hose/ Connector Product Application, Denver, Colorado 303-744-5070.

Rating Scale

- "1" Excellent resistance
- "2" Good resistance
- "X" Not recommended
- "--- " Testing recommended

HOW TO USE THE CHEMICAL RESISTANCE TABLE

- 1. Chemicals are listed alphabetically.
- 2. Find the hose, coupling and adapter material type that has a resistance rating of "1" or "2" (See Rating Scale).
- 3. Find hose with compatible polymer(s) in the Gates Hydraulic Hose Selection Guide.
- 4. Look for compatible couplings for the selected hose by following the hose page references in the Selection Guide.

NOTE: O-rings used with couplings also must be considered for chemical compatibility with the fluid to be conveyed. This includes couplings containing internal o-rings; for example, MPX (Male Pipe Swivel). Gates standard o-ring is made of Nitrile. If o-rings other than Nitrile are required, contact Gates Hose/Connector Product Application.





| Rating Scale: | | Gat | tes | Но | se | Pol | ym | ers | | | | | ngs oters | 3 |
|--|-----------------|-----------------------|---------------|--------|--------|----------|--------|--------|----------|--------------|---------------------|---------------------|--------------|--------|
| Excellent Good resistance Xot recommended Testing recommended Cover stock rating only; Rating for tube stock "X" Use Gates fuel hose or contact Denver Product Application Department Chemical Name | Polychloroprene | Nitrile, HNBR, or XTF | Nitrile + PVC | CPE | CSM | Urethane | PTFE | Nylon | MegaTuff | Carbon Steel | Stainless Steel 304 | Stainless Steel 316 | Aluminum | Brass |
| Α | | | | | | | | | | | | | | |
| Absorption Oil | 2 | 1 | 2 | 1 | 2 | - | 1 | 1 | 2 | - | - | - | - | 1 |
| Acetaldehyde | X | Х | Х | - | Х | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| Acetamide | 1 | 2 | - | - | - | Х | 1 | - | 1 | - | - | - | - | - |
| Acetic Acid, 5-20% | 2 | Х | 2 | 1 | 2 | Х | 1 | 1 | 1 | X | 2 | 2 | 2 | Х |
| Acetic Acid, 25% | 2 | X | 2 | 1 | 2 | - | 1 | X | 1 | X | 2 | 2 | 2 | Х |
| Acetic Acid, 30% Acetic Acid, 50% | 2 | X X | 2 | 1 | - | 2 | 1 1 | 2 2 | 1 1 | X X | 2 2 | 1 2 | 2 2 | X X |
| Acetic Acid, 50% Boiling | X | x | - | т | | 2 | 1 | X | - | x | X | 2 | - | _ |
| Acetic Acid, 80% | x | X | - | - | - | - | 1 | X | 1 | x | 2 | 2 | 2 | х |
| Acetic Acid, 80% Boiling | x | Х | - | - | - | - | 1 | Х | - | x | Х | 2 | Х | Х |
| Acetic Acid, 100% | X | Х | - | - | - | - | 1 | Х | Х | X | Х | 2 | 2 | Х |
| Acetic Acid, 100% Boiling | Х | Х | - | - | - | Х | 1 | Х | Х | X | Х | 2 | - | Х |
| Acetic Acid, 100% (Hot) Vapors | 2 | 2 | - | - | - | - | - | Х | Х | X | Х | 2 | 2 | Х |
| Acetic Acid, Air Free | - | - | - | - | - | - | 1 | - | - | X | Х | Х | - | Х |
| Acetic Acid, Anhydride | X | Х | Х | 1 | 2 | - | 1 1 | х - | х - | X X | 2 X | 2 X | 2 | X X |
| Acetic Acid, Areated Acetic Acid, Crude | x | x | | | | 2 | 1 | 1 | - | x | 2 | 1 | 2 | x |
| Acetic Acid, Glacial | x | X | х | 1 | х | Х | 1 | x | х | x | 2 | 2 | 2 | - |
| Acetone (Dimethylketone) | x | Х | Х | 1 | Х | Х | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Acetonitrile (Methyl Cyanide) | 2 | Х | 2 | 1 | 2 | - | - | - | 2 | - | - | - | - | - |
| Acetylene | 2 | 2 | 1 | 1 | - | - | 1 | 1 | Х | 1 | 1 | 1 | 1 | 2 |
| Acrylonitrile (Vinyl Cyanide) | X | Х | Х | 1 | Х | - | - | - | 2 | 1 | 1 | 1 | 2 | 1 |
| Aero Lubriplate | 1 | 1 | - | - | - | - | - | - | - | 1 | 1 | 1 | 1 | - |
| Aero-Safe 2300 Aeroshell Type 1A, 1AC, 4 | 2 X | X 1 | - | - | - | X 1 | 2 | - | - | 1 | 1 | 1 | 1 | 1 |
| Aeroshell 7AGrease | 2 | 1 | | | | X | 2 | | - | 1 | 1 | 1 | 1 | 2 |
| Aeroshell 17 Grease | 2 | 1 | - | - | - | X | - | - | - | 1 | 1 | 1 | 1 | - |
| Aeroshell 750 | X | 2 | - | - | - | Х | - | - | - | 1 | 1 | 1 | 1 | - |
| Air, Ambient | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Air, 150°F | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Air, 180°F | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Air, 200°F Aircraft Hyd. Oil AA | X | X 1 | х - | 1 | X - | 2 | 1 | 2 | 1 | 11 | 1 1 | 1 1 | 1 1 | 1 1 |
| Alcohol | 1 | 1 | | | | 2 | 1 | | 1 | | 1 | 1 | 1 | 1 |
| Alcohol, Amyl | 2 | 2 | - | - | - | - | 1 | 1 | 2 | - | 2 | 1 | 2 | - |
| Alcohol, Benzyl | X | Х | - | 1 | 2 | 2 | 1 | - | 1 | 1 | 1 | 1 | - | - |
| Alcohol, Butyl | 2 | Х | 2 | - | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Alcohol, Denatured | 1 | 1 | - | - | 1 | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Alcohol, Diacetone | - | X | - | - | 2 | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Alcohol, Ethyl (Ethanol) Alcohol, Furfural | 12 | 1 X | 1 X | 1 1 | 1 2 | 2 | 1 1 | 1 | 1 2 | 12 | 1 1 | 1 1 | 1 1 | 2 1 |
| Alcohol, Hexyl (Hexanol) | 2 | 1 | - | | X | 2 | 1 | | - | 1 | 1 | 1 | 1 | 2 |
| Alcohol, Isobutyl | 2 | 2 | - | - | 1 | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| Alcohol, Isopropyl (Isopropanol) | 2 | 2 | 2 | - | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| Alcohol, Methyl (100%) | | | | | | | | | | | | | | |
| (Methanol) | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| Alcohol, Methyl (6%) | 1 | 1 | 1 | - | 1 | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| Alcohol, Octyl Alcohol, Propyl | 2 | 2 1 | - | 2 | Ì | - | 1 1 | 1 X | - 1 | 12 | 1 1 | 1 1 | 1 1 | - 1 |
| Alkazene | X | X | x | - | x | x | - | - | | 1 | 1 | - | - - | - |
| Aluminum Chloride | 1 | 1 | 1 | 1 | 1 | 2 | 1 | х | Х | X | 2 | 2 | Х | х |
| Aluminum Fluoride | 1 | 1 | 1 | 1 | 1 | 2 | 1 | Х | - | X | 2 | 2 | 2 | Х |
| Aluminum Hydroxide | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 | - | 1 | 1 | - | 1 |
| Aluminum Hydroxide, Saturated | 1 | 1 | - | - | - | - | 1 | 1 | 1 | - | 1 | 1 | - | - |
| Aluminum Nitrate | 1 | 1 | 1 | 1 | 1 | 2 | 1 | - | 1 | X | 1 | 1 | 2 | - |
| Aluminum Sulfate Alums | 1 | 1 | 1 | 1 | 1 | Х | 1 | 1 | - | X | Х | 2 | Х | Х |
| AIUIIIS | | 1 | 1 | 1 | 1 | _ | 1 | - | 1 | x | 2 | 2 | х | Х |
| (Ammonium or Potassium) | 1 | | | | | | | | | | | | | |
| (Ammonium or Potassium) Ammonia, Aqueous | 1 1 | 2 | 1 | - | 1 | - | 1 | 1 | 1 | - | 1 | 1 | - | Х |

| Rating Scale: | | Gat | tes | Но | se | Pol | ym | ers | | | | | ngs | |
|---|-----------------|-----------------------|---------------|--------|--------|----------|--------|--------|----------|--------------|---------------------|---------------------|----------|--------|
| Excellent Good resistance Xot recommended Testing recommended Gover stock rating only; Rating for tube stock "X" Use Gates fuel hose or contact Denver Product Application Department Chemical Name | Polychloroprene | Nitrile, HNBR, or XTF | Nitrile + PVC | CPE | CSM | Urethane | PTFE | Nylon | MegaTuff | Carbon Steel | Stainless Steel 304 | Stainless Steel 316 | Aluminum | Brass |
| Ammonium Chloride, 1% | Х | 2 | 1 | 1 | 1 | 1 | 1 | 1 | - | Х | 2 | 2 | Х | Х |
| Ammonium Chloride, | | | | | | | | | | | _ | | | |
| 10% Boiling Ammonium Chloride, | X | Х | - | - | - | - | 1 | Х | - | X | 2 | 2 | Х | Х |
| 28% Boiling | Х | х | - | - | _ | - | 1 | х | - | x | 2 | 2 | х | х |
| Ammonium Chloride, | | | | | | | | | | | | | | |
| 50% Boiling | X | Х | - | - | - | - | 1 | Х | - | X | 2 | 2 | Х | Х |
| Ammonium Hydroxide Ammonium Hydroxide, 3 Molar | 2 | 2 X | 2 | 1 | 1 | Х 2 | 1 1 | 1 | 1 1 | 2 X | 1 2 | 1 2 | - X | X X |
| Ammonium Hydroxide, 3 Molar | | ^ | | - | - | 2 | т | - | 1 | | 2 | 2 | ^ | ^ |
| Concentrated | 1 | Х | - | 1 | - | Х | 1 | 1 | 1 | Х | 2 | 2 | Х | Х |
| Ammonium Metaphosphate | 2 | 2 2 | 2 1 | - | 2 | - | 1 | - v | - | 1 | 1 1 | 1 | X 2 | - X |
| Ammonium Nitrate, Fertilizer Ammonium Nitrite | $ 1 \\ 1$ | 2 | 1 | 1 | 1 | 1 | 1 | X 1 | - | 12 | 1 | 1 1 | 2 X | × - |
| Ammonium Persulfate | X | X | Х | 1 | - | х | - | X | - | X | 2 | 2 | X | х |
| Ammonium Persulfate, 5% | 1 | Х | - | - | - | - | - | Х | - | X | 2 | 2 | Х | Х |
| Ammonium Persulfate, 10% | 1 | Х | - | - | - | Х | - | Х | | X | 2 | 2 | Х | Х |
| Ammonium Phosphate (Mono, Di, Tri, Basic) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | | x | 2 | 2 | х | _ |
| Ammonium Sulfate | 1 | 2 | 1 | 1 | 1 | 1 | 1 | x | - | X | x | 2 | X | Х |
| Ammonium Thiocyanate | 1 | 1 | - | 1 | 1 | - | 1 | - | - | 1 | 1 | 1 | - | - |
| Amyl Acetate | X | Х | Х | 2 | Х | 2 | 1 | 1 | 1 | X | 1 | 1 | Х | 2 |
| Amyl Alcohol Amyl Borate | 2 | 2 2 | 2 2 | 1 | 2 | - | 1 | 1 | 1 2 | 1 | 1 | 1 | 1 | 1 |
| Amyl Chloride | X | - | X | 2 | x | 2 | 1 | 2 | - | | 1 | 1 | - | - |
| Amyl Chloronaphthalene | X | Х | Х | - | Х | - | 1 | - | 2 | - | 1 | 1 | - | - |
| Amyl Naphthalene | X | Х | Х | - | Х | - | 1 | - | 2 | - | 1 | 1 | - | - |
| Amyl Phenol AN-0-3 Grade M | - 1 | - | - | - | 2 | - | 1 | - | - | - | 1 | 1 | - | - |
| AN-0-6 | | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| AN-0-366 | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Anderol, L-774 (Diester) | X | 2 | - | - | - | - | 1 | Х | - | - | - | - | - | - |
| Anderol, L-826 (Diester) Anderol, L-829 (Diester) | X X | 2 2 | 2 | - | - | - | 1 1 | X X | - | - | - | - | - | - |
| ANG-25 (Glyceral Ester) | 2 | 2 | 2 | - | 2 | 2 | 1 | 2 | - | | - | 2 | - | - |
| ANG-25 (Diester Base, TG749) | X | 2 | - | - | - | - | 1 | Х | - | 1 | 1 | 1 | 1 | - |
| Aniline | X | Х | Х | 2 | Х | Х | 1 | 2 | - | 2 | 1 | 1 | Х | Х |
| Aniline Dyes Aniline Hydrochloride | X X | X X | - | 2 2 | - | - | 1 1 | × | X | 2 X | 1 1 | 1 1 | 2 | x |
| Animal Gelatin | | 1 | - | 2 | - | 2 | 1 | - | 2 | ^ | 1 | 1 | - | - |
| Animal Fats | 2 | 1 | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Х |
| Animal Oil (Lard Oil) | 2 | 1 | - | 1 | - | - | 1 | - | 1 | 1 | 1 | 1 | 1 | - |
| Antifreeze, Alcohol Base Antifreeze, Glycol Base | 2 | 2 1 | 2 1 | 2 1 | 2 1 | 2 | 1 1 | - | 1 2 | 1 | 1 1 | 1 1 | 1 1 | - 1 |
| Antimeeze, Giycor Base Antimony Chloride, 50% | 2 | 1 | - | - | - | 2 | 1 | X | 2 | X | X | X | - | - |
| AN-VV-0-366B Hydraulic Fluid | 1 | - | - | - | - | - | - | 2 | 1 | - | - | - | - | - |
| Aqua Regia (Concentrated) | X | Х | Х | 2 | Х | Х | 1 | Х | - | X | Х | Х | Х | - |
| Arco A.T.F. Dexron | - | 1 1 | - | - | 2 | - | Ì | 2 | х - | - | - | - | - | - |
| Arco C2, 100 Aromatic Fuel 30%, Mil. | | - | - | - | - | - | - | - | - | - | - | 2 | - | - |
| Aromatic Fuel 50% | x | 2 | - | - | - | - | 1 | - | - | - | - | - | - | - |
| Aromatic Hydrocarbons | X | Х | - | - | Х | 2 | 1 | - | - | 2 | 1 | 2 | 2 | 2 |
| Arsenic Acid | | - v | - v | 1 | - v | - | 1 1 | - | 2 | 2 | - | 1 | 2 | - 1 |
| Askarel, Transformer Oil Asphalt, Under 180°F | X 2 | Х 2 | Х 2 | x | X X | - 1 | 1 | 2 | 1 2 | 1 | 1 1 | 1 1 | - | 1 2 |
| Asphalt, Cut Back | X | 2 | 2 | - | X | 1 | 1 | 1 | X | 1 | 1 | 1 | 2 | 2 |
| Asphalt, Topping | 1 | Х | - | - | - | - | 1 | - | Х | 1 | 1 | 1 | - | - |
| ASTM OIL No. | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | X | 1 | 1 | 1 | 1 | 1 |
| ASTM Oil No. ASTM Oil No. 3 | 2 X | 2 1 | 1 X | - X | 2 X | 2 | 1 1 | 1 1 | 1 1 | 1 | 1 1 | 1 1 | 1 1 | 1 1 |
| ASTM OILNO. 3 ASTM OILNO. 4 | x | 2 | - | - | - | - | 1 | - | 1 | 1 | 1 | 1 | 1 | - |
| | | | | | | | | | | | | | | |



