

# MINING

2015 PRODUCTS CATALOG



**POWERING PROGRESS™**



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# Meeting the Challenge of Underground Mining

Managing the operations of an underground mine is a balancing act. First to consider is worker safety. A lot can go wrong in the confined spaces of an underground mine.

Safety notwithstanding, mine operators must also focus on maintaining production at the highest level possible, while keeping non-productive time to the bare minimum.

Regulatory compliance is another concern. MSHA (Mine Safety and Health Administration) has strict regulations regarding equipment and procedures to protect workers from accidents. Following these procedures is mandatory, and violations result in fines and delays.

In addition to the restrictions imposed by MSHA, the EPA (Environmental Protection Agency) keeps a close eye on the mining environment. It lets the hammer down hard when infractions occur, such as oil spills or other forms of contamination.

Related to all these factors is product quality and availability. Poor quality products can fail, causing safety hazards, stopping production, violating standards, and threatening the environment. Products must not only meet high quality standards, but also be readily available to keep production on schedule.

Mine operators must meet all these challenges to realize top efficiency and profitability in an underground mining operation. That's why so many rely on Gates.

## A Comprehensive, Goal-Focused Approach

Gates manufactures fluid power products and provides services designed to help mine operators reduce downtime, improve productivity, and ensure worker safety. Our hydraulic and industrial hoses and power transmission products have been developed over time and through experience to perform in the harsh conditions found in underground mines.

Gates fluid power product line includes hydraulic hoses, couplings, adapters, and crimpers tailored to the demands of continuous and longwall mining equipment. Examples include Coal Power/Longwall Mine Hose for high pressure hydraulic lines in longwall equipment and roof-support systems; iLok™ couplings that reduce the time, cost, and risk of moving longwall machinery; and the GC® 32Tsi™ “smart” crimper that uses the latest technology to make factory-quality, leak-free assemblies every time.

For fluid transfer applications, Gates Mine Master™ industrial hoses and couplings are specifically designed to tackle tough mining challenges, including longwall emulsion lines, air drills, rock dust spraying, and hot water washdowns.

And Gates V-belt and synchronous drive systems can handle a wide range of power transmission chores in and around the mine.

# Agency and Industry Specifications

Gates entire line of underground mining products meets or exceeds MSHA 2G standards. In addition, Gates hose, coupling, and assembly specifications meet and often far exceed the standards set by both U.S. and international agencies and industry bodies, including the following:

## Agency and Industry Hose, Coupling & Assembly Specifications

**ABS** — American Bureau of Shipping

**AS 2260** — Australian Standard

**BV** — Bureau VERITAS (Marine Division), International

**DNV** — Det Norske Veritas (North Sea Floating Vessels), International

**DIN** — Deutsch Industry Norm, International

**GL** — Germanischer Lloyd's, International

**IJS** — Industrial Jack Specifications, USA

**LR** — Lloyd's Register, International

**RCCC** — Regular Common Carrier Conference for Fleet Truck & Bus, USA

**DOT** — Department of Transportation, USA

**FMVSS** — Federal Motor Vehicle Safety Standard, USA

**MSHA 2G** — Mine Safety & Health Administration, USA

**FRAS** — Fire Retardant Anti-Static, Australia

**USCG** — United States Coast Guard

**ISA** — International Standards Organization

**SAE** — Society of Automotive Engineers

**EN** — European Norm

Gates Hose Type	Agency Specifications				Industry Specifications (PSI Performance)		
	MSHA 2G	FRAS	USCG J1942		SAE	ISO	EN
			Fuel Oil	Power			
EFCPS	X	X			Gates Proprietary Design		
EFLW	X	X			Gates Proprietary Design		
LW	X	X			Gates Proprietary Design		
CPB	X	X			Gates Proprietary Design		
Mine Master™ Spray 1000	X	X			Gates Proprietary Design		
Mine Master™ Air Drill 600 HT					Gates Proprietary Design		
Mine Master™ Rock Dust 100SD	X	X			Gates Proprietary Design		
Mine Master™ Air Drill 500					Gates Proprietary Design		
Mine Master™ Air Drill 500 FR	X	X			Gates Proprietary Design		



Hose Types	DNV			ABS			USCG					
	Sizes		Max Working Pressure (psi)	Sizes		Max Working Pressure (psi)	Sizes		Max Working Pressure (psi)			
	From	To		From	To		From	To	Couplings			
G1	-4	-32	Per Catalog	G (4 - 20) GSP/ESA (24 - 32)	-4	-32	Per Catalog	G (4 - 20) GSP (24 - 32)	-3	-20	Per Catalog	PC (3) G (4 - 20)
G2	-4	-32	Per Catalog	G (4 - 20) GSP/ESA (24 - 32)	-4	-32	Per Catalog	G (4 - 20) GSP (24 - 32)	-3	-32	Per Catalog	PC (3), B-SS (4) G (4 - 20)
G1H									-4	-16	Per Catalog	G
G2XH									-6	-16	Per Catalog	G
M3K	-4	-16	3000	G	-4	-16	3000	G	-4	-16	3000	B-SS (10, 12)
M4K	-4	-16	4000	G & GS	-4	-12	4000	G & GS	-4	-12	4000	G & GS B-SS (4, 8)
M5K	-4	-8	5000	G					-8	-8	5000	B-SS
M6K	-4	-4	6000	G								
EFG3K	-20	-32	3000	GS / GSP	-20	-32	3000	GS	-20	-32	3000	GS
EFG4K	-6	-20	4000	GS	-6	-16	4000	GS	-6	-16	4000	S-SS (6, 8, 10, 16) GS
EFG5K	-6	-32	5000	GS / GSH / GSM	-10	-32	5000	GS (6-20) GSM (24-32)	-6	-20	5000	S-SS (6, 8, 10) GS
EFG6K	-6	-32	6000	GS / GSH / GSM	-6	-32	6000	GS (6-20) GSM (24-32)	-6	-24	6000	GS (6-20) / GSH (24) S-SS (6, 8, 10)
M2T			Expected Spring 2015		-4	-16	Per Catalog	B-SS & G			Expected Winter 2015	
GM2T	-4	-16	Per Catalog	G / GB / PCK					-8	-12	Per Catalog	B-SS
GMV			GMV Expected Spring 2015		-12	-64	Per Catalog	GL (12-64) G (12-20)	-12	-64	Per Catalog	GL (12-32), G (12) G4H (40-64)
G4H					-12	-20	Per Catalog	GL				
C5M					-5	-16	500	PCSS / C5	-5	-16	500	C5
4XH / 4XP			Expected Spring 2015		-10	-16	Per Catalog	GS				
Black Gold PS/PB			Expected Spring 2015		-4	-32	Per Catalog	Various	-4	-32	Per Catalog	Various
Rotary/Drilling Grade D/E					2.5"	5"	Per Catalog	Various				
BG Cementing (4651ZX/ZZ/ZT)	1.5"	2"	5k-10k	-	2"	2"	5k-10k	GSH				
BG Cementing, 5k (4774PE)	2.5"	4"	5000	-	2.5"	4"	5000	-				
BG Cementing, 10k (4773PE)	2.5"	3.5"	10000	-	2.5"	3.5"	10000	-				

## Application Engineering and Technical Support

Gates field application engineers, customer service personnel, and field sales representatives stand ready to lend their considerable expertise for anything from routine questions to technical solutions. Their years of experience with the mining industry, combined with Gates engineering and manufacturing expertise, can help keep your operation up and running.

## Safety

Worker safety is a paramount concern, so Gates offers safety training programs such as Safe Hydraulics to ensure mine workers and supervisors know how to safely handle Gates hydraulic hoses and systems. Additionally, Gates offers educational training at the Customer Solutions Center in Denver, Colorado, USA, where attendees learn how to select, assemble, install, and maintain our hydraulic and industrial hoses and systems.

## Product Availability

Having the products you need close at hand when you need them is vital to maintaining a productive operation with minimal downtime. Gates fluid power distributors provide complete equipment coverage for your mining operation. They maintain an extensive, global online database of hydraulic assembly replacement parts so you can get replacement assemblies for any piece of equipment right away, optimizing uptime and profitability.

## Constant Innovation

At Gates Customer Solutions Center, our engineers and scientists work to push the boundaries of fluid power knowledge and product application. These efforts continue to produce innovations that benefit the mining industry, such as the new iLok™ hydraulic coupling for longwall and continuous mining machinery.

# Gates Engineered Product Solutions

## Spiral Wire and Wire Braid Hydraulic Hoses & Assemblies

Gates line of specialized mining hose includes spiral wire and wire braid hydraulic hoses with dynamic working pressures up to 6,525 psi, and static working pressures up to 11,050 psi. These hoses are designed for the high-pressure lines in longwall and continuous mining equipment. They meet the MSHA 2G standard for flame resistance, and exceed both SAE and ISO specifications.

## Robust, Leak-Free, Corrosion-Resistant Couplings That Can Handle the Rigors of Underground Mines

Most hose failures, such as blow-offs or leaks, occur at the coupling. Gates couplings are designed for Gates wire braid and spiral wire hoses to form a robust, leak-free, and corrosion-resistant connection that can stand up to the conditions in underground mines.

### MegaCrimp™ Couplings

Gates MegaCrimp couplings are designed for use with Gates wire braid hydraulic hoses to create a robust, leak-free assembly. The pre-assembled coupling is designed with a patented “C” insert attached to the ferrule. This design ensures that crimping forces are evenly distributed to form a concentric, leak-free seal.

One MegaCrimp coupling size can accommodate various one- and two-wire braid hydraulic hoses of different constructions and wall thicknesses, simplifying inventory requirements and helping to reduce costs.

### Key Features

- Robust “bite the wire” crimp
- Low profile
- Full-stem insertion
- Full-length crimp
- Tested to industry-leading 600,000 impulse cycles
- Simplifies inventory management
- Environmentally-friendly TuffCoat™ plating for 5x better corrosion resistance than SAE standard



*During crimping, only the MegaCrimp coupling's outside shell takes on the shape of the dies. The “C” insert starts round, stays round – like the hose.*



*Once inserted, MegaCrimp couplings stay put. They don't fall out.*



*MegaCrimp couplings have an optimum insertion force — not too tight, not too loose — so you can feel them “hit bottom” when inserted.*

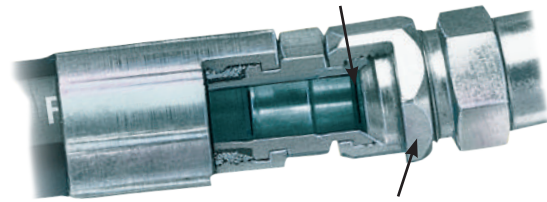
# GlobalSpiral™ Couplings

Engineered for extreme high-pressure, high-impulse spiral wire hose, Gates GlobalSpiral couplings feature a “bite-the-wire” crimp for improved coupling retention. They can be used with Gates four- and six-spiral wire hoses up to 8,000 psi.

The couplings are available in over 30 thread configurations, including SAE, DIN, BSP, Komatsu, and JIS, to suit the needs of any mining operation. They have been tested to industry-leading 1,000,000 impulse cycles at 250°F (121°C).

## The no-skive coupling... one stem is all you need

Robust swivel joint allows for maximum torque



Strong Full-Torque Nut™ design—up to 24,000 psi burst pressure (-20 size EFG6K) with improved torque resistance

Features	Benefits
No skive	Fast, tailor-made assemblies. Eliminates skiving equipment, odor and dust.
Tested to 1,000,000 impulse cycles	Extended coupling life.
Coupling to 6,000 psi working pressure in all sizes*	Easy-to-manage inventory. Fewer SKUs.
Over 75-plus thread/flange configurations	Application coverage.
TuffCoat® plating	More than five times better corrosion resistance than SAE ASTMB117 specification.
“Bite-the-wire” crimp	Improved coupling retention.
Premium steel	Maximum strength.
+250°F temperature capability	Full performance at high temperatures. Longer coupling life.
Machined full-back FJX and FFORX nuts	4:1 burst performance up to 24,000 psi. Improved torque/sealing capability.
Meets worldwide DIN, EN, SAE, ISO and Gates EFG6K standards and requirements	World-class performance.
One stem used for all spiral hoses	Less inventory. Easier to use.
Two-piece design	Reduced inventory by 30% because only one stem is required for all spiral wire hose types.

\*Except as noted in coupling tables

# MegaTuff® and 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.

## MegaTuff covers: 300x more protection than standard hose covering

Gates MegaTuff hoses are exceptionally resistant to abrasion, thanks to special cover construction and compounding that uses high-performance engineered plastics in an innovative manufacturing process. Also, the specially bonded cover stays put. It won’t peel as do some competitive hose covers.

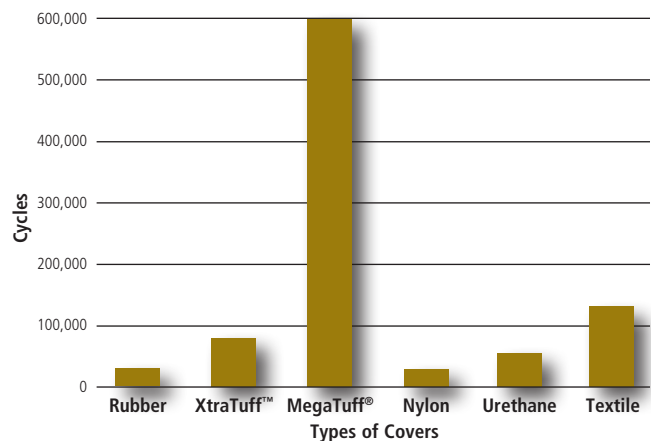
MegaTuff hoses maintain their flexibility and minimum bend radius. They are resistant to oil, ozone, and UV rays, and have been tested to 1,000,000 impulse cycles without failure. These tough hoses are ideally suited for harsh underground mining conditions.

## XtraTuff covers: 25x more protection and standard hose covering

Made of special hybrid compounds, Gates XtraTuff™ covers offer 25x the abrasion resistance of standard cover hydraulic hose, increasing service life, lowering maintenance and eliminating the need for costly hose protectors like spring guards and nylon sleeves. XtraTuff hose is versatile, flexible and easy to manage. With pressure ratings up to 5,000 psi, these hoses will outperform anything the competition has to offer.

### Abrasion Testing

ISO6945 — Metal-to-hose rubbing cycles to lose one gram of weight





## iLok™ Coupling



### Reduces the Time, Cost, and Risk of Moving Longwall Mining Machinery

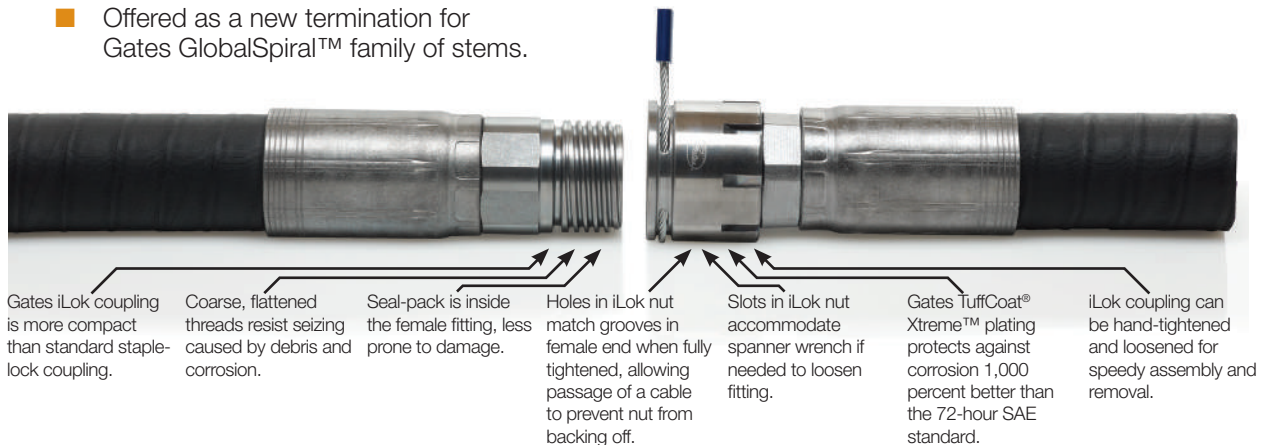
Gates iLok coupling is designed to realize dramatic reductions in downtime when moving and re-assembling longwall mining equipment. Compared to a staple-lock coupling, it's simpler, safer, and faster.

### A Coupling So Simple It's Revolutionary

- Simple to understand and use
- Easy to connect and disconnect by hand
- Withstands high impulse applications
- Uses a secure, visible locking system
- Releases residual pressure away from workers during disconnection
- Compact, to fit in tight quarters
- Smooth, to prevent abrasion against adjoining hoses

### Specifications

- Rated at 6,000 psi (-4, -6, -8, -12, -16, -20, -24, -32, -40 sizes) & 5,000 psi (-48 size) for mining applications.
- Rated at 5,000 psi (-4, -6, -8, -12, -16, -20, -24, -32, -40 sizes) & 4,000 psi (-48 size) for hydraulic applications.
- Mining application is described as testing to 300,000 impulse tested at working pressure at 250°F (+121°C) with no leaks or failures.
- Hydraulic application is at SAE standards at 133% working pressure, 250°F (+121°C) and at an increased 1 million impulse cycles with no leaks or failures.
- 4:1 design factor (burst pressure to working pressure ratio).
- Tested in accordance with SAE-J343.
- Approved for static impulse applications only.
- TuffCoat® Xtreme™ plating provides red rust protection that exceeds the 72-hour SAE standard by 1000 percent.
- MSHA-approved for underground mining applications.
- Offered as a new termination for Gates GlobalSpiral™ family of stems.



# TuffCoat™ and TuffCoat™ Xtreme® Plating

## Beat the SAE Standard by 600 to 1000 Percent

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. This form of corrosion is prevalent in underground mines, where humidity, salt, and oxygen preside.

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

- Contaminate hydraulic fluids
- Create leak paths
- Compromise fitting connections and adjacent components
- Make maintenance more difficult

For conditions such as those found in continuous and longwall mining operations, Gates offers couplings with TuffCoat and TuffCoat Xtreme plating.

## 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 600% greater than the SAE 72-hour standard, and 561% greater than the 96-hour industry standard.



Competitor      Gates      Competitor      Competitor      Competitor

*Tested under SAE J516 and ASTM B-117 salt-spray conditions, TuffCoat plating provided more than 400 hours of protection from red rust formation – over 500 percent better than the 72-hour SAE standard.*

*The Gates coupling with TuffCoat plating shows no red rust formation. White patches on couplings are salt residue, not corrosion.*

## TuffCoat Xtreme: An Extra Measure of Protection

TuffCoat Xtreme offers 840 hours of red rust corrosion resistance based on ASTM B117 salt spray testing. That's 1066% greater than the 72-hour SAE standard and 1,033% greater than the 96-hour industry standard.

## Salt Spray Testing Standards

The SAE J516 standard for hydraulic fittings specifies that fittings shall be plated with a material that passes a 72-hour salt spray test in accordance with ASTM B117. The appearance of red rust within this period indicates failure.

## GC<sup>®</sup>32TSi<sup>™</sup> Crimper

There's no room for error when replacing hydraulic hose assemblies on underground mining equipment. Gates GC32TSi innovative "smart" crimper leaves nothing to chance. All the necessary tools and information reside on-board to crimp rock-solid, leak-free, factory-quality hose assemblies.

Gates GC32TSi crimper features a touch-screen control panel for easy navigation. It links to Gates eCrimp<sup>™</sup> database for up-to-the-minute crimp specifications and optimal hose/coupling selection. Advanced functionality such as automatic spring-back compensation, precision crimp diameter measurement, machined die retention plates with a simple die loading system, and a self-lubricating crimper head assist the operator in building factory-quality assemblies that meet Gates stringent crimping specifications.



### Key Features:

- Select hose and couplings to be crimped on control panel. Images of these components will then be displayed on tablet screen along with required dies.
- Precision crimps without looking up data, adjusting crimper settings or manually measuring final crimp OD.
- After crimp is complete, the crimp OD is automatically measured and displayed on screen.
- Crimper will not fully retract until the proper crimp OD has been achieved.
- Crimper head ratchets a few degrees after each retract to re-distribute grease.
- Controller is updated where wireless internet is available, or via thumb drive.
- Rear-mounted camera ensures coupling is in full contact with dies prior to crimping.

## LifeGuard™ Line-of-Sight Sleeving System



In the cramped quarters of an underground mine, workers are often in close proximity to high pressure hydraulic lines. In these conditions, a pinhole leak or burst could be catastrophic, resulting in personal injury, fluid injection and burns, electrical shock, or mechanical failure.

Gates LifeGuard sleeving system provides an extra measure of safety in line-of-sight hydraulic applications. It contains bursts up to 10,000 psi and pinhole leaks up to 5,000 psi at 250°F for up to five minutes. After redirecting the explosive force down the length of the hose, the LifeGuard sleeve disperses the energy and fluids at the hose ends via carefully designed “channel” clamps. The leaked fluid then allows for fast hose failure detection.

No other flexible connection safeguards operators, equipment, and the environment against hydraulic hose hazards like the LifeGuard sleeving system.

## Hydraulic Hose Assemblies for Every Purpose

In addition to Gates proprietary line of specialized hydraulic hoses designed for underground mining, Gates offers a complete line of hydraulic hoses, couplings, and adapters for every equipment need.

Gates MegaSys® hose line includes spiral wire and wire braid hoses that can be bent up to one-third SAE bend radius specifications. MegaSys hoses have constant working pressures (up to 8,000 psi) in all sizes, to make selection easier. Their flexibility allows for tighter routing and easier assembly, and extends hose life in bending, flexing applications. They are available with abrasion-resistant MegaTuff or XtraTuff covers. Combined with Gates MegaCrimp and GlobalSpiral couplings, MegaSys hose assemblies assure leak-free performance.

From large diameter hydraulic hoses for high capacity equipment, to hydraulic hoses that remain flexible even in frigid temperatures, Gates has the product to meet the most demanding need.



## Mine Master™ Industrial Hoses

Gates mining-specific industrial hoses are abrasion resistant and meet MSHA standards for safety and tough duty. They include:

- **Mine Master Air Drill 500 FR** – For heavy-duty, high pressure use in mining applications requiring wire-braided hose with an oil resistant tube and abrasion resistant cover.
- **Mine Master Air Drill 600 HT** – A high-pressure and high temperature air hose used in mining applications requiring a wire-braided hose with a high degree of hot air resistance.
- **Mine Master Longwall Emulsion 1000** – For flexible connections in high pressure water distribution and emulsion systems. The thick cover meets MSHA's self-extinguishing requirements, and is designed for the rough mining environment.
- **Mine Master Rock Dust 100SD** – For rock dusting applications in underground coal mines where limestone dust (or other inert rock-derived dusting agents) is sprayed in order to isolate exposed coal surfaces from potential heat or ignition sources.
- **Mine Master Spray 1000** – For high-pressure water service in underground mining applications and hot water washdown service.
- **Mine Master Air Drill 500** – For extra heavy duty, high pressure use in pneumatic mining applications requiring wire-braided hose with an oil resistant tube and abrasion resistant cover.



Gates also offers industrial hoses for a wide range of ancillary services such as chemical transfer, material handling, petroleum, steam, water, and multi-purpose applications.

## Power Transmission Belts and Drives

Gates V-belts and synchronous belts are designed for tough duty in a variety of mining power transmission applications.

### Poly Chain® GT® Carbon™ Synchronous Belts

Gates Poly Chain GT Carbon drive system is more than a match for roller chain drives in a wide range of power transmission applications. The belt's durable, polyurethane construction resists chemicals, oil, pollutants, and abrasion. The patented use of carbon fiber tensile cords provides increased horsepower ratings for greater power density, compactness, and flexibility. When combined with Gates Poly Chain GT2 sprockets, you have a lightweight, long-lasting, maintenance-free drive system that can replace roller chain size for size.

### Predator® Single and PowerBand® V-Belts

Predator V-belts are designed for heavy-duty, aggressive applications such as rock crushing equipment. They are built to take the punishment from high-horsepower motors, shock loads from sudden stops and starts, high heat, dirty operating environments, and contamination from oil and solvents—all conditions that can prevail in mining operations.

### Gates Complete Synchronous and V-Belt Line

Gates invented the V-belt in 1917, and continues to lead the world in the manufacture of innovative, high-quality synchronous and V-belt drives. There's a Gates belt drive for nearly any power transmission application. See the Gates Power Transmission Products Catalog for details.



# SERVICE AND SUPPORT SOLUTIONS

## Safe Hydraulics™ Program



With safety being a paramount concern in mining operations, Gates offers a comprehensive preventive maintenance program called Safe Hydraulics. The high pressures and temperatures associated with hydraulics, coupled with the confined working spaces in underground mines, make proper hose and fitting selection and maintenance critical.

Top quality Gates products, combined with the knowledge of how to use and maintain them, provide a wealth of benefits to mine operators, including:

- Reduced equipment downtime
- Reduced repair costs
- Efficient production
- Increased equipment life expectancy
- Improved spare parts inventory control
- Reduced capital outlays for premature new equipment purchases
- Better use of maintenance personnel
- Minimized safety hazards
- Reduced risk of liability due to spills

Visit [www.gates.com/safehydraulics](http://www.gates.com/safehydraulics) to obtain a complimentary Safe Hydraulics Guide with tips and information about:

- Preventive maintenance program components
- Workplace safety procedures
- Troubleshooting advice
- Proper hose selection
- Correct hose assembly
- Hose assembly installation

## Training & Education



It's no secret in the mining industry that finding qualified employees is becoming a formidable challenge. Unskilled or poorly trained workers expose mine operators to increased liability due to errors and accidents. Complicated product lines add to the problem.

That's why Gates offers Gates U – educational workshops about Gates hydraulic and industrial hose and their applications. These intensive workshops are held at Gates Customer Solutions Center in Denver, Colorado, where Gates engineers and scientists push the boundaries of fluid power knowledge.

### Hydraulic Products Workshop

The Hydraulic Products Workshop prepares participants to implement the correct Gates hydraulic solution for their application. This intensive workshop features:

- Safe Hydraulics Practices
- Hose Fabrication Principles
- Thread Identification Techniques
- Hose Routing and Installation Skills
- Cleanliness Standards
- Implementation of the Gates System
- Gates Customer Service
- Gates Marketing Programs
- Gates Web Application Tools
- Application Identification and Troubleshooting Skills
- Application of Product Knowledge to Sales
- Proper Crimping Techniques

### Industrial Hose Workshop

This workshop includes:

- Review of Safe Practices for Industrial Hose and Couplings
- Comprehensive Product Line Review
- Discussion of Key Product Features and Benefits
- Foundational Application Engineering Skills
- Proper Crimping Skills and Techniques
- Web Application Tools Overview
- Product Application and Market Specific Discussions
- Application of Product Knowledge to Sales
- CSC Tour Focused on Testing and Development of Gates Industrial Hose Products

### Fluid Power Level 1 Certification

Gates U participants who complete both the Hydraulic Products and Industrial Hose Workshops are eligible to take the Gates Fluid Power Level 1 Certification exam. This two-part assessment includes a comprehensive written exam and a hands-on demonstration of hose assembly skills practiced throughout the workshop week. A grade of 80 percent on the written exam is required to pass, as well as an accurate demonstration of hose assembly skills with a certified Gates instructor.

### Application Engineering & Technical Support

When a hydraulic hose fails on underground mining equipment, it could end up costing your operation thousands of dollars in downtime and lost production. Hydraulic hose failures can occur for a number of reasons, including improper hose and/or coupling selection, assembly, installation, and maintenance.

Gates has been setting the standard for hydraulic hose engineering and manufacturing for decades. Our experienced engineering, customer service, and field sales experts have the knowledge and expertise to diagnose hydraulic hose system problems and provide solutions that will get and keep your operations up and running.

# WARNINGS AND CAUTIONS

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

## WARNING

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

Never underestimate the power of a blown hydraulic assembly.



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** thermoplastic hose for **non-conductive** applications. For instance: cherry pickers. All other Gates hoses are electrically conductive.

### 6. DO NOT use hydraulic hose to transmit high pressure gases or steam.

### Follow Good Maintenance Practices

1. **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, inspection 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 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, making, installation and maintenance of hose assemblies. This catalog, Gates Corporation, the hydraulic equipment maker and the Society of Automotive Engineers Recommended Practice SAE J1273, have useful information about selecting, making, installing and servicing hydraulic hose

assemblies. For further information, please contact your local 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-to-date crimp data, visit our website at [www.gates.com/ecrimp](http://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.

### LIMITED WARRANTY

Gates Products are warranted to be free from defects in material and workmanship, and Gates will, at its option, replace or repair any Products proved defective in material or workmanship. This is the sole remedy for breach of warranty. ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, HEREBY ARE EXPRESSLY DISCLAIMED. LIABILITY FOR CONSEQUENTIAL, INCIDENTAL, SPECIAL, EXEMPLARY AND INDIRECT DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOST PROFITS, HEREBY IS EXPRESSLY EXCLUDED, REGARDLESS OF WHETHER SUCH DAMAGES WERE REASONABLY FORESEEABLE, OR WHETHER GATES HAD KNOWLEDGE THAT THEY COULD OCCUR. This Limited Warranty shall be void to the extent that any of the following, as determined by Gates, occurs: (a) improper installation of the Products, including any unauthorized installation of Products into vehicles; (b) improper usage or maintenance of the Product; (c) induction of defect by other products; (d) mishandling of the Products or other abuse; (e) improper matching with other applications; (f) collision, engine overheating or oil starvation, or product misapplication or contamination, including, but not limited to, contamination with oil or antifreeze; (g) the Products used for racing or competition; (h) any use not recommended in writing by Gates; or (i) any failure to follow use instructions.

# GETTING THE BEST SERVICE LIFE from Gates Hydraulic Hose + Assemblies

How long will a hydraulic hose assembly last? It depends on how it's used. This catalog and other Gates literature show the recommended limits for our assemblies (and also the hoses and couplings used to make assemblies). These limits include installation, maintenance and conditions of use. These limits MUST be followed or the assembly can fail resulting in personal injury or property damage. If you do not have this important information, you can get it at no cost from your local Gates distributor or Gates field representative.

Hose assemblies in use should be inspected regularly for leaks, kinks, cover blisters, gouges, abrasion and other damage. Damaged or worn assemblies must be replaced immediately. You can increase assembly life if you do the following:

**Hose Assembly Installation –** Hydraulic hose assembly installations should comply with hydraulic hose fitting and plumbing standards per ASME J1273 for the proper application of these assemblies.

**Working Pressure –** The hydraulic system pressure should not exceed the rated working pressure of the hose. Pressure surges or peaks exceeding the rated working pressure are destructive and must be taken into account when selecting a hose.

**Minimum Burst Pressure –** Burst pressures are pressures referred to in this catalog which were intended for destructive testing purposes and for design safety factors only.

**Temperature Range –** Do not expose hose to internal or external temperatures exceeding the recommended limits. Consult additional technical data when hydraulic fluids contain emulsions or solutions. The fluid manufacturer's recommended maximum operating temperature for any given fluid must not be exceeded, regardless of hose temperature range.

**Fluid Compatibility –** The hydraulic assembly (tube, cover, reinforcement and couplings) must be fluid compatible. The correct hose must be used because phosphate ester and petroleum-based hydraulic fluids have drastically different chemical characteristics. Many hoses are compatible with one or the other, but not all fluids. For example, Gates G2XH, MegaTech® and C5D hoses are capable of handling phosphate ester and petroleum-based hydraulic fluids.

**Minimum Bend Radius –** Do not bend or flex hose to a radius smaller than the minimum recommended and do not subject hose to tension or torque. This can place excessive stress on the reinforcement and severely reduce the ability of the hose to withstand pressure.

**Hose Size –** Hose size (inside diameter) must be capable of handling the required flow volume. Too small an I.D. for a given volume of flow results in excessive fluid pressure and heat generation which can result in tube damage.

**Hose Routing –** Restrain, protect or guide hose, with clamps if necessary, to minimize the risk of damage due to excessive flexing, whipping or contacting other moving parts or corrosives. Determine hose lengths and configurations that protect from abrasion, snagging or kinking and provide leak-resistant connections.

**Hose Length –** Correct hose length should include considerations for length changes under pressure, machine vibration and motion, and hose assembly routing.

**Hose Applications –** Select the proper hose for the application. Suction applications (Gates GMV or G4H) and special fluid or high temperature capabilities are among the applications requiring particular consideration and a specific hose. When additional information is required, contact your local Gates representative.

**NOTE: Do not use Gates hydraulic hose in place of permanent piping.**

## Hose Shelf Life

Storage environment, along with rubber materials can vary the shelf life limit. Shelf life is difficult to quantify as many variables affect the hose. **Proper storage precautions can result in three to five years shelf life.**

Beyond this time there can be significant service life decrease, depending on storage environment variables. Some variables are:






- *Temperature* — Hose should be stored in a cool, dry area never exceeding +100°F (+38°C). If stored below freezing, pre-warming may be required prior to handling, testing and placing into service.
- Direct sunlight, rain, heaters or being near electrical equipment
- Humidity and ozone
- Oil, solvents, corrosive materials or fumes
- Insects or rodents
- Radioactivity
- Space allowance and bends

Store hose in original container. Never stack hose too high, as its weight can crush hose at the bottom of the stack.

Gates recommends hose in extended storage be visually inspected and tested prior to use. Hose judged marginal should be replaced to avoid potential failure, property damage or bodily injury. Store hose on a first-in/first-out basis. Unusually long storage, or poor storage environment can deteriorate hose, reduce performance and may lead to premature failure.

Meets Flame Resistance Acceptance Designation "MSHA 2G"



Description	Product Number	 (in)	 (in)	 Dynamic WP (Max.psi) (1)	 Static WP (Max.psi) (2)	Min. Burst Pressure (psi)	MBR (in)	 (Lbs.)
12EFCPSXLL	4651-1718	3/4	1.24	6000	7000	24000	9.5	.90
16EFCPSXLL	4651-1704	1	1.53	6000	7000	24000	12.0	1.48
20EFCPS X 50FT	4651-1705	1 1/4	1.97	6000	7000	24000	16.5	2.79
20EFCPSXLL	4651-1701	1 1/4	1.97	6000	7000	24000	16.5	2.65
24EFCPS X 50FT	4651-1706	1 1/2	2.26	5000	6000	20000	20.0	3.26
24EFCPSXLL	4651-1702	1 1/2	2.26	5000	6000	20000	20.0	3.19
32EFCPS X 50FT	4651-1707	2	2.80	5000	6000	20000	25.0	4.67
32EFCPSXLL	4651-1703	2	2.80	5000	6000	20000	25.0	4.79

(1) Meets or exceeds SAE, ISO pressure requirements and EN 856 4SH dynamic working pressure.

(2) Static working pressure means very little pressure surging as, for example, in longwall internal hydraulic roof support systems.

**Recommended For:** High-pressure hydraulic lines in longwall mining equipment and roof-support systems; petroleum-based or water emulsion fluids. Meets pressure requirements of EN 856 4SH. Available in cut lengths and/or 121' to 200' continuous lengths.

**Temperature Range:** -40°F to +250°F (-40°C to +121°C). For water emulsions see Temperature Limits Table.

**Tube:** Black, oil resistant, synthetic rubber (NBR).

**Reinforcement:** Four layers of alternated, spiraled, high-tensile steel wire over a layer of fabric on -12 and -16 sizes - six layers of alternated, spiraled, high-tensile steel wire over a layer of fabric on -20, -24 and -32 sizes.

