HYDRAULIC HOSE

HOSE SELECTION & SERVICE LIFE RECOMMENDATIONS

Extracts from SAE J1273 DEC2014: Recommended Practices for Hydraulic Hose Assemblies

1. Scope—SAE J1273 provides guidelines for selection, routing, fabrication, installation, replacement, maintenance, and storage of hose and hose assemblies for fluid-power systems. Many of these SAE Recommended Practices also may be suitable for other hoses and systems.

5. Hose Selection and Routing—A wide variety of interacting factors influence hose service life and the ability of each fluid-power system to operate satisfactorily, and the combined effects of these factors on service life are often unpredictable. Therefore, these documents should not be construed as design standards. For applications outside the specifications in SAE J517, SAE J514, or other relevant design standards, performance of hose assemblies should be determined by appropriate testing. Carefully analyze each system. Then design routings and select hose and related components to meet the system-performance and hose-service-life requirements, and to minimize the risks of personal injury and/or property damage. Consider the following factors:

5.1 System Pressures—Excessive pressure can accelerate hose assembly failure. Analyze the steady-state pressures, and the frequency and amplitude of pressure surges, such as pulses and spikes. These are rapid and transient rises in pressure which may not be indicated on many common pressure gauges and can be identified best on high-frequency-response electronic measuring instruments.

For maximum hose service life, hose selection should be based on a system pressure, including surges, that is less than the hose maximum working pressure. Hose may be used above its maximum working pressure where reduced life expectancy is acceptable. SAE J1927 provides one method to help predict wire-reinforced hose service life for a given hydraulic application, where the surge pressure peaks vary, and/or the highest pressure peaks occur infrequently.

5.2 Suction—For suction applications, such as inlet flow to pumps, select hose to withstand both the negative and positive pressures the system imposes on the hose.

5.3 External Pressure—In certain applications, such as in autoclaves or under water, the external environmental pressures may exceed the fluid pressure inside the hose. In these applications, consider the external pressures, and if necessary, consult the manufacturers.

5.4 Temperature—Exceeding hose temperature ratings may significantly reduce hose life. Select hose so the fluid and ambient temperatures, both static and transient, fall within the hose ratings. The effects of external heat sources should not raise the temperature of the hose above its maximum operating temperature. Select hose, heat shields, sleeving, and other methods for these requirements, and route or shield hose to avoid hose damage from external heat sources.

HOSE SELECTION & SERVICE LIFE RECOMMENDATIONS (cont'd)

5.5 Permeation—Permeation, or effusion, is seepage of fluid through the hose. Certain materials in hose construction are more permeable than others. Consider the effects of permeation whenselecting hose, especially with gaseous fluids. Consult the hose and fluid manufacturers for permeability information.

5.6 Hose-Material Compatibility—Variables that can affect compatibility of system fluids with hose materials include, but are not limited to:

a. Fluid pressure
b. Temperature
c. Concentration
d. Duration of exposure

Because of permeation (see 5.5), consider compatibility of system fluids with the hose, tube, cover, reinforcement, and fittings. Consult the fluid and hose manufacturers for compatibility information.

NOTE— Many fluid/elastomer compatibility tables in manufacturers' catalogs show ratings based on fluids at 21 °C, room temperature. These ratings may change at other temperatures. Carefully read the notes on the compatibility tables, and if in doubt, consult the manufacturer.

5.7 Environment—Environmental conditions can cause hose and fitting degradation. Conditions to evaluate include, but are not limited to:

a. Ultraviolet light
b. Salt water
c. Air pollutants
d. Temperature (see 5.4)
e. Ozone
f. Chemicals
g. Electricity
h. Abrasion

If necessary, consult the manufacturers for more information.

5.8 Static-Electric Discharge—Fluid passing through hose can generate static electricity resulting in static-electric discharge. This may create sparks that can puncture hose. If this potential exists, select hose with sufficient conductivity to carry the static-electric charge to ground.

5.9 Sizing—The power transmitted by pressurized fluid varies with pressure and rate of flow. Select hose with adequate size to minimize pressure loss, and to avoid hose damage from heat generation or excessive velocity. Conduct calculations, or consult the manufacturers for sizing at flow velocities.

5.10 Unintended Uses—Hose assemblies are designed for the internal forces of conducted fluids. Do not pull hose or use it for purposes that may apply external forces for which the hose or fittings were not designed.

5.11 Specifications and Standards—When selecting hose and fittings for specific applications, refer to applicable government, industry, and manufacturer's specifications and standards.

HOSE SELECTION & SERVICE LIFE RECOMMENDATIONS (cont'd)

5.12 Unusual Applications—Applications not addressed by the manufacturer or by industry standards may require special testing prior to selecting hose.

5.13 Hose Cleanliness—The cleanliness requirements of system components, other than hose, will determine the cleanliness requirements of the application. Consult the component manufacturers' cleanliness information for all components in the system. Hose assemblies vary in cleanliness levels; therefore, specify hose assemblies with adequate cleanliness for the system.

5.14 Hose Fittings—Selection of the proper hose fittings for the hose and application is essential for proper operation and safe use of hose and related assembly equipment. Hose fittings are qualified with the hose. Therefore, select only hose fittings compatible with the hose for the applications. Improper selection of hose fittings or related assembly equipment for the application can result in injury or damage from leaks, or from hose assemblies blowing apart (see 4.2, 6.2, 6.3, and 6.4).

5.15 Vibration—Vibration can reduce hose service life. If required, conduct tests to evaluate the frequency and amplitude of system vibration. Clamps or other means may be used to reduce the effects of vibration. Consider the vibration requirements when selecting hose and predicting service life.

5.16 Hose Cover Protection—Protect the hose cover from abrasion, erosion, snagging, and cutting. Special abrasion-resistant hoses and hose guards are available for additional protection. Route hose to reduce abrasion from hose rubbing other hose or objects that may abrade it.

5.17 External Physical Abuse—Route hose to avoid:

a. Tensile loads
b. Side loads
c. Flattening
d. Thread damage
e. Kinking
f. Damage to sealing surfaces
g. Abrasion
h. Twisting

5.18 Swivel-Type Adapters—Swivel-type fittings or adapters do not transfer torque to hose while being tightened. Use these as needed to prevent twisting during installation.

5.19 Live Swivels—If two components in the system are rotating in relation to each other, live swivels may be necessary. These connectors reduce the torque transmitted to the hose.

5.20 Slings and Clamps—Use slings and clamps to support heavy or long hose and to keep it away from moving parts. Use clamps that prevent hose movement that will cause abrasion.

5.21 Minimum Bend Radius—The minimum bend radius is defined in SAE J343 and is specified in other SAE standards and hose manufacturer's product literature. Routing at less than minimum bend radius may reduce hose life. Sharp bending at the hose/fitting juncture may result in leaking, hose rupturing, or the hose assembly blowing apart (see 4.2)

5.22 Elbows and Adapters—In special cases, use elbows or adapters to relieve hose strain.

5.23 Lengths—Unnecessarily long hose can increase pressure drop and affect system performance.

HOSE SELECTION & SERVICE LIFE RECOMMENDATIONS (cont'd)

When pressurized, hose that is too short may pull loose from its fittings, or stress the fitting connections, causing premature metallic or seal failures. When establishing hose length, use the following practices:

5.23.1 MOTION ABSORPTION—Provide adequate hose length to distribute movement and prevent bends smaller than the minimum bend radius.

5.23.2 HOSE AND MACHINE TOLERANCES—Design hose to allow for changes in length due to machine motion and tolerances.

5.23.3 HOSE LENGTH CHANGE DUE TO PRESSURE—Design hose to accommodate length changes from changing pressures. Do not cross or clamp together high- and low-pressure hoses. The difference in length changes could wear the hose covers.