| Rating Scale: | | Gat | tes | Но | se | Pol | ym | ers | | | | | ngs oters | |
|---|-----------------|-----------------------|---------------|--------|--------|----------|--------|--------|----------|--------------|---------------------|---------------------|--------------|--------|
| Excellent Good resistance X Not recommended Testing recommended [] Cover stock rating only; Rating for tube stock "" Use Gates fuel hose or contact Denver Product Application Department Chemical Name | Polychloroprene | Nitrile, HNBR, or XTF | Nitrile + PVC | CPE | CSM | Jrethane | PTFE | Nylon | MegaTuff | Carbon Steel | Stainless Steel 304 | Stainless Steel 316 | Aluminum | Brass |
| ASTM Reference Fuel A | | | | | 1 | | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 |
| ASTM Reference Fuel B | [2] [2] | | [1] [2] | 1 2 | X | - | 1 | ÷. | 1 | 1 | 1 | 1 | 1 | 1 |
| ASTM Reference Fuel C | X | 2 | X | 2 | x | - | 1 | - | 1 | 1 | 1 | 1 | - | 1 |
| ATL-857 | X | 2 | - | - | - | - | - | - | 2 | - | - | - | - | - |
| Atlantic Dominion F | 2 | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Aurex 903R (Mobil) | 2 | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Automatic Brake Fluid | 2 | Х | - | - | - | - | 1 | - | 1 | 1 | 1 | 1 | 1 | - |
| Automatic Transmission Fluid | | 4 | | 4 | | | 4 | | 4 | 1 | 4 | 1 | 4 | |
| - ATF Aviation Gasoline, Mil. | 2 | 1 2 | | 1 | - | | 1 | - | 1 | 1 | 1 1 | 1 | 1 | - |
| B | - | 2 | - | - | | - | - | | _ | - | - | 1 | т | |
| Baltic Types | | | | | | | | | | | | | | |
| 100, 150, 200, 300, 500 | - | 1 | - | - | _ | - | 1 | - | - | . | - | - | - | - |
| Banvel, | | | | | | | - | | | | | | | |
| Concentrated (Ag Spray) | - | - | - | - | - | - | 1 | 1 | - | - | - | 1 | - | - |
| Bardol B | X | Х | Х | - | Х | - | 1 | - | - | 1 | 1 | 1 | - | - |
| Barium Carbonate | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | - | 2 | 1 | 1 | Х | 1 |
| Barium Chloride | X | 1 | 1 | 1 | 1 | 1 | 1 | 1 | - | X | 2 | 2 | Х | 2 |
| Barium Chloride, 5% | X | 1 | - | - | - | - | 1 | Х | 1 | 2 | 1 | 1 | Х | - |
| Barium Chloride, Aqueous Solution (Hot) | x | 1 | _ | _ | | _ | 1 | х | - | 2 | 2 | 2 | х | - |
| Barium Hydroxide | | 1 | 1 | 1 | 1 | x | 1 | 1 | 1 | X | 1 | 2 | X | x |
| Barium Sulfate | 1 | 1 | - | 1 | 2 | - | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 |
| Barium Sulfate, | | | | | | | | | | | | | | |
| Aqueous Solution (Hot) | X | - | - | - | - | - | 1 | Х | 1 | 2 | 1 | 1 | 2 | - |
| Barium Sulfide | 2 | 1 | 1 | 1 | 1 | - | 1 | 2 | 1 | X | 1 | 1 | Х | Х |
| Bayol D | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Bayol 35 Boot Sugar Liquoro | x | 1 1 | - 1 | - | - 1 | · | - 1 | - | - | 2 | -2 | -2 | -2 | x |
| Beet Sugar Liquors Bellows 80-20 Hydraulic Oil | <u> </u> | 1 | - | | ± | 2 | 1 | - | ± | 2 | - | - | - | - |
| Benzaldehyde | x | X | Х | 2 | х | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Benzene, Benzol | X | Х | Х | Х | Х | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 |
| Benzene Sulfonic Acid | X | - | - | - | - | - | 1 | - | 1 | X | - | 2 | Х | - |
| Benzine, Petroleum Ether | X | 2 | Х | 1 | - | 2 | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Benzoic Acid 21°C (70°F) | X | Х | Х | 1 | - | - | 1 | - | 1 | 1 | 1 | 1 | 1 | 1 |
| Benzol Benzyl Alcohol | X X | X X | х - | X 1 | - | - | 1 1 | 1 X | 2 1 | 1 | 1 1 | 1 1 | 1 1 | 1 |
| Benzyl Benzoate | <u> </u> | 2 | | | 2 | | 1 | - | - | | 1 | 1 | - | 2 |
| Benzyl Chloride | x | х | Х | Х | - | - | 1 | 2 | 2 | 1 | - | - | - | - |
| Bismuth Carbonate | X | - | - | - | - | - | 1 | - | - | 1 | 1 | 1 | - | - |
| Black Point 77 | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Black Sulfate Liquor | 2 | 2 | 2 | 2 | 2 | - | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 |
| Blast Furnace Gas | X | X | X | - | X | X | 1 | - V | - | 1 | 1 | 1 | 2 | 1 |
| Borax, Sodium Borate Bordeaux Mixture | X 2 | 2 2 | 2 2 | 1 | 1 | 1 1 | 1 1 | X 1 | - 1 | 2 X | 1 | 1 1 | X 1 | 2 X |
| Boric Acid | 1 | 1 | 1 | - | 1 | 1 | 1 | X | 1 | x | 2 | 2 | 1 | x |
| Boron Fuels, HEF | X | Х | - | - | - | - | - | - | - | - | - | - | - | - |
| Brake Fluid, Petroleum Base | 2 | 1 | 2 | 1 | Х | - | 1 | - | - | 1 | 1 | 1 | - | 1 |
| Brake Fluid, Synthetic Base | X | Х | Х | 1 | Х | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Bray GG - 130 | X | 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Brayco 719-r (VV-H-910) | 2 | X | - | - | - | - | - | - | - | - | - | - | - | - |
| Brayco 885 (MIL-L-6085A) Brayco 910 | X 2 | 2 2 | 2 | - | - | - | 2 | - | - | - | - | - | - | - |
| Brayco 910 Brine | 2 | 2 | - | - 1 | 2 | - | - | - | - | 2 | - | - | | 2 |
| Brom-113 | X | 2 | - | - | - | - | - | - | - | - | - | - | | - |
| Brom-114 | 2 | 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Bromine, Dry | x | Х | Х | - | - | - | Х | - | - | x | Х | Х | - | Х |
| Bunker Oil | X | 2 | 2 | - | Х | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 |
| Butadiene | X | 2 | - X | - | - Х | - X | 1 1 | 1 | - | - | 1 1 | 1 1 | - | 1 1 |
| Butane | X | Х | | - | | | | Х | - | 1 | | | - | |

| Rating Scale: | | Cat | too | Цо | | Dol | lum | oro | | | Со | upli | ngs | |
|---|-----------------|-----------------------|---------------|--------|--------|----------|--------|--------|----------|--------------|---------------------|---------------------|----------|--------|
| - | | udi | ies | 10 | se | ru | lym | ers | | | | | ters | 3 |
| Excellent Cool resistance X Not recommended Testing recommended Cover stock rating only; Rating for tube stock "X" Use Gates fuel hose or contact Denver Product Application Department Chemical Name | Polychloroprene | Nitrile, HNBR, or XTF | Nitrile + PVC | CPE | CSM | Urethane | PTFE | Nylon | MegaTuff | Carbon Steel | Stainless Steel 304 | Stainless Steel 316 | Aluminum | Brass |
| Butter Oil | 2 | - | | - | | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Butyric Acid | Х | - | - | 1 | - | - | 1 | Х | 1 | X | 1 | 1 | - | 2 |
| Butyl Acetate | Х | Х | Х | 2 | Х | - | 1 | - | 2 | 2 | 1 | 1 | 1 | 1 |
| Butyl Alcohol | 1 | 1 | 1 | 1 | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Butyl Amine | - | - | - | - | - | - | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| Butyl Carbitol | 2 | 2 | 2 | 1 | - | - | 1 1 | - | - | 1 | 1 | 1 1 | 1 1 | 1 - |
| Butyl Mercaptan Butyl Stearate | x | 2 | 2 | 2 | Ĵ | | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Butyraldehyde | X | X | - | 2 | - | - | 1 | - | - | 1 | - | - | - | 1 |
| C | | | | | | | | | | | | | | |
| Calcium Acetate | Х | Х | Х | 1 | Х | - | 1 | - | - | 2 | 2 | 2 | Х | 1 |
| Calcium Arsenate | - | - | - | - | - | 1 | 1 | 1 | - | - | - | - | - | - |
| Calcium Bisulfate | 1 | 1 | 2 | 1 | 1 | - | 1 | - | - | - | 2 | 1 | - | Х |
| Calcium Bisulfide | 1 | 1 | 2 | 1 | 1 | 1 | 1 | - | - | - | 2 | 2 | Х | Х |
| Calcium Bisulfite | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | - | X | 1 | 1 | 1 | X |
| Calcium Carbonate Calcium Chlorate | 1 1 | 1 1 | 1 1 | 1 | 1 1 | 1 | 1 1 | 1 | - | 2 | 1 2 | 1 1 | X 1 | 1 |
| Calcium Chloride | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | X | 2 | 1 | X | 2 |
| Calcium Hydroxide | 1 | 2 | 2 | 1 | 1 | X | 1 | | х | X | X | 1 | - | 2 |
| Calcium Hydroxide, 10% Boiling | - | 2 | - | - | - | - | 1 | Х | Х | 2 | 1 | 1 | Х | Х |
| Calcium Hydroxide, 20% Boiling | - | - | - | - | - | - | 1 | Х | Х | - | 1 | 1 | Х | Х |
| Calcium Hydroxide, 50% Boiling | - | - | - | - | - | - | 1 | Х | Х | - | Х | 2 | Х | Х |
| Calcium Hypochlorite, | | ~ | | | ~ | | | | | | | ~ | | |
| 5% (Under 100°F) | Х | 2 | Х | 1 | 2 | - | 1 | Х | Х | X | Х | 2 | Х | Х |
| Calcium Hypochlorite, 15% (Under 100°F) | х | - | х | 1 | 2 | - | 1 | х | Х | _ | х | 2 | Х | х |
| Calcium Nitrate | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | - | Х | 2 | 2 | x | 1 |
| Calcium Silicate | - | 2 | - | 1 | 2 | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Calcium Sulfate | 1 | 1 | 1 | 1 | 1 | - | 1 | - | - | 2 | 1 | 1 | 2 | 1 |
| Calcium Sulfide | 1 | 2 | - | 1 | - | - | 1 | 2 | - | 2 | 1 | 1 | 2 | - |
| Caliche Liquors | 1 | 2 | - | 1 | 1 | 1 | 1 | - | - | 1 | 1 | 1 | - | - |
| Cane Sugar Liquors | 1 X | 1 X | 2 X | 1 1 | - | - | 1 1 | - | - | 1 | 1 | 1 1 | 1 2 | 2 X |
| Carbolic Acid, Phenol Carbon Dioxide, Dry | 2 | 1 | 1 | 1 | X 1 | X 1 | 1 | X - | - | X 1 | 1 | 1 | 2 | 1 |
| Carbon Dioxide, Wet | 2 | 1 | 1 | 1 | 1 | - | 1 | - | 1 | 1 | 1 | 1 | 1 | 1 |
| Carbon Disulfide | Х | Х | - | 2 | Х | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | Х |
| Carbon Monoxide, | | | | | | | | | | | | | | |
| Under 150°F (Hot) | 2 | 2 | 2 | 1 | 1 | - | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| Carbon Tetrachloride, 5%-10% | - | - | - | - | - | - | 1 | - | Х | - | Х | - | - | - |
| Carbon Tetrachloride, Pure Carbonic Acid | X 1 | X 1 | X 1 | 2 1 | X 1 | X X | 1 1 | X - | X 1 | X X | X 1 | 2 1 | 2 2 | 2 X |
| Castor Oil | 2 | 2 | 2 | | 2 | 2 | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| Caustic Soda, 20% | 2 | X | X | 1 | 1 | X | 1 | 2 | - | 2 | 1 | 1 | X | X |
| Caustic Soda, 50% | 2 | Х | Х | 1 | 1 | Х | 1 | 2 | - | 2 | 1 | 1 | Х | Х |
| Cellosolve Acetate, Under 100°F | | Х | Х | | | - | 1 | - | - | 2 | 2 | 2 | 1 | - |
| Cellosolve, Butyl, Under 100°F | Х | Х | Х | - | Х | - | 1 | - | - | 2 | 2 | 2 | 2 | - |
| Cellosolve, Union Carbide, Under 100°F | v | v | | | | | 1 | | | | 2 | 2 | 2 | |
| Cellugard, Cellugard 200 | X 1 | X 1 | - | - | - | - | 1 1 | 2 | - | 2 | 2 1 | 2 1 | 2 1 | - 1 |
| Cellulube 90, 150, 220, 300, 550 | | X | х | - | х | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Cellulube 1000, 220A, | | | | | | | - | | | - | - | - | - | • |
| ST220, A60 | Х | Х | Х | - | Х | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Cellutherm 2505A | Х | 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Chevron Fr-10,13,20.8 | - | - | - | - | - | - | 1 | - | - | 1 | 1 | 1 | - | 1 |
| Chlordane | Х | Х | Х | - | Х | - | 1 | 1 | - | - | - | - | - | - |
| Chlorinate Paraffin & Petroleum Oil | - | _ | _ | _ | _ | _ | 1 | - | _ | 1 | 1 | 1 | 1 | 1 |
| Chlorine Gas, Dry | | N | 01 | 105 | | | ILA | | | 2 | X | X | - | 2 |
| Chlorine Gas, Wet | | | | | | | ILA | | | x | X | Х | Х | x |
| Chlorine Trifluoride | Х | Х | - | - | - | - | - | - | - | 1 | 1 | 1 | 1 | - |
| | | | | | | | | | | | | | | |