**Cover:** Black, oil and abrasion resistant, synthetic rubber (Neoprene). Yellow layline stripe.






**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GSM Couplings (-24 and -32)  
GlobalSpiral™ Couplings (-12, -16 and -20)

**Gates Proprietary Hose:** Superior to SAE and ISO Specifications.



Meets Flame Resistance Acceptance Designation "MSHA 2G"



Description	Product Number	 (in)	 (in)	 Dynamic WP (Max.psi) (1)	 Static WP (Max.psi) (2)	Min. Burst Pressure (psi)	MBR (in)	 (Lbs.)
12EFCPS-MTFXCTN	4651-1720	3/4	1.24	6000	7000	24000	9.5	1.00
16EFCPS-MTFXCTN	4651-1708	1	1.53	6000	7000	24000	12.0	1.54
20EFCPS-MTFXCTN	4651-1709	1 1/4	1.97	6000	7000	24000	16.5	2.64
24EFCPS-MTFXCTN	4651-1710	1 1/2	2.26	5000	6000	20000	20.0	3.14
32EFCPS-MTFXCTN	4651-1711	2	2.80	5000	6000	20000	25.0	4.86

(1) Meets or exceeds SAE, ISO and EN 856 4SH dynamic working pressure.

(2) Static working pressure means very little pressure surging as, for example, in longwall internal hydraulic roof support systems.

**Recommended For:** High-pressure hydraulic lines in longwall mining equipment and roof-support systems; petroleum-based or water emulsion fluids. Meets pressure requirements of EN 856 4SH. Available in carton packs.

**Temperature Range:** -40°F to +250°F (-40°C to +121°C). For water emulsions see Temperature Limits Table.

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

**Reinforcement:** Four layers of alternated, spiraled, high-tensile steel wire over a layer of fabric on -12 and -16 sizes - six layers of alternated, spiraled, high-tensile steel wire over a layer of fabric on -20, -24 and -32 sizes.






**Cover:** Black, oil and abrasion resistant MegaTuff® cover with yellow color layline. Also available in standard cover.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GSM Couplings (-24 and -32)  
GlobalSpiral™ Couplings (-12, -16 and -20)

**Gates Proprietary Hose:** Superior to SAE and ISO Specifications.

Meets Flame Resistance Acceptance Designation "MSHA 2G"



Description	Product Number	 (in)	 (in)	 Dynamic WP (Max.psi) (1)	 Static WP (Max.psi) (2)	Min. Burst Pressure (psi)	MBR (in)	 (Lbs.)
6EFLWXCTN	4651-0068	3/8	.80	4000	5000	16000	5.0	.48
8EFLWXLL	4651-1541	1/2	.94	4000	5000	16000	7.0	.59
12EFLWXLL	4651-1716	3/4	1.21	4000	5000	16000	9.5	.87
16EFLWXLL	4651-1717	1	1.50	4000	5000	16000	12.0	1.28
20EFLWXLL	4651-1542	1 1/4	1.85	4000	5000	16000	16.5	1.88
24EFLWXLL	4651-1543	1 1/2	2.11	3000	4000	12000	20.0	2.10
32EFLW X50FT	4651-0085	2	2.63	3000	4000	12000	30.0	2.89
32EFLWXLL	4651-1544	2	2.63	3000	4000	12000	30.0	2.93

(1) Impulse pressure rating.

(2) Static working pressure means very little pressure surging as, for example, in longwall internal hydraulic roof support systems.

**Recommended For:** High-pressure hydraulic lines in longwall mining equipment and roof-support systems; petroleum-based or water emulsion fluids. Available in 121' to 200' continuous lengths, carton packs and/or cut lengths. 12EFLW meets the static pressure requirements of longwall mining equipment. 16EFLW meets pressure requirements of longwall mining equipment and EN 856 4SP.

**Temperature Range:** -40°F to +250°F (-40°C to +121°C). For water emulsions see Temperature Limits Table.

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

**Reinforcement:** Four layers of alternated, spiraled, high-tensile steel wire over a layer of fabric.






**Cover:** Black, oil and abrasion resistant, synthetic rubber (Neoprene). Yellow layline stripe.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Couplings (-12, -16 and -20)  
GlobalSpiral™ Plus Couplings (-24 and -32)

**Gates Proprietary Hose:** Superior to SAE and ISO Specifications.

Meets Flame Resistance Acceptance Designation "MSHA 2G"



Description	Product Number	 (in)	 (in)	 Dynamic WP (Max.psi) (1)	 Static WP (Max.psi) (2)	Min. Burst Pressure (psi)	MBR (in)	 (Lbs.)
6EFLW-MTFXCTN	4651-0011	3/8	.80	4000	5000	16000	5.0	.51
8EFLW-MTFXCTN	4651-0012	1/2	.94	4000	5000	16000	7.0	.60
12EFLW-MTFXCTN	4651-1712	3/4	1.21	4000	5000	16000	9.4	.92
16EFLW-MTFXCTN	4651-1713	1	1.50	4000	5000	16000	12.0	1.32
20EFLW-MTFXCTN	4651-1804	1 1/4	1.85	4000	5000	16000	16.5	1.91
24EFLW-MTFXCTN	4651-1805	1 1/2	2.11	3000	4000	12000	20.0	2.10
32EFLW-MTFXCTN	4651-1806	2	2.63	3000	4000	12000	30.0	2.89

(1) Impulse pressure rating.

(2) Static working pressure means very little pressure surging as, for example, in longwall internal hydraulic roof support systems.

**Recommended For:** High-pressure hydraulic lines in longwall mining equipment and roof-support systems; petroleum-based or water emulsion fluids. Available in carton packs. 12EFLW meets the static pressure requirements of longwall mining equipment. 16EFLW meets pressure requirements of longwall mining equipment and EN 856 4SP.

**Temperature Range:** -40°F to +250°F (-40°C to +121°C). For water emulsions see Temperature Limits Table.

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

**Reinforcement:** Four layers of alternated, spiraled, high-tensile steel wire over a layer of fabric.






**Cover:** Black, oil and abrasion resistant MegaTuff® cover with yellow color layline. Also available in standard cover.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Couplings (-12, -16 and -20)  
GlobalSpiral™ Plus Couplings (-24 and -32)

**Gates Proprietary Hose:** Superior to SAE and ISO Specifications.

Meets Flame Resistance Acceptance Designation "MSHA 2G"  
Meets performance of British Coal Specification BCS174.



Description	Product Number	 (in)	 (in)	 Dynamic WP (Max.psi) (1)	 Static WP (Max.psi) (2)	Min. Burst Pressure (psi)	MBR (in)	 (Lbs.)
4CPBXREEL	4657-2548	1/4	.59	6525	11050	26100	4.0	.27
6CPBXREEL	4657-2549	3/8	.74	5500	9575	22000	5.0	.38
8CPBXREEL	4657-2550	1/2	.87	5250	6400	21000	6.0	.47
12CPBXREEL	4657-2551	3/4	1.15	4000	4950	16000	9.0	.69
16CPBPXREEL	4657-2552	1	1.48	3125	3775	12500	12.0	1.04
20CPBXCTN	4657-2553	1 1/4	1.87	2500	2900	10000	15.0	1.57
24CPB X 50FT	4657-4525	1 1/2	2.11	1300	1500	5200	20.0	1.59
32CPB X 50FT	4657-4526	2	2.62	1175	1350	4700	25.0	2.28

(1) This working pressure per BCS174 means frequent pressure surges. Qualification testing requires 100,000 impulse cycles at 133% of the dynamic working pressure.

(2) This working pressure means very little pressure surging. BCS174 says that the internal hydraulic circuit of a roof support system represents an almost steady-state condition with little or no dynamic loading, and hoses consequently will tolerate higher ratings. Determined by EN 853 2SN, it is the allowable working pressure under static load that approximates a 1:2.5 ratio to burst pressure. This is based on the EN specification burst pressures and not the higher Gates minimum burst pressures listed above.

**Recommended For:** High-pressure hydraulic lines in longwall mining equipment and roof-support systems; petroleum-based or water emulsion fluids. Available in reel pack, carton pack or cut length.

**Temperature Range:** -40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.

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

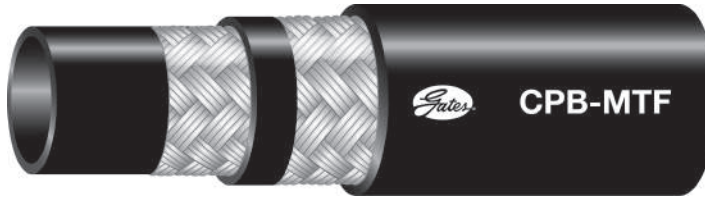
**Reinforcement:** Two braids of high-tensile steel wire.

**Cover:** Black, oil and abrasion resistant, synthetic rubber (Nitrile).

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Plus Couplings (-24 and -32)  
MegaCrimp® Couplings (-4, -6, -8, -12, -16 and -20)

**Gates Proprietary Hose:** Superior to SAE and ISO Specifications.

Meets Flame Resistance Acceptance Designation "MSHA 2G"  
Meets performance of British Coal Specification BCS174.



Description	Product Number	⊖ (in)	⊕ (in)	Ⓢ Dynamic WP (Max.psi) (1)	Ⓢ Static WP (Max.psi) (2)	Min. Burst Pressure (psi)	MBR (in)	Ⓢ (Lbs.)
4CPB-MTFXREEL	4657-1451	1/4	.59	6525	11050	26100	4.0	.27
6CPB-MTFXREEL	4657-1452	3/8	.74	5500	9575	22000	5.0	.38
8CPB-MTFXREEL	4657-1453	1/2	.87	5250	6400	21000	6.0	.46
10CPB-MTFXREEL	4657-4500	5/8	.99	4500	5500	18000	7.5	.55
12CPB-MTFXREEL	4657-1454	3/4	1.17	4000	4950	16000	9.0	.70
16CPB-MTFXREEL	4657-1455	1	1.48	3125	3775	12500	12.0	1.06
20CPB-MTFXCTN	4657-1456	1 1/4	1.87	2500	2900	10000	15.0	1.61
24CPB-MTFXCTN	4657-4426	1 1/2	2.11	1300	1500	5200	20.0	1.70
32CPB-MTFXCTN	4657-4427	2	2.62	1175	1350	4700	25.0	2.35

(1) This working pressure per BCS174 means frequent pressure surges. Qualification testing requires 100,000 impulse cycles at 133% of the dynamic working pressure.

(2) This working pressure means very little pressure surging. BCS174 says that the internal hydraulic circuit of a roof support system represents an almost steady-state condition with little or no dynamic loading, and hoses consequently will tolerate higher ratings. Determined by EN 853 2SN, it is the allowable working pressure under static load that approximates a 1:2.5 ratio to burst pressure. This is based on the EN specification burst pressures and not the higher Gates minimum burst pressures listed above.

**Recommended For:** High-pressure hydraulic lines in longwall mining equipment and roof-support systems; petroleum-based or water emulsion fluids. Available in reel pack, carton pack or cut length.

**Temperature Range:** -40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.

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

**Reinforcement:** Two braids of high-tensile steel wire.

**Cover:** Black, oil and abrasion resistant MegaTuff® cover. Also available in standard cover.

**Coupling Recommendation**  
(See Crimp Data Manual 35019 or E-crimp): GlobalSpiral™ Plus Couplings (-24 and -32)  
MegaCrimp® Couplings (-4, -6, -8, -12, -16 and -20)

**Gates Proprietary Hose:** Superior to SAE and ISO Specifications.



**MegaCrimp™ iLok™ - Male Couplings**

Description	Product Number	Hose I.D. (in)	L (in)	C (in)	M (in)
4G-4MILORX-TCX	7346-00425	1/4	2.70	1.673	.709
6G-6MILORX-TCX	7346-00345	3/8	2.85	1.720	.866
8G-8MILORX-TCX	7346-00335	1/2	3.09	1.693	.984

**GlobalSpiral™ iLok™ - Male Couplings**

Description	Product Number	Hose I.D. (in)	L (in)	C (in)	M (in)
12GS-12MILX-TCX	7346-00205	3/4	4.57	2.559	1.654
12GS-12MILX-TCX XBULK	7346-0020	3/4	4.57	2.559	1.654
16GS-16MILX-TCX	7346-00255	1	5.32	3.094	2.000
16GS-16MILX-TCX XBULK	7346-0025	1	5.32	3.094	2.000
20GS-20MILX-TCX	7346-00125	1 1/4	6.18	3.382	2.313
20GS-20MILX-TCX XBULK	7346-0012	1 1/4	6.18	3.382	2.313

**GlobalSpiral™ iLok™ - Female Couplings**

Description	Product Number	Hose I.D. (in)	L (in)	C (in)	M (in)
12GS-12FILOR-TCX	7346-00215	3/4	4.21	2.205	1.280
12GS-12FILOR-TCX XBULK	7346-0021	3/4	4.21	2.205	1.280
16GS-16FILOR-TCX	7346-00265	1	4.84	2.606	1.673
16GS-16FILOR-TCX XBULK	7346-0026	1	4.84	2.606	1.673
20GS-20FILOR-TCX	7346-00135	1 1/4	5.71	2.909	1.909

**GlobalSpiral™ Plus iLok™ - Male Couplings**

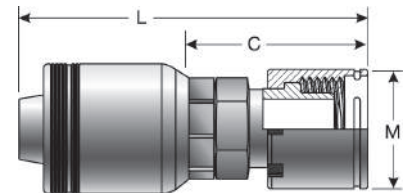
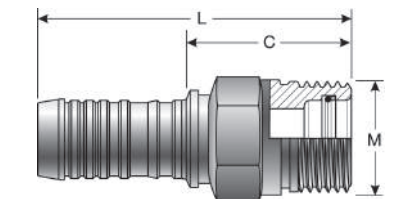
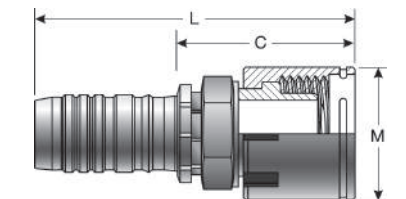
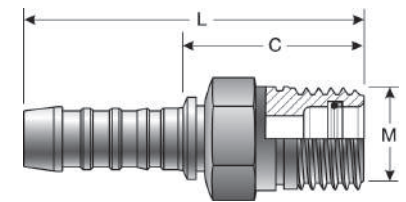
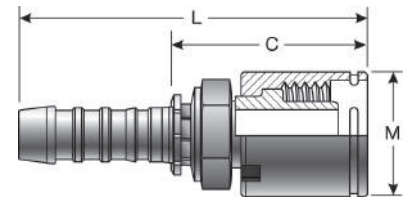
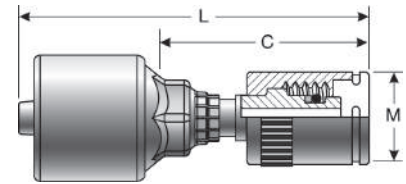
Description	Product Number	Hose I.D. (in)	L (in)	C (in)	M (in)
24GSP-24MILX-TCX	7346-00175	1 1/2	6.58	3.673	2.740
24GSP-24MILX-TCX XBULK	7346-0017	1 1/2	6.58	3.673	2.740
32GSP-32MILX-TCX	7346-00095	2	7.72	2.528	3.346
32GSP-32MILX-TCX XBULK	7346-0009	2	7.72	2.528	3.346

**GlobalSpiral™ Plus iLok™ - Female Couplings**

Description	Product Number	Hose I.D. (in)	L (in)	C (in)	M (in)
24GSP-24FILOR-TCX	7346-00185	1 1/2	6.10	3.205	2.224
24GSP-24FILOR-TCX XBULK	7346-0018	1 1/2	6.10	3.205	2.224
32GSP-32FILOR-TCX	7346-00105	2	7.01	3.39	2.776
32GSP-32FILOR-TCX XBULK	7346-0010	2	7.01	3.39	2.776

**GlobalSpiral™ MAX iLok™ - Male Couplings**

Description	Product Number	Hose I.D. (in)	Thread Size	H1 (mm)	L (in)	C (in)	M (in)	Weight (Lbs.)
24GSM-24MILX-TCX	7346-00005	1 1/2	56-5	55	8.01	4.27	2.740	5.12
24GSM-24MILX-TCX XBULK	7346-0000	1 1/2	56-5	55	8.01	4.27	2.740	5.14
32GSM-32MILX-TCX	7346-00055	2	70-5	70	8.98	4.50	3.346	9.00
32GSM-32MILX-TCX XBULK	7346-0005	2	70-5	70	8.98	4.50	3.346	9.00
40GSM-40MILX-TCX	7346-00445	2 1/2	100-6	—	11.65	4.646	4.685	13.39
48GSM-48MILX-TCX	7346-00305	3	100-6	—	12.52	4.764	5.394	24.46
48GSM-48MILX-TCX XBULK	7346-0030	3	100-6	—	12.52	4.764	5.394	24.46



Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

Standard Hydraulic Hose

Equipment and Parts

Product Information

**GlobalSpiral™ MAX iLok™ - Female Couplings**

Description	Product Number	Hose I.D. (in)	Thread Size	H1 (mm)	L (in)	C (in)	M (in)	Weight (Lbs.)
24GSM-24FILOR-TCX	7346-00015	1 1/2	56-5	57.2	7.22	3.48	2.224	4.37
24GSM-24FILOR-TCX XBULK	7346-0001	1 1/2	56-5	57.2	7.22	3.48	2.224	4.37
32GSM-32FILOR-TCX	7346-00065	2	70-5	76.2	8.46	3.98	2.776	8.13
32GSM-32FILOR-TCX XBULK	7346-0006	2	70-5	76.2	8.46	3.98	2.776	8.13
48GSM-48FILOR-TCX	7346-00315	3	110-6	112.0	12.36	4.606	4.390	21.26
48GSM-48FILOR-TCX XBULK	7346-0031	3	110-6	112.0	12.36	4.606	4.390	21.26

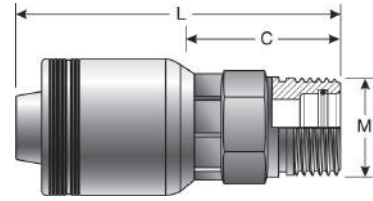
Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

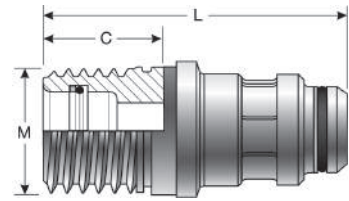
Standard Hydraulic Hose

Equipment and Parts



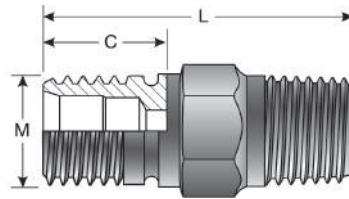
**Female iLok™ to Male Press-Lok® Super (Hex)**

Description	Product Number	Hose I.D. (in)	L (in)	M (in)
12FILOR-12MSHSP-TCX	7346-00225	3/4	3.07	1.280
12FILOR-12MSHSP-TCX XBULK	7346-0022	3/4	3.07	1.280
16FILOR-16MSHSP-TCX	7346-00275	1	4.06	1.673
16FILOR-16MSHSP-TCX XBULK	7346-0027	1	4.06	1.673
20FILOR-20MSHSP-TCX	7346-00145	1 1/4	4.29	1.909
24FILOR-24MSHSP-TCX	7346-00035	1 1/2	4.13	2.224
24FILOR-24MSHSP-TCX XBULK	7346-0003	1 1/2	4.13	2.224
32FILOR-32MSHSP-TCX	7346-00085	2	3.94	2.776
32FILOR-32MSHSP-TCX XBULK	7346-0008	2	3.94	2.776



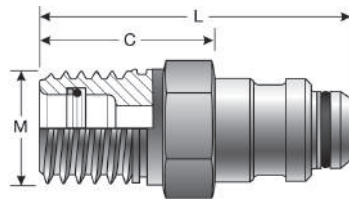
**Female iLok™ to Male Press-Lok®**

Description	Product Number	Hose I.D. (in)	L (in)
8FILOR-8MP-TCX	7346-00365	1/2	1.87
24FILOR-24MP-TCX	7346-00375	1 1/2	3.66
32FILOR-32MP-TCX	7346-00385	2	3.94



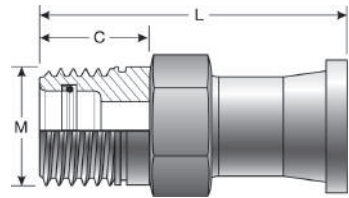
**Female iLok™ to Male Press-Lok® Super (Round)**

Description	Product Number	Hose I.D. (in)	L (in)	M (in)
12FILOR-12MSH-TCX	7346-00235	3/4	3.43	1.280
12FILOR-12MSH-TCX XBULK	7346-0023	3/4	3.43	1.280
16FILOR-16MSH-TCX	7346-00285	1	4.41	1.673
16FILOR-16MSH-TCX XBULK	7346-0028	1	4.41	1.673



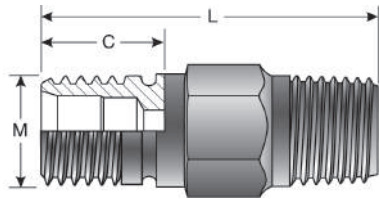
**Female iLok™ to Code 62 O-Ring Flange Heavy**

Description	Product Number	Hose I.D. (in)	L (in)
20FILOR-20FLH-TCX XBULK	7346-0015	1 1/4	4.70
24FILOR-24FLH-TCX XBULK	7346-0004	1 1/2	5.65



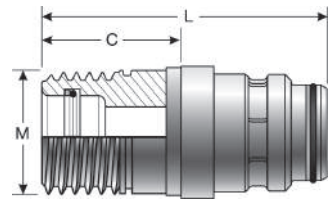
**Female iLok™ to Male Pipe Adapter**

Description	Product Number	Hose I.D. (in)	L (in)
4FIL-4MP-TCX	7346-00435	1/4	1.65
6FIL-6MP-TCX	7346-00355	3/8	1.67



**Female iLok™ to Press-Lok®**

Description	Product Number	Hose I.D. (in)	L (in)
32FILOR-32MSASP-TCX XBULK	7346-0011	2	3.86
32FILOR-MSASP-TCX	7346-00115	2	3.86



Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

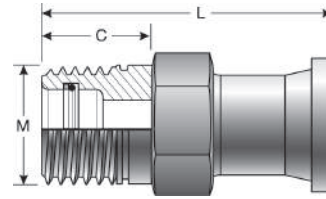
Standard Hydraulic Hose

Equipment and Parts

Product Information

### Female iLok™ to Caterpillar Style O-Ring Flange

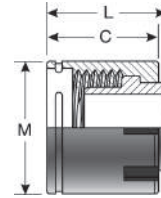
Description	Product Number	Hose I.D. (in)	L (in)
20FILOR-20FLC-TCX XBULK	7346-0016	1 1/4	4.70
24FILOR-24FLC-TCX XBULK	7346-0002	1 1/2	5.65



Specialized Mining Hose

### Male iLok™ Plug

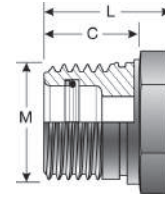
Description	Product Number	Hose I.D. (in)	L (in)
24MILX-PLUG-TCX	7346-00395	1 1/2	2.83
24MILX-PLUG-TCX XBULK	7346-0039	1 1/2	2.83
32MILX-PLUG-TCX	7346-00195	2	2.83
32MILX-PLUG-TCX XBULK	7346-0019	2	2.83



Specialized Mining Couplings, Adapters and Accessories

### Female iLok™ Plug

Description	Product Number	Hose I.D. (in)	L (in)
24FILOR-PLUG-TCX	7346-00405	1 1/2	2.25
24FILOR-PLUG-TCX XBULK	7346-0040	1 1/2	2.25
32FILOR-PLUG-TCX	7346-00415	2	2.52
32FILOR-PLUG-TCX XBULK	7346-0041	2	2.52



Standard Industrial Hose

Standard Hydraulic Hose

Equipment and Parts

**iLok™ Cable**

Description	Product Number	Hose I.D. (in)
ICL-12-16-20	7253-51295	3/4 - 1 1/4
ICL-12-16-20 XBULK	7253-5129	3/4 - 1 1/4
ICL-24-32	7253-51305	1 1/2 - 2
ICL-24-32 XBULK	7253-5130	1 1/2 - 2

**Miscellaneous**

Description	Product Number	Std. Pack
ILOK GREASE	7482-4011	10

Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

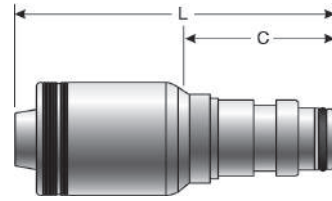
Standard Hydraulic Hose

Equipment and Parts



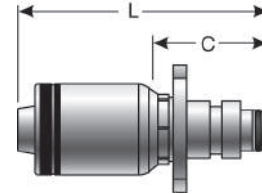
**GlobalSpiral™ MAX Pressure Press-Lok® Super - Male Couplings**

Description	Product Number	Hose I.D. (in)	L (in)	C (in)
24GSM-24PLSOR	7341-02615	1 1/2	7.13	3.39
32GSM-32PLSOR	7341-20505	2	8.06	3.57
32GSM-32PLSOR XBULK	7341-2050	2	8.06	3.57



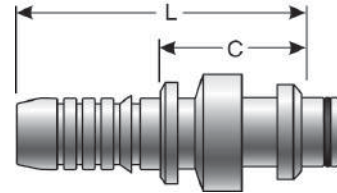
**GlobalSpiral™ MAX Pressure Press-Lok® Super - Male Couplings With Hammer Flange**

Description	Product Number	Hose I.D. (in)	L (in)	C (in)
32GSM-32PLSORHF	7341-20525	2	10.87	4.01



**GlobalSpiral™ Press-Lok® Super - Male Couplings**

Description	Product Number	Hose I.D. (in)	L (in)	C (in)
8GS-8PLSOR	7347-72865	1/2	3.21	1.73
12GS-12PLSOR	7347-72875	3/4	3.96	1.97
16GS-16PLSOR	7347-72885	1	5.00	2.76
20GS-20PLSOR	7347-72855	1 1/4	5.92	3.13



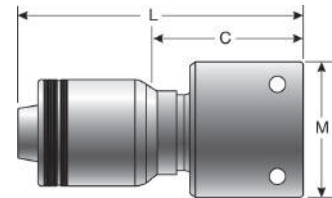
**GlobalSpiral™ Press-Lok® Super - Male Couplings With Hammer Flange**

Description	Product Number	Hose I.D. (in)	L (in)	C (in)
20GS-20PLSOR-HF XBULK	7347-7289	1 1/4	6.22	3.42

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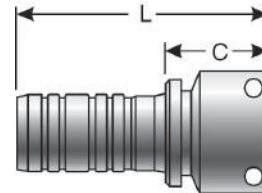
**GlobalSpiral™ MAX Pressure Press-Lok® Super - Female Couplings**

Description	Product Number	Hose I.D. (in)	L (in)	C (in)
24GSM-24FPLS	7341-02625	1 1/2	7.50	3.76
32GSM-32FPLS	7341-20515	2	8.50	4.01
32GSM-32FPLS XBULK	7341-2051	2	8.50	4.01



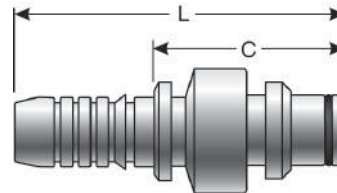
**GlobalSpiral™ Press-Lok® Super - Female Couplings**

Description	Product Number	Hose I.D. (in)	L (in)	C (in)
8GS-8FPLS	7347-72905	1/2	3.00	1.53
12GS-12FPLS	7347-72915	3/4	4.25	2.24
16GS-16FPLS	7347-72925	1	5.25	3.02
20GS-20FPLS	7347-72935	1 1/4	6.00	3.20



**GlobalSpiral™ Press-Lok® - Male Couplings**

Description	Product Number	Hose I.D. (in)	L (in)	C (in)
6GS-6PL	7347-72145	3/8	3.00	1.54
8GS-8PL	7347-72245	1/2	3.01	1.50
12GS-12PL	7347-72445	3/4	3.70	1.70
16GS-16PL	7347-72555	1	4.13	1.89
20GS-20PL	7347-72645	1 1/4	4.92	2.12

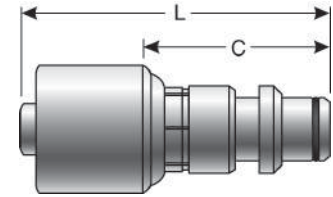


Meets or Exceeds SAE J1467.

**MegaCrimp® Press-Lok® - Male Couplings**

Description	Product Number	Hose I.D. (in)	L (in)	C (in)
4G-4PL	7100-14585	1/4	2.56	1.54
4G-4PL XBULK	7100-1458	1/4	2.56	1.54
4G-6PL	7100-14595	1/4	2.58	1.56
6G-6PL	7100-14605	3/8	2.64	1.54
6G-6PL XBULK	7100-1460	3/8	2.64	1.54
8G-8PL	7100-04615	1/2	3.01	1.54
8G-8PL XBULK	7100-0461	1/2	3.01	1.54
12G-12PL	7100-04625	3/4	3.56	1.56
12G-12PL XBULK	7100-0462	3/4	3.56	1.56
16G-16PL	7100-04635	1	4.13	1.90
16G-16PL XBULK	7100-0463	1	4.13	1.90
20G-20PL	7100-04645	1 1/4	4.25	1.93

Meets or Exceeds SAE J1467.



**GlobalSpiral™ Plus Press-Lok® - Male Couplings**

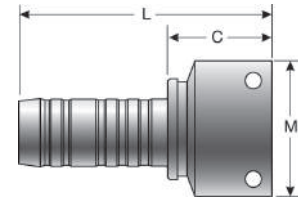
Description	Product Number	Hose I.D. (in)	L (in)	C (in)
24GSP-24PL	7347-72725	1 1/2	5.39	2.50
32GSP-32PL	7347-72795	2	6.14	2.52

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**GlobalSpiral™ Plus Press-Lok® - Female Couplings**

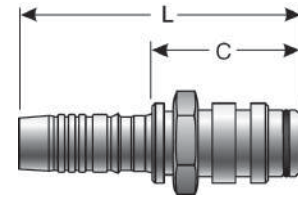
Description	Product Number	Hose I.D. (in)	L (in)	C (in)
32GSP-32FSA	7347-72815	2	5.91	2.28

Meets or Exceeds SAE J1467.