5.24 Hose Movement and Bending—Hose allows relative motion between system components. Analyze this motion when designing hose systems. The number of cycles per day may significantly affect hose life. Also avoid multiple planes of motion and twisting motion. Consider the motion of the hose when selecting hose and predicting service life. In applications that require hose to move or bend, use these practices:

5.24.1 BEND IN ONLY ONE PLANE TO AVOID TWISTING

5.24.2 PREVENT HOSE BENDING IN MORE THAN ONE PLANE—If hose follows a compound bend, couple it into separate segments, or clamp it into segments that flex in only one plane.

7. Hose Installation and Replacement—Use the following practices when installing hose assemblies in new systems or replacing hose assemblies in existing systems:

7.1 Pre-Installation Inspection—Before installing hose assemblies, examine:
a. Hose length and routing for compliance with original design
b. Assemblies for correct style, size, length, and visible nonconformities
c. Fitting sealing surfaces for burrs, nicks, or other damage

NOTE— When replacing hose assemblies in existing systems, verify that the replacement is of equal quality to the original assembly.

7.2 Handling During Installation—Handle hose with care during installation. Kinking hose, or bending at less than minimum bend radius may reduce hose life. Avoid sharp bending at the hose/fitting juncture (see 5.21).

7.3 Twist Angle and Orientation—Pressure applied to a twisted hose may shorten the life of the hose or loosen the connections. To avoid twisting, use the hose lay line or marking as a reference.

7.4 Securement and Protection—Install necessary restraints and protective devices. Determine that such devices do not create additional stress or wear points.

7.5 Routing—Review proper routing practices provided in Section 5 and make appropriate corrections to obtain optimum performance.

HOSE SELECTION & SERVICE LIFE RECOMMENDATIONS (cont'd)

7.6 Assembly Torque—The connection end of a hose fitting is normally threaded to obtain a tight pressure seal when attached to a port, an adapter, or another fitting. Sometimes bolts or screws provide the threaded connection. Each size and type of connection requires different torque values, and these may vary due to type of material or exterior coating.

Follow appropriate torquing instructions to obtain a proper pressure seal without over-torquing. A properly calibrated torque wrench should be used to tighten each connection, except when the manufacturer specifies tightening a specified number of hex flat turns beyond finger tight to obtain a seal.

7.7 System Checkouts—In hydraulic or other liquid systems, eliminate all air entrapment after completing the installation. Follow manufacturers' instructions to test the system for possible malfunctions and leaks.

7.7.1 TO AVOID INJURY DURING SYSTEM CHECKOUTS:

a. Do not touch any part of the system when checking for leaks (see 4.1).
b. Stay out of potentially hazardous areas while testing hose systems (see Section 4).
c. Relieve system pressure before tightening connections.

8. Maintenance Inspection—A hose and fitting maintenance program may reduce equipment downtime, maintain peak operating performance, and reduce the risk of personal injury and/or property damage. The user should design and implement a maintenance program that suits the specific application and each specific hose in that application.

8.1 Inspection Frequency—Evaluate factors such as the nature and severity of the application, past history, and manufacturers' information to establish the frequency of visual inspections and functional tests.

8.2 Visual Inspection (Hose and Fittings)—Visually inspect hose and fittings for:

a. Leaks at hose fitting or in hose
b. Damaged, cut, or abraded cover
c. Exposed reinforcement
d. Kinked, crushed, flattened, or twisted hose
e. Hard, stiff, heat cracked, or charred hose
f. Blistered, soft, degraded, or loose cover
g. Cracked, damaged, or badly corroded fittings
h. Fitting slippage on hose
i. Other signs of significant deterioration

If any of these conditions exist, evaluate the hose assemblies for correction or replacement.

8.3 Visual Inspection (All Other Components)—When visually inspecting hose and fittings, inspect for related items including:

a. Leaking ports
b. Damaged or missing hose clamps, guards, or shields
c. Excessive dirt and debris around hose
d. System fluid: level, type, contamination, condition, and air entrainment

If any of these are found, address them appropriately.

HOSE SELECTION & SERVICE LIFE RECOMMENDATIONS (cont'd)

8.4 Functional Test—Functional tests determine if systems with hose are leak free and operating properly. Carry out functional tests per information from equipment manufacturers.

9. Hose Storage—Age control and the manner of storage can affect hose life. Use the following practices when storing hose.

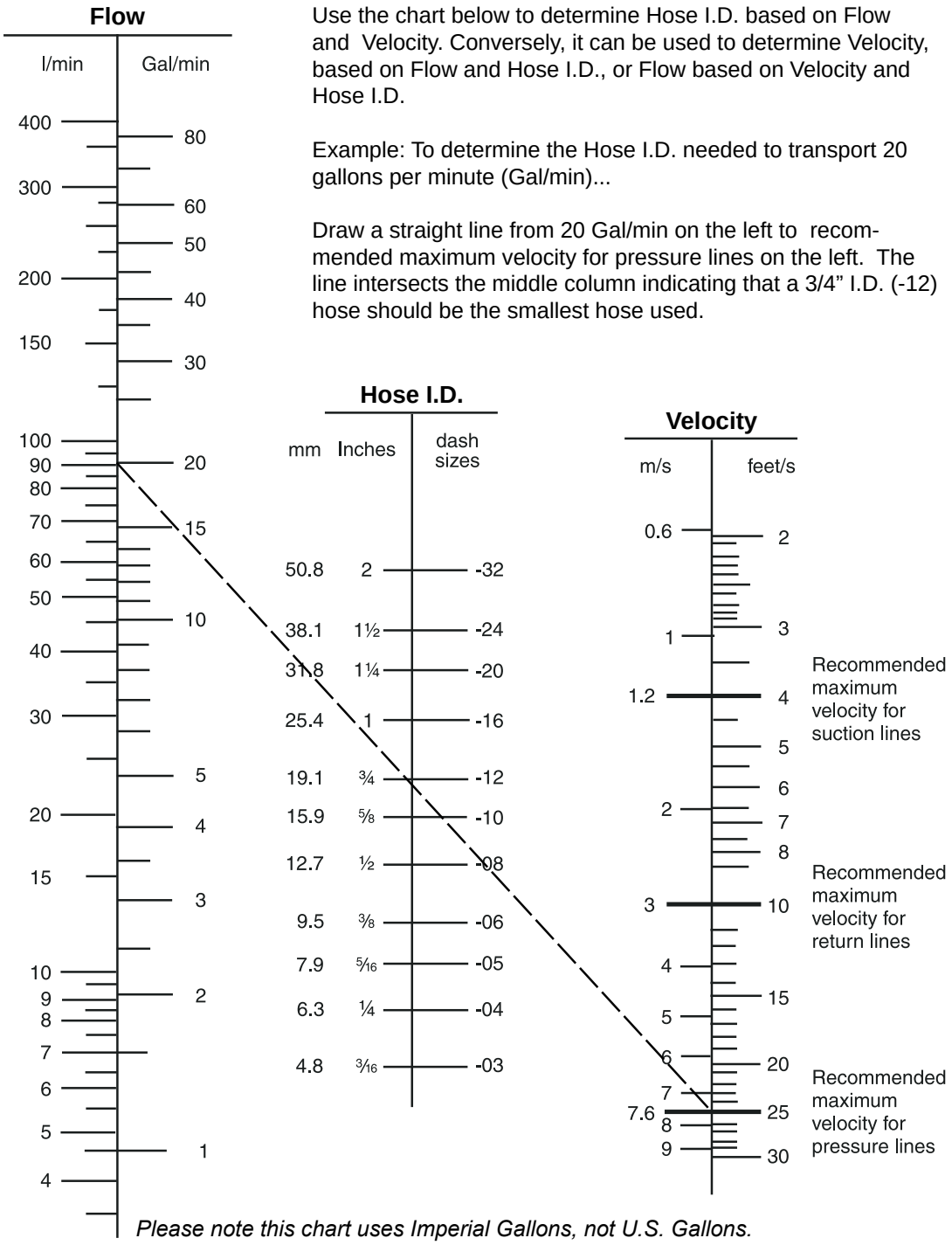
9.1 Age Control—Maintain a system of age control to determine that hose is used before its shelf life has expired. Shelf life is the period of time when it is reasonable to expect the hose to retain full capabilities for rendering the intended service.