| Rating Scale: 1 Excellent | | Ga | tes | Но | se | Pol | ym | ers | | | | upli dap | ngs iters | } |
|--|---------------------------------------|--|---------------------------------------|-----------------|-----------------------|------------------|--|---------------------------------|--------------------------------------|---|--|---|----------------------------|--|
| Good resistance X Not recommended Testing recommended Cover stock rating only; Rating for tube stock "X" Use Gates fuel hose or contact Denver Product Application Department Chemical Name | Polychloroprene | Nitrile, HNBR, or XTF | Nitrile + PVC | CPE | CSM | Urethane | PTFE | Nylon | MegaTuff | Carbon Steel | Stainless Steel 304 | Stainless Steel 316 | Aluminum | Brass |
| Chlorine Water, 3% Chlorine Chlorine Water, 25% Chlorine Chloroacetic Acid | X X | X X | X X | - | - 2 | - 2 | 1 1 | - 2 | 1 | - | X X | X X | - | - |
| (Under 100°F) Chlorobenzene Chlorobromo Methane Chloroform O-Chloronaphthalene Chlorosulfonic Acid Chlorotoluene Chlorox, Bleach Chromic Acid, 5% Chromic Acid, 10% Chromic Acid, 25% Chromic Acid, 25% Chromic Acid, 100% Circo Light Process Oil Citgo FR Fluids Citgo Glycol FR-20XD | X X X X X X X X X X X X X X X X X X X | X X X X X X 2 X X X X 1 X 1 | × × × × × × × × × × × × × × × × × × × | X X X 1 1 1 1 X | 2 X X - X 2 - 2 2 2 | x x x x x x 2 2 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | X X 2 X 1 X X X X | X 2 X 1 1 1 1 2 | X 2 2 2 1 1 1 X X X X X X X 1 1 1 | X 2 2 1 1 1 X X X X X X 1 1 1 | X 2 2 1 1 1 2 2 2 2 2 1 1 1 1 | X X X X X X X X 1 1 | 2 1 1 1 1 |
| Citgo Sentry (Under 100°F) Citgo Tractor Hydraulic Fluid Citric Acid, 5% @150°F Citric Acid, 5% @150°F Citric Acid, 15% Boiling Citric Acid, 15% Boiling Coal Gas Coal Tars Cod Liver Oil Coke Oven Gas (Under 100°F) Condor 1000, 1002, 1004, | 2 1 1 1 1 X 1 X | 2 1 2 2 2 2 2 X X 2 1 2 | 1 1 X 1 X | 1 | X - 1 2 2 | 2 2 2 1 | 1 1 1 1 1 1 1 1 1 1 1 | 1 X 1 X X X X | 1 1 1 | 1 1 X X X X X X 1 1 1 | 1 1 1 X 2 X - 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 | 1 2 X X 1 1 | 1 X X 1 X X - 1 1 1 |
| 1006, 1008 Condor 1008, 1010, 1012, 1014, 1016 | - | 2 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| Convelex 10 Copper Arsenate, Cupric Arsenate | - | X - | - | - | 2 | - | - | - | - | - | - | - | - | - |
| Copper Chloride, 1% Copper Chloride, 5% Copper Chloride, Cupric Chloride | 1 1 2 | 1 1 2 | -2 | 2 | - | - | 1 1 1 | X X 2 | - | X X X | x x x | 1 1 1 | - | x - x |
| Copper Cyanide, Cupric Cyanide | 2 | 2 | 2 | - | 2 | - | 1 | х | - | 1 | 1 | 1 | - | х |
| Copper Nitrate, 1% & 5% Copper Nitrate, Cupric Nitrate Copper Sulfate, Cupric Sulfate Copper Sulfate, 10% Copper Sulfate, 50% Corn Oil Corn Syrup Cottonseed Oil Creosote, Wood Or Coal Tar | 1 1 1 1 X 2 2 | 1 1 1 2 2 2 | 1 1 2 1 | 2 | 1 1 | 1 X X | 1 1 1 1 1 1 | 1 | | X 1 X - 1 1 1 | 1 1 2 1 1 1 | 1 1 2 1 1 1 | X 1 X X 1 1 | X X 1 1 |
| (Under 100F) Cresol, Cresylic Acid | X | 2 | X | - | | Х | 1 | X | Х | 2 | 1 | 1 | 1 | х |
| (Under 100°F) Cyesylic Acid Crude Petroleum Oil | X X | X X | X - | - | X - | • | 1 | X X | - | 2 1 | 1 | 1 | 2 1 | - |
| (Under 100°F) Cutting Oil, Water Soluble Cutting Oil, Sulfur Base | X X X | X 1 1 | 2 | 2 | 2 | 2 | 1 1 1 | - | - | X 1 1 | X 1 1 | 2 1 1 | 1 - 1 | 1 1 |

| Rating Scale: Gates Hose Polymers Couplings & Adapters 2 Good resistance Todor resistance Image: Commended Testing recommended Testing recommende Testing recommended Testing recommended Testing re | | | | | | | | | | | | 0.0 | ali | | |
|--|---|-----------------|----------|--------|-----|--------|----------|------|--------|----------|--------------|--------|--------|----------|--------|
| | Rating Scale: 1 Excellent | - 1 | Gat | es | Но | se | Po | ym | ers | | | | | | 5 |
| Cyclohexanone X < | Testing recommended Cover stock rating only; Rating for tube stock "X" Use Gates fuel hose or contact Denver Product Application Department | Polychloroprene | HNBR, or | + Ф | CPE | CSM | Urethane | PTFE | Nylon | MegaTuff | Carbon Steel | | Steel | Aluminum | Brass |
| Cyclohexanone X X X X X X X 1 1 <th1< th=""> 1<!--</td--><td>Cutting Oil</td><td>2</td><td>1</td><td>2</td><td>1</td><td>Х</td><td>-</td><td>1</td><td>-</td><td>-</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></th1<> | Cutting Oil | 2 | 1 | 2 | 1 | Х | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Cymene X Dectol R&O OllsDid </td <td>Cyclohexane</td> <td>Х</td> <td>2</td> <td>-</td> <td></td> <td>Х</td> <td></td> <td></td> <td>1</td> <td>1</td> <td>1</td> <td></td> <td></td> <td></td> <td>1</td> | Cyclohexane | Х | 2 | - | | Х | | | 1 | 1 | 1 | | | | 1 |
| D D Dasco FR150, FR200, FR20B, R310 1 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<> | | | | | | | | | | | | | | | |
| Dasco FR150, FR200, FR200B, FR310 . 1 <th1< th=""> 1 1</th1<> | | Х | Х | Х | Х | Х | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| FR200B, FR310 - 1 < | | | | | | | | | | | | | | | |
| Denatured Alcohol 1 | FR200B, FR310 Dasco IFR DC200, DC510, DC550, DC560 | - | 1 1 | - | | - X | - | 1 | 1 1 | - | 1 | 1 1 | 1 1 | 1 1 | 1 1 |
| Developing Fluids, Photo 1 </td <td>Dectol R&O Oils</td> <td>Х</td> <td>1</td> <td>-</td> <td>-</td> <td>-</td> <td>2</td> <td>-</td> <td>-</td> <td>-</td> <td> -</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> | Dectol R&O Oils | Х | 1 | - | - | - | 2 | - | - | - | - | - | - | - | - |
| Developing Solutions, Hypos 2 - 1 1 - - 1 1 - 1 | | | | | | | | | | | | | | | |
| DiacetoneXXX1X-11111111Dibecol EtherXX-111 | | | | | | | | | - | | | | | | |
| Diacetone Alcohol . X . 1 . 1 | | | | | | | | | - | | | | | | |
| Dibenzel EtherXXX22111111111Dibutyl Pthhalate(Under 120°F)XXX2X111 | | | | | | | | | | | | | | | |
| Dibutyl Phthalate (Under 120°F) X X X 2 1 - - 1 1 1 1 1 Dibutyl Sebacate X | | х | | - | | - | - | | | - | | | | | |
| (Under 120°F) X X X Z X Z Z I < | Dibutyl Ether | Х | Х | - | 1 | - | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Dibutyl Sebacate X | Dibutyl Phthalate | | | | | | | | | | | | | | |
| Dichlorobenzene X | | | | | | | | | - | | | | | | |
| DichloroethaneXXXXxxxXX | · | | | | | | | | | | | | | | |
| Diesel Oil, Fuel ASTM #2 [2] 1 [2] 2 X 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 Diester Lubricant MILI-F308 X 2 1 1 1 1 1 1 1 1 X 2 1 1 1 1 1 1 1 Diethylamine (Under 120°F) 2 2 - 2 X - 1 1 1 1 1 1 Diethylene Glycol 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 Diethylene Glycol 1 1 1 1 1 1 1 1 1 1 1 1 1 Diethylene Glycol 1 1 1 1 1 1 1 1 1 1 1 1 1 1 Diethylene Glycol X X - 1 1 - 1 - 1 1 1 1 Diethylene Glycol X X X X 2 1 X - 1 1 Diethyl Sebacate X X X X 2 1 X 1 1 Diisobutylene X X X X 2 1 X 1 2 Diisobutyl Ketone X X X 2 1 X 1 1 Dimethyl Aniline Dioctyl Phthalate X X X 2 X 1 1 Dioctyl Phthalate X X X X 2 X | | | | | | | | | | | | | | | |
| Diester Lubricant MILI-7808 X 2 - - 1 | | | | | | | | | | | | | | | |
| Diester Synthetic Lubricants X 2 - - 1 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<> | | | | | | | | | | | | | | | |
| Diethylene Glycol 1 | | | | - | - | - | - | 1 | - | - | 1 | 1 | 1 | 1 | - |
| Diethy Ether X X 1 <t< td=""><td>Diethylamine (Under 120°F)</td><td>2</td><td>2</td><td>-</td><td>2</td><td>Х</td><td>-</td><td>1</td><td>1</td><td>-</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></t<> | Diethylamine (Under 120°F) | 2 | 2 | - | 2 | Х | - | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| Diethyl Phthalate - X - 2 - 1 - 1 1 - 1 Diethyl Sebacate X X 2 - 1 - - 1 1 - 1 1 - 1 | | | | | | | | | 1 | - | | | | | |
| Diethyl Sebacate X X X 2 - 1 - - 1 1 - 1 Diisobutylene X X X 2 - 1 X - 2 1 1 2 1 Diisobutyl Ketone X X 2 X 1 1 - 1 | | | | | | | | | | | | | | | |
| Diisobutylene X 2 - 1 X - 1 < | | | | | | | | | | | | | | | |
| Diisobutyi Ketone X X X 2 X 1 | | | | | | | | | | | | | | | |
| Diisopropyl Ketone X X X 2 X 1 1 - 1 1 - 1 Dimethyl Aniline X X X X 2 X - 1 1 - 1 1 - 1 | | | | Х | | | - | | 1 | - | | | | | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | | Х | | 2 | | - | 1 | 1 | - | - | 1 | 1 | - | 1 |
| (Under 120°F) X < | Dimethyl Aniline | Х | Х | Х | 2 | Х | - | 1 | - | - | - | - | - | - | 1 |
| Dimethyl Phthalate X X X I X I X I X I X I X I <thi< th=""> I <thi< th=""></thi<></thi<> | | | | | | | | | | | | | | | |
| Dioctyl Phthalate X | | | | | - | - | - | | - | | | | | | - |
| Dioctyl Sebacate X | · · · · · · · · · · · · · · · · · · · | | | | | | - | | | | | | | | |
| Dioxane X X X Z 2 - 1 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> | | | | | | | - | | - | - | | | | | |
| Dirco Oils - 1 - - 1 | | | | | | | - | | 1 | - | | | | | 1 |
| Dispersing Oil #10 X X - - 1 | Dipentene | Х | Х | - | 2 | - | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Dowtherm A X | | | | | - | - | | | | - | | | | | |
| Dowtherm E X X x 2 x 1 x 1 <th1< th=""> <th1<< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th1<<></th1<> | | | | | | | | | | | | | | | |
| DP47, 200 Flow - DOW - 1 - - 1 | | | | | | | | | | | | | | | |
| Duro FR-HD - 1 - 1 | | | | | | | | | | | | | | | |
| Duro Oils - 1 - 1 | | | | | | | | | | | | | | | |
| Elco 28-EPLubricant X 1 - - - - - 1 | | - | | - | - | - | | | | - | | | | | |
| Enamels 1 | E | | | | | | | | | | | | | | |
| Energol HL68 - 1 - - - - - 1 1 1 1 1 1 Energol HLPC 68 - 1 - - - - - 1 <td< td=""><td>Elco 28-EPLubricant</td><td>Х</td><td>1</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>1</td><td>1</td><td>1</td><td>1</td><td>-</td></td<> | Elco 28-EPLubricant | Х | 1 | - | - | - | - | - | - | - | 1 | 1 | 1 | 1 | - |
| Energol HLPC 68 - 1 - - - - - 1 1 1 1 1 1 EPHydraulic Oils, Chevron - 1 - - - - - 1 </td <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> | | | | | - | - | | | | | | | | | |
| EPHydraulic Oils, Chevron - 1 - - - - - - 1 1 1 1 1 1 Epichlorohydrin (Under 120°F) X X - - - 1 1 2 1 1 - - - 5 1 1 2 1 1 - - - 5 - - - 1 | - | | | | - | - | | | | | | | | | |
| Epichlorohydrin (Under 120°F) X X x <t< td=""><td>-</td><td></td><td></td><td></td><td>-</td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<> | - | | | | - | - | | | | | | | | | |
| Esam-6 Fluid 2 - <t< td=""><td></td><td></td><td></td><td></td><td>-</td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<> | | | | | - | - | | | | | | | | | |
| Ethanol 1 1 - 1 - X 1 1 X 1 1 - 1 Ethanolamine, Aminoethanol 2 2 - 1 X 1 < | | | | | - | - | | | | | | | | | |
| | | | | - | 1 | - | Х | 1 | 1 | 1 | | | | - | 1 |
| Ethers (Under 120°F) X 2 X 1 2 1 | | | | | | | | | | | | | | | |
| | Ethers (Under 120°F) | Х | 2 | Х | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |