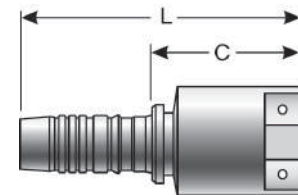
**GlobalSpiral™ Plus Press-Lok® Low-profile - Male Couplings**

Description	Product Number	Hose I.D. (in)	L (in)	C (in)
24GSP-24PLLM XBULK	7347-7966	1 1/2	5.91	3.01
32GSP-32PLLM XBULK	7347-7968	2	6.10	2.48



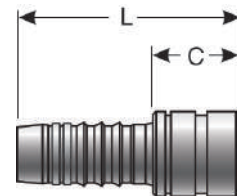
**GlobalSpiral™ Plus Press-Lok® Low-profile - Female Couplings**

Description	Product Number	Hose I.D. (in)	L (in)	C (in)
24GSP-24PLLF XBULK	7347-7967	1 1/2	5.67	2.77
32GSP-32PLLF XBULK	7347-7969	2	6.10	2.48



**Longwall Mine Emulsion Hose Coupling Press-Lok® Low-profile - Male Coupling**

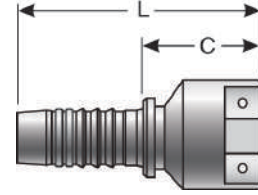
Description	Product Number	L (mm)	C (mm)
40LW-40PLLM XBULK	7107-1000	155.0	72.5



Product Information

**Longwall Mine Emulsion Hose Coupling Press-Lok® Low-profile - Female Coupling**

Description	Product Number	L (mm)	C (mm)
40LW-40PLLF XBULK	7107-1001	160.0	77.5



Specialized Mining Hose

**Longwall Mine Emulsion Hose Ferrule**

Description	Product Number	L (mm)
40LW1FXBULK	7107-1002	76.2



Specialized Mining Couplings, Adapters and Accessories

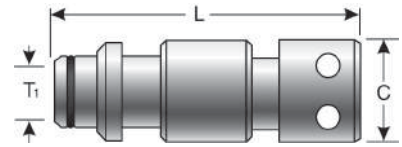
Standard Industrial Hose

Standard Hydraulic Hose

Equipment and Parts

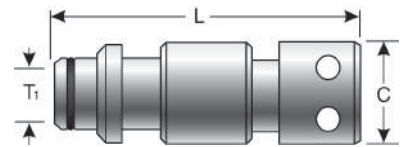
**Male Press-Lok® Super to Female Press-Lok®**

Description	Product Number	C (mm)	T1 (in)	L (mm)
20MSH-6FSA	7304-6040	70.0	1 1/4	81.0
20MSH-12FSA	7304-6041	70.0	1 1/4	81.0
20MSH-16FSA	7304-6299	70.0	1 1/4	90.0
20MSH-20FSA	7304-6042	70.0	1 1/4	100.0
20MSH-24FSA	7304-6037	70.0	1 1/4	116.0
20MSH-32FSA	7304-6038	70.0	1 1/4	116.0
24MSH-16FSA	7304-6039	82.0	1 1/2	128.0
24MSH-20FSA	7304-6043	82.0	1 1/2	128.0
24MSH-32FSA	7304-6045	82.0	1 1/2	128.0
32MSH-20FSA	7304-6044	95.0	2	128.0
32MSH-24FSA	7304-6046	95.0	2	132.0



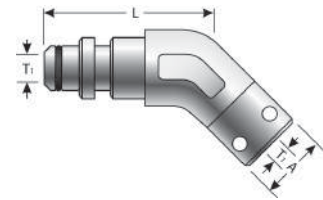
**Male Press-Lok® Super to Female Press-Lok® Super Straight**

Description	Product Number	C (mm)	T1 (in)	L (mm)
20MSH-20FSH XBULK	7304-6224	70.0	1 1/4	100.0
24MSH-20FSH	7304-6225	82.0	1 1/2	128.0



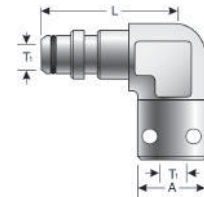
**Male Press-Lok® Super to Female Press-Lok® Super - 45°**

Description	Product Number	A (mm)	T1 (in)	L (mm)
8MSH-8FSH45	7304-6302	40	1/2	37.0
12MSH-12FSH45	7304-6342	65	3/4	55.0
16MSH-16FSH45	7304-6304	50	1	43.0



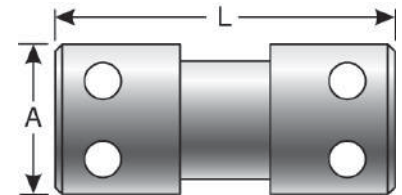
**Male Press-Lok® Super to Female Press-Lok® Super - 90°**

Description	Product Number	A (mm)	T1 (in)	L (mm)
12MSH-12FSH90	7304-6343	40	3/4	60.0
16MSH-16FSH90	7304-6300	55	1	65.0
20MSH-20FSH90	7304-6301	70	1 1/4	75.0
24MSH-24FSH90	7304-6221	82	1 1/2	90.0



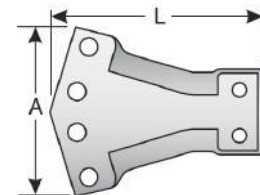
**Female Press-Lok® Super to Female Press-Lok® Super Straight**

Description	Product Number	Reference Coupling (in)	A (mm)	L (mm)
8FSH-8FSH	7304-6269	1/2 - 1/2	35	65.0
12FSH-12FSH	7304-6270	3/4 - 3/4	40	70.0
16FSH-16FSH	7304-6271	1 - 1	55	80.0
20FSH-20FSH	7304-6000	1 1/4 - 1 1/4	70	90.0
24FSH-24FSH	7304-6001	1 1/2 - 1 1/2	82	100.0
32FSH-32FSH	7304-6002	2 - 2	95	100.0



**Female Press-Lok® Super Y**

Description	Product Number	A (mm)	L (mm)
20-20-20FSHY	7304-6026	135	130.0
32-32-32FSHY	7304-6130	170	160.0



Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

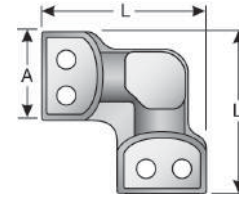
Standard Industrial Hose

Standard Hydraulic Hose

Equipment and Parts

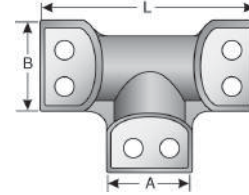
**Female Press-Lok® Super to Female Press-Lok® Super - 90°**

Description	Product Number	Reference Coupling (in)	A (mm)	L (mm)
8FSH-8FSH90	7304-6272	1/2 - 1/2	35	65.0
12FSH-12FSH90	7304-6273	3/4 - 3/4	40	70.0
16FSH-16FSH90	7304-6274	1 - 1	55	73.0
20FSH-20FSH90	7304-6010	1 1/4 - 1 1/4	70	78.0
24FSH-24FSH90	7304-6011	1 1/2 - 1 1/2	82	83.0
32FSH-32FSH90	7304-6012	2 - 2	95	88.0



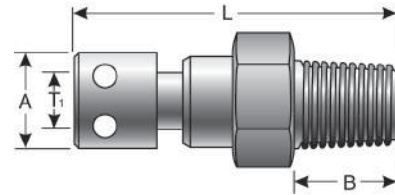
**Female Press-Lok® Super Tee**

Description	Product Number	Reference Coupling (in)	A (mm)	B (mm)	L (mm)
8-8-8FSHT	7304-6275	1/2 - 1/2 - 1/2	35	35	143.0
12-12-12FSHT	7304-6346	3/4 - 3/4 - 3/4	40	40	145.0
16-16-16FSHT	7304-6277	1 - 1 - 1	55	55	150.0
20-20-20FSHT	7304-6020	1 1/4 - 1 1/4 - 1 1/4	70	70	155.0
24-24-20FSHT	7304-6023	1 1/2 - 1 1/2 - 1 1/4	70	82	166.0
24-24-24FSHT	7304-6021	1 1/2 - 1 1/2 - 1 1/2	82	82	166.0
32-32-20FSHT	7304-6278	2 - 2 - 1 1/4	70	95	176.0
32-32-32FSHT	7304-6022	2 - 2 - 2	95	95	176.0



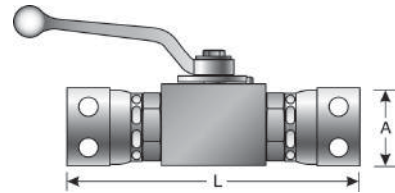
**Female Press-Lok® Super to NPTF Solid Male**

Description	Product Number	A (mm)	T1 (in)	Thread Size	L (mm)
8FSH-8MP	7304-6296	35	1/2	1/2-14	65.0
12FSH-12MP	7304-6297	40	3/4	3/4-14	70.0
16FSH-16MP	7304-6298	55	1	1-11 1/2	80.0
20FSH-20MP	7304-6080	70	1 1/4	1 1/4-11 1/2	90.0
24FSH-24MP	7304-6081	82	1 1/2	1 1/2-11 1/2	100.0
32FSH-32MP	7304-6082	95	2	2-11 1/2	112.0



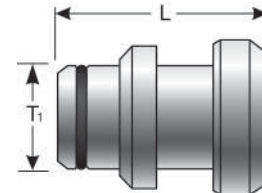
**Female Press-Lok® Super to Female Press-Lok® Super Ball Valve**

Description	Product Number	Reference Coupling (in)	A (mm)	L (mm)
20FSH-20FSHBV	7304-6100	1 1/4 - 1 1/4	70	206.0
24FSH-24FSHBV	7304-6101	1 1/2 - 1 1/2	83	250.0
32FSH-32FSHBV	7304-6102	2 - 2	95	259.0



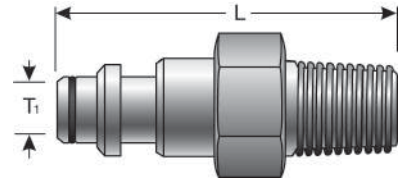
**Male Press-Lok® Super Plug**

Description	Product Number	T1 (in)	L (mm)
8MSH-PLUG	7304-6286	1/2	16.0
12MSH-PLUG	7304-6287	3/4	16.0
16MSH-PLUG	7304-6288	1	45.0
20MSH-PLUG	7304-6050	1 1/4	64.0
24MSH-PLUG	7304-6051	1 1/2	70.0
32MSH-PLUG	7304-6052	2	70.0



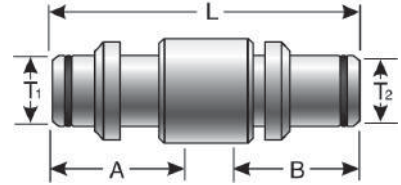
**Male Press-Lok® Super to NPTF Solid Male**

Description	Product Number	T1 (in)	Thread Size	L (mm)
8MSH-8MP	7304-6289	1/2	1/2-14	73.0
12MSH-12MP	7304-6290	3/4	3/4-14	85.0
16MSH-16MP	7304-6291	1	1-11 1/2	90.0
20MSH-20MP	7304-6060	1 1/4	1 1/4-11 1/2	96.0
24MSH-24MP	7304-6061	1 1/2	1 1/2-11 1/2	102.0
32MSH-32MP	7304-6062	2	2-11 1/2	105.0



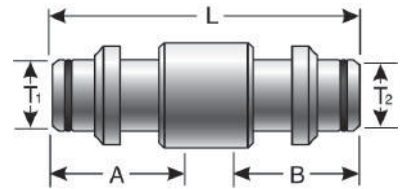
**Male Press-Lok® Super to Male Press-Lok®**

Description	Product Number	A (mm)	B (mm)	T1 (in)	T2 (in)	L (mm)
20MSH-24MSA XBULK	7304-6320	60	32	1 1/4	1 1/2	100.0



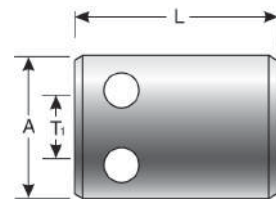
**Male Press-Lok® Super to Male Press-Lok® Super**

Description	Product Number	A (mm)	B (mm)	T1 (in)	T2 (in)	L (mm)
12MSH-12MSH	7304-6344	35	35	3/4	3/4	75.0
16MSH-12MSH	7304-6292	40	35	1	3/4	80.0
20MSH-12MSH XBULK	7304-6069	52	35	1 1/4	3/4	93.0
20MSH-16MSH	7304-6293	35	40	3/4	1	97.0
20MSH-20MSH	7304-6070	52	52	1 1/4	1 1/4	109.0
20MSH-24MSH	7304-6073	58	52	1 1/4	1 1/2	115.0
20MSH-32MSH	7304-6074	60	52	1 1/4	2	125.0
24MSH-20MSH	7304-6075	58	52	1 1/2	1 1/4	115.0
24MSH-24MSH	7304-6071	58	58	1 1/2	1 1/2	120.0
32MSH-20MSH	7304-6076	60	52	2	1 1/4	125.0
32MSH-24MSH	7304-6077	60	58	2	1 1/2	125.0
32MSH-32MSH	7304-6072	60	60	2	2	125.0



**Female Press-Lok® Super Cap**

Description	Product Number	A (mm)	T1 (in)	L (mm)
8FSH-CAP	7304-6279	35	1/2	65.0
12FSH-CAP	7304-6280	40	3/4	70.0
16FSH-CAP	7304-6281	55	1	80.0
20FSH-CAP	7304-6030	70	1 1/4	90.0
24FSH-CAP	7304-6031	82	1 1/2	100.0
32FSH-CAP	7304-6032	95	2	100.0



Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

Standard Hydraulic Hose

Equipment and Parts



Product Information

### Staple

Description	Product Number	Reference Coupling (in)
8SHS STAPLE	7304-6087	1/2
12SHS STAPLE	7304-6088	3/4
16SHS STAPLE	7304-6089	1
20SHS STAPLE	7304-6090	1 1/4
24SHS STAPLE	7304-6091	1 1/2
32SHS STAPLE	7304-6092	2



Specialized Mining Hose

### O-Ring

Description	Product Number	Reference Coupling (in)
8 SHOR O-RING	7304-6113	1/2
12 SHOR O-RING	7304-6114	3/4
16 SHOR O-RING	7304-6120	1
20 SHRO O-RING	7304-6110	1 1/4
24 SHRO O-RING	7304-6111	1 1/2
32 SHOR O-RING	7304-6112	2



Specialized Mining Couplings, Adapters and Accessories

### Back-Up Ring

Description	Product Number	Reference Coupling (in)
8 SHBR BACK-UP RING	7304-6118	1/2
12 SHBR BACK-UP RING	7304-6119	3/4
16 SHBR BACK-UP RING	7304-6122	1
20 SHBR BACK-UP RING	7304-6115	1 1/4
24 SHBR BACK-UP RING	7304-6116	1 1/2
32 SHBR BACK-UP RING	7304-6117	2



Standard Industrial Hose

Standard Hydraulic Hose

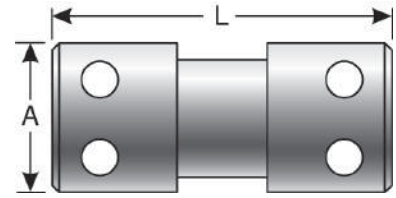
Equipment and Parts

Gates can make special designs, angles, bores, etc. Contact Gates Customer Service with your detailed needs.

**Female Press-Lok® to Female Press-Lok®**

Description	Product Number	Reference Coupling (in)	A (mm)	L (mm)
4FSA-4FSA	7304-5001	1/4 - 1/4	25	58.0
6FSA-6FSA	7304-5002	3/8 - 3/8	32	32.0
8FSA-8FSA	7304-5003	1/2 - 1/2	35	35.0
10FSA-10FSA	7304-5004	5/8 - 5/8	38	38.0
12FSA-12FSA	7304-5005	3/4 - 3/4	44	45.0
16FSA-16FSA	7304-5006	1 - 1	55	55.0
20FSA-20FSA	7304-5007	1 1/4 - 1 1/4	61	60.0
24FSA-24FSA	7304-5280	1 1/2 - 1 1/2	70	70.0
32FSA-32FSA	7304-5281	2 - 2	80	80.0
40FSA-40FSA	7304-5278	2 1/2 - 2 1/2	100	136.0
48FSA-48FSA	7304-5279	3 - 3	120	190.0

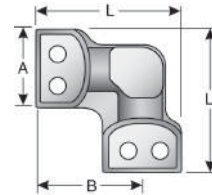
Meets or Exceeds SAE J1467.



**Female Press-Lok® to Female Press-Lok® - 90°**

Description	Product Number	Reference Coupling (in)	A (mm)	B (mm)	L (mm)
4FSA-4FSA90	7304-5008	1/4 - 1/4	32	37	53.0
6FSA-6FSA90	7304-5009	3/8 - 3/8	32	37	53.0
8FSA-8FSA90	7304-5010	1/2 - 1/2	38	40	59.0
12FSA-12FSA90	7304-5011	3/4 - 3/4	41	42	63.0
16FSA-16FSA90	7304-5012	1 - 1	55	50	80.0
20FSA-20FSA90	7304-5013	1 1/4 - 1 1/4	61	53	84.0
24FSA-24FSA90	7304-5283	1 1/2 - 1 1/2	70	67	102.0
32FSA-32FSA90	7304-5259	2 - 2	82	70	114.0

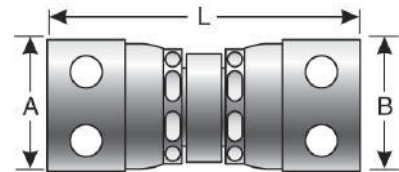
Meets or Exceeds SAE J1467.



**Female Press-Lok® Swivel to Female Press-Lok® Swivel**

Description	Product Number	Reference Coupling (in)	A (mm)	B (mm)	L (mm)
4FSAX-4FSAX	7304-5036	1/4 - 1/4	25	25	60.0
6FSAX-4FSAX	7304-5038	3/8 - 1/4	32	25	60.0
6FSAX-6FSAX	7304-5037	3/8 - 3/8	32	32	60.0
8FSAX-6FSAX	7304-5040	1/2 - 3/8	35	32	60.0
8FSAX-8FSAX	7304-5039	1/2 - 1/2	35	35	60.0
12FSAX-8FSAX	7304-5042	3/4 - 1/2	44	35	65.0
12FSAX-12FSAX	7304-5041	3/4 - 3/4	44	44	60.0
16FSAX-12FSAX	7304-5044	1 - 3/4	55	44	70.0
16FSAX-16FSAX	7304-5043	1 - 1	55	55	80.0
20FSAX-20FSAX	7304-5045	1 1/4 - 1 1/4	61	61	80.0

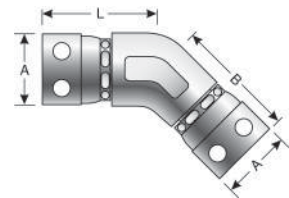
Meets or Exceeds SAE J1467.



**Female Press-Lok® Swivel to Female Press-Lok® Swivel - 45°**

Description	Product Number	Reference Coupling (in)	A (mm)	B (mm)	L (mm)
4FSAX-4FSAX45	7304-5066	1/4 - 1/4	25	39	45.0
6FSAX-6FSAX45	7304-5067	3/8 - 3/8	32	42	48.0
8FSAX-8FSAX45	7304-5068	1/2 - 1/2	35	42	50.0
12FSAX-12FSAX45	7304-5069	3/4 - 3/4	44	42	53.0
16FSAX-16FSAX45	7304-5070	1 - 1	55	55	68.0
20FSAX-20FSAX45	7304-5071	1 1/4 - 1 1/4	61	61	70.0

Meets or Exceeds SAE J1467.

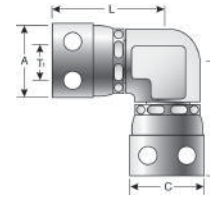


Gates can make special designs, angles, bores, etc. Contact Gates Customer Service with your detailed needs.

**Female Press-Lok® Swivel to Female Press-Lok® Swivel - 90°**

Description	Product Number	Reference Coupling (in)	A (mm)	B (mm)	C (mm)	T1 (in)	L (mm)
4FSAX-4FSAX90	7304-5046	1/4 - 1/4	25	45	25	1/4	58.0
6FSAX-6FSAX90	7304-5047	3/8 - 3/8	32	48	32	3/8	63.0
8FSAX-6FSAX90	7304-5049	1/2 - 3/8	35	50	32	1/2	66.0
8FSAX-8FSAX90	7304-5048	1/2 - 1/2	35	50	35	1/2	66.0
12FSAX-12FSAX90	7304-5050	3/4 - 3/4	44	53	44	3/4	72.0
16FSAX-16FSAX90	7304-5051	1 - 1	55	68	55	1	93.0
20FSAX-20FSAX90	7304-5052	1 1/4 - 1 1/4	61	70	61	1 1/4	99.0

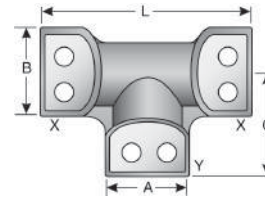
Meets or Exceeds SAE J1467.



**Female Press-Lok® Fixed Tee**

Description	Product Number	Reference Coupling X-X-Y (in)	A (mm)	B (mm)	C (mm)	L (mm)
6-6-6FSAT	7304-5015	3/8 - 3/8 - 3/8	32	53	37	73.0
8-8-6FSAT	7304-5017	1/2 - 1/2 - 3/8	32	59	40	78.0
8-8-8FSAT	7304-5016	1/2 - 1/2 - 1/2	38	59	40	78.0
12-12-6FSAT	7304-5019	3/4 - 3/4 - 3/8	32	63	42	84.0
12-12-8FSAT	7304-5020	3/4 - 3/4 - 1/2	38	63	42	84.0
12-12-12FSAT	7304-5018	3/4 - 3/4 - 3/4	41	63	42	84.0
16-16-6FSAT	7304-5022	1 - 1 - 3/8	32	78	50	100.0
16-16-8FSAT	7304-5023	1 - 1 - 1/2	38	78	50	100.0
16-16-12FSAT	7304-5024	1 - 1 - 3/4	41	78	50	100.0
16-16-16FSAT	7304-5021	1 - 1 - 1	55	78	50	100.0
20-20-6FSAT	7304-5026	1 1/4 - 1 1/4 - 3/8	32	84	53	107.0
20-20-8FSAT	7304-5027	1 1/4 - 1 1/4 - 1/2	38	84	53	107.0
20-20-12FSAT	7304-5028	1 1/4 - 1 1/4 - 3/4	41	84	53	107.0
20-20-16FSAT	7304-5029	1 1/4 - 1 1/4 - 1	55	84	53	107.0
20-20-20FSAT	7304-5025	1 1/4 - 1 1/4 - 1 1/4	61	84	53	107.0
24-24-6FSAT	7304-5430	1 1/2 - 1 1/2 - 3/8	32	102	67	134.0
24-24-8FSAT	7304-5431	1 1/2 - 1 1/2 - 1/2	35	102	67	134.0
24-24-12FSAT	7304-5432	1 1/2 - 1 1/2 - 3/4	45	102	67	134.0
24-24-16FSAT	7304-5433	1 1/2 - 1 1/2 - 1	55	102	67	134.0
24-24-20FSAT	7304-5434	1 1/2 - 1 1/2 - 1 1/4	60	102	67	134.0
24-24-24FSAT	7304-5285	1 1/2 - 1 1/2 - 1 1/2	70	102	67	134.0
32-32-16FSAT	7304-5435	2 - 2 - 1	55	111	70	146.0
32-32-20FSAT	7304-5436	2 - 2 - 1 1/4	60	111	70	146.0
32-32-24FSAT	7304-5437	2 - 2 - 1 1/2	70	111	70	146.0
32-32-32FSAT	7304-5286	2 - 2 - 2	82	111	82	140.0
40-40-32FSAT	7304-5438	2 1/2 - 2 1/2 - 2	90	190	145	320.0
40-40-40FSAT	7304-5439	2 1/2 - 2 1/2 - 2 1/2	100	210	160	320.0
48-48-32FSAT	7304-5440	3 - 3 - 2	90	220	175	360.0
48-48-48FSAT	7304-5441	3 - 3 - 3	170	240	180	360.0

Meets or Exceeds SAE J1467.



Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

Standard Hydraulic Hose

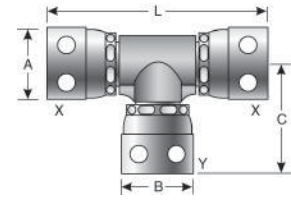
Equipment and Parts

Gates can make special designs, angles, bores, etc. Contact Gates Customer Service with your detailed needs.

### Female Press-Lok® Swivel Tee

Description	Product Number	Reference Coupling X-X-Y (in)	A (mm)	B (mm)	C (mm)	L (mm)
4-4-4FSAXT	7304-5053	1/4 - 1/4 - 1/4	25	25	45	90.0
6-6-6FSAXT	7304-5054	3/8 - 3/8 - 3/8	32	32	48	86.0
8-8-6FSAXT	7304-5056	1/2 - 1/2 - 3/8	35	32	50	100.0
8-8-8FSAXT	7304-5055	1/2 - 1/2 - 1/2	35	35	50	100.0
8-8-12FSAXT	7304-5057	1/2 - 1/2 - 3/4	35	44	53	106.0
12-12-6FSAXT	7304-5059	3/4 - 3/4 - 3/8	44	32	53	84.0
12-12-8FSAXT	7304-5060	3/4 - 3/4 - 1/2	44	35	53	84.0
12-12-12FSAXT	7304-5058	3/4 - 3/4 - 3/4	44	44	53	84.0
12-12-16FSAXT	7304-5344	3/4 - 3/4 - 1	60	60	78	136.0
16-8-16FSAXT	7304-5062	1 - 1/2 - 1	55	35	59	136.0
16-12-16FSAXT	7304-5063	1 - 3/4 - 1	55	44	59	136.0
16-16-6FSAXT	7304-5339	1 - 1 - 3/8	55	32	59	136.0
16-16-16FSAXT	7304-5061	1 - 1 - 1	55	55	59	136.0
20-10-20FSAXT	7304-5065	1 1/4 - 5/8 - 1 1/4	61	38	53	107.0
20-20-6FSAXT	7304-5345	1 1/4 - 1 1/4 - 3/8	60	32	62	140.0
20-20-8FSAXT	7304-5346	1 1/4 - 1 1/4 - 1/2	60	35	62	140.0
20-20-12FSAXT	7304-5312	1 1/4 - 1 1/4 - 3/4	61	44	62	140.0
20-20-16FSAXT	7304-5347	1 1/4 - 1 1/4 - 1	60	60	71	140.0
20-20-20FSAXT	7304-5064	1 1/4 - 1 1/4 - 1 1/4	61	61	70	140.0

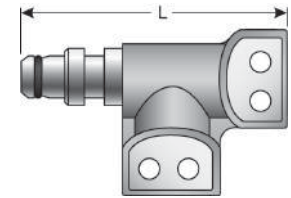
Meets or Exceeds SAE J1467.



### Male Press-Lok® Adapter to Female Press-Lok® Adapter T

Description	Product Number	Reference Coupling (in)	L (mm)
6MSA-6-6FSAT	7304-5367	3/8 - 3/8 - 3/8	84.0
8MSA-8-8FSAT	7304-5368	1/2 - 1/2 - 1/2	93.0

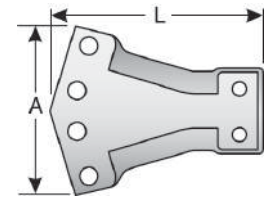
Meets or Exceeds SAE J1467.



### Female Press-Lok® Y

Description	Product Number	Reference Coupling (in)	A (mm)	L (mm)
6-6-6FSAY	7304-5030	3/8 - 3/8 - 3/8	62	83.0

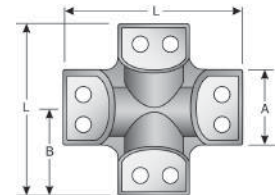
Meets or Exceeds SAE J1467.



### Female Press-Lok® Cross

Description	Product Number	Reference Coupling (in)	A (mm)	B (mm)	L (mm)
4-4-4FSAC	7304-5685	1/4 - 1/4 - 1/4 - 1/4	32	38	75.0
6-6-6-6FSAC	7304-5031	3/8 - 3/8 - 3/8 - 3/8	32	38	75.0
8-8-8-8FSAC	7304-5032	1/2 - 1/2 - 1/2 - 1/2	38	40	80.0
12-12-12-12FSAC	7304-5033	3/4 - 3/4 - 3/4 - 3/4	41	40	80.0
16-16-16-16FSAC	7304-5034	1 - 1 - 1 - 1	55	50	100.0
20-20-20-20FSAC	7304-5035	1 1/4 - 1 1/4 - 1 1/4 - 1 1/4	61	53	106.0

Meets or Exceeds SAE J1467.

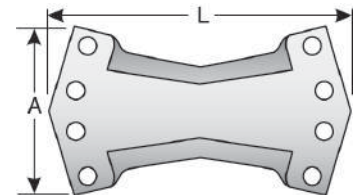


### Female Press-Lok® K Configuration

Description	Product Number	Reference Coupling (in)	A (mm)	L (mm)
6-6-6-6FSAK	7304-5184	3/8 - 3/8 - 3/8 - 3/8	63	110.0

Meets or Exceeds SAE J1467.

NOTE: Larger K sizes available. Contact Customer Service.

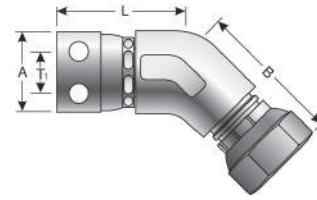


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**Female Press-Lok® Swivel to Female British Standard Pipe Parallel - 45°**

Description	Product Number	A (mm)	B (mm)	T1 (in)	Thread Size	L (mm)
4FSAX-4FBSPPX45	7304-5394	25	27	1/4	1/4-19	37.0
6FSAX-6FBSPPX45	7304-5395	32	29	3/8	3/8-19	37.0
8FSAX-8FBSPPX45	7304-5396	35	33	1/2	1/2-14	37.0

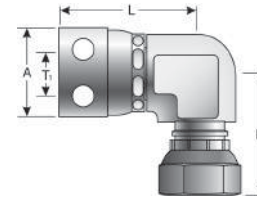
Meets or Exceeds SAE J1467.



**Female Press-Lok® Swivel to Female British Standard Pipe Parallel - 90°**

Description	Product Number	A (mm)	B (mm)	T1 (in)	Thread Size	L (mm)
4FSAX-4FBSPPX90	7304-5397	25	43	1/4	1/4-19	31.0
6FSAX-6FBSPPX90	7304-5398	32	42	3/8	3/8-19	35.0
8FSAX-8FBSPPX90	7304-5399	35	45	1/2	1/2-14	40.0
12FSAX-12FBSPPX90	7304-5650	45	58	3/4	3/4-14	58.0
16FSAX-16FBSPPX90	7304-5651	60	65	1	1-11	67.0
20FSAX-20FBSPPX90	7304-5652	60	68	1 1/4	1 1/4-11	72.0

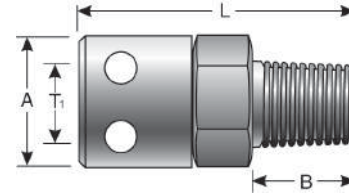
Meets or Exceeds SAE J1467.



**Female Press-Lok® to NPTF Solid Male**

Description	Product Number	A (mm)	B (mm)	T1 (in)	Thread Size	L (mm)
24FSAX-24MP	7304-5338	80	25.4	1 1/2	1 1/2-11 1/2	74.9
32FSAX-32MP	7304-5337	80	25.4	2	2-11 1/2	74.9

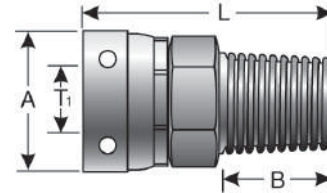
Meets or Exceeds SAE J1467.



**Female Press-Lok® Swivel to NPTF Solid Male**

Description	Product Number	A (mm)	B (mm)	T1 (in)	Thread Size	L (mm)
4FSAX-2MP	7304-5356	25	15	1/4	1/8-27	51.0
4FSAX-4MP	7304-5094	25	15	1/4	1/4-18	51.0
4FSAX-6MP	7304-5095	25	15	1/4	3/8-18	51.0
6FSAX-2MP	7304-5640	32	15	3/8	1/8-27	51.0
6FSAX-4MP	7304-5313	32	15	3/8	1/4-18	51.0
6FSAX-6MP	7304-5096	32	15	3/8	3/8-18	51.0
6FSAX-8MP	7304-5097	32	19	3/8	1/2-14	56.0
8FSAX-8MP	7304-5099	35	19	1/2	1/2-14	58.0
8FSAX-12MP	7304-5314	35	19	1/2	3/4-14	58.0
12FSAX-8MP	7304-5315	44	19	3/4	1/2-14	60.0
12FSAX-12MP	7304-5100	44	19	3/4	3/4-14	60.0
12FSAX-16MP	7304-5357	44	24	3/4	1-11 1/2	65.0
16FSAX-12MP	7304-5359	55	19	1	3/4-14	76.0
16FSAX-16MP	7304-5101	55	24	1	1-11 1/2	81.0
16FSAX-20MP	7304-5641	55	25	1	1 1/4-11 1/2	82.0
16FSAX-24MP	7304-5642	55	26	1	1 1/2-11 1/2	82.0
20FSAX-16MP	7304-5643	61	24	1 1/4	1-11 1/2	81.0
20FSAX-20MP	7304-5102	61	25	1 1/4	1 1/4-11 1/2	82.0

Meets or Exceeds SAE J1467.



Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

Standard Hydraulic Hose

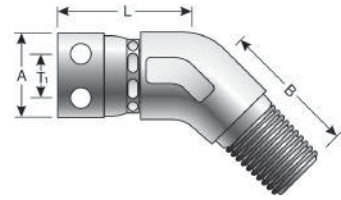
Equipment and Parts

Gates can make special designs, angles, bores, etc. Contact Gates Customer Service with your detailed needs.

**Female Press-Lok® Swivel to NPTF Solid Male - 45°**

Description	Product Number	A (mm)	B (mm)	T1 (in)	Thread Size	L (mm)
4FSAX-4MP45	7304-5127	25	28	1/4	1/4-18	45.0
6FSAX-6MP45	7304-5128	32	30	3/8	3/8-18	48.0
6FSAX-8MP45	7304-5129	32	32	3/8	1/2-14	48.0
8FSAX-6MP45	7304-5130	35	32	1/2	3/8-18	50.0
8FSAX-8MP45	7304-5131	35	34	1/2	1/2-14	50.0
8FSAX-12MP45	7304-5132	35	33	1/2	3/4-14	50.0
12FSAX-12MP45	7304-5133	44	38	3/4	3/4-14	53.0
16FSAX-16MP45	7304-5134	55	50	1	1-11 1/2	68.0
20FSAX-20MP45	7304-5135	61	57	1 1/4	1 1/4-11 1/2	67.0

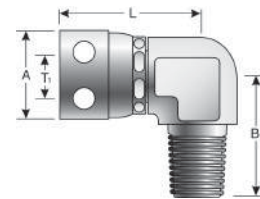
Meets or Exceeds SAE J1467.



**Female Press-Lok® Swivel to NPTF Solid Male - 90°**

Description	Product Number	A (mm)	B (mm)	T1 (in)	Thread Size	L (mm)
4FSAX-4MP90	7304-5316	25	31	1/4	1/4-18	44.0
4FSAX-6MP90	7304-5387	25	31	1/4	3/8-18	44.0
6FSAX-6MP90	7304-5109	32	34	3/8	3/8-18	44.0
6FSAX-8MP90	7304-5110	32	38	3/8	1/2-14	44.0
8FSAX-8MP90	7304-5112	35	40	1/2	1/2-14	48.0
8FSAX-12MP90	7304-5113	35	41	1/2	3/4-14	48.0
8FSAX-16MP90	7304-5111	35	36	1/2	1-18	50.0
12FSAX-8MP90	7304-5258	44	44	3/4	1/2-14	57.0
12FSAX-12MP90	7304-5114	44	44	3/4	3/4-14	57.0
16FSAX-12MP90	7304-5358	55	58	1	3/4-14	67.0
16FSAX-16MP90	7304-5115	55	58	1	1-11 1/2	67.0
20FSAX-20MP90	7304-5116	61	67	1 1/4	1 1/4-11 1/2	67.0

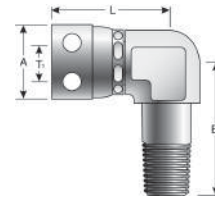
Meets or Exceeds SAE J1467.



**Female Press-Lok® Swivel to NPTF Solid Male - 90° Long Drop**

Description	Product Number	A (mm)	B (mm)	T1 (in)	Thread Size	L (mm)
4FSAX-4MP90L	7304-5317	25	51	1/4	1/4-18	45.0
6FSAX-6MP90L	7304-5318	32	45	3/8	3/8-18	48.0
8FSAX-8MP90L	7304-5319	35	48	1/2	1/2-14	48.0
12FSAX-12MP90L	7304-5320	44	64	3/4	3/4-14	53.0

Meets or Exceeds SAE J1467.



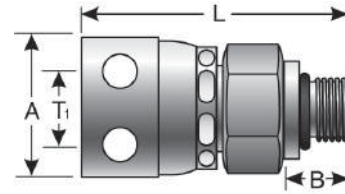


Gates can make special designs, angles, bores, etc. Contact Gates Customer Service with your detailed needs.

**Female Press-Lok® Swivel to Male O-Ring Boss Solid**

Description	Product Number	A (mm)	B (mm)	T1 (in)	Thread Size	L (mm)
4FSAX-4MB	7304-5083	25	13	1/4	7/16-20	49.0
4FSAX-5MB	7304-5369	25	13	1/4	1/2-20	49.0
4FSAX-6MB	7304-5084	25	13	1/4	9/16-18	49.0
6FSAX-4MB	7304-5370	32	13	3/8	7/16-20	49.0
6FSAX-6MB	7304-5085	32	13	3/8	9/16-18	49.0
6FSAX-8MB	7304-5086	32	15	3/8	3/4-16	54.0
8FSAX-6MB	7304-5087	35	13	1/2	9/16-18	52.0
8FSAX-8MB	7304-5088	35	15	1/2	3/4-16	54.0
8FSAX-10MB	7304-5089	35	16	1/2	7/8-14	57.0
8FSAX-12MB	7304-5375	35	18	1/2	1 1/6-12	59.0
12FSAX-10MB	7304-5371	44	16	3/4	7/8-14	57.0
12FSAX-12MB	7304-5090	44	18	3/4	1 1/16-12	57.0
12FSAX-16MB	7304-5091	44	20	3/4	1 5/16-12	59.0
12FSAX-20MB	7304-5372	44	20	3/4	1 5/8-12	59.0
12FSAX-24MB	7304-5373	44	23	3/4	1 7/8-12	62.0
16FSAX-12MB	7304-5260	60	18	1	1 1/16-12	74.0
16FSAX-16MB	7304-5092	60	20	1	1 5/16-12	76.0
20FSAX-16MB	7304-5374	60	20	1 1/4	1 5/16-12	73.0
20FSAX-20MB	7304-5093	60	20	1 1/4	1 5/8-12	73.0
24FSAX-24MB	7304-5376	80	23	1 1/2	1 7/8-12	85.0
32FSAX-32MB	7304-5377	80	23	2	2 1/2-12	80.0

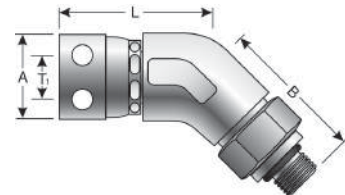
Meets or Exceeds SAE J1467.



**Female Press-Lok® Swivel to Male O-Ring Boss Solid - 45°**

Description	Product Number	A (mm)	B (mm)	T1 (in)	Thread Size	L (mm)
4FSAX-4MB45	7304-5117	25	30	1/4	7/16-20	45.0
4FSAX-6MB45	7304-5118	25	34	1/4	9/16-18	45.0
6FSAX-4MB45	7304-5361	32	32	3/8	7/16-20	48.0
6FSAX-6MB45	7304-5119	32	35	3/8	9/16-18	48.0
6FSAX-8MB45	7304-5120	32	35	3/8	3/4-16	48.0
8FSAX-6MB45	7304-5121	35	38	1/2	9/16-18	50.0
8FSAX-8MB45	7304-5122	35	38	1/2	3/4-16	50.0
8FSAX-10MB45	7304-5123	35	40	1/2	7/8-14	50.0
8FSAX-12MB45	7304-5362	35	46	1/2	1 1/16-12	50.0
12FSAX-12MB45	7304-5124	45	45	3/4	1 1/16-12	53.0
16FSAX-16MB45	7304-5125	60	53	1	1 5/16-12	68.0
20FSAX-20MB45	7304-5126	60	52	1 1/4	1 5/8-12	67.0

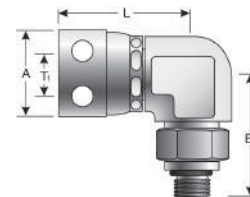
Meets or Exceeds SAE J1467.