Store hose in a manner that facilitates age control and first-in, first-out usage based on manufacturing date on hose or hose assembly. Per SAE J517:

a. Shelf life of rubber hose in bulk form, or in hose assemblies passing visual inspection and proof test, is forty quarters (ten years) from the date of vulcanization.
b. Shelf life of thermoplastic and polytetrafluoroethylene hose is considered to be unlimited.

NOMOGRAPHIC CHART

Flow Capacity of Hose Assemblies
Recommended Flow Velocities



Use the chart below to determine Hose I.D. based on Flow and Velocity. Conversely, it can be used to determine Velocity, based on Flow and Hose I.D., or Flow based on Velocity and Hose I.D.

Example: To determine the Hose I.D. needed to transport 20 gallons per minute (Gal/min)...

Draw a straight line from 20 Gal/min on the left to recommended maximum velocity for pressure lines on the left. The line intersects the middle column indicating that a 3/4" I.D. (-12) hose should be the smallest hose used.

Please note this chart uses Imperial Gallons, not U.S. Gallons.

EXTREMELY HIGH PRESSURE HOSE

FOUR/SIX SPIRAL WIRE HOSE
EFG6K
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FOUR/SIX SPIRAL WIRE HOSE
EFG5K
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FOUR SPIRAL WIRE HOSE
EFG4K
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FOUR SPIRAL WIRE HOSE
EFG3K
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HIGH PRESSURE HOSE

TWO WIRE BRAID HOSE
G2
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HIGH TEMP. TWO WIRE BRAID HOSE
G2XH
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TWO WIRE BRAID SLIMLINE HOSE
M2T
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TWO WIRE BRAID SLIMLINE HOSE - MTF COVER
M2T-MTF
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TWINLINE TWO WIRE BRAID HOSE
CM2TDL-XTF
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ONE/TWO WIRE BRAID HOSE
M3K
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TWO WIRE BRAID HOSE
M4K
Page 3 - 19

TWO WIRE BRAID HOSE - XTF COVER
M4K-XTF
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TWO WIRE BRAID HOSE
M5K
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TWO WIRE BRAID HOSE
M6K
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TWO WIRE BRAID JACK HOSE
J2AT
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MEDIUM PRESSURE HOSE

ONE WIRE BRAID HOSE
G1
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HIGH TEMP. OIL/AIR RETURN
ACP
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HIGH TEMP. OIL/AIR RETURN
ACR
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WATER JETTING

POWERCLEAN™ WIRE BRAID HOSE
PC
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LOW PRESSURE HOSE

PUSH-LOCK FIBRE BRAID HOSE
LOL
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PUSH-LOCK FIBRE BRAID HOSE
LOC
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PUSH-LOCK FIBRE BRAID HOSE
GTH
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MultiMaster® RETURN AND SUCTION
GMV-MEGAFLEX
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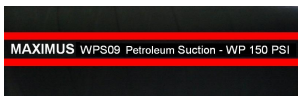

MAXIMUS PETROLEUM SUCTION
RWPS09
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PUSH-LOCK FIBRE BRAID HOSE
G3H
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FLEET APPLICATION HOSE

ONE WIRE NOMINAL BORE HOSE
C5C
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ONE WIRE NOMINAL BORE HOSE
C5D
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ONE WIRE NOMINAL BORE HOSE
C5E
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ONE WIRE NOMINAL BORE HOSE
C5M
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POWER STEERING HOSE
PS188
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PTFE HOSE

STAINLESS BRAIDED PTFE HOSE
R14
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THERMOPLASTIC HOSE

FIBRE BRAID THERMOPLASTIC HOSE
R7
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FIBRE BRAID THERMOPLASTIC HOSE
R7NC
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TWINLINE THERMOPLASTIC HOSE
R7T
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FIBRE BRAID THERMOPLASTIC HOSE
R8X
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FIBRE BRAID THERMOPLASTIC HOSE
R8XNC
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TWINLINE THERMOPLASTIC HOSE
R8XT
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FIBRE BRAID THERMOPLASTIC HOSE
R18
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TWINLINE THERMOPLASTIC HOSE
R18T
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PAINTSPRAY HOSE

ONE WIRE BRAID THERMOPLASTIC
PS1B
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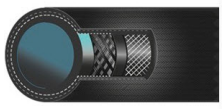
AUTOMOTIVE HOSE



LPG SERVICE HOSE
LPG
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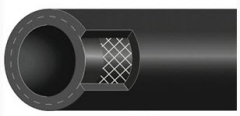

LPG VAPORISER HOSE
MVAP
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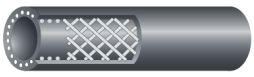

FUEL LINE
27000FUEL
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VACUUM HOSE
27000VAC
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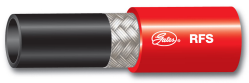
FIRE SUPPRESSION HOSE



ONE WIRE BRAID HOSE
RFS
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MULTIPURPOSE HOSE

Premoflex MULTI-PURPOSE HOSE
PREMOFLEX
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Terminator MULTI-PURPOSE HOSE
TERMINATOR
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EXTREMELY HIGH PRESSURE HOSE

EFG6K

FOUR/SIX SPIRAL WIRE HOSE
SPIRAL WIRE REINFORCED HOSE - SAE 100R15

- Due to manufacturing tolerances, external dimension is an average.
- Recommended for: Extremely high pressure and high impulse hydraulic applications.
- Internal tube: -6, -8, -10, -12, -16, -20: Nitrile based; -24: Neoprene based.
- Reinforcement: Four (six for -20, -24) alternating layers of spiralled, high tensile steel wire.
- External cover: Neoprene based, MSHA approved.
- Temperature range: -40°C to +121°C
- Standards: SAE 100R15. Meets or exceeds performance requirements of EN 856 4SP (-8) and EN 856 4SH (-12, -16)
- Characteristics: Extremely flexible. Compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils and petroleum-based fluids in sizes -06 to -20 (not -24)
- Optional: EFG6K-MTF: the range of EFG6K is also available with the Gates special MegaTuff™ cover which offers 300 times the abrasion resistance of the standard cover as per ISO 6945, superior ozone/weathering resistance - please contact Hydraulink for further details and availability.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
6EFG6K	06	10	3/8	20.5	6000	420	24000	1680	65
8EFG6K	08	12	1/2	24.0	6000	420	24000	1680	90
10EFG6K	10	16	5/8	27.6	6000	420	24000	1680	100
12EFG6K	12	19	3/4	31.4	6000	420	24000	1680	120
16EFG6K	16	25	1	38.7	6000	420	24000	1680	150
20EFG6K	20	31	1.1/4	50.0	6000	420	24000	1680	210
24EFG6K	24	38	1.1/2	57.4	6000	420	24000	1680	250
32EFG6K	32	51	2	71.1	6000	420	24000	1680	635