| Rating Scale: 1 Excellent | | Ga | tes | Ho | se | Pol | ym | ers | | | | upli dap | | ; |
|---|-----------------|-----------------------|---------------|--------|--------|----------|--------|-------|----------|--------------|---------------------|---------------------|----------|--------|
| 2 Good resistance X Not recommended Testing recommended [] Cover stock rating only; Rating for tube stock "X" * Use Gates fuel hose or contact Denver Product Application Department Chemical Name | Polychloroprene | Nitrile, HNBR, or XTF | Nitrile + PVC | CPE | CSM | Urethane | PTFE | Nylon | MegaTuff | Carbon Steel | Stainless Steel 304 | Stainless Steel 316 | Aluminum | Brass |
| Ethyl Acetate | Х | Х | Х | 2 | Х | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 |
| Ethyl Acetoacetate | X | Х | Х | 1 | Х | Х | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Ethyl Acrylate | X | Х | Х | 2 | Х | Х | 1 | - | - | 1 | 1 | 1 | 1 | - |
| Ethyl Alcohol | 1 | 1 | 1 | 1 | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| Ethyl Amine, Monoethylamine Ethyl Benzene | X | X X | X X | 1 2 | X X | X 1 | 1 1 | - | - | 2 | 1 | 1 1 | 2 1 | 1 1 |
| Ethyl Bromide, Di | x | x | x | 2 | x | | 1 | | - | | 1 | 1 | 1 | 1 |
| Ethyl Butyrate | x | X | X | - | - | - | 1 | - | - | | 1 | 1 | 1 | |
| Ethyl Cellulose | - | - | - | 1 | - | - | 1 | - | - | 1 | 1 | 1 | - | 1 |
| Ethyl Chloride | Х | Х | Х | - | - | Х | 1 | - | 2 | 2 | 1 | 1 | 1 | 2 |
| Ethyl Ether | | Х | Х | Х | - | - | 1 | - | Х | 2 | 1 | 1 | 1 | 1 |
| Ethyl Mercaptan | X | Х | Х | - | Х | Х | 1 | - | - | 2 | - | - | - | - |
| Ethyl Oxalate | X | X | - | 1 | Х | X | 1 | - | - | - | - | - | - | - |
| Ethyl Pentachlorobenzene Ethyl Silicate | - | X 1 | - | X 1 | 2 | 1 1 | 1 1 | - | - | 2 | 1 | 1 1 | - | 1 1 |
| Ethylene Chloride | X | X | X | X | 2 | 1 | 1 | X | - | | 1 | 1 | - | 2 |
| Ethylene Chlorohydrin, | | ~ | ~ | ~ | | - | - | ~ | | | - | - | | - |
| Under 100°F | x | Х | Х | - | - | Х | 1 | Х | - | 1 | 1 | 2 | Х | - |
| Ethylene Diamine | | | | | | | | | | | | | | |
| (Under 100°F) | 2 | 2 | 2 | 1 | Х | Х | 1 | - | - | - | - | - | - | 1 |
| Ethylene Dichloride | X | X | Х | X | - | 1 | 1 | X | - | - | 1 | 1 | Х | 2 |
| Ethylene Glycol | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 |
| F F | - | 4 | - | | | | | | - | 1 | 4 | 4 | 4 | 4 |
| Factovis 52 Fatty Acids | 2 | 1 2 | 2 | 2 | x | 1 | 1 | 1 | 2 | 12 | 1 | 1 1 | 1 1 | 1 2 |
| Ferric Chloride | - | - | - | 1 | 2 | | 1 | 1 | - | X | X | X | Х | X |
| Ferric Chloride, 1% | 1 | 1 | - | - | - | - | 1 | 1 | - | X | 2 | 2 | X | X |
| Ferric Chloride, 1% Boiling | - | 2 | - | - | - | - | 1 | 1 | - | X | Х | Х | Х | Х |
| Ferric Chloride, 5% Still | 2 | 1 | - | - | - | - | 1 | 1 | - | X | Х | Х | Х | Х |
| Ferric Chloride, 5% Agitated | | | | | | | | | | | | | | |
| or Aerated | 2 | 2 | - | - | - | - | 1 | 1 | - | X | X | X | X | X |
| Ferric Chloride, 10% Ferric Sulfate | 2 | 1 2 | -2 | - | 2 | - | 1 1 | 1 | - | X X | X 1 | X 1 | X X | X X |
| Ferrous Chloride | 2 | 2 | - | 1 | 2 | 2 | 1 | - | - | x | 1 | 2 | - | 2 |
| Ferrous Nitrate | 2 | 2 | 2 | - | 2 | - | 1 | - | - | - | 1 | 1 | - | - |
| Ferrous Sulfate, Copper Gas | 2 | 2 | 2 | 1 | 2 | - | 1 | - | 1 | X | 1 | 1 | 1 | 2 |
| Ferrous Sulfate, 10% | 1 | 1 | - | - | - | - | 1 | 1 | 1 | X | 2 | 2 | Х | - |
| Ferrous Sulfate, Saturated | 1 | - | - | - | - | - | 1 | 1 | 1 | - | 2 | 2 | Х | - |
| Fire Resistant Hydraulic Fluid, | | 4 | | | | | 4 | | | 1 | 4 | 4 | 4 | 4 |
| Texaco Firtec 290, MF | | 1 | - | - | - | - | 1 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Fixing Solution, Photo | 2 | - | - | - | 2 | - | 1 | - | - | - | 1 | 1 | - | - |
| Fluoboric Acid | 1 | 1 | - | 1 | - | - | 1 | - | 1 | 1 | - | 1 | Х | - |
| Fluoboric Acid, 65% | 2 | - | - | 1 | 2 | Х | 1 | - | 1 | - | 1 | 1 | - | - |
| Fluosilicic Acid | 2 | 1 | - | - | - | - | 1 | - | 1 | X | Х | Х | Х | 1 |
| Fluosilicic Acid, 50% | 2 | Х | Х | | 2 | Х | 1 | Х | 1 | - | - | - | 1 | - |
| Formaldehyde | 1 2 | Х 2 | - | 1 | - | - | 1 | 2 | - | 1 | 1 | 1 | 1 | X |
| Formaldehyde, 37% Formaldehyde, Hot | - | - | - | - | 2 | 2 | 1 1 | 1 | 1 | - X | 1 2 | 1 1 | 1 2 | 1 1 |
| Formic Acid (Under 120°F) | 1 | х | 1 | | 2 | х | 1 | 2 | 1 | x | 2 | 1 | 1 | 2 |
| Formic Acid, Dilute Hot | | X | - | 1 | - | - | 1 | X | - | x | 2 | 1 | 2 | X |
| Freon 12 (Under 100°F) | | | | | | | | | | | | | | |
| Use Freon Hose Only | | | | | | | | | 2 | 1 | 1 | 1 | 1 | |
| Freon 114 Use Freon Hose Only | | | | | | | | | 1 | 1 | 1 | 1 | - | |
| Fruit Juices | | | | | - | - | 1 | 1 | - | X | 1 | 1 | - | - |
| Fuel Oil | | | [1] | | | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 2 |
| Fumaric Acid Furan, Furfuran | 2 X | X X | - X | - 1 | - | X - | 1 1 | Ĵ | 1 1 | 1 | 1 1 | 1 1 | - 1 | - 1 |
| Furan Resin | x | x | - | - | 2 | 2 | 1 | | - | - | - | 1 | - | - |
| Furfural Alcohol, Ant Oil | 2 | Х | Х | | 2 | - | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 |
| **Nitrile 150°E or less, no const | ant | ont | lant | | | | | | | | | | | _ |

| Rating Scale: 1 Excellent | | Ga | tes | Но | se | Pol | ym | ers | | | | | ings | |
|---|-----------------|-----------------------|---------------|--------|--------|----------|--------|--------|----------|--------------|---------------------|---------------------|----------|--------|
| Excellent Good resistance Xot recommended Testing recommended Cover stock rating only; Rating for tube stock "X" Use Gates fuel hose or contact Denver Product Application Department Chemical Name | Polychloroprene | Nitrile, HNBR, or XTF | Nitrile + PVC | CPE | CSM | Urethane | PTFE | Nylon | MegaTuff | Carbon Steel | Stainless Steel 304 | Stainless Steel 316 | Aluminum | Brass |
| Fusel Oil, Grain Oil | Х | Х | - | - | - | - | 1 | - | 1 | - | - | - | - | - |
| Fyrguard 150, 200 Fyrquel A60, 90, 100, 150, 220, 300, 500 | - x | 1 X | - | - | - | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Fyrquel 1000, 15R&0, 220R&0, 550R&0 | х | х | - | - | - | - | 1 | - | - | 1 | - | - | 1 | - |
| G | | | | | | | | | | | | | | |
| Gallic Acid (Under 100°F) | X | Х | Х | 1 | - | Х | 1 | 2 | 1 | X | 1 | 1 | Х | - |
| Gas, Natural | 2 | - * | - * | Х - | - | - | 1 1 | - | - | 12 | 1 1 | 1 | - | 2 1 |
| Gasohol Gasoline, Aviation | | - | 2 | - | X - | - | 1 1 | - | 1 1 | 2 | 1 | 1 1 | 1 1 | 1 |
| Gasoline, Meter | x | * | - | - | - | - | 1 | Х | 1 | 1 | 1 | 1 | 1 | X |
| Gasoline, Premium | [2] | * | * | - | Х | Х | 1 | - | 1 | 2 | 1 | 1 | 1 | 1 |
| Gasoline, Sour | X | Х | - | - | - | - | 1 | - | - | 2 | 1 | 1 | Х | - |
| Gasoline, Standard Gasoline, Unleaded | [1] | * | * | 2 | Х | Х | 1 | - | 1 | 2 | 1 | 1 | 1 | 1 |
| Under 50% Aromatics | X | * | Х | - | Х | Х | 1 | - | 1 | 2 | 1 | 1 | 1 | 1 |
| Gelatin Glauber's Salt | 12 | 1 X | - | - | 2 | - | 1 1 | 1 | - | X 1 | 1 1 | 1 1 | 1 | - |
| Glucose | 1 | 1 | 1 | - | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| Glue (Under 120°F) | 2 | 2 | 2 | - | 1 | 1 | 1 | 2 | - | 2 | 1 | 1 | 2 | X |
| Glycerine, Glycerol | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | - | 2 | 1 | 1 | 1 | 2 |
| Glycol FR Fluids | - | 1 | - | - | - | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Glycols (Under 120°F) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 |
| Grease, Ester Base | 2 | - | -2 | - | - 2 | - 1 | 1 1 | 1 1 | - 2 | 1 | 1 1 | 1 1 | 1 1 | 1 1 |
| Grease, Petroleum Base Grease, Silicone Base Green Sulfate Liguor, | - | - | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Under 100°F | 2 | 2 | 1 | 2 | 1 | - | 1 | - | 1 | 1 | 1 | 1 | - | - |
| Gulf FR Fluid G-200 Gulf FR Fluid P37, P40, P43, | - | 1 | - | - | - | Х | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| P45, P47 | - | Х | - | - | - | Х | 1 | - | - | - | - | - | - | - |
| H | | | | | | | | | | | | | | |
| Halowax Oil | X | Х 2 | X | - | X - | 2 | 1 1 | - | 1 | - | - | - | 2 | - |
| Heptachlor, In Petroleum Heptane (Under 100°F) | [2] | | X [2] | 1 | x | 1 | 1 | - 1 | 1 | 1 | 1 | 1 | 1 | - |
| N-Hexaldehyde | 2 | x | 2 | - | - | - | 1 | - | 1 | 1 | 1 | 1 | 1 | 1 |
| Hexane (Under 120°F) | [2] | 1 | [2] | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Hexene | [2] | 2 | - | 1 | - | - | 1 | - | 1 | 1 | 1 | 1 | - | 1 |
| Hexyl Alcohol | 1 | 2 | 1 | 1 | - | - | 1 | - | - | 1 | 1 | 1 | 1 | 2 |
| High Viscosity Lubricant, U4 | 2 | 1 | - | - | - | - | 1 1 | - | - | - | - | - | - | - |
| High Viscosity Lubricant, H2 Hilo MS #1 | 2 X | 1 X | 2 | | | | - | - | - | - | - | | 2 | - |
| Houghto-Safe 1010,1055 (Phos. Ester) | x | x | х | 1 | х | _ | 1 | _ | - | 1 | 1 | 1 | 1 | 1 |
| Houghto-Safe 1115, 1120, 1130 (Phos. Ester) | x | x | x | | x | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Houghto-Safe 271, 416, 520, 616 (Water/Glycol) | 2 | 1 | 1 | - | - | 2 | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Houghto-Safe 620, 625, 640, 525 (Water/Glycol) | 1 | 1 | 1 | - | - | 2 | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Houghto-Safe 5046, 5046W (Water/Oil Emulsion) | 2 | 1 | - | - | - | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Hy-Chock Oil Hydrafluid 760, | - | 1 | - | - | - | - | 1 | 1 | - | 1 | 1 | 1 | - | - |
| Texaco and Houghton | - | 1 | - | - | - | - | 1 | 1 | - | 1 | 1 | 1 | - | 1 |
| | - | 1 | - | - | - | - | 1 | 1 | - | 1 | 1 | 1 | - | 1 |
| Hydrafluid AZR&O, A, B, AA, C | | A | | | | | A | | | 1 | ~ | | | |
| Hydrafluid AZR&O, A, B, AA, C Hydrasol A Hydraulic Fluid, | - | 1 | - | - | - | - | 1 | 1 | - | 1 | 1 | 1 | - | - |



| Rating Scale: 1 Excellent | | Ga | tes | Но | se | Pol | ym | ers | | | | | ngs oters | |
|--|-----------------|-----------------------|---------------|-----|--------|----------|--------|--------|----------|--------------|---------------------|---------------------|--------------|--------|
| 2 Good resistance X Not recommended Testing recommended [Cover stock rating only; Rating for tube stock "X" * Use Gates fuel hose or contact Denver Product Application Department Chemical Name | Polychloroprene | Nitrile, HNBR, or XTF | Nitrile + PVC | CPE | CSM | Urethane | PTFE | Nylon | MegaTuff | Carbon Steel | Stainless Steel 304 | Stainless Steel 316 | Aluminum | Brass |
| Hydraulic Fluid, | | | | | | | | | | | | | | |
| Std. Petroleum Oils | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| Hydraulic Fluid, Water Glycol Base | 1 | 1 | 1 | _ | _ | 1 | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| Hydraulic Fluid HF - 18, HF - 20 | - | 1 | - | - | - | 2 | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| Hydraulic Fluid HF - 31 | - | - | - | - | - | - | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| Hydraulic Oils, Petroleum | 2 | 1 | - | - | - | - | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| Hydraulic Oils, Synthetic Hydraulic Safety Fluid 200 & | - | Х | - | - | - | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| 300, Texaco | . | 1 | _ | - | - | 1 | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Hydrazine | x | x | Х | - | - | 2 | 1 | - | - | - | - | | - | - |
| Hydro-Drive Oil, Houghton | - | 1 | - | - | - | 2 | 1 | - | - | - | - | - | - | - |
| Hydrobromic Acid | X | Х | - | - | - | - | 1 | Х | 1 | 1 | 1 | 1 | Х | - |
| Hydrobromic Acid, 37% | X | Х | Х | 1 | 2 | Х | 1 | Х | 1 | 1 | 1 | 1 | X | - |
| Hydrochloric Acid Hydrochloric Acid, 3 Molar | 2 | X X | - | - | - | - | 1 1 | X X | 1 1 | X X | X X | X X | X X | X X |
| Hydrochloric Acid, Concentrated | x | X | - | - | - | - | 1 | X | 1 | x | X | X | X | x |
| Hydrochloric Acid, 15% | x | Х | Х | 1 | 2 | Х | 1 | Х | 1 | Х | Х | Х | Х | Х |
| Hydrochloric Acid, 37% | x | - | Х | 1 | 2 | Х | 1 | Х | 1 | Х | Х | Х | Х | Х |
| Hydrocyanic Acid, | | | | | ~ | v | | | | | | | | |
| 20% Under 100°F Hydrocyanic Acid, 98% | X | Х | Х | - | 2 | X | 1 1 | 1 | 1 1 | X | 1 | 1 | 1 | Х |
| Hydrofluoric Acid, 10% | 2 | 2 | x | 1 | 1 | x | 1 | x | 1 | x | x | x | x | x |
| Hydrofluoric Acid, | - | _ | ,, | _ | _ | | _ | ,, | - | | ,, | | ,, | |
| 20% (Under 120°F) | 2 | Х | Х | 1 | 2 | Х | 1 | Х | 1 | Х | Х | Х | Х | Х |
| Hydrofluoric Acid, | | ., | | | _ | | | | | | | | | ., |
| 48% (Under 120°F) | 2 | X X | X X | 1 | 2 2 | X X | 1 1 | X X | 1 X | X X | X X | X X | X X | X X |
| Hydrofluoric Acid, 70% Hydrofluoric Acid, Concentrated | X | x | x | 1 | 2 | x | 1 | x | x | x | x | x | X | x |
| Hydrofluoric Acid, Anhydrous | - | Х | - | - | - | - | 1 | - | - | - | - | - | - | - |
| Hydrofluosilicic | x | Х | Х | Х | - | - | 1 | Х | 1 | Х | Х | Х | Х | 1 |
| Hydrogen | 1 | 1 | - | 1 | - | - | 1 | - | Х | X | Х | Х | 1 | - |
| Hydrogen Chloride Gas Hydrogen Cyanide Gas | - | - | - | 1 | - | - | 1 | - | - | - | 1 | 1 | - 1 | - |
| Hydrogen Fluoride | - | | | - | - | - | - | | | - | - | • | т | - |
| (Under 100°F) | - | Х | - | - | - | - | 1 | - | - | 2 | 2 | 1 | - | - |
| Hydrogen Peroxide, Dilute | 1 | 2 | - | - | - | - | 1 | 1 | 1 | 1 | - | 1 | - | Х |
| Hydrogen Peroxide, 10% | X | 1 | Х | 1 | 2 | Х | 1 | Х | 1 | X | 2 | 1 | 1 | Х |
| Hydrogen Peroxide, 30% | X X | 2 X | X X | 1 | 2 | X X | 1 1 | X X | 1 1 | X X | 2 2 | 1 1 | 1 1 | X X |
| Hydrogen Peroxide, 70% Hydrogen Peroxide, 90% | X | x | - | - | 2 | - | 1 | - | 1 | x | 2 | 1 | - | x |
| Hydrogen Sulfide | 2 | | - | - | - | - | 1 | 1 | Х | 2 | 2 | 1 | - | Х |
| Hydrogen Sulfide | | | | | | | | | | | | | | |
| Aqueous Solution | 2 | Х | - | - | - | - | 1 | - | - | X | - | - | Х | - |
| Hydrogen Sulfide, Gas Hydrolube, Water Glycol | 2 | - 1 | - | - | - | ·X | - 1 | - | X 1 | - 1 | - 1 | - | - | - |
| Hydrolubric Oil, Houghton | 2 | 2 | - | - | 2 | 2 | 1 | 1 | - | <u>-</u> | - | - | | - |
| Hydroquinone | x | - | - | - | Х | - | 1 | - | - | - | 1 | 1 | 2 | - |
| Hykil No.6 (33%); Water (67%) | - | 2 | - | - | - | - | 1 | - | - | 1 | - | - | - | - |
| Hypochlorous Acid | | | | | _ | | | | | | | | | |
| (Under 120°F) | X | X 1 | X - | - | 2 | 2 | 1 1 | 1 | 1 | 2 | 2 | 2 | х - | - |
| Hypoid Grease (Parapoid 10-C) | - | Т | - | - | - | - | T | - | - | - | - | • | - | - |
| Imol, Imol S150, S220, | - | | | | | | | | | | | | | |
| \$300, \$500 | - | 1 | - | - | - | 2 | 1 | 1 | - | 1 | 1 | 1 | 1 | - |
| Industron 53 | - | 1 | - | - | - | - | 1 | - | - | - | - | - | - | - |
| Ink (Printers) | 1 | 1 | - | - | - | - | 1 | 1 | - | 2 | 2 | 1 | - | 2 |
| Ink Oil | 2 | 2 1 | - 2 | - | - х | Ì | 1 1 | - | - | 1 | 1 1 | 1 1 | - | 1 1 |
| Insulating Oil (Transformer) | 2 | т | 2 | - | ^ | • | т | - | - | - | Ŧ | Т | - | Т |