**Female Press-Lok® Swivel to Male O-Ring Boss Solid - 90°**

Description	Product Number	A (mm)	B (mm)	T1 (in)	Thread Size	L (mm)
4FSAX-4MB90	7304-5103	25	32	1/4	7/16-20	45.0
4FSAX-6MB90	7304-5256	25	36	1/4	9/16-18	45.0
6FSAX-4MB90	7304-5254	32	34	3/8	7/16-20	48.0
6FSAX-6MB90	7304-5104	32	38	3/8	9/16-18	48.0
6FSAX-8MB90	7304-5105	32	40	3/8	3/4-16	48.0
8FSAX-6MB90	7304-5255	35	40	1/2	9/16-18	50.0
8FSAX-8MB90	7304-5106	35	42	1/2	3/4-16	50.0
8FSAX-10MB90	7304-5257	35	46	1/2	7/8-14	50.0
8FSAX-12MB90	7304-5261	35	51	1/2	1 1/16-12	50.0
12FSAX-12MB90	7304-5107	45	54	3/4	1 1/16-12	53.0
16FSAX-16MB90	7304-5108	60	61	1	1 5/16-12	68.0
20FSAX-20MB90	7304-5265	60	65	1 1/4	1 5/8-12	67.0

Meets or Exceeds SAE J1467.



Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

Standard Hydraulic Hose

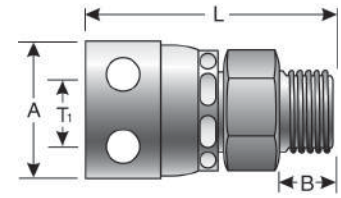
Equipment and Parts

Gates can make special designs, angles, bores, etc. Contact Gates Customer Service with your detailed needs.

**Female Press-Lok® Swivel to Male British Standard Pipe Parallel**

Description	Product Number	A (mm)	B (mm)	T1 (in)	Thread Size	L (mm)
4FSAX-4MBSPP	7304-5072	25	9	1/4	1/4-19	45.5
4FSAX-6MBSPP	7304-5365	25	10	1/4	3/8-19	45.5
6FSAX-4MBSPP	7304-5605	32	12	3/8	1/4-19	51.0
6FSAX-6MBSPP	7304-5073	32	10	3/8	3/8-19	47.0
6FSAX-8MBSPP	7304-5074	32	13	3/8	1/2-14	52.0
8FSAX-6MBSPP	7304-5075	35	10	1/2	3/8-19	49.5
8FSAX-8MBSPP	7304-5076	35	13	1/2	1/2-14	52.5
8FSAX-10MBSPP	7304-5606	35	16	1/2	5/8-14	56.0
8FSAX-12MBSPP	7304-5391	35	14	1/2	3/4-14	56.0
8FSAX-16MBSPP	7304-5393	35	17	1/2	1-11	58.0
10FSAX-10MBSPP	7304-5600	38	16	5/8	5/8-14	56.0
12FSAX-8MBSPP	7304-5392	45	13	3/4	1/2-14	56.0
12FSAX-12MBSPP	7304-5077	45	14	3/4	3/4-14	56.0
12FSAX-16MBSPP	7304-5078	45	16.5	3/4	1-11	56.0
16FSAX-12MBSPP	7304-5079	60	14	1	3/4-14	72.0
16FSAX-16MBSPP	7304-5080	60	16.5	1	1-11	72.5
16FSAX-20MBSPP	7304-5607	55	20	1	1 1/4-11	69.0
20FSAX-16MBSPP	7304-5081	60	16.5	1 1/4	1-11	76.0
20FSAX-20MBSPP	7304-5082	60	19	1 1/4	1 1/4-11	76.0
20FSAX-24MBSPP	7304-5608	55	22	1 1/4	1 1/2-11	71.0

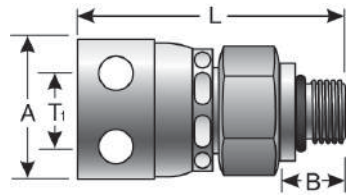
Meets or Exceeds SAE J1467.



**Female Press-Lok® Swivel to Male BSP O-Ring**

Description	Product Number	A (mm)	B (mm)	T1 (in)	Thread Size	L (mm)
4FSAX-4MBSPPOR	7304-5660	25	15	1/4	1/4-19	51.0
6FSAX-6MBSPPOR	7304-5661	32	17	3/8	7/16-20	53.0
6FSAX-8MBSPPOR	7304-5662	32	19	3/8	1/2-14	58.0
8FSAX-6MBSPPOR	7304-5663	35	17	1/2	7/16-20	56.0
8FSAX-8MBSPPOR	7304-5664	35	19	1/2	1/2-14	58.0
8FSAX-12MBSPPOR	7304-5665	35	24	1/2	3/4-14	67.0
8FSAX-16MBSPPOR	7304-5666	35	26	1/2	9/16-18	72.0
12FSAX-8MBSPPOR	7304-5667	45	19	3/4	1/2-14	66.0
12FSAX-12MBSPPOR	7304-5668	45	24	3/4	3/4-14	66.0
12FSAX-16MBSPPOR	7304-5669	45	26	3/4	1-11	72.0
16FSAX-12MBSPPOR	7304-5670	60	24	1	3/4-14	81.0
16FSAX-16MBSPPOR	7304-5671	60	26	1	1-11	81.0
16FSAX-20MBSPPOR	7304-5672	60	26	1	1 1/4-11	85.0
20FSAX-16MBSPPOR	7304-5673	60	26	1 1/4	1-11	82.0
20FSAX-20MBSPPOR	7304-5674	60	26	1 1/4	1 1/4-11	82.0

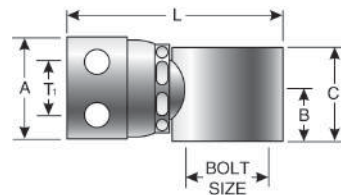
Meets or Exceeds SAE J1467.



**Female Press-Lok® Swivel to Female Banjo Fitting**

Description	Product Number	A (mm)	B (mm)	C (mm)	T1 (in)	L (mm)	Bolt Size
4FSAX-4BJ	7304-5402	25	14	22	1/4	40.0	1/4 BSP
6FSAX-6BJ	7304-5220	32	16.5	29	3/8	44.0	3/8 BSP
8FSAX-6BJ	7304-5620	35	17.5	29	1/2	45.0	3/8 BSP
8FSAX-8BJ	7304-5221	35	17.5	32	1/2	47.0	1/2 BSP
12FSAX-12BJ	7304-5622	45	24	44.5	3/4	52.0	3/4 BSP
16FSAX-16BJ	7304-5623	60	30	51	1	96.0	1 BSP
20FSAX-20BJ	7304-5624	60	32	63.5	1 1/4	96.0	1 1/4 BSP

Meets or Exceeds SAE J1467.

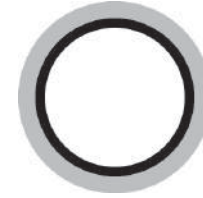


Gates can make special designs, angles, bores, etc. Contact Gates Customer Service with your detailed needs.

**Press-Lok® Banjo Washer**

Description	Product Number	Reference Coupling (in)
4BW	7304-5401	1/4
6BW	7304-5224	3/8
8BW	7304-5225	1/2

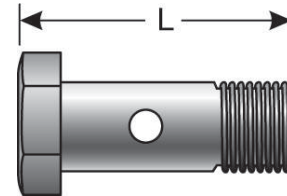
Meets or Exceeds SAE J1467.



**Press-Lok® Banjo Bolt BSP Thread**

Description	Product Number	Thread Size	L (mm)
4BB	7304-5400	1/4-19	36.0
6BB	7304-5222	3/8-19	40.0
8BB	7304-5223	1/2-14	50.0
12BB	7304-5406	3/4-14	64.0
16BB	7304-5407	1-11	75.0
20BB	7304-5408	1 1/4-11	90.0

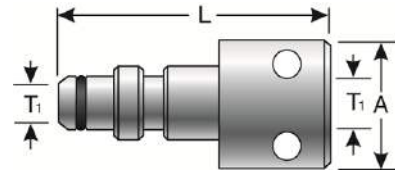
Meets or Exceeds SAE J1467.



**Male Press-Lok® to Female Press-Lok®**

Description	Product Number	A (mm)	T1 (in)	L (mm)
16MSA-12FSA	7304-6341	60	1	72.0

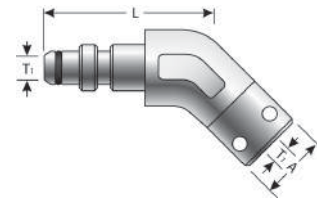
Meets or Exceeds SAE J1467.



**Male Press-Lok® to Female Press-Lok® - 45°**

Description	Product Number	A (mm)	T1 (in)	L (mm)
6MSA-6FSA45	7304-6336	32	3/8	37.0
8MSA-8FSA45	7304-6337	35	1/2	37.0
12MSA-12FSA45	7304-6339	45	3/4	44.0

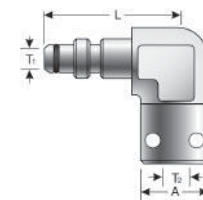
Meets or Exceeds SAE J1467.



**Male Press-Lok® to Female Press-Lok® - 90°**

Description	Product Number	A (mm)	T1 (in)	T2 (in)	L (mm)
6MSA-6FSA90	7304-5276	30	3/8	3/8	47.0
8MSA-8FSA90	7304-6338	35	1/2	1/2	51.0
12MSA-12FSA90	7304-6340	45	3/4	3/4	56.0

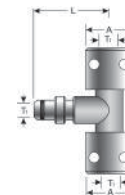
Meets or Exceeds SAE J1467.



**Male Press-Lok® to Female Press-Lok® to Female Press-Lok®**

Description	Product Number	A (mm)	T1 (in)	L (mm)
16MSA-16FSA-6FSA XBULK	7304-5688	55	1	41.0

Meets or Exceeds SAE J1467.



Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

Standard Hydraulic Hose

Equipment and Parts

Gates can make special designs, angles, bores, etc. Contact Gates Customer Service with your detailed needs.

**Male Press-Lok® to Female Press-Lok® Swivel**

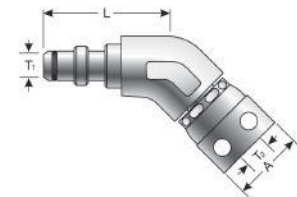
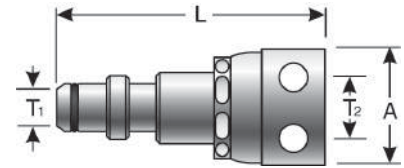
Description	Product Number	A (mm)	T1 (in)	T2 (in)	L (mm)
4MSA-4FSAX	7304-5560	25	1/4	1/4	65.0
4MSA-6FSAX	7304-5561	32	1/4	3/8	65.0
4MSA-8FSAX	7304-5562	35	1/4	1/2	65.0
6MSA-4FSAX	7304-5329	25	3/8	1/4	65.0
6MSA-6FSAX	7304-5563	32	3/8	3/8	65.0
6MSA-8FSAX	7304-5564	35	3/8	1/2	60.0
6MSA-12FSAX	7304-5573	45	3/8	3/4	60.0
6MSA-20FSAX	7304-5574	32	3/8	1 1/4	78.0
8MSA-4FSAX	7304-5349	25	1/2	1/4	65.0
8MSA-6FSAX	7304-5330	32	1/2	3/8	65.0
8MSA-8FSAX	7304-5385	35	1/2	1/2	60.0
8MSA-12FSAX	7304-5576	45	1/2	3/4	60.0
8MSA-16FSAX	7304-5577	35	1/2	1	72.0
8MSA-20FSAX	7304-5578	35	1/2	1 1/4	78.0
12MSA-6FSAX	7304-5579	32	3/4	3/8	70.0
12MSA-8FSAX	7304-5331	36	3/4	1/2	65.0
12MSA-12FSAX	7304-5554	45	3/4	3/4	70.0
12MSA-16FSAX	7304-5555	60	3/4	1	72.0
12MSA-20FSAX	7304-5556	60	3/4	1 1/4	78.0
16MSA-12FSAX	7304-5332	45	1	3/4	72.0
16MSA-16FSAX	7304-5557	60	1	1	72.0
16MSA-20FSAX	7304-5558	60	1	1 1/4	86.0
16MSA-24FSAX	7304-5559	60	1	1 1/2	90.0
16MSA-32FSAX	7304-5551	60	1	2	90.0
20MSA-12FSAX	7304-5333	45	1 1/4	3/4	78.0
20MSA-16FSAX	7304-5334	61	1 1/4	1	78.0
20MSA-20FSAX	7304-5552	61	1 1/4	1 1/4	78.0
20MSA-24FSAX	7304-5565	61	1 1/4	1 1/2	90.0
20MSA-32FSAX	7304-5553	61	1 1/4	2	90.0
24MSA-16FSAX	7304-5567	61	1 1/2	1	90.0
24MSA-20FSAX	7304-5568	70	1 1/2	1 1/4	90.0
24MSA-24FSAX	7304-5566	70	1 1/2	1 1/2	90.0
24MSA-32FSAX	7304-5550	70	1 1/2	2	90.0
32MSA-16FSAX	7304-5570	61	2	1	90.0
32MSA-20FSAX	7304-5571	70	2	1 1/4	90.0
32MSA-24FSAX	7304-5572	70	2	1 1/2	90.0
32MSA-32FSAX	7304-5569	70	2	2	90.0

Meets or Exceeds SAE J1467.

**Male Press-Lok® to Female Press-Lok® Swivel - 45°**

Description	Product Number	A (mm)	T1 (in)	T2 (in)	L (mm)
4MSA-4FSAX45	7304-6264	25	1/4	1/4	37.0
6MSA-4FSAX45	7304-5336	32	3/8	1/4	37.0
6MSA-6FSAX45	7304-5583	32	3/8	3/8	37.0
8MSA-6FSAX45	7304-5582	35	1/2	3/8	37.0
8MSA-8FSAX45	7304-5581	35	1/2	1/2	37.0
8MSA-12FSAX45	7304-6265	35	1/2	3/4	37.0
12MSA-12FSAX45	7304-5584	45	3/4	3/4	43.0
16MSA-16FSAX45	7304-5585	60	1	1	52.0
20MSA-20FSAX45	7304-5587	60	1 1/4	1 1/4	52.0

Meets or Exceeds SAE J1467.

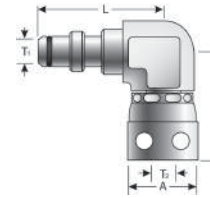


Gates can make special designs, angles, bores, etc. Contact Gates Customer Service with your detailed needs.

**Male Press-Lok® to Female Press-Lok® Swivel - 90°**

Description	Product Number	A (mm)	B (mm)	T1 (in)	T2 (in)	L (mm)
4MSA-4FSAX90	7304-5177	25	43	1/4	1/4	45.0
4MSA-6FSAX90	7304-5586	32	43	1/4	3/8	45.0
4MSA-8FSAX90	7304-5589	35	50	1/4	1/2	48.0
6MSA-4FSAX90	7304-5310	25	45	3/8	1/4	46.0
6MSA-6FSAX90	7304-5178	32	42	3/8	3/8	45.0
6MSA-8FSAX90	7304-5335	35	50	3/8	1/2	50.0
8MSA-4FSAX90	7304-5590	25	47	1/2	1/4	50.0
8MSA-6FSAX90	7304-5591	32	48	1/2	3/8	50.0
8MSA-8FSAX90	7304-5179	35	45	1/2	1/2	50.0
8MSA-12FSAX90	7304-5592	44	53	1/2	3/4	55.0
10MSA-10FSAX90	7304-5180	38	51	5/8	5/8	53.0
12MSA-8FSAX90	7304-5593	35	52	3/4	1/2	54.0
12MSA-12FSAX90	7304-5181	44	53	3/4	3/4	55.0
12MSA-16FSAX90	7304-5594	60	68	3/4	1	62.0
12MSA-20FSAX90	7304-5595	60	72	3/4	1 1/4	66.0
16MSA-12FSAX90	7304-5405	44	56	1	3/4	69.0
16MSA-16FSAX90	7304-5182	60	66	1	1	65.0
16MSA-20FSAX90	7304-5596	60	70	1	1 1/4	75.0
20MSA-12FSAX90	7304-5597	45	59	1 1/4	3/4	73.0
20MSA-16FSAX90	7304-5598	60	68	1 1/4	1	73.0
20MSA-20FSAX90	7304-5183	60	66	1 1/4	1 1/4	67.0
24MSA-24FSA90	7304-5308	80	85	1 1/2	1 1/2	85.0
32MSA-32FSA90	7304-5309	80	95	2	2	95.0

Meets or Exceeds SAE J1467.



Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

Standard Hydraulic Hose

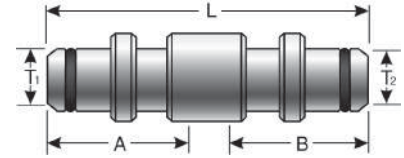
Equipment and Parts

Gates can make special designs, angles, bores, etc. Contact Gates Customer Service with your detailed needs.

**Male Press-Lok® to Male Press-Lok®**

Description	Product Number	A (mm)	B (mm)	T1 (in)	T2 (in)	L (mm)
4MSA-4MSA	7304-5136	26	26	1/4	1/4	56.0
6MSA-4MSA	7304-5321	26	26	3/8	1/4	56.0
6MSA-6MSA	7304-5137	26	26	3/8	3/8	56.0
6MSA-6MSA-72	7304-6347	26	26	3/8	3/8	72.0
8MSA-4MSA	7304-5322	26	26	1/2	1/4	56.0
8MSA-6MSA	7304-5143	26	26	1/2	3/8	56.0
8MSA-8MSA	7304-5138	26	26	1/2	1/2	56.0
10MSA-4MSA	7304-5323	26	26	5/8	1/4	56.0
10MSA-10MSA	7304-5139	26	26	5/8	5/8	56.0
12MSA-6MSA	7304-5324	26	26	3/4	3/8	56.0
12MSA-8MSA	7304-5325	26	26	3/4	1/2	56.0
12MSA-12MSA	7304-5140	26	26	3/4	3/4	56.0
16MSA-8MSA	7304-5326	32	26	1	1/2	61.0
16MSA-10MSA	7304-5144	32	26	1	5/8	62.0
16MSA-12MSA	7304-5145	32	26	1	3/4	61.0
16MSA-16MSA	7304-5141	32	32	1	1	66.0
20MSA-12MSA	7304-5327	32	26	1 1/4	3/4	61.0
20MSA-16MSA	7304-5146	32	32	1 1/4	1	66.0
20MSA-20MSA	7304-5142	32	32	1 1/4	1 1/4	66.0
24MSA-8MSA	7304-6267	36	26	1 1/2	1/2	70.0
24MSA-12MSA	7304-6268	36	26	1 1/2	3/4	70.0
24MSA-16MSA XBULK	7304-6305	36	32	1 1/2	1	76.0
24MSA-20MSA	7304-5380	36	36	1 1/2	1 1/4	74.0
24MSA-24MSA	7304-5288	36	36	1 1/2	1 1/2	78.0
32MSA-16MSA	7304-6266	36	32	2	1	76.0
32MSA-24MSA	7304-5290	36	36	2	1 1/2	78.0
32MSA-32MSA	7304-5289	36	36	2	2	78.0
40MSA-40MSA	7304-5287	65	65	2 1/2	2 1/2	140.0
48MSA-48MSA	7304-5291	70	70	3	3	150.0

Meets or Exceeds SAE J1467.



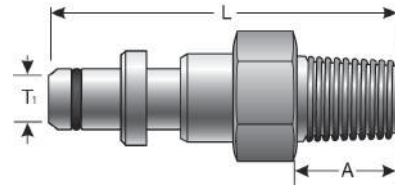


Gates can make special designs, angles, bores, etc. Contact Gates Customer Service with your detailed needs.

**Male Press-Lok® to NPTF Solid Male**

Description	Product Number	A (mm)	T1 (in)	Thread Size	L (mm)
4MSA-2MP	7304-5540	10	1/4	1/8-27	53.0
4MSA-4MP	7304-5153	15	1/4	1/4-18	53.0
4MSA-6MP	7304-5303	15	1/4	3/8-18	53.0
4MSA-12MP	7304-2541	19	1/4	3/4-14	58.0
6MSA-2MP	7304-5542	10	3/8	1/8-27	53.0
6MSA-4MP	7304-5154	15	3/8	1/4-18	53.0
6MSA-6MP	7304-5155	15	3/8	3/8-18	53.0
6MSA-8MP	7304-5156	19	3/8	1/2-14	53.0
6MSA-12MP	7304-5543	19	3/8	3/4-14	58.0
8MSA-4MP	7304-5544	15	1/2	1/4-18	58.0
8MSA-6MP	7304-5157	15	1/2	3/8-18	60.0
8MSA-8MP	7304-5158	19	1/2	1/2-14	60.0
8MSA-12MP	7304-5159	19	1/2	3/4-14	60.0
8MSA-16MP	7304-5545	24	1/2	1-11 1/2	60.0
12MSA-6MP	7304-5546	15	3/4	3/8-18	64.0
12MSA-8MP	7304-5547	19	3/4	1/2-14	64.0
12MSA-12MP	7304-5160	19	3/4	3/4-14	64.0
12MSA-16MP	7304-5161	24	3/4	1-11 1/2	70.0
16MSA-12MP	7304-5306	19	1	3/4-14	74.0
16MSA-16MP	7304-5162	24	1	1-11 1/2	79.0
16MSA-20MP	7304-5548	25	1	1 1/4-11 1/2	79.0
20MSA-20MP	7304-5163	25	1 1/4	1 1/4-11 1/2	79.0
20MSA-24MP XBULK	7304-5531	26	1 1/4	1 1/2-11 1/2	80.0
24MSA-20MP	7304-5549	25	1 1/2	1 1/4-11 1/2	79.0
24MSA-24MP	7304-5301	26	1 1/2	1 1/2-11 1/2	80.0
32MSA-32MP	7304-5302	26	2	2-11 1/2	80.0

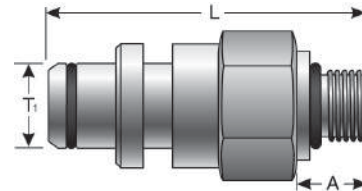
Meets or Exceeds SAE J1467.



**Male Press-Lok® to Male O-Ring Boss Solid**

Description	Product Number	A (mm)	T1 (in)	Thread Size	L (mm)
4MSA-4MB	7304-5352	13	1/4	7/16-20	52.0
4MSA-5MB	7304-5453	13	1/4	1/2-20	52.0
4MSA-6MB	7304-5353	13	1/4	9/16-18	52.0
6MSA-4MB	7304-5168	13	3/8	7/16-20	53.0
6MSA-6MB	7304-5169	13	3/8	9/16-18	53.0
6MSA-8MB	7304-5170	15	3/8	3/4-16	53.0
6MSA-10MB	7304-5454	16	3/8	7/8-14	53.0
6MSA-12MB	7304-5455	19	3/8	1 1/16-12	59.0
8MSA-6MB	7304-5171	13	1/2	9/16-18	56.0
8MSA-8MB	7304-5172	15	1/2	3/4-16	56.0
8MSA-10MB	7304-5173	16	1/2	7/8-14	56.0
8MSA-12MB	7304-5174	19	1/2	1 1/16-12	59.0
8MSA-16MB	7304-5456	20	1/2	1 5/16-12	59.0
12MSA-8MB	7304-5457	15	3/4	3/4-16	60.0
12MSA-10MB	7304-5458	16	3/4	7/8-14	60.0
12MSA-12MB	7304-5175	19	3/4	1 1/16-12	60.0
12MSA-16MB	7304-5459	20	3/4	1 5/16-12	60.0
16MSA-12MB	7304-5460	19	1	1 1/16-12	74.0
16MSA-16MB	7304-5176	20	1	1 5/16-12	74.0
16MSA-20MB	7304-5461	20	1	1 5/8-12	79.0
20MSA-20MB	7304-5462	20	1 1/4	1 5/8-12	79.0

Meets or Exceeds SAE J1467.



Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

Standard Hydraulic Hose

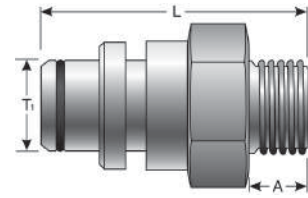
Equipment and Parts

Gates can make special designs, angles, bores, etc. Contact Gates Customer Service with your detailed needs.

**Male Press-Lok® to Male British Standard Pipe Parallel**

Description	Product Number	A (mm)	T1 (in)	Thread Size	L (mm)
4MSA-4MBSPP	7304-5340	9	1/4	1/4-19	51.0
4MSA-6MBSPP	7304-5341	10	1/4	3/8-19	51.0
6MSA-4MBSPP	7304-5500	9	3/8	1/4-19	50.0
6MSA-6MBSPP	7304-5164	10	3/8	3/8-19	50.0
6MSA-8MBSPP	7304-5501	13	3/8	1/2-14	50.0
8MSA-6MBSPP	7304-5404	10	1/2	3/8-19	50.0
8MSA-8MBSPP	7304-5165	13	1/2	1/2-14	55.0
8MSA-12MBSPP	7304-5502	14	1/2	3/4-14	58.0
8MSA-16MBSPP	7304-5503	17	1/2	1-11	62.0
12MSA-10MBSPP	7304-5504	13	3/4	5/8-14	58.0
12MSA-12MBSPP	7304-5166	14	3/4	3/4-14	58.0
12MSA-16MBSPP	7304-5505	17	3/4	1-11	62.0
16MSA-12MBSPP	7304-5506	14	1	3/4-14	72.0
16MSA-16MBSPP	7304-5167	17	1	1-11	72.0
16MSA-20MBSPP	7304-5507	19	1	1 1/4-11	79.0
20MSA-20MBSPP	7304-5508	19	1 1/4	1 1/4-11	79.0
20MSA-24MBSPP	7304-5509	20	1 1/4	1 1/2-11	79.0
24MSA-24MBSPP	7304-5510	23	1 1/2	1 1/2-11	82.0
32MSA-32MBSPP	7304-5511	23	2	2-11	82.0

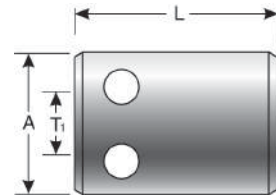
Meets or Exceeds SAE J1467.



**Female Press-Lok® Cap**

Description	Product Number	A (mm)	T1 (in)	L (mm)
4FSA	7304-5185	25	1/4	35.0
6FSA	7304-5186	30	3/8	38.0
8FSA	7304-5187	35	1/2	38.0
12FSA	7304-5188	40	3/4	40.0
16FSA	7304-5189	55	1	50.0
20FSA	7304-5190	60	1 1/4	50.0
24FSA	7304-5298	70	1 1/2	80.0
32FSA	7304-5299	80	2	80.0
40FSA	7304-5297	100	2 1/2	120.0
48FSA	7304-5300	120	3	140.0

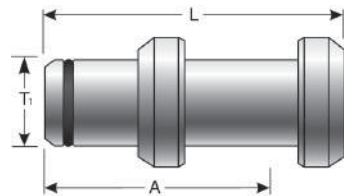
Meets or Exceeds SAE J1467.



**Male Press-Lok® Plug**

Description	Product Number	A (mm)	T1 (in)	L (mm)
4MSA	7304-5147	26	1/4	34.0
6MSA	7304-5148	26	3/8	34.0
8MSA	7304-5149	26	1/2	34.0
10MSA	7304-5328	26	5/8	34.0
12MSA	7304-5150	26	3/4	34.0
16MSA	7304-5151	32	1	41.0
20MSA	7304-5152	32	1 1/4	41.0
24MSA	7304-5304	36	1 1/2	44.0
32MSA	7304-5305	36	2	44.0
40MSA	7304-5307	72	2 1/2	80.0
48MSA	7304-5311	102	3	110.0

Meets or Exceeds SAE J1467.



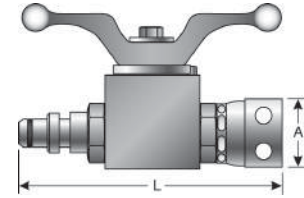
Gates can make special designs, angles, bores, etc. Contact Gates Customer Service with your detailed needs.

**Male Press-Lok® to Female Ball Valve Adapter**

Description	Product Number	Reference Coupling (in)	A (mm)	L (mm)
4MS-4FSXBV	7304-5227	1/4 - 1/4	25	106.0
6MS-6FSXBV	7304-5228	3/8 - 3/8	30	113.0
8MS-8FSXBV	7304-5229	1/2 - 1/2	32	118.0
12MS-12FSXBV	7304-5230	3/4 - 3/4	40	135.0
16MS-16FSXBV	7304-5231	1 - 1	55	151.0
20MS-20FSXBV	7304-5232	1 1/4 - 1 1/4	60	165.0
24MS-24FSXBV	7304-5292	1 1/2 - 1 1/2	70	217.0
32MS-32FSXBV	7304-5293	2 - 2	80	218.0

Meets or Exceeds SAE J1467.

NOTE: T Handle to 1"; Single arm crank 1 1/4" and above as shown in illustration.

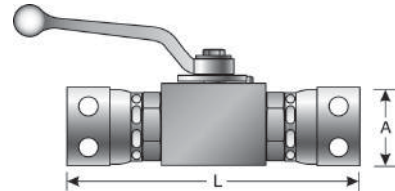


**Female Press-Lok® Ball Valve to Female Ball Valve Adapter**

Description	Product Number	Reference Coupling (in)	A (mm)	L (mm)
4FSX-4FSXBV	7304-5234	1/4 - 1/4	25	106.0
6FSX-6FSXBV	7304-5235	3/8 - 3/8	30	113.0
8FSX-8FSXBV	7304-5236	1/2 - 1/2	32	118.0
12FSX-12FSXBV	7304-5237	3/4 - 3/4	40	138.0
16FSX-16FSXBV	7304-5238	1 - 1	55	151.0
20FSX-20FSXBV	7304-5239	1 1/4 - 1 1/4	60	166.0
24FSX-24FSXBV	7304-5295	1 1/2 - 1 1/2	70	223.0
32FSX-32FSXBV	7304-5296	2 - 2	80	238.0

Meets or Exceeds SAE J1467.

NOTE: T Handle to 1"; Single arm crank 1 1/4" and above as shown in illustration.



### Staple - Carbon Steel

Description	Product Number	Reference Coupling (in)
4SS STAPLE	7304-5191	1/4
6SS STAPLE	7304-5192	3/8
8SS STAPLE	7304-5193	1/2
10SS STAPLE	7304-5194	5/8
12SS STAPLE	7304-5195	3/4
16SS STAPLE	7304-5196	1
20SS STAPLE	7304-5197	1 1/4
24SS STAPLE	7304-5269	1 1/2
32SS STAPLE	7304-5270	2
40SS STAPLE	7304-5271	2 1/2
48SS STAPLE	7304-5272	3

For static pressure applications.



### Staple - Stainless Steel

Description	Product Number	Reference Coupling (in)
4SSS STAPLE	7304-5211	1/4
6SSS STAPLE	7304-5212	3/8
8SSS STAPLE	7304-5213	1/2
10SSS STAPLE	7304-5214	5/8
12SSS STAPLE	7304-5215	3/4
16SSS STAPLE	7304-5216	1
20SSS STAPLE	7304-5217	1 1/4
24SSS STAPLE	7304-5273	1 1/2
32SSS STAPLE	7304-5274	2

For impulse pressure applications.



### O-Ring

Description	Product Number	Reference Coupling (in)
4SOR O-RING	7304-5205	1/4
6SOR O-RING	7304-5206	3/8
8SOR O-RING	7304-5207	1/2
10SOR O-RING	7304-5208	5/8
12SOR O-RING	7304-5209	3/4
16SOR O-RING	7304-5210	1
20SOR O-RING	7304-5218	1 1/4
24SOR O-RING	7304-5262	1 1/2
32SOR O-RING	7304-5263	2



### Back-Up Ring

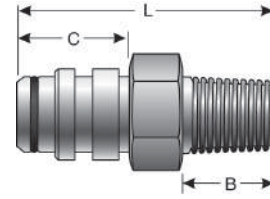
Description	Product Number	Reference Coupling (in)
4SBR BACK-UP RG	7304-5198	1/4
6SBR BACK-UP RG	7304-5199	3/8
8SBR BACK-UP RG	7304-5200	1/2
10SBR BACK-UP RG	7304-5201	5/8
12SBR BACK-UP RG	7304-5202	3/4
16SBR BACK-UP RG	7304-5203	1
20SBR BACK-UP RG	7304-5204	1 1/4
24SBR BACK-UP RG	7304-5266	1 1/2
32SBR BACK-UP RG	7304-5267	2



Product Information

**Press-Lok® Low-Profile Male to NPTF Solid Male**

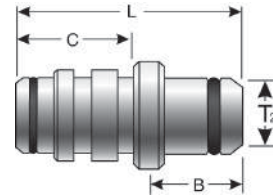
Description	Product Number	B (mm)	C (mm)	L (mm)
24PLLM-24MP XBULK	7304-6245	25.4	51.5	99.3



Specialized Mining Hose

**Press-Lok® Low-Profile Male to Male Press-Lok®**

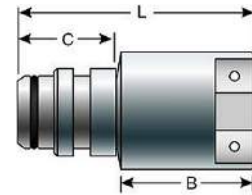
Description	Product Number	B (mm)	C (mm)	T2 (in)	L (mm)
24PLLM-24MSA XBULK	7304-6249	63	51.5	1 1/2	115.0



Specialized Mining Couplings, Adapters and Accessories

**Press-Lok® Low-Profile Male to Female Press-Lok®**

Description	Product Number	B (mm)	C (mm)	L (mm)	Reference Coupling (in)
24PLLM-24FSA XBULK	7304-6246	68.5	51.5	123.0	1 1/2



**Staple for Low Pressure Stainless Steel**

Description	Product Number	Reference Coupling (in)
24SSL STAPLE	7304-6242	1 1/2
32SSL STAPLE	7304-6232	2



Standard Industrial Hose






Standard Hydraulic Hose

Equipment and Parts

Air and Multi-Purpose Hose - Plant Master™ XTreme™ 501 AR [Terminator®]  
(Specification 3202T, TW)

Meets Flame Resistance Acceptance Designation "MSHA 30 CFR 18.65"



Product Number	Color	 (in)	 (in)	 Max. Working Pressure	 Vacuum (In. Hg)	MBR (in)	 (Lbs.)	Length (ft)
3202-0301	Yellow	1/4	.57	501	30.0	3.0	.12	500
3202-0001	Yellow	1/4	.57	501	30.0	3.0	.15	600
3202-0306	Yellow	3/8	.75	501	25.0	3.0	.20	500
3202-0006	Yellow	3/8	.75	501	25.0	3.0	.19	600
3202-0311	Yellow	1/2	.89	501	25.0	5.0	.27	500
3202-0011	Yellow	1/2	.89	501	25.0	5.0	.25	600
3202-0316	Yellow	3/4	1.22	501	15.0	6.0	.45	500
3202-0016	Yellow	3/4	1.22	501	15.0	6.0	.45	600
3202-0021	Yellow	1	1.51	501	10.0	8.0	.57	350
3202-0027	Yellow	1 1/4	1.78	501	10.0	10.0	.73	350
3202-0029	Yellow	1 1/2	2.09	501	10.0	12.0	.96	100
3202-0032	Yellow	2	2.64	501	10.0	14.0	1.35	100
3202-0033	Yellow	2	2.64	501	10.0	14.0	1.35	200

- Recommended For:** Applications requiring a premium-quality, multi-purpose hose with superior abrasion resistance for air, oil and some chemical applications. Excellent durability for extra-long life in these applications: mining, air drill, construction, poultry plants and other severe service. Good weather and ozone resistance.
- Caution:** Due to Terminator's 501 PSI working pressure, care should be taken to properly select couplings to match. Hose assembly working pressure is the working pressure of the lowest rated component.
- Temperature Range:** -40°F to +212°F (-40°C to +100°C) continuous service.
- Construction: Tube:** Type C (Nitrile). Black.
- Construction: Reinforcement:** Synthetic, high tensile textile cord.
- Construction: Cover:** Type C4 (Carboxylated Nitrile). Yellow.
- Packaging:** 1 1/2" and 2": Packaged 100' coiled and wrapped in polyethylene.  
1" and 1 1/4": Packaged in 300' to 400' reels. Maximum 3 pieces. Minimum length 50'.  
1/4" through 3/4": Packaged in 500' to 700' reels. Maximum 2 pieces in 50' increments.  
Exact length reels: 500' in one continuous length.  
Minimum of 90% of hose reels will be 1-piece lengths.
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GLX® Couplings (-4 through -20)  
GlobalSpiral™ Plus Couplings (-24 and -32)  
MegaCrimp® Couplings (-4 through -20)

Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose






Standard Hydraulic Hose

Equipment and Parts



Air and Multi-Purpose Hose - Plant Master™ XTreme™ 300 AR [Premo Flex® AR]  
(Specification 3205AR)



Product Number	Color	 (in)	 (in)	 Max. Working Pressure	 Vacuum (In. Hg)	MBR (in)	 (Lbs.)	Length (ft)
3205-0406	Red	1/4	.53	300	30.0	2.0	.12	500
3205-0401	Red	1/4	.53	300	30.0	2.0	.12	600
3205-0407	Red	3/8	.70	300	30.0	3.0	.16	500
3205-0402	Red	3/8	.70	300	30.0	3.0	.16	600
3205-0408	Red	1/2	.84	300	25.0	4.0	.22	500
3205-0403	Red	1/2	.84	300	25.0	4.0	.22	600
3205-0409	Red	3/4	1.19	300	20.0	5.0	.41	500
3205-0404	Red	3/4	1.19	300	20.0	5.0	.47	600
3205-0405	Red	1	1.50	300	10.0	8.0	.59	350

**Recommended For:** Applications requiring a premium grade spiral hose with superior abrasion resistance, excellent flexibility and maximum resistance to air, water, petroleum oils and lubricating oils (to 212°F). Recommended for gasoline, kerosene, and fuel oil transfer only to 120°F. Good weather and ozone resistance.