EXTREMELY HIGH PRESSURE HOSE

EFG5K

FOUR/SIX SPIRAL WIRE HOSE
SPIRAL WIRE REINFORCED HOSE - SAE 100R13

- Due to manufacturing tolerances, external dimension is an average.
- Recommended for: Extremely high pressure and high impulse hydraulic applications.
- Internal tube: -6 to -20
- Nitrile based: -24, -32: Neoprene based.
- Reinforcement: Four (six for -20, to -32) alternating layers of spiralled, high tensile steel wire.
- External cover: Neoprene based, MSHA approved.
- Temperature range: -40°C to +121°C
- Standards: EN 856 R13. SAE 100R13. Meets or exceeds performance requirements of EN 856 4SP (-10, -12) and EN 856 4SH (-20).
- Characteristics: Extremely flexible. Compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols, vegetable oils and petroleum-based fluids in sizes -06 to -20 (not -24 or -32).
- Optional: EFG5K-MTF: the range of EFG5K is also available with the Gates MegaTuff™ cover which offers 300 times the abrasion resistance of the standard cover as per ISO 6945, superior ozone/weathering resistance - please contact Hydraulink for further details and availability.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
8EFG5K	08	12	1/2	24.0	5000	350	20000	1400	90
10EFG5K	10	16	5/8	27.6	5000	350	24000	1400	100
12EFG5K	12	19	3/4	31.4	5000	350	24000	1400	120
16EFG5K	16	25	1	38.7	5000	350	24000	1400	150
20EFG5K	20	31	1.1/4	50	5000	350	24000	1400	210
24EFG5K	24	38	1.1/2	57.4	5000	350	24000	1400	250
32EFG5K	32	51	2	71	5000	350	24000	1400	635

EXTREMELY HIGH PRESSURE HOSE

EFG4K

FOUR SPIRAL WIRE HOSE
SPIRAL WIRE REINFORCED HOSE - SAE 100R12

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Extremely high pressure and high impulse hydraulic applications.
- Internal tube: Nitrile based.
- Reinforcement: Four alternating layers of spiralled, high tensile steel wire.
- External cover: Neoprene based, MSHA approved.
- Temperature range: -40°C to +121°C
- Standards: Gates proprietary. EN 856 R12. SAE 100R12. Meets or exceeds performance requirements of EN 856 4SP (-16, -20).
- Characteristics: Extremely flexible. Compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids in sizes -06 to -20 (not -24).
- Optional: EFG4K-MTF: the range of EFG4K is also available with the Gates special MegaTuff™ cover which offers 300 times the abrasion resistance of the standard cover as per ISO 6945, superior ozone and weathering resistance - please contact Hydraulink for further details and availability.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
6EFG4K	06	10	3/8	20.5	4000	280	16000	1120	65
8EFG4K	08	12	1/2	24.0	4000	280	16000	1120	90
10EFG4K	10	16	5/8	27.6	4000	280	16000	1120	100
12EFG4K	12	19	3/4	30.7	4000	280	16000	1120	120
16EFG4K	16	25	1	38.0	4000	280	16000	1120	150
20EFG4K	20	31	1.1/4	47.0	4000	280	16000	1120	210

EXTREMELY HIGH PRESSURE HOSE

EFG3K

FOUR SPIRAL WIRE HOSE
SPIRAL WIRE REINFORCED HOSE - SAE 100R12

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Extremely high pressure and high impulse hydraulic applications.
- Internal tube: Neoprene based.
- Reinforcement: Four alternating layers of spiralled, high tensile steel wire.
- External cover: Neoprene based, MSHA approved.
- Temperature range: -40°C to +121°C
- Standards: Gates proprietary. EN 856 R12. SAE 100R12.
- Characteristics: Extremely flexible.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
24EFG3K	24	38	1.1/2	53.5	3000	210	12000	840	500
32EFG3K	32	51	2	66.8	3000	210	12000	840	630

HIGH PRESSURE HOSE

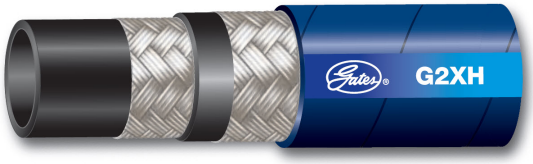
G2

TWO WIRE BRAID HOSE
BRAIDED WIRE REINFORCED HOSE - SAE 100R2 Type AT

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications.
- Internal tube: Nitrile based.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: NBR/PVC based. MSHA approved.
- Temperature range: -40°C to +100°C constant and +121°C intermittent.
- Standards: SAE 100R2AT. SAE 100R2S. EN 853 2SN. ISO 1436.
- Characteristics: G2 hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
3G2	03	5	3/16	13.2	6000	415	24000	1660	90
4G2	04	6	1/4	15.0	5800	400	23200	1600	100
5G2	05	8	5/16	16.3	5000	350	20000	1400	110
6G2	06	10	3/8	18.8	4800	330	19200	1320	130
8G2	08	12	1/2	21.8	4000	275	16000	1100	180
10G2	10	16	5/8	25.1	3625	250	14500	1000	200
12G2	12	19	3/4	29.0	3100	215	12400	860	240
16G2	16	25	1	37.6	2400	165	9600	660	300
20G2	20	31	1.1/4	47.5	1825	125	7300	500	420
24G2	24	38	1.1/2	53.6	1300	90	5200	360	508
32G2	32	51	2	66.6	1175	80	4700	324	635

HIGH PRESSURE HOSE



G2XH

HIGH TEMP. TWO WIRE BRAID HOSE
BRAIDED WIRE REINFORCED HOSE - SAE 100R2 Type S

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High temperature, high pressure hydraulic applications
- Internal tube: CPE based.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: CSM based. MSHA approved. Blue.
- Temperature range: -40°C to +150°C.
- Standards: EN 853 2SN. SAE 100R2S - high temperature. ISO 1436.
- Characteristics: G2XH hose is compatible with biodegradable hydraulic fluids like synthetic esters, and vegetable oils as well as petroleum-based fluids.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4G2XH	04	6	1/4	15.0	6000	420	24000	1680	100
6G2XH	06	10	3/8	18.8	5000	350	20000	1400	130
8G2XH	08	12	1/2	21.8	4250	290	17000	1160	180
10G2XH	10	16	5/8	24.9	3625	250	14500	1000	200
12G2XH	12	19	3/4	29.0	3100	215	12400	860	240
16G2XH	16	25	1	37.6	2500	170	10000	680	300

HIGH PRESSURE HOSE

M2T

TWO WIRE BRAID SLIMLINE HOSE
BRAIDED WIRE REINFORCED HOSE - SAE 100R16

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications. Easy to route and to install in tight areas.
- Internal tube: Nitrile based.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: NBR/PVC based. MSHA approved. Dual green stripe layline.
- Temperature range: -40°C to +100°C.
- Standards: Gates proprietary. Exceeds SAE 100R16.
- Characteristics: M2T hose has smaller exterior dimensions and significantly tighter bend radius than specified in SAE 100R16.
- Optional: M2T-MTF: the range of M2T is also available with the Gates special MegaTuff™ cover which offers 300 times the abrasion resistance of the standard cover as per ISO 6945, superior ozone/weathering resistance - please contact Hydraulink for further details and availability.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure - psi	Working pressure - bar	Min burst pressure - psi	Min burst pressure - bar	Min bend radius (mm)
4M2T	04	6	1/4	13.7	6000	420	24000	1680	50
6M2T	06	10	3/8	17.5	5000	350	20000	1400	65
8M2T	08	12	1/2	20.6	4300	300	7200	1200	90
10M2T	10	16	5/8	24.1	3800	260	15200	1040	100
12M2T	12	19	3/4	27.9	3500	240	14000	960	120
16M2T	16	25	1	35.1	2500	140	10000	560	150