| | | | | | | | | | | | 0.0 | | | |
|---|-----------------|-----------------------|---------------|-----|--------|----------|--------|--------|----------|--------------|---------------------|---------------------|--------------|----------|
| Rating Scale: 1 Excellent | | Ga | es | Ho | se | Pol | lym | ers | | | | upli .dap | ngs oters | 5 |
| Good resistance X Not recommended Testing recommended [] Cover stock rating only; Rating for tube stock "X" * Use Gates fuel hose or contact Denver Product Application Department Chemical Name | Polychloroprene | Nitrile, HNBR, or XTF | Nitrile + PVC | CPE | CSM | Urethane | PTFE | Nylon | MegaTuff | Carbon Steel | Stainless Steel 304 | Stainless Steel 316 | Aluminum | Brass |
| Isobutyl Alcohol | 2 | 2 | 2 | 1 | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| Iodine (Under 100°F) | X | Х | - | 1 | 2 | Х | 1 | 1 | - | 2 | 2 | 2 | Х | - |
| lodine, In Alcohol Iodine Pentafluoride | 2 X | - X | - | 2 | - | X - | 1 1 | - | 1 | - x | -2 | - 2 | X X | 2 |
| Isooctane | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | - | 1 | 1 | 1 | 2 | 1 |
| Isooctyl Thioglucolate | - | - | - | - | - | - | 1 | 1 | - | - | - | - | - | - |
| Isobutane - WET | X X | X X | - | - | - | X 2 | 1 1 | X 1 | - 1 | X 2 | 1 2 | 1 1 | 2 X | 1 1 |
| Isopropyl Acetate Isopropyl Alcohol (Isopropanol) | 2 | 2 | Х 2 | 1 | X 2 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 2 |
| Isopropyl Ether | X | X | X | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| J | | | | | | | | | | | | | | |
| Fuel JP-3 (Under 100°F) | [2] | | [2] | - | Х | 2 | 1 | 1 | - | 1 | 1 | 1 | 2 | 1 |
| Jet Fuel JP-4 (Under 100°F) Jet Fuel JP-5 | [X] X | 1 1 | [2] X | - | X X | - | 1 1 | 1 1 | - | 12 | 1 1 | 1 1 | 2 2 | 1 1 |
| Jet Fuel JP-6 | x | 1 | x | | x | - | 1 | 1 | - | 2 | 1 | 1 | 2 | 1 |
| Jet Fuel JP-x | 2 | 1 | Х | - | Х | - | 1 | 1 | - | 2 | 1 | 1 | 2 | 1 |
| K | | | | | | | | | | | | | | |
| Kerosene | X | 1 | [2] | 1 | Х | - | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| Ketchup Ketones | 1 X | 1 X | - X | - | · X | - X | 1 1 | 1 1 | - 1 | - 1 | 1 1 | 1 1 | -2 | - 1 |
| L | ~ | | | | | | - | - | - | - | - | - | - | <u> </u> |
| Lacquer Solvents | Х | Х | Х | - | Х | 2 | 1 | 1 | 1 | X | 2 | 1 | 1 | 1 |
| Lacquers | X | Х | Х | - | Х | - | 1 | 1 | - | X | Х | 1 | 1 | 1 |
| Lactic Acid | 1 | X | Х | - | 1 | Х | 1 | - | 1 | X | 2 | 1 | X | 2 |
| Lactic Acid (5%) Lactic Acid (5% Boiling) | 2 X | 1 X | - | - | Ĵ | - | 1 1 | 1 | 1 | X X | 2 2 | 1 1 | 1 2 | X X |
| Lactic Acid (10% Boiling) | x | Х | - | - | - | - | 1 | - | - | X | 2 | 1 | X | Х |
| Lactol | 2 | 2 | 2 | - | - | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Lard | 2 | 1 | - | 1 | - | - | 1 1 | 1 | 1 | 1 | 1 | 1 | 1 | Х |
| Lasso (Ag Spray) Latex | - 1 | - 1 | 2 | - | x | - | 1 | 1 1 | - 1 | - 1 | 1 1 | 1 1 | - | - 1 |
| Lead Acetate | x | х | - | 1 | 2 | 1 | 1 | - | - | 2 | 2 | 2 | Х | 1 |
| Lead Arsenate | 2 | 2 | - | - | - | - | 1 | - | - | 1 | 1 | 1 | - | - |
| Lead Nitrate | 2 | 2 | - | - | 1 | 1 | 1 | - | 1 | 1 | 2 | 2 | - | - |
| Lead Sulfate Lead, Tetraethyl (Under 100°F) | 1 X | 1 2 | - X | 1 | 2 X | - | 1 1 | -2 | - | 1 | 1 | 1 | | 2 |
| Lead, Tetramethyl | x | 2 | Х | - | Х | 1 | 1 | - | - | - | - | - | - | - |
| Lecithin | 2 | Х | - | - | - | - | 1 | - | - | - | 1 | 1 | - | - |
| Ligroin (Petroleum Ether, Under 120°F) | x | 1 | - | | х | | 1 | | - | 2 | 1 | 1 | х | |
| Lime (Chlorinated, | | + | - | | ^ | - | Ŧ | - | | | 1 | т | ~ | - |
| Free Chlorine 20%) | - | 1 | - | 1 | - | 1 | - | - | 1 | - | - | 2 | - | - |
| Lime Bleach (Under 100°F) | X | 2 | Х | - | Х | - | - | - | - | X | 2 | 1 | - | - |
| Lime Sulphur Lime Sulfur (Under 135°F) | 1 1 | X X | - Х | 2 | - 2 | 2 | 2 2 | 1 1 | 1 1 | 2 | 1 1 | 1 1 | X X | X X |
| Lindane (Ag Spray) | | - | - | - | - | - | 2 | 1 | - - | 2 | 1 | 1 | - | - |
| Linoleic Acid | x | 2 | Х | - | - | - | 1 | - | 1 | X | 2 | 1 | 1 | - |
| Linseed Oil | X | 1 | - | - | - | - | 1 | 1 | Х | 1 | 1 | 1 | 2 | 2 |
| Linseed Oil (Boiled) | 2 | 2 | 1 | 1 | 1 | 1 | 1 | - | - | 2 | 1 | 1 | 1 | 2 |
| Lubricating Oil (SAE 10, 20, 30, 40, 50) Lubricating Oils | 2 | 2 | - | - | - | - | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| (Diester, Under 135°F) | x | 2 | Х | - | - | х | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| IVI Machine Oil (Under 135°F) | 1 | 1 | 2 | - | 2 | | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| Magnesium Carbonate | | 1 | 2 | - | 2 | 1 | 1 | - | - | 2 | 2 | 2 | 1 | - |
| Magnesium Chloride | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | x | 2 | 1 | X | 2 |
| Magnesium Hydroxide | 2 | 2 | 2 | 1 | | Х | 1 | - | - | 1 | 1 | 1 | Х | X |
| Magnesium Nitrate | 2 | 2 | 2 | - | 1 | - | 1 | - | - | 2 | 2 | 2 | Х | 1 |



| Rating Scale: 1 Excellent | | Ga | tes | Но | se | Pol | ym | ers | | | | | ngs ters | |
|---|-----------------|-----------------------|---------------|--------|--------|----------|--------|-------|----------|--------------|---------------------|---------------------|-------------|--------|
| 2 Good resistance X Not recommended Testing recommended [] Cover stock rating only; Rating for tube stock "X" * Use Gates fuel hose or contact Denver Product Application Department Chemical Name | Polychloroprene | Nitrile, HNBR, or XTF | Nitrile + PVC | CPE | CSM | Urethane | PTFE | Nylon | MegaTuff | Carbon Steel | Stainless Steel 304 | Stainless Steel 316 | Aluminum | Brass |
| Magnesium Sulfate | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| Malathion (Ag Spray Dilute) | - | 2 | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 |
| Maleic Acid | 2 | Х | - | - | - | - | 1 | - | 1 | 2 | 2 | 1 | - | - |
| Malic Acid | - | - | - | - | - | - | 1 | - | 1 | 2 | 2 | 1 | - | - |
| Manganese Salts Maxmul | - | 1 | 1 | - | 1 | - | 1 | - | - | - | - | - | - | - |
| (Penzoil Hydraulic Fluid) | 2 | 1 | 2 | - | - | - | 1 | - | | 1 | - | 1 | - | _ |
| Mercuric Chloride | 1 | 2 | 2 | 1 | 1 | 2 | 1 | Х | - | X | 1 | 1 | х | х |
| Mercuric Cyanide | 1 | 2 | 2 | - | 1 | - | - | - | - | 2 | 2 | 2 | Х | - |
| Mercurous Nitrate | | | | | | | | | | | | | | |
| (Under 120°F) | 1 | 2 | 2 | - | 1 | - | 1 | - | 1 | 1 | 1 | 1 | Х | - |
| Mercury | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | Х | Х |
| Mesityl Oxide | X | X | Х | 2 | Х | Х | 1 | - | 1 | 1 | 1 | 1 | 1 | 1 |
| Methane | 2 | 1 | - | - | - | - | 1 | - | - | - | 1 | 1 | - | - |
| Methoxychlor (Insecticide) Methyl Acetate | x | x | x | 1 | x | - | 1 1 | × | | 1 | 1 1 | 1 1 | - | - |
| Methyl Acrylate | Â | x | x | | x | 2 | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Methyl Alcohol | | 1 | 1 | 1 | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| Methyl Amine | | | | | | | | | | | | | | |
| (25% Aqueous Solution) | 2 | Х | - | - | - | - | 1 | - | 1 | 1 | 1 | 1 | 1 | - |
| Methyl Amine (60%) | 2 | 2 | - | - | - | - | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 |
| Methyl Amine (99%) | X | Х | - | - | - | - | 1 | - | 1 | 1 | 1 | 1 | 1 | Х |
| Methyl Bromide | X | Х | Х | - | Х | Х | 1 | 1 | - | 1 | 1 | 1 | Х | 1 |
| Methyl Butyl Ketone (MBK) | X | X | Х | 2 | Х | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Methyl Cellosolve (Under 100°F) Methyl Chloride | 2 X | X X | - X | 1 X | X X | - | 1 1 | - | 2 | 2 | 2 1 | 2 1 | 2 | 1 1 |
| Methyl Ethyl Ketone (MEK) | Â | x | x | 2 | x | x | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 |
| Methyl Formate | 2 | X | X | - | X | - | 1 | - | - | 2 | 1 | 1 | 1 | 1 |
| Methyl Isobutyl Ketone | | | | | | | | | | | | | | |
| (MIBK, 100°F) | x | Х | Х | 2 | Х | Х | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| Methyl Isopropyl Ketone | X | Х | Х | 2 | Х | Х | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| Methyl Methacrylate | X | Х | Х | 2 | 2 | - | 1 | - | - | 2 | 2 | 2 | - | - |
| Methyl Salicylate | 2 | 2 | 2 | - | - | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Methyl Sulfate (Dimethyl, Under 100°F) | x | х | Х | - | Х | 1 | 1 | 1 | | 1 | 1 | 1 | - | |
| Methylene Chloride | Â | X | X | х | x | | 1 | X | 2 | 1 | 1 | 1 | х | 1 |
| Methylene Dichloride | X | X | X | - | - | - | 1 | 1 | - | 1 | 1 | 1 | x | 1 |
| Mineral Oil (Under 120°F) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 |
| Mineral Spirits | - | 1 | 2 | - | Х | - | 1 | - | - | 1 | 1 | 1 | 2 | 1 |
| Mobile Therm 603 | - | 1 | - | - | - | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Molasses (Under 120°F) | 2 | 2 | 2 | - | 1 | 1 | 1 | - | - | 2 | 1 | 1 | 2 | Х |
| Monochlorobenzene | X | | Х | X | Х | Х | 1 | - | - | 1 | 1 | 1 | X | 1 |
| Monoethanolamine | X | 2 | 2 | 1 | Х - | - | 1 1 | Ĵ | 1 | 1 | 1 1 | 1 1 | 2 | 1 |
| Morpholine (Pure Additive) Motor Oils (Under 135°F) | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| Mould Oil | 1. | | - | | - | - | 1 | | * | 1 | 1 | 1 | - | - |
| Muriatic Acid (Hydrochloric) | x | Х | Х | 1 | 2 | Х | 1 | Х | 1 | X | X | X | Х | Х |
| Mustard | 1 | 2 | 1 | - | 1 | - | 1 | - | - | Х | 1 | 1 | 2 | - |
| N | | | | | | | | | | | | | | |
| Naphtha | | | | | | | | | | | | | | |
| (Low Aromatic Content) | X | 2 | Х | 1 | Х | - | 1 | 1 | - | 2 | 1 | 1 | 1 | 1 |
| Naphthalene (Tar Camphor) | X | | Х | 1 | Х | - | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| Naphthalene | X | Х | Х | - | Х | - | 1 | - | - | 1 | 1 | 1 | - | 1 |
| Naphthenic Acid | - | 2 | - | - | - | - | 1 | - | - | - | 2 | 1 | - | - |
| Natural Gas | 1. | - | - | - | - | - | 1 | - | Х | 1 | 1 | 1 | - | 2 |
| Nickel Acetate solution (in water or alcohol) | | _ | _ | - | _ | _ | 1 | - | 1 | 1 | 1 | 1 | 1 | 1 |
| Nickel Chloride | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| Nickel Nitrate | | 2 | 2 | | 2 | - | 1 | 1 | - | 2 | 2 | 2 | X | - |
| | Ι. | 2 | - | - | 2 | х | 1 | | - | | 1 | 1 | - | |