**Temperature Range:** -40°F to +212°F (-40°C to +100°C) continuous service.

**Construction: Tube:** Type C (Nitrile). Black.

**Construction: Reinforcement:** Synthetic, high tensile textile cord.

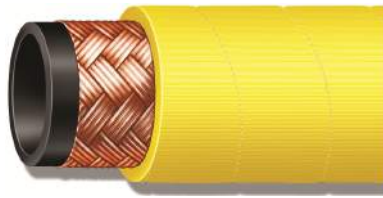
**Construction: Cover:** Type C4 (Carboxylated Nitrile). Red.






**Packaging:** 1": Packaged in 300' to 400' reels. Maximum 2 pieces in 50' increments.  
1/4" through 3/4": Packaged in 500' to 700' reels. Maximum 2 pieces in 50' increments.  
Exact length reels: 500' in one continuous length.  
Minimum of 90% of hose reels will be 1-piece lengths.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GLX® Couplings  
MegaCrimp® Couplings

Mining Hose - Mine Master™ Spray 1000 [1000 MP/Mine Spray]  
(Specification 3619M)

Meets Flame Resistance Acceptance Designation "MSHA 30 CFR 18.65"



Product Number	Color	 (in)	 (in)	 Max. Working Pressure	 Vacuum (In. Hg)	MBR (in)	 (Lbs.)	Length (ft)
3619-0699	Yellow	1/2	.84	1000	30.0	5.0	.29	50
3619-0761	Yellow	1/2	.84	1000	30.0	5.0	.29	50
3619-0716	Yellow	1/2	.84	1000	30.0	5.0	.29	100
3619-0700	Yellow	3/4	1.10	1000	25.0	8.0	.43	50
3619-0762	Yellow	3/4	1.10	1000	25.0	8.0	.43	50
3619-0721	Yellow	3/4	1.10	1000	25.0	8.0	.43	100
3619-0789	Yellow	3/4	1.10	1000	25.0	8.0	.43	100
3619-0701	Yellow	1	1.42	1000	25.0	11.0	.66	50
3619-0763	Yellow	1	1.42	1000	25.0	11.0	.66	50
3619-0786	Yellow	1	1.42	1000	25.0	11.0	.66	100
3619-0790	Yellow	1	1.42	1000	25.0	11.0	.66	100
3619-0702	Yellow	1 1/4	1.69	1000	20.0	16.0	.81	50
3619-0764	Yellow	1 1/4	1.69	1000	20.0	16.0	.81	50
3619-0787	Yellow	1 1/4	1.69	1000	20.0	16.0	.81	100
3619-0791	Yellow	1 1/4	1.69	1000	20.0	16.0	.81	100
3619-0708	Yellow	1 1/2	1.92	1000	15.0	18.0	1.07	50
3619-0765	Yellow	1 1/2	1.92	1000	15.0	18.0	1.07	50
3619-0788	Yellow	1 1/2	1.92	1000	15.0	18.0	1.07	100
3619-0792	Yellow	1 1/2	1.92	1000	15.0	18.0	1.07	100
3619-0760	Yellow	2	2.45	1000	10.0	25.0	1.47	50
3619-0766	Yellow	2	2.45	1000	10.0	25.0	1.47	50
3619-0745	Yellow	2	2.45	1000	10.0	25.0	1.47	100

**Recommended For:** High-pressure water service in underground mining applications and hot water washdown service. The thick cover meets MSHA's self-extinguishing requirements, and is designed for the tough mining environment.

**Caution:** Air service working pressure is 300 psi for all sizes.

**Temperature Range:** -40°F to +212°F (-40°C to +100°C) service range.

**Construction: Tube:** Type P (EPDM). Black.

**Construction: Reinforcement:** Braided, high tensile steel wire.

**Construction: Cover:** Type C2 (Modified Nitrile). Yellow (non-marking). All sizes are perforated.

**Packaging:**  
 1 1/2" x 100': Packaged 400' per bulk carton, each length coiled and tied.  
 1 1/2" x 50': Packaged 400' per bulk carton, each length coiled and tied.  
 1 1/4" x 100': Packaged 600' per bulk carton, each length coiled and tied.  
 1 1/4" x 50': Packaged 600' per bulk carton, each length coiled and tied.  
 1" x 100': Packaged 700' per bulk carton, each length coiled and tied.  
 1" x 50': Packaged 700' per bulk carton, each length coiled and tied.  
 1/2" through 2": 50' and 100' lengths, one length coiled in a carton.  
 1/2" x 50': Packaged 1200' per bulk carton, each length coiled and tied.  
 2" x 50': Packaged 200' per bulk carton, each length coiled and tied.  
 3/4" x 100': Packaged 1000' per bulk carton, each length coiled and tied.  
 3/4" x 50': Packaged 1000' per bulk carton, each length coiled and tied.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Plus Couplings (-24 and -32) MegaCrimp® Couplings (-8 through -20)

Mining Hose - Mine Master™ Longwall Emulsion 1000 [Longwall Mine Emulsion]  
(Specification 3619MC, MY)

Meets Flame Resistance Acceptance Designation "MSHA 30 CFR 18.65"



Product Number	Color	⊖ (in)	⊕ (in)	⌚ Max. Working Pressure	⊖ Vacuum (In. Hg)	MBR (in)	⚖ (Lbs.)	Length (ft)
3619-0809	Black	2 1/2	3.34	1000	10.0	20.0	3.17	50
3619-0811	Black	2 1/2	3.34	1000	10.0	20.0	3.17	100
3619-0810	Black	3	3.91	1000	10.0	20.0	4.14	50
3619-3531	Black	3	3.91	1000	10.0	20.0	4.14	100
3619-0051	Yellow	3	3.91	1000	10.0	20.0	4.14	50
3619-3530	Yellow	3	3.91	1000	10.0	20.0	4.14	100

- Recommended For:** Flexible connections in high pressure water distribution and emulsion systems used in a variety of industries. The thick cover meets MSHA's self-extinguishing requirements, and is designed for the tough mining environment.
- Temperature Range:** -40°F to +212°F (-40°C to +100°C) normal service.
- Construction: Tube:** Type A (Chloroprene). Black.
- Construction: Reinforcement:** Braided, high tensile steel wire.
- Construction: Cover:** Type C2 (Specially compounded elastomer). Black.  
Type C4 (Carboxylated Nitrile). Yellow.
- Packaging:** All lengths coiled in a carton.
- Coupling Recommendation:** 2 1/2 LW (see Crimp Data Manual 35019 or E-crimp)  
Dixon Hodedell Style  
Wildman Reusable Male

Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories






Standard Industrial Hose

Standard Hydraulic Hose

Equipment and Parts

Mining Hose - Mine Master™ Air Drill 600 HT [Scorpion™]  
(Specification 3618MT)



Product Number	Color	 (in)	 (in)	 Max. Working Pressure	 Vacuum (In. Hg)	MBR (in)	 (Lbs.)	Length (ft)
3618-0311	Black	1 1/2	2.02	600	—	12.0	1.13	50
3618-0312	Black	2	2.62	600	—	16.0	1.51	50
3618-0313	Black	2 1/2	3.12	600	—	18.0	1.89	50
3618-0314	Black	3	3.64	600	—	20.0	2.46	50
3618-0315	Black	4	4.79	600	—	25.0	4.10	50

**Recommended For:** High-pressure and high temperature air hose used on industrial, construction, pneumatic mining and drilling applications requiring a wire braided hose with a high a thick rubber cover.

**Temperature Range:** -40°F to +300°F (-40°C to +149°C).

**Construction: Tube:** Type J (CPE). Black.

**Construction: Reinforcement:** Braided, high tensile steel wire.






**Construction: Cover:** Type J (CPE). Black. All sizes perforated.

**Packaging:** 50' per carton +/- 10'. Maximum of 2 pieces. Minimum length 10'.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Plus Couplings (-24 and -32)

Mining Hose - Mine Master™ Air Drill 500 [18MB]  
(Specification 3618, GL)








Product Number	Color	 (in)	 (in)	 Max. Working Pressure	 Vacuum (In. Hg)	MBR (in)	 (Lbs.)	Length (ft)
3618-0011	Gray	3/4	1.28	500	25.0	6.0	.41	50
3618-0021	Gray	1	1.55	500	25.0	8.0	.80	50
3618-0031	Gray	1 1/4	1.80	500	15.0	10.0	1.02	50
3618-0041	Gray	1 1/2	2.21	500	15.0	12.0	1.42	50
3618-0051	Gray	2	2.77	500	15.0	14.0	2.30	50
3618-1000	Gray	2	2.77	500	15.0	14.0	1.99	100
3618-0201	Gray	2 1/2	3.46	500	10.0	30.0	3.28	50
3618-0205	Gray	2 1/2	3.46	500	10.0	30.0	3.28	60
3618-0215	Gray	3	3.97	500	10.0	36.0	4.10	50
3618-0225	Gray	4	5.06	500	10.0	47.6	5.32	50

- Recommended For:** Extra heavy-duty, high pressure use on industrial, construction and pneumatic mining applications requiring wire braided hose with an oil resistant tube and abrasion resistant cover.
- Temperature Range:** -30°F to +212°F (-34°C to +100°C) continuous service.
- Construction: Tube:** Type A (Chloroprene). Black.
- Construction: Reinforcement:** Braided, high tensile steel wire.
- Construction: Cover:** Type C2 (Modified Nitrile). Gray with yellow stripe. All sizes are perforated. For 3/4" through 1 1/4" sizes only.  
Type D3 (Natural Rubber). Gray with yellow stripe. All sizes are perforated. For 1 1/2" through 4" sizes only.
- Packaging:** 2 1/2" x 60': Packaged 60' length coiled in carton.  
2" though 4": Packaged 48' - 50' length coiled in carton.  
3/4" through 1 1/2": Packaged 49' - 50' length coiled in carton.
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Plus Couplings (-24 and -32)

Mining Hose - Mine Master™ Air Drill 500 FR [500 MP Air Drill]  
(Specification 3618, Y)

Meets Flame Resistance Acceptance Designation "MSHA 30 CFR 18.65". Yellow Cover Only.



Product Number	Color	 (in)	 (in)	 Max. Working Pressure	 Vacuum (In. Hg)	MBR (in)	 (Lbs.)	Length (ft)
3618-0801	Black	3/4	1.11	500	25.0	6.0	.41	100
3618-0802	Black	1	1.45	500	25.0	8.0	.66	100
3618-0803	Black	1 1/4	1.74	500	15.0	10.0	.86	100
3618-0804	Black	1 1/2	1.99	500	15.0	12.0	1.00	100
3618-0805	Black	2	2.50	500	15.0	14.0	1.39	100
3618-0806	Black	2 1/2	3.14	500	10.0	30.0	2.15	100
3618-0807	Black	3	3.67	500	10.0	36.0	2.77	100
3618-0808	Yellow	3/4	1.11	500	25.0	6.0	.41	100
3618-0809	Yellow	1	1.45	500	25.0	8.0	.65	100
3618-0810	Yellow	1 1/4	1.74	500	15.0	10.0	.85	100
3618-0811	Yellow	1 1/2	1.99	500	15.0	12.0	1.00	100
3618-0812	Yellow	2	2.50	500	15.0	14.0	1.39	100
3618-0813	Yellow	2 1/2	3.14	500	10.0	30.0	2.15	100
3618-0814	Yellow	3	3.67	500	10.0	36.0	2.77	100

- Recommended For:** Heavy-duty, high pressure use on industrial, construction and pneumatic mining applications requiring wire braided hose with an oil resistant tube and abrasion resistant cover.
- Temperature Range:** -22°F to +180°F (-30°C to +82°C) continuous service.
- Construction: Tube:** Type C (Nitrile). Black.
- Construction: Reinforcement:** Braided, high tensile steel wire.
- Construction: Cover:** Type C2 (Modified Nitrile). Black with yellow spiral stripe. All sizes are perforated.  
Type C2 (Modified Nitrile). Yellow with black spiral stripe. All sizes are perforated.
- Packaging:** 100' length coiled in a carton.
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Plus Couplings (-24 and -32)

Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose






Standard Hydraulic Hose

Equipment and Parts

Mining Hose - Mine Master™ Rock Dust 100SD [Rock Dust]  
(Specification 4691RD)

Meets Flame Resistance Acceptance Designation "MSHA 2G-11C"



Product Number	Color	 (in)	 (in)	 Max. Working Pressure	 Vacuum (In. Hg)	MBR (in)	 (Lbs.)	Length (ft)
4691-0700	Black	1 1/4	1.67	100	30.0	6.0	.56	100
4691-0701	Black	1 1/2	1.92	100	30.0	8.0	.66	100
4691-0702	Black	2	2.41	100	30.0	10.0	.89	100
4691-0703	Black	2 1/2	2.92	100	30.0	12.0	.98	100
4691-0704	Black	3	3.41	100	30.0	15.0	1.29	100

- Recommended For:** Rock dusting applications in underground coal mines where limestone dust (or other inert rock-derived dusting agent) is sprayed in order to isolate exposed coal surfaces from potential heat or ignition sources. Light weight and flexible for easy handling.
- Temperature Range:** -40°F to +180°F (-40°C to +82°C).
- Construction: Tube:** Type D (Natural Rubber). Black. Static conductive.
- Construction: Reinforcement:** Synthetic, high tensile textile with steel wire helix.
- Construction: Cover:** Type C2 (Modified Nitrile). Black with yellow spiral stripe.
- Packaging:** 100' length coiled and wrapped in polyethylene.
- Coupling Recommendation:** Multiple - contact Gates PA Hotline 303-744-5070 for additional information.

Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

Standard Hydraulic Hose

Equipment and Parts



**EFG6K Spiral Wire Hose - SAE 100R15**

Extremely High Pressure

For Biodegradable Hydraulic Fluids  
Meets Flame Resistance Acceptance Designation "MSHA 2G"



<b>Recommended For:</b>	Extremely high-pressure, high-impulse applications such as hydrostatic transmissions. EFG6K is designed to meet or exceed all requirements of SAE 100R15 specifications and performance requirements of EN 856 4SP (-6, -8, -10 and -12), EN 856 4SH (-12, -16, and -20), and ISO 3862 Type R15 (-6, -8, -10, -12, -16, -24). Compatible with biodegradable hydraulic fluids like polyolester, polyglycol and vegetable oil as well as standard petroleum-based fluids. Available in 121' through 200' continuous lengths.
<b>Temperature Range:</b>	-40°F to +250°F (-40°C to +121°C). For water emulsions see Temperature Limits Table.
<b>Tube:</b>	Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	Four (six for -20, -24 and -32) alternating layers of spiraled, high-tensile steel.
<b>Cover:</b>	Black, oil resistant, synthetic rubber (Neoprene - Type A). Color coded layline. Also available with unique abrasion resistant MegaTuff® cover. See Hose Stock Characteristics.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	GlobalSpiral™ Couplings (-6 through -20) (Section E) GlobalSpiral™ MAX Pressure Couplings (-24 and -32) (Section E) Stainless Steel "S" Couplings (Section H)

**EFG6K Spiral Wire Hose - SAE 100R15 - MegaTuff® Cover**

Extremely High Pressure

For Biodegradable Hydraulic Fluids  
Meets Flame Resistance Acceptance Designation "MSHA 2G"  
MegaTuff® hose lasts up to 300 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.



<b>Recommended For:</b>	Extremely high-pressure, high-impulse applications such as hydrostatic transmissions. EFG6K is designed to meet or exceed all requirements of SAE 100R15 specifications and performance requirements of EN 856 4SP (-6, -8, -10 and -12), EN 856 4SH (-12, -16, and -20), and ISO 3862 Type R15 (-6, -8, -10, -12, -16, -24). Compatible with biodegradable hydraulic fluids like polyolester, polyglycol and vegetable oil as well as standard petroleum-based fluids. Available in 121' through 200' continuous lengths.
<b>Temperature Range:</b>	-40°F to +250°F (-40°C to +121°C). For water emulsions see Temperature Limits Table.
<b>Tube:</b>	Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	Four (six for -20, -24 and -32) alternating layers of spiraled, high-tensile steel.
<b>Cover:</b>	Black, oil, abrasion and weather resistant MegaTuff® cover with color coded layline. Also available in Standard cover. See Hose Stock Characteristics.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	GlobalSpiral™ Couplings (-6 through -20) (Section E) GlobalSpiral™ MAX Pressure Couplings (-24 and -32) (Section E) Stainless Steel "S" Couplings (Section H)

Product Information

**EFG6KL Low Temp Spiral Wire Hose**

Extremely High Pressure



Specialized Mining Hose

**Recommended For:** Extremely high-pressure hydraulic applications. Compatible with biodegradable hydraulic fluids like polyolester, polyglycol and vegetable oil as well as standard petroleum based fluid.

**Temperature Range:** -70°F to +212°F (-57°C to +100°C).

**Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.

**Reinforcement:** Four or Six alternating layers of spiraled, high tensile wire.

**Cover:** Black, oil resistant, synthetic rubber. (Neoprene - Type A).

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Couplings (Section E)

Specialized Mining Couplings, Adapters and Accessories

**EFG5K Spiral Wire Hose - SAE 100R13**

Extremely High Pressure

For Biodegradable Hydraulic Fluids  
Meets Flame Resistance Acceptance Designation "MSHA 2G"



Standard Industrial Hose

**Recommended For:** Extremely high-pressure hydraulic applications. EFG5K is designed to meet or exceed all requirements of SAE 100R13 specifications 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. Available in 121' through 200' continuous lengths.

**Temperature Range:** -40°F to +250°F (-40°C to +121°C). For water emulsions see Temperature Limits Table.

**Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.

**Reinforcement:** Four (six for -20, -24 and -32) alternating layers of spiraled, high-tensile steel.

**Cover:** Black, oil resistant, synthetic rubber (Neoprene - Type A), with color coded layline. Also available with unique abrasion resistant MegaTuff® cover. See Hose Stock Characteristics.

Standard Hydraulic Hose

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Couplings (-6 through -20) (Section E)  
GlobalSpiral™ MAX Pressure Couplings (-24 and -32) (Section E)  
Stainless Steel "S" Couplings (Section H)

Equipment and Parts

**EFG5K Spiral Wire Hose - SAE 100R13 - MegaTuff® Cover**

Extremely High Pressure

For Biodegradable Hydraulic Fluids  
 Meets Flame Resistance Acceptance Designation "MSHA 2G"  
 MegaTuff® hose lasts up to 300 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.



- Recommended For:** Extremely high-pressure hydraulic applications. EFG5K is designed to meet or exceed all requirements of SAE 100R13 specifications 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. Available in 121' through 200' continuous lengths.
- Temperature Range:** -40°F to +250°F (-40°C to +121°C). For water emulsions see Temperature Limits Table.
- Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
- Reinforcement:** Four (six for -20, -24 and -32) alternating layers of spiraled, high-tensile steel.
- Cover:** Black, oil, abrasion and weather resistant MegaTuff® cover with color coded layline. Also available in Standard cover. See Hose Stock Characteristics.
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Couplings (-6 through -20) (Section E)  
 GlobalSpiral™ MAX Pressure Couplings (-24 and -32) (Section E)  
 Stainless Steel "S" Couplings (Section H)

**EFG5KL Low Temp Spiral Wire Hose**

Extremely High Pressure



- Recommended For:** Extremely high-pressure hydraulic applications. Compatible with biodegradable hydraulic fluids like polyolester, polyglycol and vegetable oil as well as standard petroleum based fluid.
- Temperature Range:** -70°F to +212°F (-57°C to +100°C).
- Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
- Reinforcement:** Four or Six alternating layers of spiraled, high tensile wire.
- Cover:** Black, oil resistant, synthetic rubber. (Neoprene - Type A).
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Couplings (Section E)

Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

Standard Hydraulic Hose

Equipment and Parts

**EFG4K Spiral Wire Hose - SAE 100R12**

Extremely High Pressure

For Biodegradable Hydraulic Fluids  
Meets Flame Resistance Acceptance Designation "MSHA 2G"



**Recommended For:** Extremely high-pressure, high-impulse applications. Exceeds all performance requirements for SAE 100R12, EN 856 R12 and ISO 3862 Type R12. Compatible with biodegradable hydraulic fluids like polyolester, polyglycol and vegetable oil as well as standard petroleum-based fluids. Available in 121' through 200' continuous lengths.

**Temperature Range:** -40°F to +250°F (-40°C to +121°C). For water emulsions see Temperature Limits Table.

**Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.

**Reinforcement:** Four alternating layers of spiraled, high-tensile steel wire.

**Cover:** Black, oil resistant, synthetic rubber (Neoprene - Type A), with color coded layline. Also available with unique abrasion resistant MegaTuff® cover. See Hose Stock Characteristics.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Couplings (Section E)  
Stainless Steel "S" Couplings (Section H)

**EFG4K Spiral Wire Hose - SAE 100R12 - MegaTuff® Cover**

Extremely High Pressure

For Biodegradable Hydraulic Fluids  
Meets Flame Resistance Acceptance Designation "MSHA 2G"  
MegaTuff® hose lasts up to 300 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.



**Recommended For:** Extremely high-pressure, high-impulse applications. Exceeds all performance requirements for SAE 100R12, EN 856 R12 and ISO 3862 Type R12. Compatible with biodegradable hydraulic fluids like polyolester, polyglycol and vegetable oil as well as standard petroleum-based fluids. Available in 121' through 200' continuous lengths.

**Temperature Range:** -40°F to +250°F (-40°C to +121°C). For water emulsions see Temperature Limits Table.

**Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.

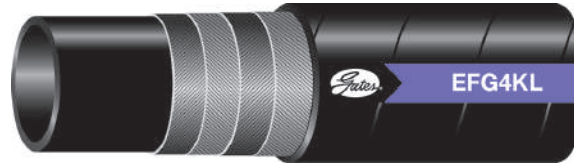
**Reinforcement:** Four alternating layers of spiraled, high-tensile steel wire.

**Cover:** Black, oil, abrasion and weather resistant MegaTuff® cover with color coded layline. Also available in Standard cover. See Hose Stock Characteristics.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Couplings (Section E)  
Stainless Steel "S" Couplings (Section H)

**EFG4KL Low Temp Spiral Wire Hose**

Extremely High Pressure



<b>Recommended For:</b>	Extremely high-pressure hydraulic applications. Compatible with biodegradable hydraulic fluids like polyolester, polyglycol and vegetable oil as well as standard petroleum based fluid.
<b>Temperature Range:</b>	-70°F to +212°F (-57°C to +100°C).
<b>Tube:</b>	Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	Four alternating layers of spiraled, high tensile wire.
<b>Cover:</b>	Black, oil resistant, synthetic rubber. (Neoprene - Type A).
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	GlobalSpiral™ Couplings (Section E)

**EFG3K Spiral Wire Hose - SAE 100R12**

Extremely High Pressure

For Biodegradable Hydraulic Fluids  
Meets Flame Resistance Acceptance Designation "MSHA 2G"



<b>Recommended For:</b>	Extremely high-pressure, high-impulse applications. Exceeds all performance requirements for SAE 100R12, EN 856 R12, performance requirements of EN 856 4SP, and ISO 3862 Type R12. Compatible with biodegradable hydraulic fluids like polyolester, polyglycol and vegetable oil as well as standard petroleum-based fluids. Available in 121' through 200' continuous lengths.
<b>Temperature Range:</b>	-40°F to +250°F (-40°C to +121°C). For water emulsions see Temperature Limits Table.
<b>Tube:</b>	Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	Four alternating layers of spiraled, high-tensile steel wire.
<b>Cover:</b>	Black, oil resistant, synthetic rubber (Neoprene - Type A), with color coded layline. Also available with unique abrasion resistant MegaTuff® cover. See Hose Stock Characteristics.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	GlobalSpiral™ Couplings (-6 through -20) (Section E) GlobalSpiral™ Plus Couplings (-24 and -32) (Section E) Stainless Steel "S" Couplings (Section H)

Product Information

**EFG3K Spiral Wire Hose - SAE 100R12 - MegaTuff® Cover**

Extremely High Pressure

Specialized Mining Hose

For Biodegradable Hydraulic Fluids  
 Meets Flame Resistance Acceptance Designation "MSHA 2G"  
 MegaTuff® hose lasts up to 300 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.



Specialized Mining Couplings, Adapters and Accessories

- Recommended For:** Extremely high-pressure, high-impulse applications. Exceeds all performance requirements for SAE 100R12, EN 856 R12, performance requirements of EN 856 4SP, and ISO 3862 Type R12. Compatible with biodegradable hydraulic fluids like polyolester, polyglycol and vegetable oil as well as standard petroleum-based fluids. Available in 121' through 200' continuous lengths.
- Temperature Range:** -40°F to +250°F (-40°C to +121°C). For water emulsions see Temperature Limits Table.
- Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
- Reinforcement:** Four alternating layers of spiraled, high-tensile steel wire.
- Cover:** Black, oil, abrasion and weather resistant MegaTuff® cover with color coded layline. Also available in Standard cover. See Hose Stock Characteristics.
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Couplings (Section E)  
 GlobalSpiral™ Plus Couplings (-24 and -32) (Section E)  
 Stainless Steel "S" and "B" Couplings (Section H)

Standard Industrial Hose

**M-XP™ Million Impulse Xtra Performance Wire Braid Hose**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G"



Standard Hydraulic Hose

- Recommended For:** High-pressure, high impulse life hydraulic applications. Provides tighter than standard minimum bend radius and greater flexibility for easier plumbing.
- Temperature Range:** -40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.
- Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
- Reinforcement:** Two braids of high-tensile steel wire.
- Cover:** Black, oil, abrasion and weather resistant, synthetic rubber (Modified Nitrile - Type C2), with color coded layline. See Hose Stock Characteristics.
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Couplings (-6 through -12) (Section E)  
 MegaCrimp® Couplings (Section G)

Equipment and Parts



**Global M6K Mega6000™ Hose**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G"



<b>Recommended For:</b>	High-pressure hydraulic applications. Provides tighter than standard minimum bend radius and greater flexibility for easier plumbing.
<b>Temperature Range:</b>	-40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.
<b>Tube:</b>	Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	Two braids of high-tensile steel wire.
<b>Cover:</b>	Black, oil, abrasion and weather resistant, synthetic rubber (Modified Nitrile - Type C2), with color coded layline. See Hose Stock Characteristics.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	MegaCrimp® Couplings (Section G) Stainless Steel "B" Couplings (Section H)

**Global M5K Mega5000™ Hose**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G"



<b>Recommended For:</b>	High-pressure hydraulic applications. Provides tighter than standard minimum bend radius and greater flexibility for easier plumbing.
<b>Temperature Range:</b>	-40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.
<b>Tube:</b>	Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	Two braids of high-tensile steel wire.
<b>Cover:</b>	Black, oil, abrasion and weather resistant, synthetic rubber (Modified Nitrile - Type C2), with color coded layline. Also available with unique abrasion resistant MegaTuff® or XtraTuff™ cover. See Hose Stock Characteristics.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	GlobalSpiral™ Couplings (Section E) MegaCrimp® Couplings (Section G) Stainless Steel "B" Couplings (Section H)



**Global M5K Mega5000™ Hose - MegaTuff® Cover**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G"



- Recommended For:** High-pressure hydraulic applications. Provides tighter than standard minimum bend radius and greater flexibility for easier plumbing.
- Temperature Range:** -40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.
- Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
- Reinforcement:** Two braids of high-tensile steel wire.
- Cover:** Black, oil, abrasion and weather resistant MegaTuff® cover with color coded layline. Also available in Standard or XtraTuff™ cover. See Hose Stock Characteristics.
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Couplings (Section E)  
MegaCrimp® Couplings (Section G)  
Stainless Steel "B" Couplings (Section H)

**Global M5K Mega5000™ Hose - XtraTuff™ Cover**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G"



- Recommended For:** High-pressure hydraulic applications. Provides tighter than standard minimum bend radius and greater flexibility for easier plumbing.
- Temperature Range:** -40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.
- Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
- Reinforcement:** Two braids of high-tensile steel wire.
- Cover:** Black, oil, abrasion and weather resistant, synthetic rubber (Modified Nitrile - Type C2), with color coded layline. Also available in Standard or MegaTuff® cover. See Hose Stock Characteristics.
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Couplings (Section E)  
MegaCrimp® Couplings (Section G)  
Stainless Steel "B" Couplings (Section H)

## Global M4K Mega4000™ Hose - SAE 100R19

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G", and ISO11237 R19



<b>Recommended For:</b>	High-pressure hydraulic applications. Exceeds SAE 100R19 and ISO11237 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.
<b>Temperature Range:</b>	-40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.
<b>Tube:</b>	Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	Two braids of high-tensile steel wire.
<b>Cover:</b>	Black, oil, abrasion and weather resistant, synthetic rubber (Modified Nitrile - Type C2), with color coded layline. Also available with unique abrasion resistant MegaTuff® or XtraTuff™ cover. See Hose Stock Characteristics.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	GlobalSpiral™ Couplings (Section E) MegaCrimp® Couplings (-4 through -12) (Section G) Stainless Steel "B" Couplings (-4 through -8) (Section H) Stainless Steel "S" Couplings (-10 and -16) (Section H)

## Global M4K Mega4000™ Hose - SAE 100R19 - MegaTuff® Cover

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G", and ISO11237 R19  
MegaTuff® hose lasts up to 300 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.



<b>Recommended For:</b>	High-pressure hydraulic applications. Exceeds SAE 100R19 and ISO11237 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.
<b>Temperature Range:</b>	-40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.
<b>Tube:</b>	Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	Two braids of high-tensile steel wire.
<b>Cover:</b>	Black, oil, abrasion and weather resistant MegaTuff® cover with color coded layline. Also available in Standard or XtraTuff™ cover. See Hose Stock Characteristics.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	GlobalSpiral™ Couplings (Section E) MegaCrimp® Couplings (-4 through -12) (Section G) Stainless Steel "B" Couplings (-4 through -8) (Section H) Stainless Steel "S" Couplings (-10 and -16) (Section H)

**Global M4K Mega4000™ Hose - SAE 100R19 - XtraTuff™ Cover**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G", and ISO11237 R19  
 XtraTuff™ hose lasts up to 25 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.



**Recommended For:** High-pressure hydraulic applications. Exceeds SAE 100R19 and ISO11237 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.

**Temperature Range:** -40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.

**Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.

**Reinforcement:** Two braids of high-tensile steel wire.

**Cover:** Black, oil, abrasion and weather resistant, synthetic rubber (Modified Nitrile - Type C2), with color coded layline. Also available in Standard or MegaTuff® cover. See Hose Stock Characteristics.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Couplings (Section E)  
 MegaCrimp® Couplings (-4 through -12) (Section G)  
 Stainless Steel "B" Couplings (-4 through -8) (Section H)  
 Stainless Steel "S" Couplings (-10 and -16) (Section H)

**M4KH Wire Braid Hose - High-Temp - SAE 100R19**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G", and ISO11237 R19



**Recommended For:** High-pressure hydraulic applications. Exceeds SAE 100R19 and ISO11237 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.

**Temperature Range:** -40°F to +250°F (-40°C to +121°C). For water emulsions see Temperature Limits Table.

**Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.

**Reinforcement:** Two braids of high-tensile steel wire.

**Cover:** Black, oil, abrasion and weather resistant, thin synthetic rubber (Neoprene - CR), with color coded layline. Flame resistance - MSHA 2G.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Couplings (Section E)  
 MegaCrimp® Couplings (Section G)

**M4KH Wire Braid Hose - High-Temp - SAE 100R19 - MegaTuff® Cover**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G", and ISO11237 R19  
MegaTuff® hose lasts up to 300 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.



<b>Recommended For:</b>	High-pressure hydraulic applications. Exceeds SAE 100R19 and ISO11237 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.
<b>Temperature Range:</b>	-40°F to +250°F (-40°C to +121°C). For water emulsions see Temperature Limits Table.
<b>Tube:</b>	Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	Two braids of high-tensile steel wire.
<b>Cover:</b>	Black, oil, abrasion and weather resistant MegaTuff® cover with color coded layline. Flame resistance - MSHA 2G.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	GlobalSpiral™ Couplings (Section E) MegaCrimp® Couplings (Section G)

**Global M4KL Mega4000™ PolarFlex® Hose - SAE 100R19**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G"



<b>Recommended For:</b>	High-pressure hydraulic applications.
<b>Temperature Range:</b>	-70°F to +212°F (-57°C to +100°C).
<b>Tube:</b>	Black, oil resistant, synthetic rubber (NBR).
<b>Reinforcement:</b>	Two braids of high-tensile steel wire.
<b>Cover:</b>	Black, oil, abrasion, and weather resistant synthetic rubber. Flame resistance - U.S. MSHA 2G.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	Permanent no-skive GlobalSpiral™ (1" only) and MegaCrimp®. Stainless Steel "S" and "B" Couplings (Section H)

**Global M3K Mega3000® Hose - SAE 100R17**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G", and ISO11237 R17



**Recommended For:** High-pressure hydraulic oil lines. Exceeds SAE 100R17 and ISO11237 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.