HIGH PRESSURE HOSE

M2T-MTF

TWO WIRE BRAID SLIMLINE HOSE - MTF COVER
BRAIDED WIRE REINFORCED HOSE - SAE 100R16
MEGATUFF COVER

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications. Easy to route and to install in tight areas.
- Internal tube: Nitrile based.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: NBR/PVC based MegaTuff (MTF) abrasion resistant. MSHA approved. Dual green stripe layline.
- Temperature range: -40°C to +100°C.
- Standards: Gates proprietary. Exceeds SAE 100R16.
- Characteristics: M2T hose has smaller exterior dimensions and significantly tighter bend radius than specified in SAE 100R16.
- Optional: M2T-MTF: the range of M2T is also available with the Gates special MegaTuff™ cover which offers 300 times the abrasion resistance of the standard cover as per ISO 6945, superior ozone/weathering resistance - please contact Hydraulink for further details and availability.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure - psi	Working pressure - bar	Min burst pressure - psi	Min burst pressure - bar	Min bend radius (mm)
4M2T-MTF	04	6	1/4	13.7	6000	420	24000	1680	38
6M2T-MTF	06	10	3/8	17.5	5000	350	20000	1400	50
8M2T-MTF	08	12	1/2	20.6	4300	300	7200	1200	71
10M2T-MTF	10	16	5/8	24.1	3800	260	15200	1040	76
12M2T-MTF	12	19	3/4	27.9	3500	240	14000	960	96
16M2T-MTF	16	25	1	35.1	2500	140	10000	560	114

HIGH PRESSURE HOSE

CM2TDL-XTF

TWINLINE TWO WIRE BRAID HOSE
TWINLINE BRAIDED WIRE REINFORCED HOSE - SAE 100R16

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure and return lines such as boom arm and forklift applications.
- Internal tube: Nitrile based.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: NBR/PVC based. MSHA approved. Dual green stripe layline.
- Temperature range: -40°C to +100°C.
- Standards: Gates proprietary. EN 857 2SC. ISO 1436.
- Characteristics: No need to use clamps as the two lines are vulcanised together to form one single unit. CM2T twin hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.
- Gates recommends minimum split length of 250 mm depending on the application. Do not expose hose reinforcement when splitting hoses.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
6CM2TDL-XTF	06	10	3/8	17.7	4800	330	19200	1320	90
8CM2TDL-XTF	08	12	1/2	20.8	4000	275	16000	1100	130

HIGH PRESSURE HOSE

M3K

ONE/TWO WIRE BRAID HOSE
BRAIDED WIRE REINFORCED HOSE - SAE 100R17

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications. Easy to route and to install in tight areas.
- Internal tube: Nitrile based.
- Reinforcement: -4, -5, -6, -8: one braid of high tensile steel wire; -10, -12, -16: two braids of high tensile steel wire.
- External cover: NBR/PVC based. MSHA approved.
- Temperature range: -40°C to +100°C constant and +121°C intermittent.
- Standards: SAE 100R17. ISO 11237-1. Meets or exceeds EN 857 1SC/2SC performance requirements.
- Characteristics: M3K hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.
- Optional: M3K-XTF: the range of M3K is also available with the Gates special XtraTuff™ cover which offers 25 times the abrasion resistance of the standard cover as per ISO 6945, superior ozone/weathering resistance - please contact Hydraulink for further details and availability.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4M3K	04	6	1/4	12.2	3000	210	12000	840	50
6M3K	06	10	3/8	16.0	3000	210	12000	840	65
8M3K	08	12	1/2	20.2	3000	210	12000	840	90
12M3K	12	19	3/4	29.0	3000	210	12000	840	120
16M3K	16	25	1	37.7	3000	210	12000	840	150

HIGH PRESSURE HOSE

M4K

TWO WIRE BRAID HOSE
BRAIDED WIRE REINFORCED HOSE - SAE 100R19

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications. Easy to route and to install in tight areas.
- Internal tube: Nitrile based.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: NBR/PVC based. MSHA approved.
- Temperature range: -40°C to +100°C constant and +121°C intermittent.
- Standards: SAE 100R19. ISO 11237-1. Meets or exceeds EN 857 2SC performance requirements.
- Characteristics: Alternative to spiral hoses in high pressure lines where flexibility is required. M4K hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

•Special item - please contact Hydraulink for further details and availability.

- -XTF (XtraTuff™) hose lasts up to 25 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4M4K	04	6	1/4	13.7	4000	275	16000	1100	50
6M4K	06	10	3/8	17.5	4000	275	16000	1100	65

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
8M4K	08	12	1/2	20.8	4000	275	16000	1100	90
10M4K	10	16	5/8	25.0	4000	275	16000	1100	100
12M4K	12	19	3/4	29.0	4000	275	16000	1100	120
16M4K	16	25	1	38.6	4000	275	16000	1100	114

HIGH PRESSURE HOSE

M4K-XTF

TWO WIRE BRAID HOSE - XTF COVER
BRAIDED WIRE REINFORCED HOSE - SAE 100R19

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications. Easy to route and to install in tight areas.
- Internal tube: Nitrile based.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: NBR/PVC based. MSHA approved.
- Temperature range: -40°C to +100°C constant and +121°C intermittent.
- Standards: SAE 100R19. ISO 11237-1. Meets or exceeds EN 857 2SC performance requirements.
- Characteristics: Alternative to spiral hoses in high pressure lines where flexibility is required. M4K hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

•Special item - please contact Hydraulink for further details and availability.

- -XTF (XtraTuff™) hose lasts up to 25 times longer than standard hose during hose-to-hose and hose-to-metal abrasion tests per ISO 6945.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4M4K-XTF	04	6	1/4	13.7	4000	280	16000	1120	50
6M4K-XTF	06	10	3/8	17.5	4000	280	16000	1120	65
8M4K-XTF	08	12	1/2	20.8	4000	280	16000	1120	90
10M4K-XTF	10	16	5/8	25.0	4000	280	16000	1120	100
12M4K-XTF	12	19	3/4	29.0	4000	280	16000	1120	120

HIGH PRESSURE HOSE

M5K

TWO WIRE BRAID HOSE
BRAIDED WIRE REINFORCED HOSE - 5000PSI

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications. Easy to route and to install in tight areas.
- Internal tube: Nitrile based.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: NBR/PVC based. MSHA approved.
- Temperature range: -40°C to +100°C constant and +121°C intermittent.
- Standards: Exceeds ISO 18752 Grade B.
- Characteristics: Alternative to spiral hoses in high pressure lines where flexibility is required. M5K hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4M5K	04	6	1/4	14	5000	350	20000	1400	50
6M5K	06	10	3/8	17.8	5000	350	20000	1400	63
8M5K	08	12	1/2	21.6	5000	350	20000	1400	89

HIGH PRESSURE HOSE

M6K

TWO WIRE BRAID HOSE
BRAIDED WIRE REINFORCED HOSE - 6000PSI

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications. Easy to route and to install in tight areas.
- Internal tube: Nitrile based.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: NBR/PVC based. MSHA approved.
- Temperature range: -40°C to +100°C constant and +121°C intermittent.
- Characteristics: Alternative to spiral hoses in high pressure lines where flexibility is required. M6K hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4M6K	04	6	1/4	14.7	6000	420	24000	1680	50

HIGH PRESSURE HOSE

J2AT

TWO WIRE BRAID JACK HOSE
BRAIDED WIRE REINFORCED JACK HOSE

- Due to manufacturing tolerances, the external dimension is an average.
- Static (non-impulse) pressure rating for hydraulic jack applications only.
- Recommended for: Hydraulic jack applications. Meets Material Handling Institute specification IJ 100 for hydraulic hose and assemblies used with jacking systems.
- Internal tube: Nitrile based.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: NBR/PVC based. MSHA approved.
- Temperature range: -40°C to +49°C constant.
- Standards: Gates proprietary.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4J2AT	04	6	1/4	15.0	10000	690	20000	1380	100
6J2AT	06	10	3/8	18.8	10000	690	20000	1380	130