| Rating Scale: | | Ga | tes | Но | se | Po | lym | ers | | | | | ings | |
|--|------------------|------------------|-------------|--------|--------|----------|-------------|--------|-------------|--------------|-----------------|-------------|----------|-------------|
| 1 Excellent 2 Good resistance X Not recommended - Testing recommended [] Cover stock rating only; Rating for tube stock "X" | prene | HNBR, or XTF | PVC | | | | - | | | teel | 304 | Steel 316 | oters | <u> </u> |
| * Use Gates fuel hose or contact Denver Product Application Department | Polychloroprene | Nitrile, HN | Nitrile + P | ЪЕ | CSM | Jrethane | PTFE | /lon | MegaTuff | Carbon Steel | Stainless Steel | Stainless : | Aluminum | Brass |
| Chemical Name | | | | CPE | ő | _ | | ź | | - | | ŝ | A | |
| Nickel Salts | 2 | - | 1 | - | - | - | 1 | - | - | - | - | -2 | - | - |
| Nicotine Salts Nitric Acid | x | x | - | | - | 1 | 1 1 | - | - | 1 X | X 1 | 2 | - | x |
| Nitric Acid, 3 Molar | Â | x | - | | 2 | - | 1 | - | 1 | x | 1 | 1 | - | X |
| Nitric Acid, Concentrated | | | | | | | _ | | _ | | - | _ | | |
| (Boiling) | x | Х | - | - | - | - | 1 | Х | Х | X | 2 | 2 | Х | Х |
| Nitric Acid, Inhibited Red | | | | | | | | | | | | | | |
| Fuming (IRFNA) | X | Х | - | - | - | - | 1 | - | Х | X | 1 | 1 | 1 | Х |
| Nitric Acid, Red Fuming (RNFA) | | Х | Х | - | Х | Х | 1 | Х | X | X | 2 | 2 | 2 | Х |
| Nitric Acid, 5% To 10% | X X | X X | X X | 1 1 | 2 2 | X X | 1 1 | X X | 1 1 | X X | 2 2 | 2 2 | 1 X | X X |
| Nitric Acid, 20% Nitric Acid, 50% (Boiling) | ^ | x | x | X | × | x | 1 | x | Х | x | 2 | 2 | X | x |
| Nitric Acid, 65% (Boiling) | Â | x | X | X | x | x | 1 | X | X | x | 2 | 2 | X | X |
| Nitric Acid & Hydrochloric Acid | - | X | - | - | - | - | 1 | - | X | X | X | X | X | _ |
| Nitrobenzene (Under 100°F) | x | Х | Х | 2 | Х | Х | 1 | 2 | - | 1 | 1 | 1 | 1 | 1 |
| Nitroethane | x | Х | Х | 1 | 2 | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Nitrogen | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | Х | 1 | 1 | 1 | 1 | 1 |
| Nitrogen Oxide Up To 50% | | | ~ | | | | | | | | | | | |
| (Under 100°F) | 1 X | 1 X | 2 | 1 | 1 | - | 1 1 | 1 | - | 1 | 1 1 | 1 1 | - | X |
| Nitromethane Nitropropane | Â | x | X X | | - | - | 1 | 1 1 | - | 1 | 1 | 1 | 1 1 | 1 1 |
| Nyvac 20 (WG), 30 (WG) | <u> </u> | 1 | - | - | _ | - | 1 | | - | 1 | 1 | 1 | 1 | 1 |
| Nyvac FR Fluid | - | 1 | - | - | - | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Nyvac FR200 Fluid | - | 1 | - | - | - | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| N-Octane | X | 2 | - | 1 | Х | - | - | - | - | 1 | 1 | 1 | - | 1 |
| 0 | | | | | | | | | | | | | | |
| Octyl Alcohol | 2 | 2 | 2 | 1 | - | - | 1 | 1 | - | 1 | 1 | 1 | - | 2 |
| Oils, Crude | | 2 | - | - | - | - | 1 | - | - | 1 | - | - | - | - |
| Oil (SAE, Under 100°F) Oleic Acid (Under 120°F) | 12 | 1 2 | 1 2 | 1 | 2 2 | 1 | 1 1 | 1 | -2 | 12 | 1 2 | 1 1 | 1 1 | 1 2 |
| Oleum | x | X | X | X | X | - | 1 | х | X | - | - | 1 | - | - |
| Olive Oil | X | 2 | 2 | 2 | Х | - | 1 | - | 1 | 2 | 1 | 1 | 1 | 2 |
| OS 45 Type III (OS45) | 1 | 2 | - | - | - | - | 1 | - | - | - | - | - | - | - |
| OS 45 Type IV (OS45-1) | 1 | 2 | - | - | - | - | 1 | - | - | - | - | - | - | - |
| 0S 70 | 1 | 2 | - | - | - | - | 1 | - | - | - | - | - | - | - |
| Oxalic Acid (5%, Hot And Cold) | 2 | 2 | - | - | - | - | 1 | 2 | - | X | 2 | 1 | 1 | Х |
| Oxalic Acid (10%) Oxalic Acid (10% Boiling) | 2 X | 2 X | 2 | - | - | - | 1 1 | 2 | 1 | X | 2 X | 1 X | 1 X | X X |
| Oxalic Acid (10% Boiling) | Îx | x | x | 1 | 2 | x | 1 | x | 2 | x | 2 | 1 | 2 | x |
| Oxygen, Gaseous | - | - | - | - | - | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Ozone (Dry) | 2 | Х | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 |
| Ozone (Wet) | - | Х | - | - | - | - | 1 | - | 2 | Х | 2 | 1 | 2 | - |
| P | | | | | | | | | | | | | | |
| Paint | x | - | - | - | Х | Х | 1 | 2 | 1 | - | 1 | 1 | 1 | 1 |
| Paint Solvents (Oil Base) | X | Х | - | - | Х | Х | 1 | 2 | - | - | 1 | 1 | 1 | 1 |
| Paints (Oil Base) | - | 1 | - | - | 1 | - | 1 | 1 | - | - | - | - | - | - |
| Paint Thinner, Duco Palmetic Acid | 2 | 1 2 | - 2 | - | - X | - | 1 1 | 1 1 | - 1 | 2 | 2 2 | 1 1 | 2 1 | X X |
| Palm Oil | 2 | 2 | 2 | - | 2 | - | 1 | - | - | 1 | 2 | 1 | 1 | 1 |
| | 2 | 1 | 2 | 1 | x | - | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 |
| Paraffin (Petroleum) | 2 | 2 | 2 | - | 2 | 2 | 1 | - | - | 1 | 1 | 1 | 1 | - |
| Paraffin (Petroleum) Paraformaldehyde | | 1 | 2 | - | - | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| | 2 | Т | | | 2 | - | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 |
| Paraformaldehyde | 2 | 2 | 2 | - | | | | | | | | - | - | - |
| Paraformaldehyde Peanut Oil (Less Than 100°F) Pentasol Perchloric Acid | I | | 2 | - | 2 | X | 1 | X | 1 | x | 2 | 1 | X | - |
| Paraformaldehyde Peanut Oil (Less Than 100°F) Pentasol Perchloric Acid Perchloroethylene | 2 X | 2 X | - | - | 2 | Х | 1 | Х | 1 | | | 1 | Х | - |
| Paraformaldehyde Peanut Oil (Less Than 100°F) Pentasol Perchloric Acid Perchloroethylene (Tetrachloroethylene) | 2 X X | 2 X X | - X | - 2 | 2 X | х - | 1 | х 2 | 1 1 | 1 | 1 | 1 1 | x x | - X |
| Paraformaldehyde Peanut Oil (Less Than 100°F) Pentasol Perchloric Acid Perchloroethylene (Tetrachloroethylene) Petroleum Ether | 2 X X X | 2 X X 2 | - | - | 2 | Х | 1 1 1 | Х | 1 1 - | | 1 1 | 1 | Х | - X 1 |
| Paraformaldehyde Peanut Oil (Less Than 100°F) Pentasol Perchloric Acid Perchloroethylene (Tetrachloroethylene) | 2 X X | 2 X X | - X | - 2 | 2 X | х - | 1 | х 2 | 1 1 | 1 | 1 | 1 1 | x x | - X |



| Rating Scale: 1 Excellent | | Ga | tes | Но | se | Pol | lym | ers | | | | upli .dap | ngs oters | 6 |
|---|-----------------|-----------------------|---------------|--------|--------|----------|--------|--------|----------|--------------|---------------------|---------------------|--------------|--------|
| Excellent Good resistance X Not recommended Testing recommended Cover stock rating only; Rating for tube stock "X" Use Gates fuel hose or contact Denver Product Application Department Chemical Name | Polychloroprene | Nitrile, HNBR, or XTF | Nitrile + PVC | CPE | CSM | Urethane | PTFE | Nylon | MegaTuff | Carbon Steel | Stainless Steel 304 | Stainless Steel 316 | Aluminum | Brass |
| Petroleum Oil (Above 250°F) | Х | Х | - | - | - | - | 1 | - | Х | - | - | - | - | - |
| Petroleum Oils (Under 100°F) | 2 | 1 | 2 | - | 2 | 2 | 1 | - | 1 | 1 | 1 | 1 | 1 | 1 |
| Petroleum Oils (Refined) | 2 | 1 | 2 | - | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Petroleum Oils (Sour) | 2 | 2 | - | - | Х | 2 | 1 | - | 1 | 2 | 1 | 1 | 1 | Х |
| Phenol (Carbolic Acid) | X | X X | X | 1 | X | × | 1 1 | x | - | 2 | 1 | 1 | 1 | X |
| Phenol (70/30 Water) Phenol (85/15 Water) | X | x | - | | - | - | 1 1 | | | | 1 1 | 1 1 | 1 1 | |
| Phorone | | ~ | | - | | | - | - | - | - | т | Ŧ | т | |
| (Diisopropylidene Acetone) | х | Х | - | - | Х | Х | 1 | - | - | 1 | 1 | 1 | - | 1 |
| Phosphate Esters | | | | | | | | | | | | | | |
| (Concentrated) | Х | Х | - | Х | Х | Х | 1 | 2 | 1 | - | - | - | - | - |
| Phosphate Esters (3 Molar) | Х | Х | - | 2 | 2 | Х | 1 | 2 | 1 | - | - | - | - | - |
| Phosphate Esters (Dilute) | Х | Х | - | 1 | 1 | Х | 1 | 2 | 1 | - | - | - | - | - |
| Phosphoric Acid | 2 | 2 | - | - | - | - | 1 | - | 1 | - | - | 2 | - | - |
| Phosphoric Acid (3 Molar) Phosphoric Acid (Concentrated) | X X | X X | - | - | - | - | 1 1 | - | 1 2 | | - | - | - | - |
| Phosphoric Acid (1%) | 2 | 2 | - | - | - | - | 1 | | 2 | | 1 | 1 | - | x |
| Phosphoric Acid (5%) | 2 | х | - | - | - | - | 1 | - | 1 | | 1 | 1 | - | X |
| Phosphoric Acid (10%) | 2 | Х | - | - | - | - | 1 | - | 1 | x | - | 1 | Х | Х |
| Phosphoric Acid (10% Hot) | 2 | Х | - | - | - | - | 1 | - | - | X | - | 1 | Х | Х |
| Phosphoric Acid (50%) | 2 | 2 | 2 | 1 | 1 | Х | 1 | Х | 1 | X | 2 | 1 | Х | 2 |
| Phosphoric Acid (50% Hot) | 2 | Х | - | - | - | - | 1 | - | - | X | Х | 2 | Х | Х |
| Phosphoric Acid (85%) | 2 | Х | - | 1 | 1 | Х | 1 | Х | 1 | X | 2 | 2 | Х | Х |
| Phosphoric Acid (85% Hot) | 2 | X | - | - | 2 | - | 1 1 | 2 | 2 | X X | х - | Х 2 | х - | X |
| Phosphoric Acid (Aerated) Phosphoric Acid Air Free | - | Ĵ | | | | | 1 | ÷ | 1 | x | | - | x | |
| Photographic Developers | 1 | 1 | - | - | - | 2 | 1 | 2 | - | x | 1 | 1 | - | 2 |
| Photographic, Emulsions | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - |
| Photographic, Fixing Solutions | 2 | - | - | - | 2 | - | 1 | - | - | - | 1 | 1 | - | - |
| Phthalic Acid | - | - | - | - | - | - | - | - | - | 2 | 2 | 1 | 2 | - |
| Picric Acid | | _ | _ | | _ | | | | _ | | | | | |
| (Water Solution 100°F) Pinene | 2 | 2 | 2 | - | 2 | - | 1 | Х | 2 | X | 1 | 1 | X | X |
| Pinene Pine Oil | X X | 2 2 | 2 | 2 2 | - X | - | 1 1 | - | - | 1 | 1 1 | 1 1 | 1 1 | 1 |
| Piperazine Hydrochloride | | 2 | - | 2 | ^ | - | Ŧ | т | • | 1 | т | т | т | - |
| Solution (34%) | - | 2 | - | - | - | - | 1 | - | - | - | - | - | - | - |
| Pitch | 2 | 1 | - | - | 2 | 2 | 1 | 1 | Х | - | - | - | - | - |
| Plating Solutions (Chrome) | Х | Х | - | - | - | Х | 1 | Х | - | - | Х | Х | - | - |
| Plating Solutions (Other) | - | 1 | - | - | - | - | 1 | - | - | - | - | - | - | - |
| Polyester Resin | - | - | - | - | - | - | - | 2 | - | - | - | - | - | - |
| Polyurethane Foam (Under 125°F) | | | | | | _ | 1 | - | - | | _ | | _ | |
| Potassium Acetate | 2 | 2 | - | 1 | 2 | x | 1 | - | - | 2 | 1 | - | x | |
| Potassium Bicarbonate | 1 | 1 | _ | - | 1 | - | 1 | 1 | - | 1 | 2 | 2 | 1 | - |
| Potassium Bisulfite | - | 1 | - | - | - | - | 1 | 1 | - | - | - | - | - | - |
| Potassium Bromate | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - |
| Potassium Bromide | 1 | 1 | - | - | 1 | 2 | 1 | 1 | - | X | Х | 2 | Х | - |
| Potassium Carbonate (Potash) | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | - | 2 | 1 | 1 | Х | Х |
| Potassium Chlorate | 1 | 1 | - | - | - | 2 | 1 | 1 | - | 2 | 2 | 2 | 2 | - |
| Potassium Chloride (1% To 5%) | 1 | 1 | - | 1 | - | 2 | 1 | 1 | 1 | 1 | 2 | 2 | Х | X |
| Potassium Chloride (Boiling) Potassium Cyanide | - 1 | - 1 | - | - 1 | - | 2 | 1 1 | - 1 | X - | 2 | 2 1 | 2 1 | - X | X X |
| Potassium Cyanide Potassium Dichromate | 1 | 1 | 2 | 1 | 2 | - | 1 1 | 1 2 | - | 1 | 1 2 | 1 2 | 2 | - |
| Potassium Ferrocyanide | - | - | - | - | - | - | 1 | - | - | 2 | 1 | 1 | 2 | - |
| Potassium Fluoride | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - |
| Potassium Hydroxide | 2 | 2 | - | - | - | - | 1 | - | - | 1 | 1 | 1 | - | - |
| Potassium Hydroxide (5%) | 1 | 1 | - | - | - | - | 1 | 1 | 1 | 2 | 2 | 2 | Х | Х |
| Deteccium Iludrovido | | | | | | | | | | | | | | х |
| Potassium Hydroxide (27% Boiling) | | | | | | | 1 | - | Х | 2 | 2 | 1 | Х | |