**Temperature Range:** -40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.

**Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.

**Reinforcement:** Braided, high-tensile steel wire. -4, -5, -6 and -8 sizes are one braid; -10, -12 and -16 sizes are two braid.

**Cover:** Black, oil, abrasion and weather resistant, synthetic rubber (Modified Nitrile - Type C2), with color coded layline. Also available with unique abrasion resistant MegaTuff® or XtraTuff™ cover. See Hose Stock Characteristics.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Couplings (Section E)  
MegaCrimp® Couplings (Section G)  
Power Crimp® Couplings (-3 only) (Section I)  
Stainless Steel "B" Couplings (Section H)

**Global M3K Mega3000® Hose - SAE 100R17 - MegaTuff® Cover**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G", and ISO11237 R17  
MegaTuff® hose lasts up to 300 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.



**Recommended For:** High-pressure hydraulic oil lines. Exceeds SAE 100R17 and ISO11237 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.

**Temperature Range:** -40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.

**Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.

**Reinforcement:** Braided, high-tensile steel wire. -4, -5, -6 and -8 sizes are one braid; -10, -12 and -16 sizes are two braid.

**Cover:** Black, oil, abrasion and weather resistant MegaTuff® cover with color coded layline. Also available in Standard or XtraTuff™ cover. See Hose Stock Characteristics.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Couplings (Section E)  
MegaCrimp® Couplings (Section G)  
Stainless Steel "B" Couplings (Section H)

**Global M3K Mega3000® Hose - SAE 100R17 - XtraTuff™ Cover**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G", and ISO11237 R17  
XtraTuff™ hose lasts up to 25 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.



<b>Recommended For:</b>	High-pressure hydraulic oil lines. Exceeds SAE 100R17 and ISO11237 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.
<b>Temperature Range:</b>	-40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.
<b>Tube:</b>	Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	Braided, high-tensile steel wire. -4, -5, -6 and -8 sizes are one braid; -10, -12 and -16 sizes are two braid.
<b>Cover:</b>	Black, oil, abrasion and weather resistant, synthetic rubber (Modified Nitrile - Type C2), with color coded layline. Also available in Standard or MegaTuff® cover. See Hose Stock Characteristics.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	GlobalSpiral™ Couplings (Section E) MegaCrimp® Couplings (Section G) Power Crimp® Couplings (-3 only) (Section I) Stainless Steel "B" Couplings (Section H)

**M3KH Wire Braid Hose - High-Temp - SAE 100R17**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G", and ISO11237 R17



<b>Recommended For:</b>	High-pressure hydraulic oil lines. Exceeds SAE 100R17 and ISO11237 R17 requirements and performance requirements of EN 857 1SC. M3KH hose has smaller exterior dimensions and significantly tighter bend radius than other SAE 100R1 and 100R2 hose.
<b>Temperature Range:</b>	-40°F to +250°F (-40°C to +121°C). For water emulsions see Temperature Limits Table.
<b>Tube:</b>	Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	Braided, high-tensile steel wire. -4, -5, -6 and -8 sizes are one braid; -10, -12 and -16 sizes are two braid.
<b>Cover:</b>	Black, oil, abrasion and weather resistant, synthetic rubber (Neoprene CR), with color coded layline. See Hose Stock Characteristics.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	GlobalSpiral™ Couplings (Section E) MegaCrimp® Couplings (Section G)



**M3KH Wire Braid Hose - High-Temp - SAE 100R17 - MegaTuff® Cover**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G", and ISO11237 R17  
 MegaTuff® hose lasts up to 300 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.



- Recommended For:** High-pressure hydraulic oil lines. Exceeds SAE 100R17 and ISO11237 R17 working pressure, minimum bend radius requirements and performance requirements of EN 857 1SC. M3KH hose has smaller exterior dimensions and significantly tighter bend radius than other SAE 100R1 and 100R2 hose.
- Temperature Range:** -40°F to +250°F (-40°C to +121°C). For water emulsions see Temperature Limits Table.
- Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
- Reinforcement:** Braided, high-tensile steel wire. -4, -6 and -8 sizes are one braid; -10, -12 and -16 sizes are two braid.
- Cover:** Black, oil, abrasion and weather resistant MegaTuff® cover with color coded layline. Also available in Standard cover. See Hose Stock Characteristics.
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Couplings (Section E)  
 MegaCrimp® Couplings (Section G)

**M2T® MegaFlex® 2-Wire Braid Hose - SAE 100R16**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G", and ISO11237 2SC R16



- Recommended For:** High-pressure hydraulic oil lines. Exceeds SAE 100R16 and ISO11237 2SC R16 requirements and performance requirements of EN 857 2SC. M2T hose has smaller exterior dimensions and significantly tighter bend radius.
- Temperature Range:** -40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.
- Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
- Reinforcement:** Two braids of high-tensile steel wire.
- Cover:** Black, oil, abrasion and weather resistant, synthetic rubber (Modified Nitrile - Type C2), with color coded layline. Also available with unique abrasion resistant MegaTuff® or XtraTuff™ cover. See Hose Stock Characteristics.
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Couplings (Section E)  
 GlobalSpiral™ Plus Couplings (-24 and -32) (Section E)  
 MegaCrimp® Couplings (Section G)  
 Stainless Steel "B" Couplings (Section H)



**M2T® MegaFlex® 2-Wire Braid Hose - SAE 100R16 - MegaTuff® Cover**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G", and ISO11237 2SC R16  
MegaTuff® hose lasts up to 300 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.



<b>Recommended For:</b>	High-pressure hydraulic oil lines. Exceeds SAE 100R16 and ISO11237 2SC R16 working pressure, minimum bend radius requirements and performance requirements of EN 857 2SC. M2T hose has smaller exterior dimensions and significantly tighter bend radius.
<b>Temperature Range:</b>	-40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.
<b>Tube:</b>	Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	Two braids of high-tensile steel wire.
<b>Cover:</b>	Black, oil, abrasion and weather resistant MegaTuff® cover with color coded layline. Also available in Standard or XtraTuff™ cover. See Hose Stock Characteristics.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	GlobalSpiral™ Couplings (Section E) MegaCrimp® Couplings (Section G) Stainless Steel "B" Couplings (Section H)

**M2T® MegaFlex® 2-Wire Braid Hose - SAE 100R16 - XtraTuff™ Cover**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G", and ISO11237 2SC R16  
XtraTuff™ hose lasts up to 25 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.



<b>Recommended For:</b>	High-pressure hydraulic oil lines. Exceeds SAE 100R16 and ISO11237 2SC R16 working pressure, minimum bend radius requirements and performance requirements of EN 857 2SC. M2T hose has smaller exterior dimensions and significantly tighter bend radius.
<b>Temperature Range:</b>	-40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.
<b>Tube:</b>	Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	Two braids of high-tensile steel wire.
<b>Cover:</b>	Black, oil, abrasion and weather resistant, synthetic rubber (Modified Nitrile - Type C2), with color coded layline. Also available in Standard or MegaTuff® cover. See Hose Stock Characteristics.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	GlobalSpiral™ Couplings (Section E) MegaCrimp® Couplings (Section G) Stainless Steel "B" Couplings (Section H)

**G2XH 2-Wire Braid Xtreme® Heat Hose - SAE 100R2 Type S**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G"



**Recommended For:** High-pressure hydraulic applications where pressure or temperature requirements exceed SAE 100R2, ISO1436 2SN R2 and EN 853 2SN or where resistance to either petroleum-base or phosphate ester fluids is required. Meets SAE J1942 requirements.

**Temperature Range:** Petroleum-base fluids: -40°F to +300°F (-40°C to +149°C). Phosphate ester fluids as recommended by the fluid manufacturer, but within a range of -40°F to +212°F. For water emulsions: Max. +225°F Pressure lines, Max +180°F Return lines.

**Tube:** Black, oil and chemical resistant, synthetic rubber (CPE).

**Reinforcement:** Two braids of high-tensile steel wire.

**Cover:** Blue, oil and abrasion resistant, thin synthetic rubber CSM. Flame resistance - U.S. MSHA 2G.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Couplings (-6 through -20) (Section E)  
GlobalSpiral™ Plus Couplings (-24 and -32) (Section E)  
MegaCrimp® Couplings (-4 through -20) (Section G)

**Global G2H High-Temp 2-Wire Braid Hose Type AT**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G"



**Recommended For:** High-pressure hydraulic oil lines. Meets or exceeds the requirements of SAE 100R2, ISO1436 2SN R2 and EN 853 2SN.

**Temperature Range:** -40°F to +275°F (-40°C to +135°C) constant and +300°F (+149°C) intermittent (up to 10% of operating time). For water emulsions see Temperature Limits Table.

**Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.

**Reinforcement:** Two braids of high-tensile steel wire.

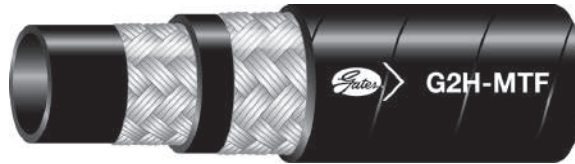
**Cover:** Black, oil resistant, synthetic rubber (CSM - Type M). Also available with unique abrasion resistant MegaTuff® cover. See Hose Stock Characteristics.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** Field Attachable Type T Couplings (-20 and -24) (Section O)  
GlobalSpiral™ Couplings (Section E)  
GlobalSpiral™ Plus Couplings (-24 and -32) (Section E)  
MegaCrimp® Couplings (-20) (Section G)

**Global G2H High-Temp - MegaTuff® Cover Type AT**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G"  
MegaTuff® hose lasts up to 300 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.



<b>Recommended For:</b>	High-pressure hydraulic oil lines. Meets or exceeds the requirements of SAE 100R2, ISO1436 2SN R2 and EN 853 2SN.
<b>Temperature Range:</b>	-40°F to +275°F (-40°C to +135°C) constant and +300°F (+149°C) intermittent (up to 10% of operating time). For water emulsions see Temperature Limits Table.
<b>Tube:</b>	Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	Two braids of high-tensile steel wire.
<b>Cover:</b>	Black, oil and abrasion resistant, synthetic rubber and MegaTuff® cover. Also available in Standard cover. See Hose Stock Characteristics.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	Field Attachable Type T Couplings (-20 and -24) (Section O) GlobalSpiral™ Couplings (Section E) GlobalSpiral™ Plus Couplings (-24 and -32) (Section E) MegaCrimp® Couplings (-20) (Section G)

**Global G2L PolarFlex® Hose - SAE 100R2 Type S**

High Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G"

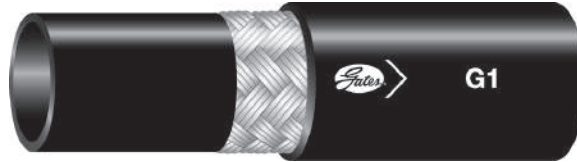


<b>Recommended For:</b>	High-pressure hydraulic oil lines. Meets or exceeds the requirements of SAE 100R2, ISO1436 2SN R2 and EN 853 2SN. Qualified to Mil-DTL-13531 Type II Class B.
<b>Temperature Range:</b>	-70°F to +212°F (-57°C to +100°C). For water emulsions see Temperature Limits Table.
<b>Tube:</b>	Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	Two braids of high-tensile steel wire.
<b>Cover:</b>	Black, oil and abrasion resistant, thin synthetic rubber (Neoprene - Type A). See Hose Stock Characteristics.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	Field Attachable Type T Couplings (-4 through -24) (Section O) GlobalSpiral™ Plus Couplings (-24 and -32) (Section E) MegaCrimp® Couplings (except -24 and -32) (Section G)

**G1 1-Wire Braid Hose - SAE 100R1 Type S**

Medium Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G"



**Recommended For:** Medium pressure hydraulic lines. Meets or exceeds the requirements of SAE 100R1, ISO 1436 1SNR1 and EN 853 1SN.

**Temperature Range:** -40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.

**Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.

**Reinforcement:** One braid of high-tensile steel wire.

**Cover:** Black, oil and abrasion resistant, synthetic rubber (Modified Nitrile - Type C2). See Hose Stock Characteristics.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** Field Attachable Type T Couplings (Section O)  
GlobalSpiral™ Couplings (Section E)  
GlobalSpiral™ Plus Couplings (Section E)  
MegaCrimp® Couplings (except -3, -24 and -32) (Section G)  
Power Crimp® Couplings (-3 only) (Section I)  
Stainless Steel "B" Couplings (Section H)

**G1H 1-Wire Braid Hose - High-Temp - SAE 100R1 Type AT**

Medium Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G"



**Recommended For:** Medium pressure hydraulic oil lines. Meets or exceeds requirements of SAE 100R1 Type AT.

**Temperature Range:** -40°F to +275°F (-40°C to +135°C) constant and +300°F (+149°C) intermittent (up to 10% of operating time). For water emulsions see Temperature Limits Table.

**Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.

**Reinforcement:** One braid of high-tensile steel wire.

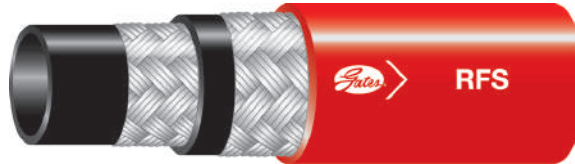
**Cover:** Black, oil and abrasion resistant, synthetic rubber (CSM - Type M).

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GlobalSpiral™ Couplings (Section E)  
GlobalSpiral™ Plus Couplings (-24 and -32) (Section E)  
MegaCrimp® Couplings (except -24 and -32) (Section G)  
Stainless Steel "B" Couplings (-24 and -32 only) (Section H)

**RFS Red Fire Suppressant Hose**

Medium Pressure

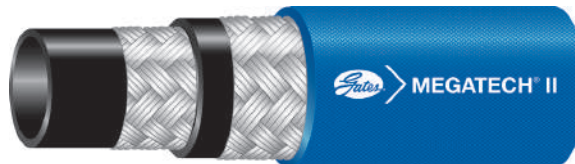
Meets Flame Resistance Acceptance Designation "MSHA 2G"



<b>Recommended For:</b>	Low-pressure powder fire suppressant applications in mining, forestry and fire fighting equipment. The red cover is for easy visual identification in these applications. Meets performance requirements of SAE 100R1.
<b>Temperature Range:</b>	-40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.
<b>Tube:</b>	Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	One braid of high-tensile steel wire.
<b>Cover:</b>	Red, oil and abrasion resistant (Modified Nitrile - Type C2).
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	MegaCrimp® Couplings (Section G) Power Crimp® Couplings (-3 only) (Section I)

**MegaTech® II - SAE 100R2 Type AT - ACP Carton Pack**

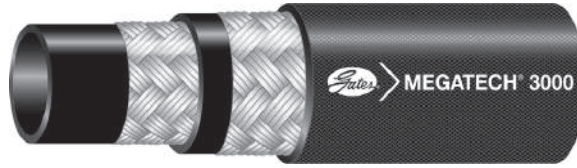
High Pressure



<b>Recommended For:</b>	Multi-purpose high-pressure, high-temperature, air compressor lines, petroleum-base or phosphate ester hydraulic fluid supply lines. Meets the requirements of SAE J1405 performance specifications for high-temperature transmission and lubricating oil systems using petroleum base oils. Meets or exceeds the requirements of SAE 100R2 and SAE 100R2 Type S.
<b>Temperature Range:</b>	-40°F to +300°F (-40°C to +149°C).
<b>Tube:</b>	Black, oil resistant, synthetic rubber (CPE - Type J). See Hose Stock Characteristics.
<b>Reinforcement:</b>	Two braids of high-tensile steel wire.
<b>Cover:</b>	Blue, oil and abrasion resistant, polyester braid.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	GlobalSpiral™ Plus Couplings (-24 and -32) (Section E) MegaCrimp® Couplings (-20 only) (Section G)

Product Information

**MegaTech® 3000 High-Temp Oil-Air Return**



Specialized Mining Hose

- Recommended For:** For pressurized hot oil return lines and rotary oil lines. Meets the requirements of SAE J1405 performance specifications for high-temperature transmission and lubricating oil systems using petroleum base oils.
- Temperature Range:** Petroleum-base fluids: -40°F to +300°F (-40°C to +149°C). Phosphate esters fluids as recommended by the fluid manufacturer, but within a range of -40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.
- Tube:** True-bore GTS (Gates Technical Spec.) black tube specifically compounded for temperature and chemical resistance (CPE - Type J).
- Reinforcement:** Two braids of high-tensile steel wire.
- Cover:** Oil and mildew resistant, textile braid, impregnated with synthetic rubber.
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** MegaCrimp® Couplings (Section G)

Specialized Mining Couplings, Adapters and Accessories

**MegaTech® 1000 High-Temp Oil-Air Return**

Fleet Application



Standard Industrial Hose

- Recommended For:** Air brake, pressurized hot oil return lines and rotary oil/air compressor lines. Meets the requirements of DOT FMVSS 106-74, SAE J1402, for Air Brake Hose (-4, 6, 8, 10), and SAE J1405 performance specifications for high-temperature transmission and lubricating oil systems using petroleum base oils. Not recommended for gasoline or diesel fuel applications.
- Temperature Range:** Petroleum-base fluids: -40°F to +300°F (-40°C to +149°C). Phosphate esters fluids as recommended by the fluid manufacturer, but within a range of -40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.
- Tube:** GTS (Gates Technical Spec.) black tube specifically compounded for temperature and chemical resistance (CPE - Type J). See Hose Stock Characteristics.
- Reinforcement:** One braid of high-tensile steel wire.
- Cover:** Oil and mildew resistant, textile braid, impregnated with synthetic rubber.
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** MegaCrimp® Couplings (Section G)

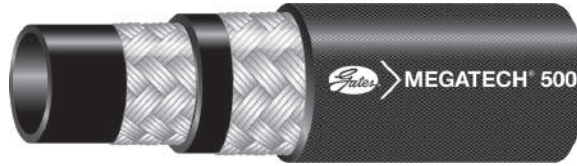
Standard Hydraulic Hose

Equipment and Parts



**MegaTech® 500 High-Temp Oil-Air Return**

Fleet Application



<b>Recommended For:</b>	For air brake hose, pressurized hot oil return lines and rotary oil/air compressor lines. Meets the requirements of SAE J1405 performance specifications for high-temperature transmission and lubricating oil systems using petroleum base oils. Not recommended for gasoline or diesel fuel applications.
<b>Temperature Range:</b>	Petroleum-base fluids: -40°F to +300°F (-40°C to +149°C). Phosphate esters fluids as recommended by the fluid manufacturer, but within a range of -40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.
<b>Tube:</b>	GTS (Gates Technical Spec.) black tube specifically compounded for temperature and chemical resistance (CPE - Type J). See Hose Stock Characteristics.
<b>Reinforcement:</b>	One braid of high-tensile steel wire.
<b>Cover:</b>	Oil and mildew resistant, textile braid, impregnated with synthetic rubber.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	GL Couplings (-24, -32 and -40) (Section J) GlobalSpiral™ Plus Couplings (-24 and -32) (Section E)

**MegaTech® 250 High-Temp Transmission Oil Cooler (TOC) Hose**

<b>Recommended For:</b>	High-temperature (300°F) transmission oil cooler lines, pressurized hot oil return lines and turbocharger oil supplies. Meets or exceeds SAE J1405 performance specifications for high-temperature transmission and lubricating oil systems using petroleum base oils. Not recommended for gasoline or diesel fuel applications.
<b>Temperature Range:</b>	Petroleum-base fluids: -40°F to +300°F (-40°C to +149°C). Phosphate esters fluids as recommended by the fluid manufacturer, but within a range of -40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.
<b>Tube:</b>	GTS (Gates Technical Spec.) black tube specifically compounded for temperature and chemical resistance (CPE - Type J). See Hose Stock Characteristics.
<b>Reinforcement:</b>	One braid of high-tensile steel wire.
<b>Cover:</b>	Oil and mildew resistant, textile braid, impregnated with synthetic rubber.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	GLP Couplings (-4 through -12) (Section J) MegaCrimp® Couplings (Section G)

Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

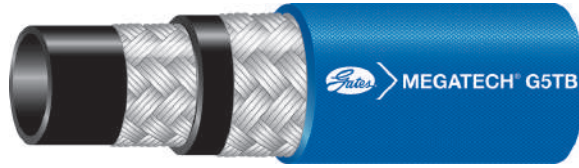
Standard Hydraulic Hose

Equipment and Parts



Product Information

**MegaTech® G5TB Xtreme® Heat Oil-Air Return**



Specialized Mining Hose

- Recommended For:** For pressurized hot oil return lines and rotary oil lines. Meets the requirements of SAE J1405 performance specifications for high-temperature transmission and lubricating oil systems using petroleum base oils.
- Temperature Range:** Petroleum-base fluids: -40°F to +300°F (-40°C to +149°C). Phosphate esters fluids as recommended by the fluid manufacturer, but within a range of -40°F to +212°F (-40°C to +100°C). For water emulsions see Temperature Limits Table.
- Tube:** True-bore GTS (Gates Technical Spec.) black tube specifically compounded for temperature and chemical resistance (CPE - Type J).
- Reinforcement:** Two braids of high-tensile steel wire.
- Cover:** Blue, oil and mildew resistant textile braid, impregnated with synthetic rubber.
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GL Couplings (-24 and -32 only) (Section J)  
GlobalSpiral™ Plus Couplings (-24 and -32) (Section E)  
MegaCrimp® Couplings (Section G)

Specialized Mining Couplings, Adapters and Accessories

**M500 Wire Braid Hose**

Low Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G"



Standard Industrial Hose

- Recommended For:** Pilot lines, grease lines and pressure return lines, 500 psi or less pressure applications.
- Temperature Range:** -40°F to +212°F (-40°C to +100°C).
- Tube:** Black, oil resistant, synthetic rubber (NBR).
- Reinforcement:** One braid of high-tensile steel wire.
- Cover:** Black, oil and abrasion resistant, synthetic rubber, flame resistance. Also available with unique abrasion resistant XtraTuff™ cover. See Hose Stock Characteristics.
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GLP Couplings (-4 through -12) (Section J)  
GlobalSpiral™ Couplings (-6 through -16) (Section E)  
MegaCrimp® Couplings (Section G)

Standard Hydraulic Hose

Equipment and Parts

**M500 Wire Braid Hose - XtraTuff™**

Low Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G"



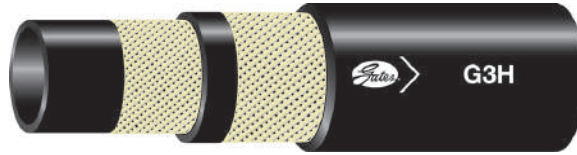
<b>Recommended For:</b>	Pilot lines, grease lines and pressure return lines, 500 psi or less pressure applications.
<b>Temperature Range:</b>	-40°F to +212°F (-40°C to +100°C).
<b>Tube:</b>	Black, oil resistant, synthetic rubber (NBR).
<b>Reinforcement:</b>	One braid of high-tensile steel wire.
<b>Cover:</b>	Black, oil and abrasion resistant, synthetic rubber, flame resistance. Also available in Standard cover. See Hose Stock Characteristics.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	GlobalSpiral™ Couplings (-6 through -16) (Section E) MegaCrimp® Couplings (Section G)

**TR500 High-Temp/Air Brake/Engine Hose**

<b>Recommended For:</b>	Air brake hose, high temperature pressurized oil return lines and rotary oil/air compressor lines, engine and transmission coolant lines and lube oil lines. Meets or exceeds DOT FMVSS 106-74, SAE J1402 for air brake hose (4, 6, 8, 10). Not recommended for gasoline or diesel fuel applications.
<b>Temperature Range:</b>	-40°F to +250°F (-40°C to +121°C). For water emulsions see Temperature Limits Table.
<b>Tube:</b>	Black (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	One braid of high-tensile steel wire.
<b>Cover:</b>	Oil and mildew resistant, textile braid, impregnated with synthetic rubber.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	GLP Couplings (Section J) MegaCrimp® Couplings (Section G)

**G3H High-Temp 2-Fiber Braid Hose - SAE 100R3**

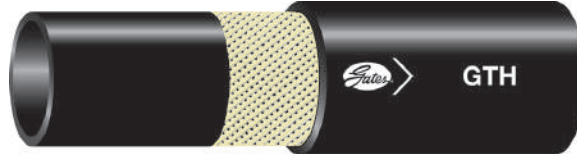
Medium Pressure



- Recommended For:** Hydraulic oil lines, anti-freeze solutions or water. Meets or exceeds requirements of SAE 100R3.
- Temperature Range:** For hydraulic oil lines -40°F to +275°F (-40°C to +135°C) constant and +300°F (+149°C) intermittent (up to 10% of operating time). For water emulsions see Temperature Limits Table.
- Tube:** Black, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
- Reinforcement:** Two fiber braids.
- Cover:** Black, oil and abrasion resistant, synthetic rubber (Neoprene - Type A). See Hose Stock Characteristics.
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** MegaCrimp® Couplings (-4, -6, -8, -10) (Section G)

**GTH High-Temp 1-Fiber Braid Hose - SAE 100R6**

Low Pressure



- Recommended For:** Hydraulic oil lines, heavy-duty transmission oil cooler lines and glycol anti-freeze solutions. Meets or exceeds requirements of SAE 100R6.
- Temperature Range:** For hydraulic oil lines -40°F to +275°F (-40°C to +135°C) constant and +300°F (+149°C) intermittent (up to 10% of operating time). For water emulsions see Temperature Limits Table.
- Tube:** Black, specially compounded, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
- Reinforcement:** One fiber braid.
- Cover:** Black, oil and abrasion resistant, synthetic rubber (Neoprene - Type A). See Hose Stock Characteristics.
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GLP Couplings (except -3 and -5) (Section J)  
MegaCrimp® Couplings (except -3) (Section G)  
Power Crimp® Couplings (-3 only) (Section I)

**GTHX High-Temp Fiber Spiral Hose - SAE 100R6**

Low Pressure



<b>Recommended For:</b>	Hydraulic oil lines, heavy-duty transmission oil cooler lines and glycol anti-freeze solutions. Meets or exceeds requirements of SAE 100R6.
<b>Temperature Range:</b>	For hydraulic oil lines -40°F to +275°F (-40°C to +135°C) constant and +300°F (+149°C) intermittent (up to 10% of operating time). For water emulsions see Temperature Limits Table.
<b>Tube:</b>	Black, specially compounded, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	Spiraled synthetic fiber.
<b>Cover:</b>	Black, oil and abrasion resistant, synthetic rubber (Neoprene - Type A). See Hose Stock Characteristics.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	MegaCrimp® Couplings (Section G)

**GMV Global MegaVac® Return Line and Suction Hose**

Low Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G"



<b>Recommended For:</b>	Petroleum and water-base hydraulic fluids in suction lines or in low pressure return lines. Meets or exceeds requirements of SAE 100R4. Uses half the bend radius of SAE 100R4. Meets marine ABS with use of HeatGuard® high temp sleeve.
<b>Temperature Range:</b>	-40°F to +275°F (-40°C to +135°C) constant and +300°F (+149°C) intermittent (up to 10% of operating time). For water emulsions see Temperature Limits Table.
<b>Tube:</b>	Black, synthetic rubber is specifically designed for resistance to high temperatures (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	Double spiral textile (braid for -12, -16 and -20) reinforced with a helical spiral-wire to prevent collapse.
<b>Cover:</b>	Black synthetic rubber is oil and abrasion resistant (Neoprene - Type A). See Hose Stock Characteristics.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	GL Couplings (-12 through -40) (Section J) GlobalSpiral™ Plus Couplings (-24 and -32) (Section E) MegaCrimp® Couplings (-12 through -20) (Section G) Use clamp over beaded nipple.

**G4H MegaVac® Return Line and Suction Hose**

Low Pressure

Meets Flame Resistance Acceptance Designation "MSHA 2G"

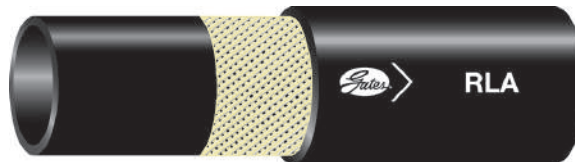


- Recommended For:** Petroleum and water-base hydraulic fluids in suction lines or in low pressure return lines. Meets or exceeds requirements of SAE 100R4 (except 1" I.D.). Uses half the bend radius of SAE 100R4.
- Temperature Range:** -40°F to +275°F (-40°C to +135°C) constant and +300°F (+149°C) intermittent (up to 10% of operating time). For water emulsions see Temperature Limits Table.
- Tube:** Black, synthetic rubber is specifically designed for resistance to high temperatures (Nitrile - Type C). See Hose Stock Characteristics.
- Reinforcement:** Double spiral textile reinforced with a helical spiral-wire to prevent collapse.
- Cover:** Black synthetic rubber is oil and abrasion resistant (Neoprene - Type A). See Hose Stock Characteristics.
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** MegaCrimp® Couplings (-12 and -16) (Section G)  
Use clamp over beaded nipple.

**RLA 1-Fiber Braid Return Line and Low Pressure Hose**

Low Pressure

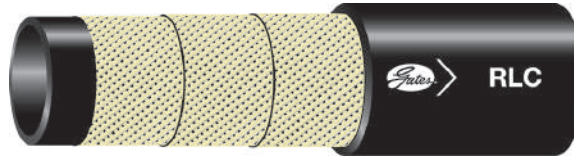
Meets Flame Resistance Acceptance Designation "MSHA 2G"



- Recommended For:** Low-pressure hydraulic oil return lines for general purpose water, glycol antifreeze solutions, conveying diesel fuel, gasoline or air. Meets SAE 30R2 performance requirements of both Type 1 and Type 2 for fuel and B20 constant contact up to 125°F biodiesel fuel transfer applications.
- Temperature Range:** -40°F to +212°F (-40°C to +100°C). Air to +160°F (+71°C) only. For water emulsions see Temperature Limits Table.
- Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
- Reinforcement:** One fiber braid (-3 to -10). Spiral braid (-12 to -16).
- Cover:** Black, synthetic rubber. Oil and abrasion resistant (Modified Nitrile - Type C2). See Hose Stock Characteristics.
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** GLP Couplings (except -3, -5 and -16) (Section J)  
MegaCrimp® Couplings (except -3) (Section G)  
Power Crimp® Couplings (-3 only) (Section I)

## RLC 3-Fiber Braid Return Line and Low Pressure Hose

Low Pressure



<b>Recommended For:</b>	Petroleum-base hydraulic oils, glycol antifreeze, air or water in low pressure fluid transfer or hydraulic system return lines. Generally connected to 100R4 stems, beaded nipples, or tube type ports with worm gear clamps.
<b>Temperature Range:</b>	For hydraulic oil lines -40°F to +275°F (-40°C to +135°C) constant and +300°F (+149°C) intermittent (up to 10% of operating time); air to +160°F (+71°C) only. For water emulsions see Temperature Limits Table.
<b>Tube:</b>	Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	Three fiber braids.
<b>Cover:</b>	Black, oil and abrasion resistant, synthetic rubber (Modified Nitrile - Type C2). See Hose Stock Characteristics.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	Use barbed stem or beaded-tube with clamps only.

## MegaTech® LOC 1-Fiber Braid High-Temp Lock-On Hose

Low Pressure

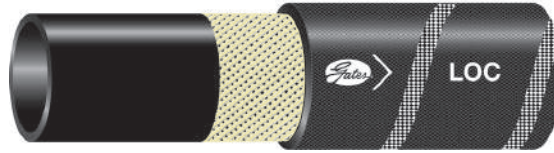


<b>Recommended For:</b>	High-temperature (300°F) transmission oil cooler lines, pressurized hot oil return lines and turbocharger oil supply lines. Meets or exceeds SAE J1405 performance specifications for high-temperature transmission and lubricating oil systems using petroleum base oils. Not recommended for gasoline or diesel fuel applications.
<b>Temperature Range:</b>	-40°F to +300°F (-40°C to +149°C).
<b>Tube:</b>	True-bore GTS (Gates Technical Spec.) black tube specifically compounded for temperature and chemical resistance (CPE - Type J).
<b>Reinforcement:</b>	One fiber braid.
<b>Cover:</b>	Oil and mildew resistant, textile braid, impregnated with synthetic rubber.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	Field Attachable LOC Couplings (Section J) GLP Couplings (-4 through -12) (Section J) MegaCrimp® Couplings (-16) (Section G)

Product Information

**LOC 1-Fiber Braid Lock-On Hose**

Low Pressure



Specialized Mining Hose

**Recommended For:** Petroleum-base hydraulic oils, glycol antifreeze compounds, water, engine lubricating oils and air. Lock-On hose and couplings are NOT recommended for vibration or pressure surge applications, such as permanent piping in residential or commercial buildings. Meets SAE 30R2, SAE 30R6 and SAE 30R7 performance requirements for fuel and B20 biodiesel fuel transfer applications up to +125°F.

**Temperature Range:** -40°F to +250°F (-40°C to +121°C). For air: -40°F to +160°F (-40°C to +71°C). For water emulsions see Temperature Limits Table.

**Tube:** Black, oil resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.

**Reinforcement:** One fiber braid.

**Cover:** Oil and mildew resistant, textile braid, impregnated with synthetic rubber.

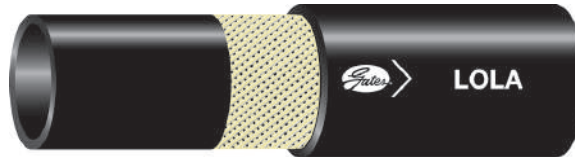
**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** Field Attachable LOC Couplings (Section J)  
GLP Couplings (Section J)  
Use clamp over beaded nipple.

Specialized Mining Couplings, Adapters and Accessories

**LOL Plus Lock-On Hose**

Low Pressure

Black Cover Only Meets Flame Resistance Acceptance Designation "MSHA 2G".



Standard Industrial Hose

**Recommended For:** Petroleum-base hydraulic oils, water, glycol antifreeze solutions, engine lubricating oils, and air. Lock-On hose and couplings are NOT recommended for pressure surge applications or critical applications, such as permanent piping in residential or commercial buildings. Do not use for gasoline or diesel fuels, unless approved by Gates H/C Product Application.

**Temperature Range:** -40°F to +212°F (-40°C to +100°C). Air to +160°F (+71°C) only. For water emulsions see Temperature Limits Table.

**Tube:** Black, oil resistant, synthetic rubber highly resistant to oil and heat (Nitrile - Type C). See Hose Stock Characteristics.

**Reinforcement:** One fiber braid.

**Cover:** Oil and abrasion resistant synthetic rubber (Modified Nitrile - Type C2). Available in black Neoprene (LOLA), blue (LOLB), green (LOLG), red (LOLR), yellow (LOLY) and gray (LOLC) colors.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** Field Attachable LOC Couplings (Section J)  
GLP Couplings (except -3) (Section J)  
Use clamp over beaded nipple.

Standard Hydraulic Hose

Equipment and Parts



**C5C Hydraulic Hose - SAE 100R5**

DOT FMVSS 106-74 Type All and SAE J1402 Type All for air brake applications (-4 to -12).