MEDIUM PRESSURE HOSE

G1

ONE WIRE BRAID HOSE
BRAIDED WIRE REINFORCED HOSE - SAE 100R1 Type AT

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Medium pressure hydraulic applications.
- Internal tube: Nitrile based.
- Reinforcement: One braid of high tensile steel wire.
- External cover: NBR/PVC based. MSHA approved.
- Temperature range: -40°C to +100°C constant and +121°C intermittent.
- Standards: SAE 100R1AT. SAE 100R1S. EN 853 1SN. ISO 1436.
- Characteristics: G1 hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
3G1	03	5	3/16	11.9	3625	250	14500	1000	100
4G1	04	6	1/4	13.5	3275	225	13100	900	100
5G1	05	8	5/16	15.0	3125	215	12500	860	110
6G1	06	10	3/8	17.5	2600	180	10400	720	130
8G1	08	12	1/2	20.8	2325	160	9300	640	180
10G1	10	16	5/8	23.9	1900	130	7600	520	200
12G1	12	19	3/4	27.9	1525	105	6100	420	240
16G1	16	25	1	35.8	1275	90	5100	360	300
20G1	20	31	1.1/4	43.4	925	63	3700	252	420
24G1	24	38	1.1/2	49.8	725	50	2900	200	510
32G1	32	51	2	64	600	40	2400	168	635

MEDIUM PRESSURE HOSE

ACP

HIGH TEMP. OIL/AIR RETURN
BRAIDED WIRE REINFORCED HOSE - FABRIC COVER

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Multi-purpose, high pressure hydraulic, air compressor lines, petroleum base or phosphate ester hydraulic fluid supply lines. Easy to route and to install in tight areas.
- Internal tube: Black, oil resistant synthetic CPE rubber.
- Reinforcement: Two braids of high tensile steel wire.
- External cover: Blue, oil and abrasion resistant, polyester braid.
- Temperature range: -40°C to +149°C.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
24ACP	24	38	1.1/2	54.1	1500	105	6000	420	508
32ACP	32	51	2	66.3	1300	90	5200	360	635

MEDIUM PRESSURE HOSE

ACR

HIGH TEMP. OIL/AIR RETURN
BRAIDED WIRE REINFORCED HOSE - FABRIC COVER

- Due to manufacturing tolerances, the external dimension is an average.
- For -24 and 32 sizes please see alternative ACP series.
- Recommended for: Pressurised hot oil return lines and air compressor lines, power steering, tilt cab cylinders, engine and transmission coolant and filtration lines.
- Internal tube: CPE based.
- Reinforcement: One braid of high tensile steel wire.
- External cover: Oil resistant textile braid, impregnated with synthetic rubber. MSHA approved.
- Temperature range: -40°C to +150°C. Phosphate ester fluids: -40°C to +100°C.
- Air: -40°C to +121°C.
- Vacuum range: To 30In.Hg (760mm.Hg)
- Standards: Gates proprietary. Meets the requirements of SAE J1019 performance specifications for use in high temperature transmission oil systems and high temperature lubrication oil systems using petroleum based oils.
- Characteristics: Very good resistance to weathering and ozone. ACR hose is compatible with a variety of fluids such as hydraulic oil, phosphate esters.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
24ACR500	24	38	1.1/2	49.5	500	35	2000	140	380
32ACR500	32	51	2	63.0	500	35	2000	140	460
40ACR500	40	63	2.1/2	75.4	500	35	2000	140	560
48ACR500	48	76	3	88.9	500	35	2000	140	610

WATER JETTING

PC

POWERCLEAN™ WIRE BRAID HOSE
BRAIDED WIRE REINFORCED WATERBLAST HOSE

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Hot and cold water high pressure cleaning equipment where heavy duty service is required. Specially compounded cover to handle pressure washer environment.
- Internal tube: Black nitrile.
- Reinforcement: Braided high tensile steel wire.
- External cover: Nitrile and PVC - non marking.
- Temperature range: -40°C to +121°C.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4PC3500	04	6	1/4	13.5	3500	240	14000	900	64
6PC3000	06	10	3/8	17.2	3000	210	12000	840	127
6PC5000	06	10	3/8	18.8	5000	350	20000	1320	127

LOW PRESSURE HOSE

LOL

PUSH-LOCK FIBRE BRAID HOSE
BRAIDED FIBRE REINFORCED HOSE

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Petroleum-based hydraulic oils, antifreeze solutions, water, hot lubricating oils and air. Suitable for low-pressure cleaning and pneumatic systems, return lines and low pressure lines. Push-Lock hose and couplings are not recommended for pressure surge applications or critical applications.
- Internal tube: Nitrile based.
- Reinforcement: One fibre braid.
- External cover: Oil and abrasion resistant synthetic rubber (blended nitrile). MSHA approved.
- Temperature range: -40°C to +100°C constant and +121°C intermittent.
- Standards: Gates proprietary.
- Characteristics: Available in 6 colours for easy colour coding. Easy to assemble.
- Suffix A = black, B = blue, C = grey, G = green, R = red, Y = yellow. Please note some size/colour combinations are not held in inventory and are subject to minimum order requirements.

Part Number	Colour	Internal Size	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
3LOLA	Black	03	3/16	10.4	300	21	1200	84	75
4LOLA	Black	04	1/4	11.9	300	21	1200	84	75
5LOLA	Black	05	5/16	14.0	300	21	1200	84	75
6LOLA	Black	06	3/8	15.9	300	21	1200	84	75
8LOLA	Black	08	1/2	19.6	300	21	1200	84	130
10LOLA	Black	10	5/8	23.9	300	21	1200	84	150
12LOLA	Black	12	3/4	26.9	300	21	1200	84	180

LOW PRESSURE HOSE

LOC

PUSH-LOCK FIBRE BRAID HOSE
BRAIDED FIBRE REINFORCED HOSE

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Petroleum based hydraulic oils, glycol anti-freeze compounds, water, engine lubricating oils and air.
- Standards: Meets SAE R2, SAE30 R6, SAE 30R7 performance requirements for fuel and B20 biodiesel fuel transfer applications.
- Internal tube: Black oil resistant synthetic nitrile.
- Reinforcement: Single fibre braid.
- External cover: Oil and mildew resistant, textile braid, impregnated with synthetic rubber.
- Temperature range: -40°C to +121°C. For air,-40°C to 71°C.

Part Number	Internal Size	Colour	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4LOC	04	Black	1/4	13.2	300	21	1200	84	75
6LOC	06	Black	3/8	16.3	300	21	1200	84	75
8LOC	08	Black	1/2	20.3	300	21	1200	84	130
10LOC	10	Black	5/8	22.9	300	21	1200	84	150

Part Number	Internal Size	Colour	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
12LOC	12	Black	3/4	25.4	300	21	1200	84	180

LOW PRESSURE HOSE

GTH

PUSH-LOCK FIBRE BRAID HOSE
BRAIDED FIBRE REINFORCED HOSE - SAE 100R6

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Hydraulic oil lines, heavy-duty transmission oil cooler lines and glycol anti-freeze solutions. Push-Lock hose and couplings are not recommended for pressure surge applications or critical applications.
- Internal tube: Nitrile based.
- Reinforcement: One fibre braid.
- External cover: Black - Neoprene based.
- Temperature range: -40°C to +135°C constant and +149°C intermittent.
- Vacuum range: -3, -4, -5, -6: 28In.Hg (710mm.Hg). -8: 18In.Hg (450mm.Hg). -10, -12: 15In.Hg (380mm.Hg). -16: 10In.Hg (250mm.Hg)
- Standards: Gates proprietary. Meets or exceeds requirements of SAE 100R6.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
3GTH	03	5	3/16	11.2	500	35	2000	140	50
4GTH	04	6	1/4	12.7	400	30	1600	120	65
5GTH	05	8	5/16	14.2	400	30	1600	120	75
6GTH	06	10	3/8	16.0	400	30	1600	120	75
8GTH	08	12	1/2	19.8	400	30	1600	120	100
10GTH	10	16	5/8	23.1	350	25	1400	100	130
12GTH	12	19	3/4	26.9	300	20	1200	80	150