| Rating Scale: | | Gat | tes | Но | se | Po | ym | ers | | | | | ngs oters | |
|---|-----------------|-----------------------|---------------|--------|--------|----------|--------|--------|----------|--------------|---------------------|---------------------|--------------|--------|
| Excellent Good resistance X Not recommended Testing recommended Cover stock rating only; Rating for tube stock "X" Use Gates fuel hose or contact Denver Product Application Department Chemical Name | Polychloroprene | Nitrile, HNBR, or XTF | Nitrile + PVC | CPE | CSM | Jrethane | PTFE | Nylon | MegaTuff | Carbon Steel | Stainless Steel 304 | Stainless Steel 316 | Aluminum | Brass |
| Potassium Hydroxide | | | | | | | | ~ | ~ | | | | _ | |
| (30%, Caustic Potash) Potassium Hydroxide | - | - | - | 1 | - | - | 1 | - | - | - | - | - | - | - |
| (50% Boiling) | - | - | - | - | - | - | 1 | - | Х | 2 | 2 | 2 | Х | Х |
| Potassium Hydroxide (70%) Potassium Hydroxide | - | 1 | - | - | - | - | 1 | - | - | - | - | - | Х | Х |
| (70% Hot) | - | - | - | - | - | - | 1 | - | Х | X | - | - | Х | Х |
| Potassium Iodide Potassium Nitrate | 1 1 | 1 1 | - | - | 1 | - 1 | 1 1 | 1 1 | 2 | 1 1 | 2 1 | 2 2 | -2 | - 2 |
| Potassium Nitrate (1% To 5%) | | 1 | - | - | - | - | 1 | - - | 2 | | 1 | 2 | 2 | 2 |
| Potassium Permanganate | 1 | 2 | - | - | - | - | 1 | 2 | - | 1 | 2 | 2 | 2 | - |
| Potassium Permanganate (5%) | 1 | 1 | - | - | - | - | 1 | 1 | - | 1 | 1 | 1 | 1 | - |
| Potassium Persulfate | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - |
| Potassium Phosphate | 1 | - | - | - | 1 | - | 1 | - | - | X | 2 | 2 | X | - |
| Potassium Sulfate Potassium Sulfate - 1% & 5% | 1 | 1 | - | 1 | - | 1 | 1 | 1 | - | 1 | 2 | 2 | 1 | - v |
| Potassium Sulfide | 1 1 | 1 1 | - | | - | 2 | 1 1 | 1 | 1 | 1 2 | 1 2 | 1 2 | 1 | X |
| Potassium Sulfite | | 1 | - | 1 | - | - | 1 | 2 | 2 | 1 | 1 | 1 | 1 | - |
| Potassium Thiosulfate | 1 | - | - | - | 1 | - | 1 | - | - | - | - | - | - | - |
| Primatol A, S, P (Ag Spray) | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - |
| Propane Gas | X | Х | - | - | - | Х | 1 | - | Х | 1 | 1 | 1 | - | 1 |
| Propionic Acid | X | Х | - | - | - | - | 1 | - | 1 | 1 | - | 2 | 2 | - |
| Propyl Acetate | X | X | - | 2 | - | - | 1 | - | 1 | 1 | - | - | - | - |
| Propyl Alcohol Propylene | 1 | 1 | 2 | 1 | - | Х | 1 | 1 | 1 | 1 | 1 | 1 | - | 2 |
| (Liquid Or Gas, Ambient) | x | х | - | 1 | - | - | 1 | 2 | | 1 | 1 | 1 | 1 | - |
| Propylene Dichloride | - | - | - | - | - | - | 1 | - | - | 1 | 2 | 1 | x | - |
| Propylene Glycol | 1 | 1 | - | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | - | - |
| Propylene Oxide | X | Х | - | - | - | - | - | - | - | 2 | 1 | 1 | 2 | - |
| Purina Insecticide | X | Х | - | - | - | • | 1 | 2 | - | 1 | 1 | 1 | 1 | 2 |
| Puropale RX Oils | 2 | 1 1 | - | - | - | 2 | 1 1 | 1 | - | 1 | 1 1 | 1 1 | 1 1 | 1 |
| Pyranol, Transformer Oil Pydraul | | X | | | - | - | 1 | - | 2 | | | 1 | T | - |
| Pydraul 10E, 29E-LT, 30E, | | ~ | | | | | - | | | | | | | |
| 60, 65E, 115E | x | Х | - | 2 | - | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Pydraul 135 | - | Х | - | 2 | - | - | 1 | 2 | - | 1 | 1 | 1 | - | - |
| Pydraul 150 | X | Х | Х | 2 | Х | 2 | 1 | 2 | - | 1 | 1 | 1 | 1 | 1 |
| Pydraul 280 | | Х | Х | 2 | Х | 2 | 1 | 2 | - | 1 | 1 | 1 | - | - |
| Pydraul 312 Pydraul 50E | X | Х | х - | 2 2 | 2 | 2 2 | 1 1 | 1 1 | 2 | 1 1 | 1 1 | 1 1 | - | - |
| Pydraul 540 | x | x | x | 2 | x | X | 1 | X | | | 1 | 1 | - | 2 |
| Pydraul 625 | x | Х | Х | 2 | Х | 2 | 1 | 2 | - | 1 | 1 | 1 | - | - |
| Pydraul A-200 | X | Х | Х | 2 | Х | Х | 1 | 2 | - | 1 | 1 | 1 | - | - |
| Pydraul F-9 | X | Х | Х | 2 | Х | 2 | 1 | 1 | - | 1 | 1 | 1 | - | - |
| Pyridine (50%) | X | Х | - | - | Х | 1 | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| Pyrogard 160, 230, 630 | - | - | - | - | - | - | 1 | - | - | 1 | 1 | 1 | - | - |
| Pyrogard 51, 53, 55 Pyrogard C, D | - | X 1 | Ĵ | - | Ĵ | - 2 | 1 1 | 1 | 2 | 1 1 | 1 1 | 1 1 | - | - 1 |
| Q Q | - | - | - | - | - | 2 | - | 1 | - | 1 | 1 | - | Т | |
| Quench Oil | 2 | 2 | | | - | | 1 | - | - | - | 1 | 1 | 1 | - |
| Quintolubric 822 | 2 | 1 | - | - | - | - | 1 | - | - | 1 | 1 | 1 | 1 | 1 |
| R | | | | | | | | | | | | | | |
| Ramrod (Ag Spray) | - | - | - | - | - | - | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| Rando Oils | - | 1 | - | - | - | 2 | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| Rape Seed Oil | 2 | Х | - | - | Х | - | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| Red Oil (Comm. Oleic Acid, | | | | | | | | | | | | | | |
| MIL-H-5606) | 2 | 2 | 2 | 1 | 2 | - | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 2 |
| Refined Wax (Petroleum) | 2 | 1 | 2 | - | - | 2 | 1 | 1 | - | 1 | 1 | 1 | - | 1 |
| Regal Oils R&O Richfield Weed Killer | - X | 1 2 | - | - | · X | 2 | 1 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 - |
| | · ^ | ~ | - | | ~ | | + | - | - | L . | - | - | - | - |



| Rating Scale: 1 Excellent | Gates Hose Polymers Couplings & Adapters | | | | | | | | | | | | | |
|---|--|-----------------------|---------------|-------------|-------------|-------------|-------------|-------------|----------|--------------|---------------------|---------------------|-------------|-------------|
| 2 Good resistance X Not recommended Testing recommended [] Cover stock rating only; Rating for tube stock "X" * Use Gates fuel hose or contact Denver Product Application Department Chemical Name | Polychloroprene | Nitrile, HNBR, or XTF | Nitrile + PVC | CPE | CSM | Urethane | PTFE | Nylon | MegaTuff | Carbon Steel | Stainless Steel 304 | Stainless Steel 316 | Aluminum | Brass |
| Round Up | 2 | 2 | - | - | - | - | 1 | 1 | - | 2 | 1 | 1 | 1 | 1 |
| RSC Futerra | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - |
| RSC Envirologic 146 | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - |
| Rubilene Oils | - | 1 | - | - | - | 2 | 1 | 1 | - | - | - | - | • | - |
| S | 4 | N | | | | | 4 | | 4 | | | | | |
| Salicylic Acid Salt Water (Sea Water) Santosafe W-G15, W-G20, W-G30 | 1 2 - | X 2 1 | 2 | - | 2 | - 1 2 | 1 1 1 | 1 1 1 | 1 | 1 2 1 | 1 1 1 | 1 1 1 | 2 X 1 | - 2 1 |
| Santo Safe 300 | Х | Х | - | - | - | - | 1 | - | - | 1 | 1 | 1 | 1 | - |
| Sevin | - | - | - | - | - | - | 1 | 1 | - | - | - 1 | - | - | - |
| Sewage SFR Fluid B (Shell) | 2 | 2 X | 2 | 1 | 2 | - | 1 1 | 1 | 1 | X | 1 | 1 | 2 | 1 |
| SFR Fluid C (Shell) | - | x | - | - | - | 2 | 1 | 2 | - | - | - | - | - | - |
| Shellac | 2 | 1 | - | - | - | - | 1 | 1 | Х | 1 | 1 | 1 | 1 | - |
| Shellac (Bleached) | 2 | 1 | - | - | - | - | 1 | 1 | Х | 1 | 1 | 1 | 1 | 2 |
| Shellac (Orange) | 2 | 1 | - | - | - | - | 1 | 1 | Х | 1 | 1 | 1 | 1 | 2 |
| Silicone Greases Silicone Oils | 2 2 | 2 2 | 2 2 | - | 2 2 | - | 1 1 | 1 1 | - | 11 | 1 1 | 1 1 | 1 1 | 1 1 |
| Silver Cyanide | 1 | - | - | - | - | 2 | 1 | - | | 1 | 1 | 1 | X | - |
| Silver Nitrate | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | - | 2 | 1 | 1 | 1 | 2 |
| Skydrol 500A& 7000 | Х | Х | Х | 2 | Х | - | 1 | 1 | - | 1 | 1 | 1 | 1 | - |
| Soap Oil | Х | Х | - | - | Х | - | 1 | - | 2 | 1 | 1 | 1 | - | - |
| Soap Solutions | 2 1 | 1 1 | 2 1 | 1 1 | 1 1 | 1 1 | 1 1 | 1 1 | 1 | 11 | 1 1 | 1 1 | 1 X | 1 2 |
| Soda Ash (Sodium Carbonate) Soda Water | - | ÷. | ÷. | | ± | 1 | 1 | 1 | - | | | - | _ | - |
| Sodium Acetate | Х | Х | Х | 1 | Х | 2 | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 |
| Sodium Benzoate | - | - | - | - | - | 1 | 1 | - | - | - | - | - | - | - |
| Sodium Bicarbonate | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | - | 2 | 1 | 1 | 2 | 2 |
| Sodium Bisulfate (Niter Cake) Sodium Bisulfite | 1 1 | 1 1 | 1 1 | 1 1 | 1 1 | 1 1 | 1 1 | 1 1 | - | X 2 | 2 1 | 1 1 | Х 2 | X |
| Sodium Borate | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 | - | - |
| Sodium Carbonate | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | - | 2 | 2 | 2 | Х | 2 |
| Sodium Chlorate | 2 | 1 | - | - | 1 | 1 | 1 | 1 | - | 2 | 2 | 2 | Х | - |
| Sodium Chloride | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | Х | X |
| Sodium Chloride - 2% Sodium Chloride - 5% | 1 1 | 1 1 | - | - | - | - | 1 1 | 1 1 | 1 1 | 2 | 2 2 | 1 1 | X X | X X |
| Sodium Chloride - 5% @ 150° F | 1 | 1 | - | - | - | - | 1 | 1 | 1 | - | 2 | 1 | - | X |
| Sodium Chloride Saturated | 1 | 1 | - | - | - | - | 1 | 1 | 1 | - | 1 | 1 | Х | - |
| Sodium Chloride Saturated | | | | | | | | | | | | | ., | |
| (Boiling) Sodium Chloride Slurry | - | - | 2 | - | - | Ì | 1 1 | - | X 1 | - | 2 | 1 | х - | - |
| Sodium Cvanide | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | - | 2 | 1 | 1 | x | x |
| Sodium Dichromate | 2 | 1 | - | 1 | 2 | 1 | 1 | 1 | - | - | - | - | - | - |
| Sodium Ferricyanide | - | - | - | - | - | - | 1 | - | - | 2 | 2 | 2 | - | - |
| Sodium Ferrocyanide | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - |
| Sodium Fluoride Sodium Fluoride (5%) | 2 | 1 1 | - | - | - | - | 1 1 | - | 1 1 | 2 | 2 2 | 2 2 | - | - |
| Sodium Fluoride (5%) Sodium Fluoride (70%) | 2 | т - | 2 | - | - | - | 1 | 1 | 1 | 2 | - | 2 | - | - |
| Sodium Hydrosulfide | 1 | Х | - | - | - | - | 1 | - | - | - | - | - | - | - |
| Sodium Hydrosulfite | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - |
| Sodium Hydroxide | 2 | 2 | - | - | - | - | 1 | - | - | 2 | - | - | - | Х |
| Sodium Hydroxide (3 Molar) | 2 | 2 | - | - 1 | Ì | - | 1 1 | - | 1 1 | - | - | - | - | X - |
| Sodium Hydroxide (10%) Sodium Hydroxide (20% Cold) | - 1 | - 2 | - | | - | - | 1 | - 1 | 1 | - 1 | - | - | x | x |
| | 1 | X | 2 | - | - | - | 1 | - | - | 2 | 1 | 1 | X | X |
| Sodium Hydroxide (20% Hot) | | | | | | | | | | l - | | | | |
| Sodium Hydroxide (20% Hot) Sodium Hydroxide (40%) | 1 | 2 | 2 | 1 | 1 | - | 1 | 2 | 1 | 2 | 1 | 1 | Х | |
| | 1 2 | 2 X | 2 X | 1 1 1 | 1 1 2 | - | 1 1 1 | 2 2 X | 1 1 | 2 2 X | 1 2 2 | 1 2 2 | X X X | X X X |