<b>Recommended For:</b>	Medium pressure hydraulic petroleum-based oil lines in impulse applications, lube oil, air and water in applications such as air brakes, power steering (CAUTION: Intended for heavy-duty commercial vehicle use only), turbocharger oil supplies, tilt cab cylinders, transmission coolant and filtration lines. Meets or exceeds requirements of SAE 100R5 for traditional hydraulic applications, DOT FMVSS 106-74 Type All and SAE J1402 Type All for air brake applications (-4 to -12). Not recommended for gasoline or diesel fuel.
<b>Temperature Range:</b>	Under SAE 100R5 (hydraulic) conditions -40°F to +212°F (-40°C to +100°C). All-purpose fleet application (hot lube oil lines) -40°F to +300°F (-40°C to +149°C). Air to +160°F (+71°C) only. Avoid continuous use at maximum temperature concurrent with maximum working pressures. For water emulsions see Temperature Limits Table.
<b>Tube:</b>	-4 and -5: black, oil and heat resistant synthetic rubber (Neoprene - Type A); -6 through -40: (Nitrile - Type C). See Hose Stock Characteristics.
<b>Reinforcement:</b>	One braid of high-tensile carbon steel wire over one braid of polyester.
<b>Cover:</b>	Black, oil and mildew resistant, polyester braid.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	C5 Field Attachable Couplings (Section P)

**C5CXH Xtreme® Heat Hose - SAE 100R5**

DOT FMVSS 106-74 Type All and SAE J1402 Type All for (-4 to -12).



<b>Recommended For:</b>	Petroleum based or phosphate ester fluids, turbo charger oil supply and hot lube oil lines. Meets the requirements of SAE J1405 performance specifications for high temperature transmission and lubrication oil systems.
<b>Temperature Range:</b>	-40°F to +302°F (-40°C to +150°C).
<b>Tube:</b>	Black, oil and heat resistant synthetic polymer tube (CPE - Type J). See Hose Stock Characteristics.
<b>Reinforcement:</b>	Braided, high tensile wire and textile.
<b>Cover:</b>	Blue, oil and mildew resistant polyester/textile braid.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	C5 Field Attachable Couplings (-6, -10, -16 and -20) (Section P) C5X Field Attachable Couplings (-5, -8, and -12 Only) (Section P) Crimp options are MegaCrimp®, GlobalSpiral™ (depending on size)

### C5D High-Temp Multi-Fluid Hose

DOT FMVSS 106-74 Type All, SAE J1402 Type All (-4 to -12).



**Recommended For:** Petroleum-base or phosphate ester fluids; diesel fuels and filtration lines, transmission coolant lines, hot lube oil lines, power steering (CAUTION: Intended for heavy-duty commercial vehicle use only), gasoline and turbocharger oil supplies. Tilt cab cylinder and air brakes. C5D (-4 to -12) meets or exceeds DOT FMVSS 106-74 Type All, SAE J1402 Type All and SAE J1405 and fuel resistance of SAE J30R2. Not approved for bio diesel.

**Temperature Range:** -40°F to +300°F (-40°C to +149°C). Air to +250°F (+121°C) only, maximum phosphate esters to +212°F (+100°C). For water emulsions see Temperature Limits Table.

**Tube:** Black, oil and heat resistant, synthetic rubber (CPE - Type J). See Hose Stock Characteristics.

**Reinforcement:** One braid of high-tensile steel wire over one braid of polyester.

**Cover:** Green for easy identification, oil and mildew resistant, polyester braid impregnated with synthetic rubber.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** C5 Field Attachable Couplings (Section P)

### C5E High-Temp Flexline Hose

DOT FMVSS 106 Type A1, SAE J1405 and SAE J1402 Type A1 (-4 to -12).



**Recommended For:** Air brake hose, power steering (CAUTION: Intended for heavy-duty commercial vehicle use only), engine and transmission coolant lines, and hot (+300°F) lube oil lines. Not recommended for gasoline or diesel fuel.

**Temperature Range:** -40°F to +300°F (-40°C to +149°C). Air +250°F (+121°C) maximum only. For water emulsions see Temperature Limits Table.

**Tube:** Black, oil and heat resistant, synthetic rubber (Nitrile - Type C). See Hose Stock Characteristics.

**Reinforcement:** One braid of high-tensile steel wire over one braid of polyester.

**Cover:** Black, oil and heat resistant, textile braid impregnated with synthetic rubber. Green stripe for easy identification.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** C5E Field Attachable Couplings (Section P)

**C14 PTFE Hose - SAE 100R14 Type A - Nonconductive**



- Recommended For:** Air compressor discharge, hot oil and fluids, hot and greasy environments.
- Temperature Range:** Dynamic: -65°F to +400°F (-54°C to +204°C). Static: -65°F to +450°F (-54°C to +232°C).
- Tube:** Type A-Nonconductive white, smooth bore Polytetrafluoroethylene (PTFE). See Hose Stock Characteristics.
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** C14 Couplings (Section M)

**C14CT PTFE Hose - SAE 100R14 Type B - Conductive**



- Recommended For:** Air compressor discharge, hot oil and fluids, hot and greasy environments.
- Temperature Range:** Dynamic: -65°F to +400°F (-54°C to +204°C). Static: -65°F to +450°F (-54°C to +232°C).
- Tube:** Type B-Conductive black/white smooth bore Polytetrafluoroethylene (PTFE). See Hose Stock Characteristics.
- Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** C14 Couplings (Section M)

Product Information

**TH8 Hydraulic Hose - SAE 100R8**

Thermoplastic



Specialized Mining Hose

**Recommended For:** Use with petroleum, water base and synthetic hydraulic fluids. Applications include: power and telephone mobile equipment (cherry pickers), lubrication lines, blowout preventer control lines, hydraulic lifts and farm and construction machinery. TH8 hose meets or exceeds performance requirements of SAE 100R8 with a significantly tighter bend radius. Multiline available.

**Temperature Range:** -65°F to +200°F (-54°C to +93°C) continuous service for petroleum and synthetic oils. Maximum of +158°F (+70°C) for water, water/oil emulsions and water glycol.

**Tube:** 100% seamless Nylon - Type Z that easily handles a broad range of hydraulic fluids, including phosphate esters and water glycol. See Hose Stock Characteristics.

**Reinforcement:** Polyester.

**Cover:** Black urethane resists hydraulic fluids, high temperatures, aging and weathering. Black TH8 cover is perforated for use in general hydraulic and pneumatic service.

Specialized Mining Couplings, Adapters and Accessories

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** MegaCrimp® Couplings (-4 through -16) (Section G)  
Swage PCTS Couplings (-3 only) (Section N)

Standard Industrial Hose

**TH8NC Non Conductive Hydraulic Hose - SAE 100R8**

Thermoplastic



Standard Hydraulic Hose

**Recommended For:** Use with petroleum, water base and synthetic hydraulic fluids. Applications include: power and telephone mobile equipment (cherry pickers), lubrication lines, blowout preventer control lines, hydraulic lifts and farm and construction machinery. TH8NC hose (orange cover) meets SAE 100R8 non-conductivity requirements. TH8NC hose meets or exceeds performance requirements of SAE 100R8 with a significantly tighter bend radius. Multiline available.

**Temperature Range:** -65°F to +200°F (-54°C to +93°C) continuous service for petroleum and synthetic oils. Maximum of +158°F (+70°C) for water, water/oil emulsions and water glycol.

**Tube:** 100% seamless Nylon - Type Z that easily handles a broad range of hydraulic fluids, including phosphate esters and water glycol. See Hose Stock Characteristics.

**Reinforcement:** Polyester.

**Cover:** Orange urethane resists hydraulic fluids, high temperatures, aging and weathering. TH8NC is non-perforated for applications requiring electrical non-conductivity. Meets SAE 100R8 Electrical Conductivity Test. Maximum leakage shall not exceed 50 microamperes when subjected to 75 kV/Ft. for five minutes. (Orange is industry accepted color for non-conductive hose).

Equipment and Parts

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** MegaCrimp® Couplings (Section G)

## TH7 Hydraulic Hose - SAE 100R7

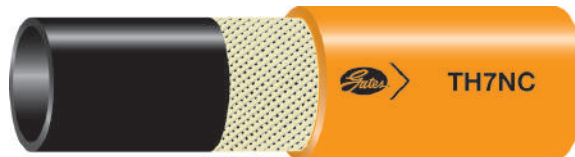
Thermoplastic



<b>Recommended For:</b>	Petroleum, water base and synthetic hydraulic fluids. Applications include: power and telephone mobile equipment (cherry pickers), lubrication lines, blowout preventer control lines, hydraulic lifts and farm and construction machinery. TH7 hose meets or exceeds performance requirements of SAE 100R7 with a significantly tighter bend radius.
<b>Temperature Range:</b>	-65°F to +200°F (-54°C to +93°C) continuous service for petroleum and synthetic oils. Maximum of +158°F (+70°C) for water, water/oil emulsions and water glycol.
<b>Tube:</b>	100% seamless Nylon - Type Z that easily handles a broad range of hydraulic fluids, including phosphate esters and water glycol. See Hose Stock Characteristics.
<b>Reinforcement:</b>	Synthetic fiber.
<b>Cover:</b>	Black polyurethane that resists hydraulic fluids, high temperatures, aging and weathering. Black TH7 is perforated for use in general hydraulic and pneumatic service.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	MegaCrimp® Couplings (Section G) Swage PCTS Couplings (-2 and -3) (Section N)

## TH7NC Non Conductive Hydraulic Hose - SAE 100R7

Thermoplastic

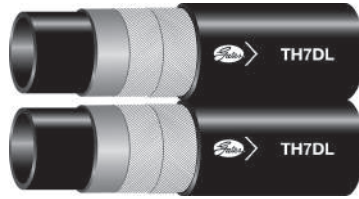


<b>Recommended For:</b>	Petroleum and synthetic hydraulic fluids. Applications include: power and telephone mobile equipment (cherry pickers), lubrication lines, blowout preventer control lines, hydraulic lifts and farm and construction machinery. Orange color TH7NC meets SAE 100R7 non-conductivity requirements and meets or exceeds performance requirements of SAE 100R7 with a significantly tighter bend radius. Meets ANSI A92.2 for vehicle mounted aerial devices (-4 to -8).
<b>Temperature Range:</b>	-65°F to +200°F (-54°C to +93°C) continuous service for petroleum and synthetic oils. Maximum of +158°F (+70°C) for water, water/oil emulsions and water glycol.
<b>Tube:</b>	-2, -12, and -16: 100% seamless Nylon - Type Z that easily handles a broad range of hydraulic fluids, including phosphate esters and water glycol; -3 through -8 Polyester. See Hose Stock Characteristics.
<b>Reinforcement:</b>	Synthetic fiber (except -2).
<b>Cover:</b>	Orange urethane that resists hydraulic fluids, high temperatures, aging and weathering. Orange TH7NC is non-perforated for applications requiring electrical non-conductivity. Meets SAE 100R7 Electrical Conductivity Test. Maximum leakage shall not exceed 50 microamperes when subjected to 75 kV/Ft. for five minutes. (Orange is industry accepted color for non-conductive hose).
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	MegaCrimp® Couplings (Section G) Swage PCTS Couplings (-2 and -3) (Section N)

Product Information

**TH7DL Dual Line Hydraulic Hose - SAE 100R7**

Thermoplastic



Specialized Mining Hose

**Recommended For:** Petroleum, water base and synthetic hydraulic fluids. Applications include: power and telephone mobile equipment (cherry pickers), lubrication lines, blowout preventer control lines, hydraulic lifts and farm and construction machinery. TH7DL hose meets or exceeds performance requirements of SAE 100R7 with significantly tighter bend radius.

Specialized Mining Couplings, Adapters and Accessories

**Temperature Range:** -65°F to +200°F (-54°C to +93°C) continuous service for petroleum and synthetic oils. Maximum of +158°F (+70°C) for water, water/oil emulsions and water glycol.

**Tube:** 100% seamless Nylon - Type Z that easily handles a broad range of hydraulic fluids, including phosphate esters and water glycol. See Hose Stock Characteristics.

**Reinforcement:** Synthetic fiber.

**Cover:** Black polyurethane that resists hydraulic fluids, high temperatures, aging and weathering. Black TH7DL is perforated for use in general hydraulic and pneumatic service.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** MegaCrimp® Couplings (Section G)

Standard Industrial Hose

**TH7NCDL Non Conductive Dual Line Hydraulic Hose - SAE 100R7**

Thermoplastic



Standard Hydraulic Hose

**Recommended For:** Petroleum, water base and synthetic hydraulic fluids. Applications include: power and telephone mobile equipment (cherry pickers), lubrication lines, blowout preventer control lines, hydraulic lifts and farm and construction machinery. Orange color TH7NCDL meets SAE 100R7 non-conductivity requirements and meets or exceeds performance requirements of SAE 100R7 with significantly tighter bend radius. Meets ANSI A92.2 for vehicle mounted aerial devices (-3 and -8).

**Temperature Range:** -65°F to +200°F (-54°C to +93°C) continuous service for petroleum and synthetic oils. Maximum of +158°F (+70°C) for water, water/oil emulsions and water glycol.

**Tube:** Polyester.

**Reinforcement:** Synthetic fiber.

**Cover:** Orange urethane that resists hydraulic fluids, high temperatures, aging and weathering. Orange TH7NCDL is non-perforated for applications requiring electrical non-conductivity. Meets SAE 100R7 Electrical Conductivity Test. Maximum leakage shall not exceed 50 microamperes when subjected to 75 kV/Ft. for five minutes. (Orange is industry accepted color for non-conductive hose.)

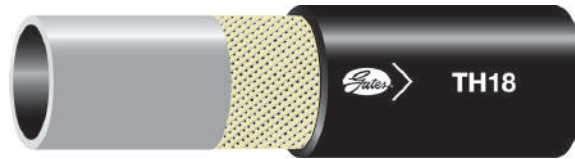
Equipment and Parts

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** MegaCrimp® Couplings (Section G)



**TH18 Constant Pressure Hydraulic Hose - SAE 100R18**

Thermoplastic



<b>Recommended For:</b>	TH18 hose meets or exceeds performance requirements of SAE 100R18 with a significantly tighter bend radius. Suitable for petroleum or synthetic-based hydraulic fluids in hydraulic systems. TH18 is ideal for industrial and agricultural applications exposed to low temperatures or cyclic and quick temperature changes. Remains highly flexible in cold weather conditions and is resistant to hydraulic fluids, high temperatures, aging and weathering.
<b>Temperature Range:</b>	-67°F to +212°F (-55°C to +100°C) continuous service for petroleum and synthetic oils. Maximum of +158°F (+70°C) for water-based fluids.
<b>Tube:</b>	Polyester elastomer.
<b>Reinforcement:</b>	Synthetic fiber.
<b>Cover:</b>	Black, special polyester, perforated.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	MegaCrimp® Couplings (Section G)

**TH18NC Constant Pressure Non Conductive Hydraulic Hose - SAE 100R18**

Thermoplastic



<b>Recommended For:</b>	TH18NC hose meets or exceeds performance requirements of SAE 100R18 with a significantly tighter bend radius. Suitable for petroleum or synthetic-based hydraulic fluids in hydraulic systems. TH18NC non-conductive hose are suitable for use in high-voltage applications. Remains highly flexible in cold weather conditions and is resistant to hydraulic fluids, high temperatures, aging and weathering.
<b>Temperature Range:</b>	-67°F to +212°F (-55°C to +100°C) continuous service for petroleum and synthetic oils. Maximum of +158°F (+70°C) for water-based fluids.
<b>Tube:</b>	Polyester elastomer.
<b>Reinforcement:</b>	Synthetic fiber.
<b>Cover:</b>	Special polyester, orange (industry-accepted color for non-conductive hose), non-perforated for applications requiring electrical non-conductivity. Meets SAE 100R18 Electrical Conductivity Test. Maximum leakage shall not exceed 50 microamperes when subjected to 75kV/ft for five minutes.
<b>Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):</b>	MegaCrimp® Couplings (Section G)

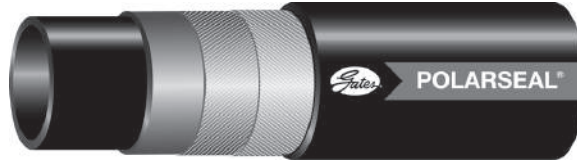


Product Information

**PolarSeal® Hose**

Refrigerant

SAE J51, Type A2 Dimensions; SAE J51, Type D Performance; SAE J2064, Type C, Class II Performance.



Specialized Mining Hose

**Recommended For:** Liquid and gaseous R134a and R12 refrigerants in automotive air conditioning and industrial systems; i.e., tractors, construction trucks, mobile and stationary refrigeration units. Designed to minimize permeation of R134a refrigerant.

Specialized Mining Couplings, Adapters and Accessories

**Temperature Range:** -22°F to +257°F (-30°C to +125°C).

**Tube:** Black, synthetic rubber (Chloroprene - Type A). See Hose Stock Characteristics.

**Reinforcement:** Two layers of spiral polyester.

**Cover:** Black synthetic rubber (EPDM). See Hose Stock Characteristics.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** PolarSeal® Couplings (Section K)

Standard Industrial Hose

**PolarSeal® II Hose**

Refrigerant



Standard Hydraulic Hose

**Recommended For:** AC systems on School/Transit Busses, RV's, Limos and other heavy equipment that has long run or hard to service AC lines. Liquid and gaseous R134a and R12 refrigerants in automotive air conditioning and industrial systems; i.e., tractors, construction trucks, mobile and stationary refrigeration units. Designed to minimize permeation of R134a refrigerant.

**Temperature Range:** -22°F to +257°F (-30°C to +125°C).

**Tube:** Black, synthetic Elastomeric rubber.

**Reinforcement:** Fabric Braid

**Cover:** Heat, Moisture and Ozone resistant black synthetic Elastomeric cover.

**Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):** PolarSeal® II Coupling (Section L)

Equipment and Parts

### MobileCrimp® 4-20 Crimper

Digital Dial Control - Just dial in appropriate crimp setting and hold the start button until light comes on and buzzer sounds, then release. Ability to lock-in setting for multiple assemblies. Light and buzzer operate on two "AAA" batteries.

Positive Stop Control - No settings necessary since color-coded spacer rings control the crimp. Just hold the start button until the ram extends to a fixed "Stop" for each crimp, then release. Controlled crimp stroke for ease of repeatability.

This lightweight, versatile crimper is powerful enough to crimp up to 1 1/4" four spiral-wire hose. Weighing approximately 70 pounds, this new field crimper combines the latest crimping technology with old-fashioned toughness and durability.

**Features Advantages:**

- Great for jobs in the field.
- Portable and lightweight.
- Powerful enough to crimp up to 1 1/4" I.D. four spiral-wire hose.
- The latest in high tech crimping.



Product Number	Description	Weight (Lbs.)
7480-0050	Positive Stop Crimper	152.00

### MobileCrimp® 4-20 Pumps

Wide selection of pumps to match all your power needs.

**Features Advantages:**

- 7481-0002 - Shop Air Pump - Works off standard shop air (90 psi). Economical, convenient and versatile for use wherever 90 psi compressed air is available.
- 7481-0006 - Hand Pump - No power source needed. Economical, convenient and portable for use anywhere. Make factory-quality assemblies in the field to minimize downtime.
- 7481-0034 - 1/2 HP 115 Volt AC Pump - Medium speed. Economical. Recommended for a stationary or mobile application.
- 7481-0035 - 1 1/2 HP 115 Volt AC Pump - High speed. Recommended for stationary applications only.
- 7481-0037 - 1/4 HP 12 Volt DC Pump - Mobile operation, runs on standard 12 volt car/truck battery or a 12 volt portable battery pack. Ideal for tough jobs in the field.



Product Number	Description	Pressure Rating (psi)	Weight (Lbs.)
7481-0035	1 1/2HP, 115V, AC Pump	10000	108.00
7481-0034	1/2HP, 115V, AC Pump	10000	32.00
7481-0037	1/4HP, 12V, DC Pump	10000	20.00
7481-0006	2 Stage Hand Pump	10000	12.00
7481-0002	Shop Air Pump	10000	10.00

Product Information

Specialized Mining Hose

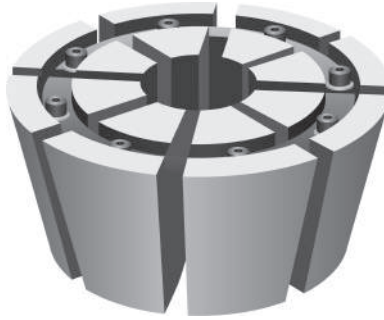
Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

Standard Hydraulic Hose

Equipment and Parts

## MobileCrimp® 4-20 Dies



Product Number	Description	Weight (Lbs.)
7482-0982	Die Set (MCC4) for Clamp Collars	7.02
7482-1400	Die Set (MC20)	7.75
7482-1220	Die Set (MC21)	7.65
7482-1221	Die Set (MC22)	7.55
7482-1131	Die Set (MC31)	8.50
7482-1132	Die Set (MC32)	8.50
7482-1133	Die Set (MC33)	8.50
7482-1134	Die Set (MC34)	8.50
7482-1135	Die Set (MC35)	8.50
7482-1136	Die Set (MC36)	8.50
7482-1137	Die Set (MC37)	7.70
7482-1138	Die Set (MC38)	8.50
7482-1139	Die Set (MC39)	8.50
7482-1140	Die Set (MC40) for 6AC	8.50
7482-1141	Die Set (MC41) for 8AC	8.50
7482-1142	Die Set (MC42) for 10AC	8.50
7482-1143	Die Set (MC43) for 12AC	8.50
7482-1144	Die Set (MC44) for Power Steering	8.50
7482-1145	Die Set (MC45) for Grease Fitting	8.50
7482-1273	Die Set (MC47)	7.65
7482-1344	Die Set (MC71)	7.20
7482-1357	Die Set (MC74)	7.00
7482-1358	Die Set (MC75)	7.20
7482-0981	Die Set (MCC3) for Clamp Collars	7.20

Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

Standard Hydraulic Hose

Equipment and Parts

## MobileCrimp® 4-20 Parts



Product Number	Description	Weight (Lbs.)
3663-6922	8' Hose Assy MC4-20	3.40
7482-1102	B1 Spacer, PS	.52
7482-1105	B2 Spacer, PS	.82
7482-1108	B3 Spacer, PS	1.12
7482-1111	B4 Spacer, PS	1.42
7482-1114	B5 Spacer, PS	1.70
7482-1117	Ball Plunger for Top of Cylinder	.05
7482-1168	Cable Assy. for DD	.12
7482-1165	Chain for Locking Pin	.06
7482-1098	Computer Cable	.10
7482-1016	Computer Crimp Control Box	3.75
7482-1099	Computer Power Module	1.75
7482-1037	Cover Plate	.75
7482-1171	DD Controller Top Mount	2.54
7482-1015	DD Computer Pressure Plate	3.25
7482-1170	DD Top Mt Contrl Kit (side to top mount)	4.35
7482-1148	Die Link	.02
7482-1000	Magnet for Handling Die Sets	1.50
7482-1147	Spring	.01
7482-1100	Digital Dial Assy. Kit (To Upgrade PS)	6.80
7482-1164	Locking Pin	.10
7482-1012	Pivot Knob	.05
7482-1006	Pivot Spacer	.20
7482-1013	Positive Stop Pressure Plate	3.50
7482-1036	Pusher	5.75
7482-1104	R1 Spacer, PS	.74
7482-1107	R2 Spacer, PS	1.00
7482-1110	R3 Spacer, PS	1.30
7482-1113	R4 Spacer, PS	1.60
7482-1116	R5 Spacer, PS	1.88
7482-1190	Retaining Ring for Piston	1.55
7482-1027	Rubber Die Ring	.01
7482-1041	Seal Kit Includes: Seal, Washer and Backup Ring	.10
7482-1149	Shoulder Screws	.01
7482-1157	Slydring for Piston	.14
7482-1009	Stand Clamp	.20
7482-1005	Stand	3.75
7482-1163	Tall Handle for DD	.74
7482-1103	W1 Spacer, PS	.62
7482-1106	W2 Spacer, PS	.90
7482-1109	W3 Spacer, PS	1.20
7482-1112	W4 Spacer, PS	1.50
7482-1115	W5 Spacer, PS	1.80

### Power Crimp® 707 Crimper

Crimps most hydraulic hose from low pressure return lines to extremely high pressure spirals, from 3/16" to 1 1/4" I.D. Crimps straight and bent tube couplings, plus 45° and 90° block types. Can also be adapted for use as a power swager. Gates Power Crimp 707 is the most precise, yet simplest crimper made. It was the first crimper with electronic digital readout to indicate gauge setting. The toughest part about using the 707 is pushing a button. It takes just a few seconds to make factory-quality hose assemblies.

**Specifications:**

- Dimensions: 7480-0043 - 13" wide by 12" deep by 26 1/2" high
- Production Rate: 100 assemblies per hour (using 1/2" I.D. two-wire straight thread assemblies)
- Standard PC707 without die sets wired for 115 volts (includes die backup ring and a notched cone)



Product Number	Description	Weight (Lbs.)
7480-0043	PC707ND (No Dies)	188.12
7480-0049	PC707ND (No Dies) w/Brackets	250.00

### Power Crimp® 707 Pump

The flows of two fixed displacement pumps are combined to deliver a high volume of oil at low pressure for fast transversion. 115 volt, 30 amp, circuit, 1 h.p., 60 cycles.

**Specifications:**

- Dimensions: 12" wide by 25" deep by 12" high



Product Number	Description	Max. Working Pressure	Weight (Lbs.)
7481-0023	Pump 115V/30amp/1HP/60 Cycle	4900	70.00

Product Information

Specialized Mining Hose

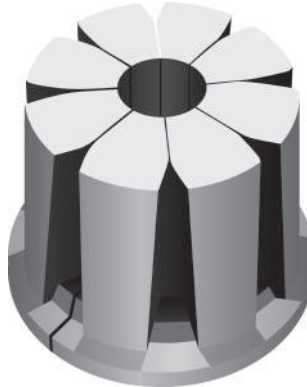
Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

Standard Hydraulic Hose

Equipment and Parts

## Power Crimp® 707 Dies



Product Number	Description	Weight (Lbs.)
7482-1122	CC-7C3 Die Set for Clamp Collar	8.50
7482-1123	CC-7C4 Die Set for Clamp Collar	8.50
7482-1364	Die Set 718M	8.40
7482-0920	Die Set 720 (Requires No Notch Cone)	8.50
7482-1401	Die Set 720S	8.50
7482-1217	Die Set 721	8.22
7482-1218	Die Set 722	8.12
7482-1327	Die Set 722M	8.20
7482-0931	Die Set 731	9.50
7482-0932	Die Set 732	9.50
7482-0933	Die Set 733	8.04
7482-0934	Die Set 734	7.86
7482-0935	Die Set 735	7.60
7482-0936	Die Set 736	7.40
*7482-0937	Die Set 737	8.16
*7482-0939	Die Set 739	8.00
7482-0947	Die Set 740 (6ACA)	9.50
7482-0941	Die Set 741 (8ACA)	9.00
7482-0942	Die Set 742 (10ACA)	8.50
7482-0943	Die Set 743 (12ACA)	7.75
7482-0944	Die Set 744 (Power Steering)	7.88
7482-0945	Die Set 745 (Grease Fitting)	9.50
7482-0946	Die Set 746 (Replaces B Die)	9.00
7482-1232	Die Set 782 for GL	6.00
7482-1233	Die Set 783 for GL	5.85
7482-1429	Die Set 38311 (LG)	5.77
7482-1424	Die Set 73234 (LG)	5.61
7482-1425	Die Set 73335 (LG)	5.54
7482-1426	Die Set 73436 (LG)	5.47
7482-1427	Die Set 73537 (LG)	5.77
7482-1428	Die Set 73638 (LG)	6.26

\*Must Use No-Notch Die Cone.

## Power Crimp® 707 Parts



Product Number	Description	Weight (Lbs.)
7482-0747	115V Cord Assy for Digital Readout	.15
7482-0498	230V Cord Assy. for Digital Readout	.15
7482-0229	Actuator Rod	1.50
7482-0110	Base Plate (Machine)	45.25
7482-0116	Cylinder and Top Plate	78.00
7482-0789	Die Cage Halves (Set of 2) for 700 Series	2.00
7482-0940	Die Cage Halves for 739	1.50
7482-0297	Die Cone (No Notch)	10.75
7482-0239	Die Cone With Notch	10.75
7482-0280	Digital Readout Meter	.80
7482-0291	Magnet for Removing Dies	.60
7482-0442	Microswitch	.05
7482-3011	Molykote 3 oz. Jar G Die Lubricant	.25
7482-0119	Mounting Bracket	.85
7480-6591	PC703 to PC707 Conversion Kit	12.00
7482-0499	PC707 230V Converter Kit	.73
7482-0289	PC707 Hose Assy. (Pump to Crimper)	2.10
7482-1423	Large Plate and Die Kit	21.97
7482-1422	Large Plate	4.82
7482-1095	PC707 Seal Kit for New Aluminum Piston Serial Nos. 14,000 and Up	.20
7482-0283	PC707 Shroud Only	9.10
7482-0147	O-Ring Between Piston and Rod	.05
7482-6959	Piston Return Spring	1.25
7482-0106	Piston Rod	6.90
7482-0109	Piston Rod Guide	9.80
7482-0105	Piston New Design (Seals Included)	6.10
7482-0112	Pusher Cup (update design)	11.50
7482-1672	Screw for Die Fingers	.03
7482-1215	Silver Die Back Up Ring	2.60
7482-0118	Spring Anchor	.07
7482-0919	Stainless Steel Washer	.01
7482-0277	Switch Box Complete w/115V Cord Assy.	3.87
7482-0054	Crimp Switch Button for PC603/PC707	.15
7482-0111	Tie Rod	6.00
7482-0243	Tie Rod Nut	.30



## SC32™ Crimper

The Gates SC32 crimper is a versatile, easy-to-use, economical machine suitable for a hard-working shop environment. It is offered in 110V and 220V single phase versions to match the shop power supply. This rugged crimper is designed for continued use to meet day-to-day shop and counter needs for crimps on hose up to 1 1/4" I.D. with occasional crimps for larger assemblies up to 2", 6-spiral hose.

### Specifications:

7480-0070 - Wired for 220 Volts with 2 HP electric pump.  
 7480-0071 - Wired for 110 Volts with 1 HP electric pump.  
 Dimensions: 16 1/2" wide by 32" deep by 29" high  
 Max. Crimping Force: 80 tons  
 Max. Rated Working Pressure: 10,000 psi  
 Warranty: 2 Years

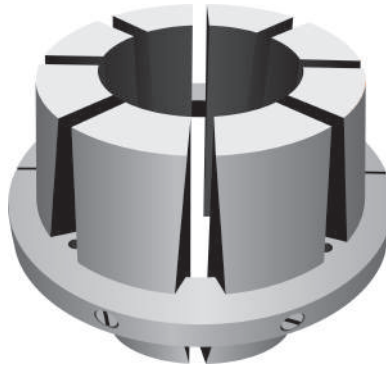


Product Number	Description	Weight (Lbs.)
7480-0071	SC32 Crimper/Pump 110V	435.00
7480-0070	SC32 Crimper/Pump 220V	435.00

## SC32™ Pumps

Product Number	Description	Weight (Lbs.)
7481-0052	SC32 Repl Pump Assy 1HP/110	69.00
7481-0051	SC32 Repl Pump Assy 2HP/220	69.00

## SC32™ Dies



Product Number	Description	Weight (Lbs.)
7482-1734	SC32 Die Ring Half, DBL Angle	1.00
7482-1711	SC32-311 DBL Angle Die Set	19.00
7482-1712	SC32-312 DBL Angle Die Set	17.00
7482-1700	SC32 Base Plate DBL Angle Die	16.00
7482-1739	SC32 Base Plate for PC707 Series	12.00
7482-1701	SC32 Die Cone DBL Angle Die	14.00
7482-1735	SC32 Die Repl Screw for DBL Angle Die	.01
7482-1736	SC32 Die Spring for DBL Angle Die	.01
7482-1432	SC32 Lg Die Set Adapter	12.00
7482-1740	SC32 Notched Die Cone for PC707 Dies	12.00
7482-1710	SC32-310 DBL Angle Die Set	19.00
7482-1713	SC32-313 DBL Angle Die Set	15.00
7482-1714	SC32-314 DBL Angle Die Set	15.00

## SC32™ Parts

Product Number	Description	Weight (Lbs.)
7482-1733	SC32 80 Ton X 4 1/2 Cylinder	75.00
7482-1732	SC32 Switch Craft Push Button Switch	.31
7482-1742	SC32 Crimper Bracket	7.00
7482-1738	SC32 Die Cone for PC707 Series	34.00
7482-1737	SC32 Micrometer	3.00
7482-1731	SC32 DPST-NO 25 AMP Omron Relay	.63
7482-1730	SC32 Pendant Switch	1.00
7482-1702	SC32 Spacer Kit - 1 Inch	14.00

**GC®32TSi Crimper and Stand**



Product Number	Description	Weight (Lbs.)
7480-7004	GC32 TSI 220V Crimper	557.40
7480-7003	GC32-XD Die Rack	48.40
7480-7002	GC32-XD/GC96 Stand	242.00

Product Information

Specialized Mining Hose

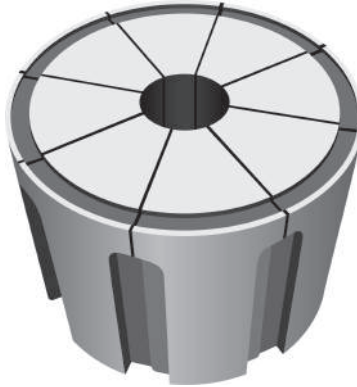
Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

Standard Hydraulic Hose

Equipment and Parts

## GC®32 Dies



Product Number	Description	Weight (Lbs.)
7482-7205	Die Set 32-18M	8.36
7482-7209	Die Set 32-20	8.36
7482-7128	Die Set 32-21	8.36
7482-7129	Die Set 32-22	8.80
7482-7206	Die Set 32-22M	8.80
7482-7130	Die Set 32-31	8.36
7482-7131	Die Set 32-33	8.80
7482-7132	Die Set 32-34	9.24
7482-7133	Die Set 32-35	10.01
7482-7134	Die Set 32-36	9.90
7482-7135	Die Set 32-37	9.24
7482-7136	Die Set 32-38	10.34
7482-7137	Die Set 32-39	9.90
7482-7143	Die Set 32-40 (6AC)	7.48
7482-7144	Die Set 32-41 (8AC)	7.48
7482-7145	Die Set 32-42 (10AC)	7.48
7482-7146	Die Set 32-43 (12AC)	7.26
7482-7147	Die Set 32-44 (Power Steering)	7.92
7482-7157	Die Set 32-45 (Grease Fitting)	8.36
7482-7148	Die Set 32-46 (Battery Cable)	8.36
7482-7149	Die Set 32-81 (12GL)	7.70
7482-7150	Die Set 32-82 (16GL)	7.26
7482-7151	Die Set 32-83 (20GL)	6.60
7482-7152	Die Set 32-84 (24GL)	6.82
7482-7153	Die Set 32-85 (32GL)	5.50
7482-7154	Die Set 32-86 (40GL)	3.74
7482-7138	Die Set 32-310L	9.24
7482-7139	Die Set 32-311	8.80
7482-7140	Die Set 32-312	8.58
7482-7141	Die Set 32-313	7.48
7482-7142	Die Set 32-314	6.91
7482-7156	Die Set 32-331 (Clamp Collars)	8.58
7482-1419	Die Set 32-3234 (LG)	9.68
7482-1420	Die Set 32-3335 (LG)	9.53
7482-1421	Die Set 32-3436 (LG)	9.24
7482-1430	Die Set 32-3537 (LG)	9.76
7482-1431	Die Set 32-3638 (LG)	10.46
7482-1443	Die Set 32-38311 (LG)	9.00

## GC®32 Parts



Product Number	Description	Weight (Lbs.)
3663-5161	Hose Assembly	.18
7482-7194	Back Press. Cont. Cartridge	.33
7482-7175	Breather Cap	.24
7482-7208	Control Box CSA	25.30
7482-7115	Control Panel Post	.14
7482-7189	M5X10 Button Cap Screw	.00
7482-7188	Dial Vernier Locking Plate	.01
7482-7105	Dial Vernier	1.65
7482-7268	Die Retention Plate Kit	.07
7482-7124	Die Tubs	.69
7482-7119	Foam Fillers GC32-XD Set of 8	.04
7482-7111	Foot Pedal	4.40
7482-7176	Fuses	.00
7482-7108	Depth Stop	3.52
7482-7100	Head Replacement Kit	275.00
7482-7126	Head Seal	.00
7482-7192	Inner Washer (Cont. Panel)	.12
7482-7179	Kickers	3.30
7482-7117	Kicker Tubing (Lower)	.15
7482-7116	Kicker Tubing (Upper)	.27
7482-7109	Mirror	3.85
7482-7196	Oil Filter Element	.25
7482-7101	Panel Replacement Kit	25.30
7482-7103	Pilot Operated Check	.81
7482-7113	Control Panel Screws	.00
7482-7104	Quick Change Tool	5.50
7482-7193	Relief Valve	.40
7482-7180	2 Position 3-Way Solenoid	3.96
7482-7102	Valve Block Adapters	.08

### Gates GC®96 Crimper

The GC96 crimper is capable of crimping 2" 6-wire and up to 6" I.D. industrial hose. This crimper allows distributors to make reliable and professional looking assemblies providing more value to the end user. The large crimper head allows industrial hose assemblies to be made with a variety of terminations using crimpable ferrules and sleeves. The GC96 crimper has additional versatility since in conjunction with optional spacer dies and GC®32-XD dies; it can make Gates hydraulic hose assemblies also.