LOW PRESSURE HOSE

GMV-MEGAFLEX

MultiMaster® RETURN AND SUCTION
FIBRE AND WIRE REINFORCED HOSE - SAE 100R4

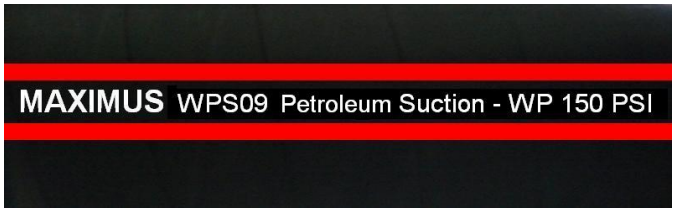
- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Petroleum and water based hydraulic fluids in suction lines or in low pressure return lines.
- Internal tube: Nitrile based.
- Reinforcement: Synthetic high tensile steel wire helix.
- External cover: Black corrugated chloroprene. MSHA approved.
- Temperature range: -40°C to +135°C constant and +150°C intermittent.
- Vacuum range: to 25In.Hg (635mm.Hg) for all sizes.
- Standards: Gates proprietary. SAE 100R4.
- Characteristics: Extremely flexible and lightweight.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
12GMV-MEGAFLEX	12	19	3/4	30.5	350	24	1400	96	20.3
16GMV-MEGAFLEX	16	25	1	35.8	300	21	1200	84	25.4
20GMV-MEGAFLEX	20	31	1.1/4	42.2	250	17	1000	68	33.0
24GMV-MEGAFLEX	24	38	1.1/2	48.3	160	11	640	44	38.1
32GMV-MEGAFLEX	32	51	2	60.7	150	10	600	40	50.8
40GMV-MEGAFLEX	40	63	2.1/2	74.7	150	10	600	40	63.5
48GMV-MEGAFLEX	48	76	3	87.4	150	10	600	40	76.2
64GMV-MEGAFLEX	64	102	4	166.4	150	10	600	40	152.4

LOW PRESSURE HOSE

RWPS09

MAXIMUS PETROLEUM SUCTION
RUBBER OIL SUCTION - 150 PSI



- Conforming Standards: AS2683 Type 1; Grade 2; Kind 1
- Temperature: -20°C to +80°C
- Cover: Black; Smooth Wrapped Finish SBR Rubber
- Tube: Black; NBR Rubber Compound
- Reinforcement: High Strength Synthetic Cord Plus Embedded Steel Helix Wire
- Application: Lightweight Suction Hose for the transfer of petroleum products with an aromatic content up to 30%. Resistant to Abrasion And Weather.

Part Number	Hose I.D (mm)	Hose O.D (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)
RWPS09-063	63.5	76	150	10.4	450	31
RWPS09-076	76.1	89	150	10.4	450	31
RWPS09-102	101.6	118	150	10.4	450	31

LOW PRESSURE HOSE

G3H

PUSH-LOCK FIBRE BRAID HOSE
BRAIDED FIBRE REINFORCED HOSE - SAE 100R3

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Hydraulic oil lines, anti-freeze solutions, or water.
- Standards: Meets or exceeed SAE R3.
- Internal tube: Black synthetic nitrile.
- Reinforcement: Two fibre braids.
- External cover: Oil and abrasion synthetic rubber.
- Temperature range: -40°C to +135°C.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min. bend radius (in)	Min bend radius (mm)
4G3H	04	6	1/4	14.2	1250	88	5000	352	3	75
6G3H	06	10	3/8	19.1	1125	79	4500	316	4	100
8G3H	08	12	1/2	23.9	1000	70	4000	280	5	125
12G3H	12	19	3/4	31.8	750	52	3000	208	6	150

FLEET APPLICATION HOSE

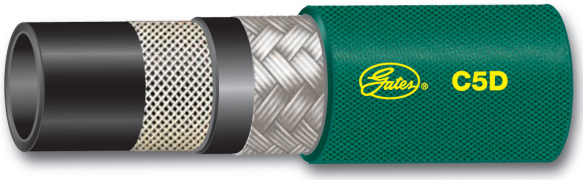
C5C

ONE WIRE NOMINAL BORE HOSE
BRAIDED WIRE REINFORCED HOSE - SAE 100R5

- -Size is based on nominal bore of corresponding tube size.
- Due to manufacturing tolerances, external dimension is an average.
- Recommended for: Medium pressure hydraulic petroleum-based oil lines in impulse applications, lube oil, air and water in applications such as air brakes, power steering, turbocharger oil supplies, tilt cab cylinders, transmission coolant and filtration lines. Not recommended for gasoline or diesel fuel.
- Internal tube: -4, -5; Neoprene based. Balance of range: Nitrile based.
- Reinforcement: One braid of high tensile steel wire over one braid of polyester.
- External cover: Black, oil and mildew resistant polyester braid.
- Temperature range: Under SAE 100R5 (hydraulic) -40°C to +100°C. All-purpose fleet application (hot lube oil lines) -40°C to +149°C. Air to +71°C only. Avoid continuous use at maximum temperature concurrent with maximum working pressures.
- Standards: Gates proprietary. Meets or exceeds requirements of SAE 100R5 for hydraulic applications).

Part Number	Internal Size	Internal Diameter (mm)	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4C5C	04	5	3/16	13.2	3000	210	12000	840	75
5C5C	05	6	1/4	14.7	3000	210	12000	840	85
6C5C	06	8	5/16	17.0	2250	155	9000	620	100
8C5C	08	10	13/32	19.6	2000	140	8000	560	115
10C5C	10	12	1/2	23.4	1750	120	7000	480	140
12C5C	12	16	5/8	27.4	1500	105	6000	420	165
16C5C	16	22	7/8	31.2	800	55	3200	220	190
20C5C	20	28	1.1/8	38.1	625	45	2500	180	230
24C5C	24	35	1.3/8	44.5	500	35	2000	140	270
32C5C	32	46	1.13/16	56.4	350	24	1400	96	340

FLEET APPLICATION HOSE



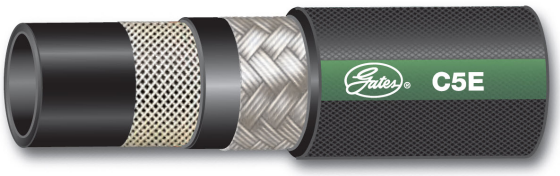
C5D

ONE WIRE NOMINAL BORE HOSE
MULTI-FLUID BRAIDED WIRE REINFORCED HOSE

- -Size is based on nominal bore of corresponding tube size.
- Due to manufacturing tolerances, the external dimension is an average.
- 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.
- Internal tube: CPE based.
- Reinforcement: One braid of high tensile steel wire over one braid of polyester.
- External cover: Green for easy identification, oil and mildew resistant, polyester braid impregnated with synthetic rubber.
- Temperature range: -40°C to +149°C. Air to +121°C only.Maximum phosphate esters to +100°C.
- Standards: Gates proprietary. Sizes -4 to -12 meet or exceed DOT FMVSS 106-74 Type AII, SAE J1402 Type AII and SAE J1019 and fuel resistance of SAE J30R2.
- Special item - please contact Hydraulink for further details and availability.