| Rating Scale: | Gates Hose Polymers Couplings & Adapters | | | | | | | | | | | | | |
|--|---|-------------------|------------------|------------------|------------------|-------------|------------------|-------------|------------------|------------------|---------------------|---------------------|------------------|------------------|
| Excellent Good resistance Kot recommended Testing recommended [] Cover stock rating only; Rating for tube stock "X" Use Gates fuel hose or contact Denver Product Application Department | Polychloroprene | ile, HNBR, or XTF | ile + PVC | | 2 | Urethane | щ | uc | gaTuff | Carbon Steel | Stainless Steel 304 | Stainless Steel 316 | Aluminum | |
| Chemical Name | Pol | Nitril | Nitril | CPE | CSM | Ure | PTFE | Nyloi | MegaT | Car | Sta | Sta | Alu | Brass |
| Sodium Hydroxide (70% Cold) Sodium Hydroxide (70% Hot) Sodium Hydroxide (80% Hot) Sodium Hypochlorite | 1 - 1 1 | 2 - X X | - | - | | - | 1 1 1 1 | - | 2 X X 1 | - - X X | - X X | 2 - X X | X - X X | X - X - |
| Sodium Hypochlorite, 5% Sodium Hypochlorite, 20% Sodium Hyposulfate | X X | X X - | X X | 1 | 1 1 - | X X - | 1 1 1 | 1 2 - | 1 1 - | X X X | X X 1 | 2 2 1 | X X X | X X - |
| Sodium Metaphosphate Sodium Nitrate Sodium Perborate Sodium Peroxide | 2 X X | 2 X X | 2 | 1 1 - | 2 2 X | 1 | 1 1 1 | 1 1 2 | - | X 1 X | 1 2 1 | 1 2 1 | 1 2 1 | X 2 X |
| (Sodium Peroxide) Sodium Phosphate Sodium Phosphate (Mono) | 1 X 1 | 2 1 1 | 1 | 2 1 | 1 | 1 | 1 1 1 | X 1 | 2 | X 2 | 1 1 | 1 1 | 1 X | X X |
| Sodium Phosphate (Dibasic) Sodium Phosphate (Tribasic) Sodium Silicate | 2 2 1 | 1 1 1 | - | - - 1 | - - 1 | - | 1 1 1 1 | - - 1 | - | - 2 1 | - 2 1 | - 2 1 | - | - - 1 |
| Sodium Silicate (Hot) Sodium Sulfate Sodium Sulfide | 1 1 1 | 1 1 1 | - | - 1 1 | - 1 1 | - 1 1 | 1 1 1 | - 1 1 | - | 2 2 X | 2 1 X | 2 1 2 | X - X | X 2 X |
| Soium Sulfide, Saturated Sodium Sulfite Sodium Sulfite, 5% | 1 2 1 | 1 2 1 | 2 | 1 | 2 | 1 | 1 1 1 | 1 2 - | - | 2 1 1 | 2 1 1 | 1 1 1 | X - 1 | X X |
| Sodium Sulfite, 10% @ 150°F Sodium Thiosulfate (HPO, An tich ior) | 1 | 1 1 | - | - 1 | - 1 | - 1 | 1 1 | - 1 | - | 2 X | 2 1 | 2 1 | 2 2 | - X |
| Sodium Tripolyphosphate (STPP) Solnus Oils | - | - 1 | - | - | - | - 2 | 1 1 | - 1 | - | - 1 | 1 1 | 1 1 | X 1 | X 1 |
| Sour Crude Oil Soybean Oil Spent Acid | - 2 - | 2 | 2 | - | - 2 2 | - | 1 1 1 | 1 | - 1 2 | - 1 - | - 1 1 | - 1 1 | 1 | - |
| Stannic Chloride Stannic Chloride, 50% Stannous Chloride | X X | 2 1 | 2 | 1 | х - | - | 1 1 | X - | - | X X | X X | X X | X X | х - |
| (Under 150°F) Stannous Chloride, 15% Starch | 1 1 2 | 1 1 2 | - | 1 - - | 1 - 1 | - 1 | 1 1 1 | X - 1 | - | - X X | X X 1 | 2 - 1 | X X 1 | - |
| Steam Stearic Acid Stearin | 2 | 2 | 2 | ST 1 - | 2 | 1 1 | 1 1 | 1 2 | 1 | 1 X - | 1 2 - | 1 1 - | x | 2 X - |
| Stoddard Solvent Styrene (Vinyl Benzene) Styrene (Monomer) Sucrose Solutions | 2 X - 1 | 2 X X 1 | X - - 1 | 1 - 2 - | - - 1 | × - - | 1 1 1 1 | 1 1 2 | - | 2 1 2 1 | 1 1 X 1 | 1 1 2 1 | 1 1 X | 1 1 2 |
| Sulfamic Acid (10%, Under 170°F) Sulfate Black Liquor | - | - 1 | - | 1 | 2 | - | 1 1 | - | 1 | - 2 | - 2 | - 2 | - X | - |
| Sulfate Green Liquor Sulfur Sulfur (Molten) | 1 - X | 1 - X | - | - | - | - | 1 | 1 | x x | 2 | 2 | 2 | × | - |
| Sulfur Chloride Sulfur Dioxide (Moist) Sulfur Dioxide (Dry) | × 2 X | × × × × | x - x | - | 2 2 2 2 | - | 1 1 1 | 2 1 X | ^ - 1 1 | X - 2 | X 2 1 | 2 1 1 | X 1 1 | X X 1 |
| Sulfur Dioxide (Diy) Sulfur Dioxide (Liquid) Sulfur Hexaflouride (Gas) Sulfur Trioxide (Dry) | 2 1 X | X 2 X | - - X | - - X | 2 2 2 X | - | 1 1 1 1 | - X 1 | - | - 2 | - - 2 | - - 2 | - 2 | - - X |
| Sulfuric Acid, 85% Sulfuric Acid, 3 Molar | X X | x x | - | - | - | - | 1 1 | - | 1 1 | X - | 2 | 2 1 - | 2 X - | - |
| | | | | | | | | | | | | | | |



| Rating Scale: 1 Excellent | Gates Hose Polymers Couplings & Adapters | | | | | | | | | | | | | |
|--|--|-----------------------------|--------------------------|-----------------------------|---|---|---------------------------------------|---|---------------------------------|---|---|---|---------------------------------------|---|
| 2 Good resistance X Not recommended Testing recommended [] Cover stock rating only; Rating for tube stock "X" * Use Gates fuel hose or contact Denver Product Application Department Chemical Name | Polychloroprene | Nitrile, HNBR, or XTF | Nitrile + PVC | CPE | CSM | Urethane | PTFE | Nylon | MegaTuff | Carbon Steel | Stainless Steel 304 | Stainless Steel 316 | Aluminum | Brass |
| Sulfuric Acid, Aerated, No Velocity | | | | | | | 1 | | 1 | 2 | 2 | 2 | х | |
| Sulfuric Acid, Air Free No Velocity Sulfuric Acid, Concentrated Sulfuric Acid, Fuming, Oleum Sulfuric Acid (10%) Sulfuric Acid (30%) Sulfuric Acid (50%) Sulfuric Acid (75%) Sulfuric Acid (75%) | - X 1 1 2 X X | - X - 2 - X X X | 2 X X X | - 1 1 | 1 1 1 2 x | | 1 1 1 1 1 1 1 | - - - - - - - - - - - - - - - - - - - | 1 1 1 X 1 1 1 | X - 2 - X X X 2 | X 1 1 X X X X X X | 2 1 1 X 2 2 2 2 | X - 2 2 X X X X | - - - - - - - - - - - - - - - - - - - |
| Sulfuric Acid (93%) Sulfurous Acid Sulfurous Acid Sulfurous Acid (10%) Sulfurous Acid (75%) Sun R&O Oils Sunsafe | X 2 - X - | X 2 X X 1 | X X X | X 1 1 | X X 1 1 | 2 | 1 1 1 1 | X X X - X 1 | 1 1 1 1 | 2 X - X 1 | X X X X X 1 | 2 2 2 1 | X 2 1 X 1 | × X - X X 1 |
| (Fire Resist. Hydr. Fluid) Suntac HPOils Suntac WR Oils Sunvis Oils 700, 800, 900 Super Hydraulic Oils (Conoco) Sutan Plus, Herbicide Sutazine Plus, Herbicide Synthetic Oil (Citgo) Syrup | 2 - - X X 2 | 1 1 1 X X 1 | x 2 | 1 | - | 2 2 2 2 2 | 1 1 1 1 | 1 1 1 1 1 1 1 1 | | 1 1 1 1 1 X 1 - | 1 - 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 | |
| Tall Oil (Under 150°F) Tallow Tannic Acid (10%) Tar And Tar Oil Tar (Bituminous, Under 100°F) Tartaric Acid Tellus Oils Ternol Oils Tergitol Terresstic Tetracthyl Lead Tetrahydrofuran (THF) Tetralin Thiopen Titanium Tetrachloride Toluene (Toluol) Toluene Diisocyanate (Under 150°F) Transformer Oil (Askarel Types) Transformer Oil (Petroleum Type) Transmission Fluid, Type A Tributoxyethyl Phosphate Tributyl Phosphate | 2 2 2 2 2 2 · · · X · 2 X X X X X X X X | 22X-2211-2122XXXXX -X 11XXX | 22···22·····XX ··X 22XXX | - 1 - X 1 1 X - 1 1 1 X 2 2 | X 2 1 1 2 X X X X X X X X X X X X X X X | 222.22.22.22.22.22.22.22.22.22.22.22.22 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 X 1 1 1 1 2 1 2 1 2 1 2 1 2 2 2 | 1 1 1 1 1 1 | 2 2 2 1 1 X 1 1 2 - 1 - 2 1 - 1 1 1 1 1 1 1 X | X 2 1 1 1 2 1 1 1 1 1 . 2 1 1 1 1 | 2 2 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | X 1 2 1 1 2 1 1 2 1 1 2 1 1 1 X X X X | - 2 X 2 2 X 1 - 2 X 1 1 1 - 1 |
| Trichloromonofluoroethane (Freon 17) | | | | Fre | | | | - | | 1 | 1 | 1 | x | - |
| Trichlorotrifluoroethane (Freon 113) Tricresyl Phosphate | х | U X | | Fre 1 | on X | Ho - | | 1 | х | 1 1 | 1 2 | 1 2 | X X | - |

| Rating Scale: 1 Excellent | | Gat | tes | Ho | se | Pol | ym | ers | | | | | ngs oters | | | |
|---|-----------------|-----------------------|---------------|--------|--------|----------|--------|--------|----------|--------------|---------------------|---------------------|--------------|--------|--|--|
| Excellent Good resistance Kot recommended Testing recommended Testing recommended Cover stock rating only; Rating for tube stock "X" Use Gates fuel hose or contact Denver Product Application Department Chemical Name | Polychloroprene | Nitrile, HNBR, or XTF | Nitrile + PVC | CPE | CSM | Urethane | PTFE | Nylon | MegaTuff | Carbon Steel | Stainless Steel 304 | Stainless Steel 316 | Aluminum | Brass | | |
| Triethanolamine (TEA) | 2 | 2 | - | 1 | 2 | - | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 | | |
| Tripolyphosphate (STPP) | X | 1 | - | - | - | - | 1 | - | - | - | 2 | 1 | Х | - | | |
| Tung Oil Turpentine | 2 X | 2 2 | 2 | -2 | 2 X | - 1 | 1 1 | 1 1 | - | 1 X | 1 1 | 1 1 | 1 1 | 1 2 | | |
| Type I Fuel (MIL-S-3136) | | | | | | | | | | | | | | | | |
| ASTM Fuel A | 2 | 1 | - | - | - | - | 1 | - | - | 1 | 1 | 1 | 1 1 | - | | |
| Type II Fuel (MIL-S-3136) Type III Fuel (MIL-3136) | X | 2 | - | - | - | - | 1 | - | - | 1 | 1 | 1 | Т | - | | |
| ASTM Fuel B | Х | 1 | - | - | - | - | 1 | - | - | 1 | 1 | 1 | 1 | - | | |
| U | | | | | | | | | | | | | | | | |
| Ucon Hydrolube Types 150CP, 200CP | - | 1 | - | - | - | 2 | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 | | |
| Ucon Hydrolube Types | | | | | | | ~ | | | | | | | | | |
| 275CP, 300CP, 550CP Ucon M1 | - | - | - | - | - | -2 | 1 1 | - 1 | - | - | - | - | - | - 1 | | |
| Union ATF Dexron | - | 1 | - | - | - | 2 | 1 | 1 | - | | 1 | 1 | - | - | | |
| Union ATF Type F | - | 1 | - | - | - | 2 | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 | | |
| Union C-2 Fluid Union C-POil | - | 1 1 | - | - | - | 2 2 | 1 | 1 1 | - | 1 | 1 1 | 1 | - 1 | - | | |
| Union Hydraulic Oil AW | - | 1 | - | 2 | - | 2 | 1 1 | 1 | - | 1 1 | 1 | 1 1 | 1 | 1 1 | | |
| Union Hydraulic Tractor Fluid | - | 1 | - | - | - | 2 | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 | | |
| Urea Solution | 1 | 2 | - | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | - | | |
| V | | | | | | | | | | | | | | | | |
| Varnish Vegetable Oils | X 2 | X 1 | X 2 | - 1 | х - | - 2 | 1 1 | 1 1 | - 1 | 2 | 1 1 | 1 1 | 1 1 | 2 2 | | |
| Vegetable Oil (Hot) | - | - | - | - | - | - | 1 | 1 | - | 2 | 2 | 2 | 1 | 2 | | |
| Versilube | 1 | 1 | - | - | - | - | 1 | - | - | 1 | 1 | 1 | 1 | - | | |
| Versilube F-50, F-44 | 2 | 2 X | 2 | - 2 | 2 X | 2 | 1 1 | 1 1 | - | 1 | 1 2 | 1 1 | 1 X | 1 X | | |
| Vinegar Vinyl Acetate | X | X | X X | 2 | x | - | 1 | - - | x | X 2 | 2 | 1 2 | 1 | 2 | | |
| Vinyl Chloride | | | | | | | | | | | | | | | | |
| (Chloroethylene, Monomer) | X | Х | Х | Х | Х | - | 1 | - | - | 2 | 1 | 1 | 2 | Х | | |
| Vitrea Oils W | X | Х | Х | - | • | 2 | 1 | 1 | - | 1 | 1 | 1 | - | - | | |
| Water | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | |
| Water, Acid Mine | 2 | x | - | - | - | - | 1 | 1 | - | x | 2 | 2 | X | x | | |
| Water, Brine | 2 | 2 | - | - | 1 | 1 | 1 | 1 | - | X | 2 | 2 | - | - | | |
| Water Deionized, (Demineralized) | | | | | - | | 1 | _ | 1 | | _ | | | _ | | |
| Water, Distilled | 2 | 1 | - | - | 1 | 1 | 1 | 1 | 1 | x | 1 | 1 | 1 | 1 | | |
| Water, Fresh | 1 | 1 | - | - | - | - | 1 | 1 | 1 | X | 1 | 1 | 1 | Х | | |
| Water In Oil Emulsions Water, Potable | - | - | - | - | - | 2 | 1 | 1 | - | - | - | - | - | - | | |
| (FDA Tube Only) | | U | se | FD/ | ٩Ho | ose | Or | ıly | | - | - | - | | - | | |
| Water, Salt | 2 | 1 | - | - | - | - | 1 | 1 | - | X | 2 | 2 | Х | Х | | |
| White & Bagley No. 2190 | | | | | | | | | | | | | | | | |
| Cutting Oil Wines | 2 | 1 1 | - 1 | 1 | - 1 | Ĵ | 1 1 | 1 | - | 2 | 2 | -2 | 1 | - | | |
| Wood Oil | 2 | 1 | • | 1 | | 1 | 1 | 1 | - | 1 | 1 | 1 | 1 | - | | |
| Х | | | | | | | | | | | | | | | | |
| Xylene | Х | 1 | - | Х | - | 2 | 1 | Х | 2 | 2 | 2 | 2 | - | - | | |
| Z | | | | | | | | - | | | | | | | | |
| Zeric Zinc Acetate | - 2 | 1 X | 2 | - | - х | 2 | 1 1 | 2 2 | 1 1 | . 1 | - 1 | - | - 1 | - 1 | | |
| Zinc Adetate Zinc Chloride Solutions | 2 | ^ 1 | 1 | 1 | ^ 1 | | 1 | 2 | 1 | X | 2 | 1 | X | X | | |
| Zinc Chromate | - | - | - | 1 | 1 | - | 1 | - | 1 | - | 1 | 1 | - | - | | |
| Zinc Hydrate | - | - | - | - | - | 2 | 1 | - | - | - | - | - | - | - | | |
| Zinc Sulfate Solutions | 2 | 2 | 2 | 1 | 2 | - | 1 | 2 | 1 | X | 2 | 1 | Х | Х | | |
| | | | | | | | | | | | | | | | | |

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DRIVEN BY POSSIBILITY[~]

CORPORATE OFFICE

3rd Floor, Building 10C, DLF Cyber City, DLF Phase II, Gurgaon - 122002, Haryana-122002

CHENNAI OFFICE

3rd Floor, Smartworks, Bharati Vilas, 26B, Jawaharlal Nehru Salai, Ekkatuthangal, Guindy Industrial Estate Chennai - 600032

GATES INDIA FACILITIES

LALRU

Chandigarh Ambala Highway, Lalru, Punjab - 141 104

PUNE

Plot No. K-8, Near Hyundai Company-Khalumbre, Pune Maharashtra - 410501(india)

FARIDABAD

Plot No.133-134, Sector 59, Phase 2, Faridabad 121 006

CHENNAI

Plot No. F 19, Sipcot Industrial Park, Pondur A, Sriperumbudur, Kancheepuram Dist. Tamilnadu 602 105