**Specifications:**

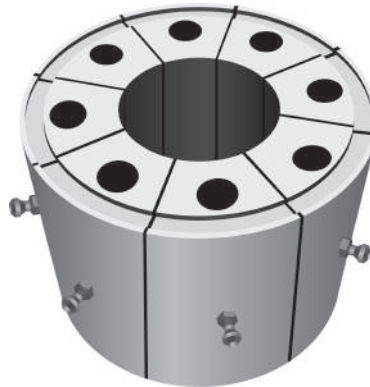
Capability: 1/4" - 2" Hydraulic hose, 2 1/2" - 4" Industrial hose, 5" - 6" Industrial hose up to and including 100 psi WP.

Dimensions: 31" high by 32" wide by 16" deep

Power Source: 208-264V, 45-65 Hz, Single phase and 20 Amps

Product Number	Description	Weight (Lbs.)
7480-0008	GC96 Crimper	770.00

### Gates GC®96 Dies



Product Number	Description	Weight (Lbs.)
7482-9610	Die Set 96-610 with Box	48.45
7482-9611	Die Set 96-611 with Box	43.10
7482-9612	Die Set 96-612 with Box	41.90
7482-9613	Die Set 96-613 with Box	47.10
7482-9614	Die Set 96-614 with Box	32.15
7482-9600	GC96 Spacer Dies with box	39.30
7482-9087	GC96-87 Die Set	44.30
7482-9088	GC96-88 Die Set	39.90
7482-9089	GC96-89 Die Set	41.40

Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

Standard Hydraulic Hose

Equipment and Parts

## PolarSeal® Hose Portable Crimper 2

Gates portable PolarSeal Crimper 2 is a hand-operated hose crimping machine specifically designed for crimping Gates PolarSeal couplings and is intended for use with Gates PolarSeal refrigerant hose. Standard dies included will crimp 5/16" (-6 Black), 13/32" (-8 Blue), 1/2" (-10 Green) and 5/8" (-12 Clear) sizes.

### Features Advantages:

- Capable of crimping underhood air conditioning applications.
- Color-coded, urethane encased dies.
- Crimps two-braid dimension or nylon barrier hose.
- Heavy-duty construction for use with air impact wrenches.
- Includes four color-coded die sets for crimping two-braid barrier hose.
- Lightweight for easy handling, less than six pounds.
- Locator flag centers ferrule in dies.
- No electrical requirements.
- OE-style bubble crimp.
- Portable hand operation, easy to change over from size to size.
- Quick-change dies, no tools required to change sizes.
- Removable die holder accommodates complicated shapes.
- Shipped in a custom carrying case with instructions.
- Unit can be bench-mounted.



Product Number	Description	Weight (Lbs.)
7480-6599	PolarSeal II Portable Crimper	10.10



## PolarSeal® Hose Portable Crimper Parts



Product Number	Description	Weight (Lbs.)
7482-1046	1/4 - 20 X 5/8 Screw	.05
7482-1075	3/8" Floor Flange	.40
7482-1074	3/8" X 4 Pipe Nipple	.00
7482-1052	3/16" X 1/2 Roll Pin	.01
7482-1071	5/32" Short Arm Hex Key	.00
7482-1060	No. 6 Black Die Carrier	.05
7482-1314	6 Die PSC2	.92
7482-1059	No. 6 Die Segment	.11
7482-1064	No. 8 Blue Die Carrier	.01
7482-1315	8 Die PSC2	.92
7482-1063	No. 8 Die Segment	.20
7482-1316	10 Die PSC2	.92
7482-1066	No. 10 Die Segment	.05
7482-1070	No. 12 Clear Die Carrier	.01
7482-1069	No. 12 Die Segment	.09
7482-1317	12 Die PSC2	.92
7482-1313	Thrust Bushing	.02
7482-1056	Actuator Screw	.55
7482-1076	Carry Case, Polars	1.00
7482-1045	Die Guide Block	1.00
7482-1051	Lock Screw	.05
7482-1048	Moveable Die Holder	.68
7482-1073	PTFE Grease	.15
7482-1047	Removable Die Holder	.00
7482-1055	Rubber Bumper	.01
7482-1050	Spring	1.00

Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

Standard Hydraulic Hose

Equipment and Parts

## PolarSeal® II Hose Pliers

The PolarSeal II pliers are used to crimp the clamps on PolarSeal II couplings. The ratcheting pliers will not release until the crimp is complete guaranteeing a proper seal. The straight jaw pliers are used when there are no obstructions to hinder crimping. The notched jaw pliers are for use in tight quarters. Use the side or the front of the pliers to complete the crimp.



Product Number	Description	Weight (Lbs.)
7369-5501	Notched Jaw Pliers	.80
7369-5503	Ratcheting Pliers	1.40
7369-5502	Straight Jaw Pliers	.80

## Vertical Hydraulic Hose Cabinet

Rack up sales and get organized at the same time with a new 'vertical' hydraulic hose cabinet from Gates.

### Features Advantages:

- Designed to support one hydraulic coupling cabinet on top for maximum efficiency.
- Optional choice for use as cabinet base with maximum of one four-drawer cabinet.
- Shown with four-drawer cabinet (purchase separately as Product No. 7484-0010).
- Six narrow and two wide slots to stock a variety of hydraulic hoses.



Product Number	Description	Weight (Lbs.)
7484-0022	Vertical Hose Storage Cabinet (Optional Cabinet Base)	154.00

## Hydraulic Hose Reel Rack

This sturdy and convenient rack stores three reels of hose.

### Specifications:

Dimensions: 30" deep by 28" wide by 72" high



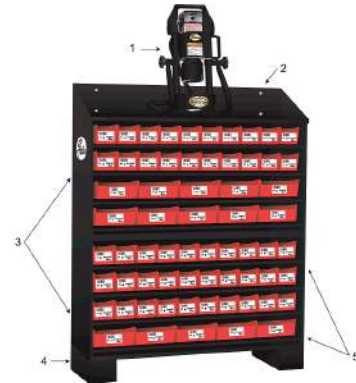
Product Number	Description	Weight (Lbs.)
7484-0019	Hydraulic Hose Reel Rack	165.00

## Hydraulic Coupling Cabinet

Customized to fit all your needs! Now even more versatile, these easy-to-assemble units are compactly designed to give you years of reliable service. Components are ordered individually by product number for easy customization.

### Specifications:

1. MobileCrimp® 4-20 - Pre-drilled holes in mounting shelf (item #2 below) allows easy mounting of either the Positive Stop or Digital Dial MobileCrimp 4-20 crimper. SAFETY HINT: If the MobileCrimp 4-20 is mounted on top of the cabinet, you MUST: • Use crimper mounting shelf (item #2 below) • Bolt shelf and cabinet to wall using pre-drilled holes • Not use the caster leg set
  2. Mounting Shelf for MC 4-20 Crimper - Product No. 7484-0013
  3. Coupling Cabinet with Four Sliding Shelves (Two Shown) - Product No. 7484-0010. Shelves slide out for easy access and can hold a combination of ten 3 1/2" wide bin boxes or five 7" wide bin boxes. Unit can be stacked and bolted together as shown in illustration. Each measures 41" wide by 21" high by 12" deep. SAFETY HINT: Slide open only one shelf at a time to avoid tipping.
  4. Stationary Legs (Shown) - Product No. 7484-0011. Allows for precise leveling. Heavy-Duty Caster Leg Set (Not Shown) - Product No. 7484-0012. Set consists of four heavy-duty casters, two of which can be locked.
  5. Bin Boxes - Order separately in whatever combination best fits your needs. Dividers come with each bin box. Each bin box has slots to allow for maximum utilization.
- When assembled, the typical combination of two four-shelf coupling cabinets and stationary leg set as shown measures 48" high by 41" wide by 12" deep.



Product Number	Description	Weight (Lbs.)
7484-0014	3 1/2" Wide Bins w/3 Dividers (Carton of 10)	7.00
7484-0015	7" Wide Bins w/3 Dividers (Carton of 5)	6.00
7484-0010	Cplg. Cabinet w/4 Sliding Shelves	82.00
7484-0012	Caster Leg Set - Heavy Duty	15.00
7484-0016	Dividers for 3 1/2" Bin (3 per pkg.)	.15
7484-0017	Dividers for 7" Bin (3 per pkg.)	.35
7484-0000	Coupling Cabinet Slide	2.20
7484-0013	Shelf Kit for Crimper MC4-20	18.00
7484-0011	Stationary Leg Set	8.15

### Two-Drawer Coupling Cabinet

This two-drawer cabinet is ideal to add nylon air brake tubing couplings to your hydraulic inventory. This cabinet can be stacked and bolted together with your existing hydraulic cabinet. Uses the same bin boxes as listed above.



**Specifications:**

Dimensions: 41" wide by 11" high by 12" deep

Product Number	Description	Weight (Lbs.)
7484-0021	2 Drawer Coupling Cabinet	42.00

### Work Bench

This new hydraulic work bench is ideal for holding either the Power Crimp® 707 or MobileCrimp® 4-20 crimpers as well as hydraulic saws. The lower shelf can be used for storage or as shown with the pump. It is made of an angle iron frame construction with a high-density fiberboard top and welded 13-gauge steel lower shelf. All hardware is included to allow for easy assembly in about 10 minutes.



**Specifications:**

Dimensions: 36" wide by 24" deep by 36" tall

Product Number	Description	Weight (Lbs.)
7484-0020	Hydraulic Work Bench	74.00

### Hydraulic Coupling Bin and Boxes

Bin boxes for hydraulic couplings. Corrugated cardboard design gives extra strength. Includes four dividers per box. Product No. 7484-0008 and 7484-0009  
The 24-bin cabinet is constructed of heavy gauge steel. Excellent for storing large 1 1/4" to 2" I.D. couplings. Product No. 7484-0007



**Specifications:**

- Dimensions: 7484-0007 - 34" wide by 24" high by 12" deep
- Dimensions: 7484-0008 - 5" wide by 4 1/2" high by 11" deep
- Dimensions: 7484-0009 - 7 1/2" wide by 4 1/2" high by 11" deep

Product Number	Description	Weight (Lbs.)
7484-0007	24 Bin Cplg. Cabinet	44.00
7484-0008	Cardboard Bin Box (Carton of 50)	16.25
7484-0009	Cardboard Bin Box-Lg 25	11.00

Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

Standard Hydraulic Hose

Equipment and Parts

## Hydraulic Coupling Cabinet Parts

Product Number	Description	Weight (Lbs.)
7369-0322	Digital Caliper 6" (Special Milled Hole)	.90
7369-0319	Intl. Thread I.D. Kit (Includes Pocket Kit 86584)	8.11
7369-4318	Pocket Thread I.D. Kit	.50
7484-0213	QD Merchandiser (Replaces 78209)	3.69

## Gates Power Cutter 208

**Features Advantages:**

Clear face shield for added safety.

Cuts small 3/16" I.D. hose and handles the tough job including 2" I.D. spiral wire hose. (Optional abrasive blade preferred for cutting spiral-wire hose, larger than 1 1/4" I.D.)

Easy to use, front face plate with moveable pins holds hose securely for a clean straight cut.

Effortless Straight Cuts Every Time

Includes scalloped, 12" blade to dissipate heat, reducing friction for clean, faster cuts up to 1 1/4" I.D.

Optional abrasive blade for continuous use with 1 1/4" I.D. and larger spiral-wire reinforced hose.

Permanent mounting brackets (included) to attach saw to table.

Powerful high torque, 4.5 horsepower peak motor that makes cutting faster and easier.

Reversible blade can be sharpened; removal and installation is easy.

Safely cuts two and four-wire hose through 2", six-wire hose through 1 1/4".

Sturdy blade guard shields blade for safety.

**Specifications:**

Blade Dimensions: 12" by 1/8"

Dimensions: 7480-6609 - 22 1/2" wide by 18 1/4" length by 23 1/2" high

No Load Speed: 3,500 rpm

Power Source: 4.5 HP Peak, 115/50/60 Hz, 20 Amps

Shaft/Arbor Hole Diameter: 1"

**Caution:**

Keep blade sharp. Heat generated by a dull blade can damage steel and flare the hose.

Product Number	Description	Weight (Lbs.)
7480-6609	208 Hose Cutter	65.00
7482-0426	12" Abrasive Blade for #204, #205, #206, #207, #208	1.85
7482-0983	12" Scalloped Blade for #204, #205, #206, #207, #208	4.70

### Gates Hose Cutter Model 4-16

**Features Advantages:**

Abrasive cut-off wheel  
Cuts up to 1", four-wire braid

**Specifications:**

Arbor Hole: 7/8"  
Cycle: 60 Hz / 1 phase  
No Load Speed: 7,400 rpm  
Power: 6.5 Amp  
Voltage: 120 Volts  
Wheel size: 6"



Product Number	Description	Weight (Lbs.)
7480-6605	Portable Saw	14.00
7482-0012	Saw Blade	.20

### Hand-Held Hose Cutter

Makes clean cuts - no ragged edges. Cuts most non-metal reinforced rubber hose. Excellent for cutting textile-reinforced hose.

**Features Advantages:**

Blade closes into handle for safety.  
Cutter and blades packaged individually on shrink-wrapped cards.  
Lightweight with nylon handles.



Product Number	Description	Weight (Lbs.)
7469-0153	Hand Held Hose Cutter (Red)	.35
7469-0154	Repl Blade for Red Hose Cutter (91153)	.02

### Small Nylon Tubing Cutter & Replacement Blades

Tubing cutter gives straight, clean, square cuts on J844 tubing.

**Features Advantages:**

"Blade guard" offers more protection against accidental blade contact.  
Designed to ensure user's safety.  
Handle has ribs for improved grip.  
Lightweight and compact size - 3/4" by 3".



Product Number	Description	Weight (Lbs.)
7208-40205	Blades for Hose Cutter Refurb	.10
7469-0147	Nylon Tubing Cutter	.20

Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

Standard Hydraulic Hose

Equipment and Parts

### Power Mate 25 Machine and Stand

Portable hose assembly machine for field attachable couplings. 115 volts, 30 amps, 1 phase, 60 cycles.

**Features Advantages:**

- Accommodates male pipe, swivel, flange and elbow type field attachable couplings.
- Affords quick and simple operation reduces costly downtime and delays.
- Applies field attachable couplings in sizes from 3/16" through 2" I.D. on medium and high-pressure hose.
- Can be bench mounted or made portable with folding leg stand.
- Easy and safe to operate.
- Hand-skiving tool can be used with Power Mate 25.
- Heavy-duty provides years of trouble-free service.
- Produces complete, dependable hose assemblies.
- Weights 141 lbs. (without stand). Takes up less than 4 by 5 ft. of floor space with stand.



Product Number	
7480-0029	
7480-0030	

### Lock-On Tool

This hand-operated coupling machine, made of rugged cast iron and steel construction, eliminates the hard work of manually pushing stems into hose. It comes complete with mandrels for 1/4", 3/8", 1/2", 5/8" and 3/4" I.D. sizes of lock-on couplings.



Product Number	Description	Weight (Lbs.)
7480-0100	Lock-On Tool	15.00

Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

Standard Hydraulic Hose

Equipment and Parts



## Lock-On Parts

Product Number	Description	Weight (Lbs.)
7482-0543	Clamp Cam	.88
7482-2502	Compression Spring	.03
7482-2585	Follower 1/2" and 5/8"	.25
7482-2608	Follower Assy. 1/4"	.30
7482-2612	Follower Assy. 3/4"	.25
7482-2610	Follower Assy. 3/8"	.25
7482-1603	Handle	3.13
7482-2070	Hose Clamp	.14
7482-2076	Mandrel 1/2" and 5/8"	.20
7482-2788	Mandrel 1/4"	.05
7482-2079	Mandrel 3/4"	.60
7482-2789	Mandrel 3/8"	.10
7482-2074	Mandrel Support	.27

## Hand-Operated Hose Perforator Tool

These hose perforators have needle-studded wooden rollers which perforate the covers of non-skive wire braid hose used in high pressure inert gas applications. They are hand operated so the operator can control the degree of perforation in the hose cover.

**Specifications:**

Dimensions: 7482-6565 - 2 1/2" O.D. roller by 1 1/4" wide by 8" OAL

Dimensions: 7482-6566 - 3 3/4" O.D. roller by 3" wide by 9 1/2" OAL



Product Number	Description	Weight (Lbs.)
7482-6565	1 1/4" Hose Perf. for 3/16" - 3/4" Hose	1.00
7482-6566	3" Hose Perf. for 1" - 2" Hose	2.00

## MegaCrimp® Coupling Insertion Tool

Offers an easy way to confirm the right insertion depth for all Gates wire-braid hydraulic hose. To use, simply insert the hose into its proper slot indicated by dash size, push it all the way in, check for square cut (maximum allowable angle of cut is five degrees), then mark the insertion depth on the hose.



Product Number	Description	Weight (Lbs.)
7482-1342	MegaCrimp Insertion Tool	4.30

## MegaClean™ System

Used to remove dirt from the inside out with the help of pressurized launchers and compatible nozzles. Gates MegaClean foam projectiles sweep through the inside surface of the hose, taking fine particles of loose dirt and other contaminants with them. At 20–30 percent larger than the hose ID, these projectiles leave nothing behind but a hose that truly is clean from the inside out.

### MegaClean MC-K32 Kit

**Product Number 7467-0001**

- MCL-32 Hand Launcher (Including "Rotary" Plug & Coupler)
- MC-GAR-1 Adapter Ring (-4 thru -20)
- LC32 Carrying & Storage Case
- Hose Nozzles GH-04, GH-05, GH-06, GH-08, GH-10, GH-12, GH-16, GH-20, GH-24, GH-32
- JIC Assembly Nozzles GA-04, GA-06, GA-08, GA-10, GA-12, GA-16, GA-20, GA-24, GA-32
- GA-04-FFORX Nozzle
- MC-32 Launcher Stand
- 1 Projectile Catcher Bucket
- 1 Roll MegaClean Assembly Tape
- 1 Bag of Projectiles Listed in Chart Below

### MegaClean MC-K20 Kit

**Product Number 7467-0002**

- MCL-20 Hand Launcher
- Female Quick-Release Coupler
- LC20 Carrying & Storage Case
- Hose Nozzles GH-04, GH-05, GH-06, GH-08, GH-10, GH-12, GH-16, GH-20
- 1 Projectile Catcher Bucket
- 1 Roll MegaClean Assembly Tape
- 1 Bag of Projectiles Listed in Chart Below

### MegaClean Projectiles Included in Kits

Product Number	Part Number	MC-K32	MC-K20	Bag Quantity
7467-50005	HAP-04	X	X	100
7467-50025	HP-04	X	X	100
7467-50035	HAP-06	X	X	100
7467-50045	HP-06	X	X	100
7467-50055	HAP-08	X	X	100
7467-50065	HP-08	X	X	100
7467-50075	HP-08-1	X	X	50
7467-50085	HP-10	X	X	50
7467-50105	HP-12	X	X	50
7467-50135	HP-16	X	X	40
7467-50155	HP-20	X	X	30
7467-50175	HP-24	X		20
7467-50195	HP-32	X		15



## How it works:



Step 1



Step 2

(continues next page)

## MegaClean™ System Replacement Projectiles

Description	Product Number	Part Number
MegaClean HAP-04-01 Assembly Projectile (100 ea)	7467-50005	MC-HAP-04-1
MegaClean HAP-04 Assembly Projectile (100 ea)	7467-50015	MC-HAP-04
MegaClean HP-04 Hose Projectile (100 ea)	7467-50025	MC-HP-04
MegaClean HAP-06 Assembly Projectile (100 ea)	7467-50035	MC-HAP-06
MegaClean HP-06 Hose Projectile (100 ea)	7467-50045	MC-HP-06
MegaClean HAP-08 Assembly Projectile (100 ea)	7467-50055	MC-HAP-08
MegaClean HP-08 Hose Projectile (100 ea)	7467-50065	MC-HP-08
MegaClean HP-08-1 Hose Projectile (50 ea)	7467-50075	MC-HP-08-1
MegaClean HP-10 Hose Projectile (50 ea)	7467-50085	MC-HP-10
MegaClean HP-10-1 Hose Projectile (50 ea)	7467-50095	MC-HP-10-1
MegaClean HP-12 Hose Projectile (50 ea)	7467-50105	MC-HP-12
MegaClean HP-12-1 Hose Projectile (40 ea)	7467-50115	MC-HP-12-1
MegaClean HP-14 Hose Projectile (40 ea)	7467-50125	MC-HP-14
MegaClean HP-16 Hose Projectile (40 ea)	7467-50135	MC-HP-16
MegaClean HP-16-1 Hose Projectile (30 ea)	7467-50145	MC-HP-16-1
MegaClean HP-20 Hose Projectile (30 ea)	7467-50155	MC-HP-20
MegaClean HP-20-1 Hose Projectile (20 ea)	7467-50165	MC-HP-20-1
MegaClean HP-24 Hose Projectile (20 ea)	7467-50175	MC-HP-24
MegaClean HP-24-1 Hose Projectile (15 ea)	7467-50185	MC-HP-24-1
MegaClean HP-32 Hose Projectile (15 ea)	7467-50195	MC-HP-32
MegaClean HP-32-1 Hose Projectile (10 ea)	7467-50205	MC-HP-32-1
MegaClean HP-40 Hose Projectile (10 ea)	7467-50215	MC-HP-40
MegaClean HP-48 Hose Projectile (10 ea)	7467-50225	MC-HP-48
MegaClean HP-56 Hose Projectile (10 ea)	7467-50235	MC-HP-56
MegaClean HP-64 Hose Projectile (10 ea)	7467-50245	MC-HP-64

Description – Bulk Pack	Product Number	Part Number
MegaClean HAPB-04-01 Assembly Projectile Bulk (10000 ea)	7467-5000	MC-HAPB-04-1
MegaClean HAPB-04 Assembly Projectile Bulk (10000 ea)	7467-5001	MC-HAPB-04
MegaClean HAPB-04 Assembly Projectile Bulk (10000 ea)	7467-5002	MC-HPB-04
MegaClean HAPB-06 Assembly Projectile Bulk (10000 ea)	7467-5003	MC-HAPB-06
MegaClean HPB-06 Hose Projectile Bulk (10000 ea)	7467-5004	MC-HPB-06
MegaClean HAPB-08 Assembly Projectile Bulk (10000 ea)	7467-5005	MC-HAPB-08
MegaClean HPB-08 Hose Projectile Bulk (10000 ea)	7467-5006	MC-HPB-08
MegaClean HPB-08-1 Hose Projectile Bulk (9000 ea)	7467-5007	MC-HPB-08-1
MegaClean HPB-10 Hose Projectile Bulk (7000 ea)	7467-5008	MC-HPB-10
MegaClean HPB-10-1 Hose Projectile Bulk (5500 ea)	7467-5009	MC-HPB-10-1
MegaClean HPB-12 Hose Projectile Bulk (4000 ea)	7467-5010	MC-HPB-12
MegaClean HPB-12-1 Hose Projectile Bulk (3800 ea)	7467-5011	MC-HPB-12-1
MegaClean HPB-14 Hose Projectile Bulk (3500 ea)	7467-5012	MC-HPB-14
MegaClean HPB-16 Hose Projectile Bulk (2000 ea)	7467-5013	MC-HPB-16
MegaClean HPB-16-1 Hose Projectile Bulk (1900 ea)	7467-5014	MC-HPB-16-1
MegaClean HPB-20 Hose Projectile Bulk (1500 ea)	7467-5015	MC-HPB-20
MegaClean HPB-20-1 Hose Projectile Bulk (1200 ea)	7467-5016	MC-HPB-20-1
MegaClean HPB-24 Hose Projectile Bulk (650 ea)	7467-5017	MC-HPB-24
MegaClean HPB-24-1 Hose Projectile Bulk (600 ea)	7467-5018	MC-HPB-24-1
MegaClean HPB-32 Hose Projectile Bulk (450 ea)	7467-5019	MC-HPB-32
MegaClean HPB-32-1 Hose Projectile Bulk (360 ea)	7467-5020	MC-HPB-32-1



Step 3



Step 4



Step 5



Step 6

## MegaClean™ Hose Nozzles

Used to remove dirt from the inside out with the help of pressurized launchers and compatible nozzles. Gates MegaClean foam projectiles sweep through the inside surface of the hose, taking fine particles of loose dirt and other contaminants with them. At 20-30 percent larger than the hose ID, these projectiles leave nothing behind but a hose that truly is clean from the inside out.



Product Number	Description
7467-3012	MegaClean GA-04 JIC Assembly Nozzle
7467-3025	MegaClean GA-04 FFORX Flat Face Nozzle
7467-3015	MegaClean GA-06 JIC Assembly Nozzle
7467-3017	MegaClean GA-08 JIC Assembly Nozzle or Tube
7467-3018	MegaClean GA-10 JIC Assembly Nozzle or Tube
7467-3019	MegaClean GA-12 JIC Assembly Nozzle or Tube
7467-3020	MegaClean GA-16 JIC Assembly Nozzle or Tube
7467-3022	MegaClean GA-20 JIC Assembly Nozzle or Tube
7467-3023	MegaClean GA-24 JIC Assembly Nozzle or Tube
7467-3024	MegaClean GA-32 JIC Assembly Nozzle or Tube
7467-3000	MegaClean GH-04 Hose Nozzle
7467-3001	MegaClean GH-05 Hose Nozzle
7467-3003	MegaClean GH-08 Hose Nozzle
7467-3004	MegaClean GH-10 Hose Nozzle
7467-3005	MegaClean GH-12 Hose Nozzle
7467-3006	MegaClean GH-16 Hose Nozzle
7467-3007	MegaClean GH-20 Hose Nozzle
7467-3008	MegaClean GH-24 Hose Nozzle
7467-3009	MegaClean GH-32 Hose Nozzle
7467-3010	MegaClean GH-40 to GH-64 Hose Nozzle Assortment
7467-3011	MegaClean GT-02 Tube Nozzle
7467-3013	MegaClean GT-04 Tube Nozzle
7467-3014	MegaClean GT-05 Tube Nozzle
7467-3016	MegaClean GT-06 Tube Nozzle
7467-3021	MegaClean GT-20 Tube Nozzle
7467-3002	MegaClean GH-06 Hose Nozzle

Product Information

Specialized Mining Hose

Specialized Mining Couplings, Adapters and Accessories

Standard Industrial Hose

Standard Hydraulic Hose

Equipment and Parts

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1 1/2HP 115V PUMP	95	4MSA-6FSAX90	43	6MSA-6MB	46
1 1/4" HOSE PERF	115	4MSA-6MB	46	6MSA-6MBSPP	46
1/2HP 115V PUMP	95	4MSA-6MBSPP	46	6MSA-6MP	45
1/2X500 RL TERMINATOR	52	4MSA-6MP	45	6MSA-6MSA	44
1/2X500RL PREMOFLEX AR RED 300	52	4MSA-8FSAX	42	6MSA-6MSA-72	44
1/2XRRL PREMO FLEX AR RED 300	53	4MSA-8FSAX90	43	6MSA-8FSAX	42
1/4-20 X 5/8 SCREW	107	4MSA-12MP	45	6MSA-8FSAX90	43
1/4HP 12VDC PUMP	95	4SBR BACK-UP RG	49	6MSA-8MB	46
1/4X500 RL TERMINATOR	52	4SOR O-RING	49	6MSA-8MBSPP	46
1/4X500RL PREMOFLEX AR RED 300	53	4SS STAPLE	48	6MSA-8MP	45
1/4XRRL PREMO FLEX AR RED 300	53	4SSS STAPLE	49	6MSA-10MB	46
1XRRL PREMO FLEX AR RED 300	53	5/32 HEX KEY	107	6MSA-12FSAX	42
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2 DRAWER CPLG CAB	110	6 DIE PSC2	107	6MSA-12MP	45
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3/8X500 RL TERMINATOR	52	6EFLWXCTN	19	8 SHOR O-RING	34
3/8X500RL PREMOFLEX AR RED 300	53	6FIL-6MP-TCX	25	8-8-6FSAT	36
3/8XRRL PREMO FLEX AR RED 300	53	6FSA	47	8-8-6FSAXT	36
3/16 X 1/2 ROLL PIN	107	6FSA-6FSA	34	8-8-8-8FSAC	37
3X50 LW EMULSION	55	6FSA-6FSA90	35	8-8-8FSAT	36
4-4-4FSAC	37	6FSAX-2MP	38	8-8-8FSAXT	36
4-4-4FSAXT	36	6FSAX-4FSAX	35	8-8-8FSHT	32
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4BW	41	6FSAX-4MBSPP	40	8CPB-MTFXREEL	22
4CPB-MTFXREEL	22	6FSAX-4MP	38	8CPBXREEL	21
4CPBXREEL	21	6FSAX-6BJ	41	8EFLW-MTFXCTN	20
4FIL-4MP-TCX	25	6FSAX-6FBSPPX45	37	8EFLWXLL	19
4FSA	47	6FSAX-6FBSPPX90	38	8FILOR-8MP-TCX	25
4FSA-4FSA	34	6FSAX-6FSAX	35	8FSA	47
4FSA-4FSA90	35	6FSAX-6FSAX45	35	8FSA-8FSA	34
4FSAX-2MP	38	6FSAX-6FSAX90	35	8FSA-8FSA90	35
4FSAX-4BJ	41	6FSAX-6MB	39	8FSAX-6BJ	41
4FSAX-4FBSPPX45	37	6FSAX-6MB45	40	8FSAX-6FSAX	35
4FSAX-4FBSPPX90	38	6FSAX-6MB90	40	8FSAX-6FSAX90	35
4FSAX-4FSAX	35	6FSAX-6MBSPP	40	8FSAX-6MB	39
4FSAX-4FSAX45	35	6FSAX-6MBSPPOR	41	8FSAX-6MB45	40
4FSAX-4FSAX90	35	6FSAX-6MP	38	8FSAX-6MB90	40
4FSAX-4MB	39	6FSAX-6MP45	38	8FSAX-6MBSPP	40
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4FSAX-4MP45	38	6FSAX-8MBSPP	40	8FSAX-8FSAX	35
4FSAX-4MP90	39	6FSAX-8MBSPPOR	41	8FSAX-8FSAX45	35
4FSAX-4MP90L	39	6FSAX-8MP	38	8FSAX-8FSAX90	35
4FSAX-5MB	39	6FSAX-8MP45	38	8FSAX-8MB	39
4FSAX-6MB	39	6FSAX-8MP90	39	8FSAX-8MB45	40
4FSAX-6MB45	40	6FSX-6FSXBV	48	8FSAX-8MB90	40
4FSAX-6MB90	40	6G-6MILORX-TCX	23	8FSAX-8MBSPP	40
4FSAX-6MBSPP	40	6G-6PL	28	8FSAX-8MBSPPOR	41
4FSAX-6MP	38	6G-6PL XBULK	28	8FSAX-8MP	38
4FSAX-6MP90	39	6GS-6PL	28	8FSAX-8MP45	38
4FSX-4FSXBV	48	6M4K-6FJX-6FJX45-18.7	104	8FSAX-8MP90	39
4G-4MILORX-TCX	23	6MS-6FSXBV	47	8FSAX-8MP90L	39
4G-4PL	28	6MSA	47	8FSAX-10MB	39
4G-4PL XBULK	28	6MSA-2MP	45	8FSAX-10MB45	40
4G-6PL	28	6MSA-4FSAX	42	8FSAX-10MB90	40
4MS-4FSXBV	47	6MSA-4FSAX45	43	8FSAX-10MBSPP	40
4MSA	47	6MSA-4FSAX90	43	8FSAX-12MB	39
4MSA-2MP	45	6MSA-4MB	46	8FSAX-12MB45	40
4MSA-4FSAX	42	6MSA-4MBSPP	46	8FSAX-12MB90	40
4MSA-4FSAX45	43	6MSA-4MP	45	8FSAX-12MBSPP	40
4MSA-4FSAX90	43	6MSA-4MSA	44	8FSAX-12MBSPPOR	41
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8MSA-4MSA	44	12FSA-8MBSPP	40	16-16-6FSAXT	36
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8MSA-8FSAX45	43	12FSA-12MB90	40	16EFLW-MTFXCTN	20
8MSA-8FSAX90	43	12FSA-12MBSPP	40	16EFLWXLL	19
8MSA-8MB	46	12FSA-12MBSPPOR	41	16FILOR-16MSHSP-TCX	24
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MC-TAPE	118	SHOULDER SCREWS	96		
MegaClean GH-06 Hose Nozzle	118	SILVER BACK UP RING	99		
MegaClean L-20 Hand Launcher	118	SLYDRING FOR PISTON	96		
MegaClean L-32 Hand Launcher	118	SOLENOID SET GC32XD	104		
MegaClean LC64 (Case Only)	118	SPRING ANCHOR	99		
MEGACRIMP INSERTION TOOL	115	SPRING POLAR CRIMP	107		
MICRO SWITCH PC707	99	STAINLESS STEEL WASHER	99		
MIRROR GC32-XD	104	STAND CLAMP MC4-20	96		
MOLYKOTE 3 OZ	99	STAND MC4-20	96		
MOUNTING BRACKET	99	STATIONARY LEG SET	110		
MOVEABLE DIE HOLDER	107	SWITCH BOX W/CORD	99		
OIL FILTER ELEMENT	104	SWITCH BUTTON PC603/PC707	99		
PANEL REPL KIT GC32	104	TALL HANDLE FOR DD	96		
PC703 TO PC707 CONV KIT	99	TERMINATOR	52		
PC707 230V CONVERTER KIT	99	TERMINATOR 1"	52		



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