Part Number	Internal Size	Internal Diameter (mm)	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4C5D	04	5	3/16	13.2	1500	105	6000	420	25
5C5D	05	6	1/4	14.7	1500	105	6000	420	40
6C5D	06	8	5/16	17.0	1500	105	6000	420	45
8C5D	08	10	13/32	19.6	1250	85	5000	340	50
10C5D	10	12	1/2	23.4	1250	85	5000	340	50
12C5D	12	16	5/8	27.4	750	52	3000	208	58
16C5D	16	22	7/8	31.2	400	28	1600	112	89

FLEET APPLICATION HOSE



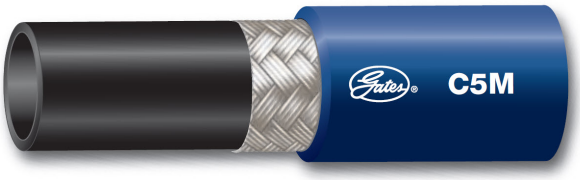
C5E

ONE WIRE NOMINAL BORE HOSE
HIGH TEMP. BRAIDED WIRE REINFORCED HOSE

- -Size is based on nominal bore of corresponding tube size.
- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Air brake hose, power steering (for heavy duty commercial vehicle use only), engine and transmission coolant lines, and hot lube oil lines. Not recommended for gasoline or diesel fuel.
- Internal tube: Black, oil and heat resistant synthetic nitrile rubber.
- Reinforcement: One braid of high tensile steel wire over one braid of polyester.
- External cover: Black, oil and heat resistant, textile braid impregnated with synthetic rubber.
- Temperature range: -40°C to +149°C. Air to +121°C only.
- Standards: Gates proprietary. Sizes -4 to -12 meet or exceed DOT FMVSS 106, SAE J1402 Type A1.

Part Number	Internal Size	Internal Diameter (mm)	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4C5E	04	5	3/16	12.4	1500	105	6000	420	20
5C5E	05	6	1/4	14	1500	105	6000	420	25
6C5E	06	8	5/16	15.5	1500	105	6000	420	35
8C5E	08	10	13/32	18.5	1250	85	5000	340	45
10C5E	10	12	1/2	21.1	1250	85	5000	340	60
12C5E	12	16	5/8	24.1	750	52	3000	208	70
16C5E	16	22	7/8	30.5	400	28	1600	112	90
20C5E	20	28	1.1/8	37.9	300	21	1200	84	115

FLEET APPLICATION HOSE



C5M

ONE WIRE NOMINAL BORE HOSE
MARINE FUEL BRAIDED WIRE REINFORCED HOSE

- -Size is based on nominal bore of corresponding tube size.
- Due to manufacturing tolerances, the external dimension is an average.
- Reference SAE J1942/-1 for USCG-approved working pressures.
- Recommended for: On-shore/off-shore and marine diesel fuel and gasoline applications, and hot oil lines up to 100°C.
- Internal tube: Nitrile based.
- Reinforcement: One braid of high tensile steel wire.
- External cover: NBR/PVC based. Blue.
- Temperature range: -20°C to +100°C.
- Standards: Gates proprietary. Meets marine fuel line specifications SAE J1527 Type A Class I and SAE J1942 requirements. Exceeds performance requirements of SAE J30R2 for non-marine applications.

Part Number	Internal Size	Internal Diameter (mm)	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
5C5M	05	6	1/4	14.7	500	35	2000	140	25
6C5M	06	8	5/16	17.0	500	35	2000	140	32
8C5M	08	10	13/32	19.6	500	35	2000	140	45
10C5M	10	12	1/2	23.4	500	35	2000	140	60
12C5M	12	16	5/8	27.4	500	35	2000	140	70
16C5M	16	22	7/8	31.2	500	35	2000	140	90

FLEET APPLICATION HOSE

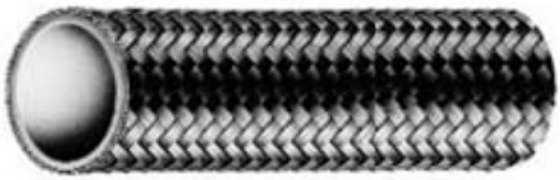
PS188

POWER STEERING HOSE
BRAIDED FIBRE HOSE FOR POWER STEERING

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Power steering pressure lines.
- Internal tube: CSM based.
- Reinforcement: Two high strength nylon braids that resist high temperatures and allow for expansion for system noise dampening.
- External cover: CSM based.
- Temperature range: -40°C to +150°C. Standards: Gates proprietary. Designed to meet requirements of SAE J2050 specifications.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
6PS188	06	10	3/8	18.0	1500	105	6000	420	85

PTFE HOSE



R14

STAINLESS BRAIDED PTFE HOSE
PTFE HOSE WITH STAINLESS STEEL BRAIDED COVER

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Air compressor discharge, hot oil fluids, hot and greasy environments.
- Internal tube: Non-conductive white, smooth bore Teflon®/PTFE.
- Reinforcement.
- External cover: AISI 304/S15 or BS970-1 1996 quality hard drawn tensile stainless steel wire.
- Temperature range: -54°C to +204°C. Characteristics: The PTFE hose tube is virtually inert to all chemicals and solvents. It is resistant to fuming Sulphuric and Nitric Acids, Amines, Antioxidants and Methanol. It is only known to react with elemental alkali metals (molten or in solution), Fluorine and Chlorine Trifluoride.
- NOTE: A damaging electrostatic charge can build up inside the hose when electrically resistive fluids are being transmitted at very high flow rates (particularly if the hose assemblies are lengthy).

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
R14-03	03	5	3/16	7.9	4000	275	12000	825	50
R14-04	04	6	1/4	9.35	3250	224	9750	672	76
R14-05	05	8	5/16	11.3	3160	218	9500	655	102
R14-06	06	10	3/8	12.65	2660	183	8000	552	127
R14-08	08	12	1/2	16.55	2330	161	7000	483	152
R14-10	10	16	5/8	19.75	1660	114	5000	345	178
R14-12	12	19	3/4	22.96	1500	103	4500	310	203
R14-16	16	25	1	27.8	1000	69	3495	241	310

THERMOPLASTIC HOSE

R7

FIBRE BRAID THERMOPLASTIC HOSE
BRAIDED FIBRE REINFORCED HOSE - SAE 100R7

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Medium pressure hydraulic applications requiring increased resistance to abrasion.
- Internal tube: Polyester elastomer.
- Reinforcement: One or two braids of synthetic fiber. External cover: Abrasion resistant polyurethane, black, pinpricked, white ink-jet branding.
- Temperature range: -40 °C to +100 °C, limited to +70 °C for air and water-based fluids.
- Standards: Meets or exceeds SAE 100R7.
- Characteristics: R7 is a medium pressure hose for use with petroleum, synthetic or water based hydraulic fluids. Suitable for general fluid power transmission like earthmoving, agricultural machinery and forklift trucks. Also suitable for many industrial gases (check for compatibility).

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
3R7	03	5	3/16	9.6	3000	210	12000	840	25
4R7	04	6	1/4	12.2	3000	210	12000	840	35
5R7	05	8	5/16	14.3	2700	190	10800	760	45

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
6R7	06	10	3/8	16.0	2300	160	9200	640	55
8R7	08	12	1/2	20.3	2000	140	8000	560	75
12R7	12	19	3/4	27.1	1300	90	5200	360	140

THERMOPLASTIC HOSE

R7NC

FIBRE BRAID THERMOPLASTIC HOSE
NON-CONDUCTIVE FIBRE REINFORCED HOSE - SAE 100R7

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Medium pressure hydraulic applications requiring increased resistance to abrasion and electrical non-conductivity.
- Internal tube: Polyester elastomer.
- Reinforcement: One or two braids of synthetic fiber. External cover: Abrasion resistant polyurethane, orange, non pinpricked, black ink-jet branding branding.
- Temperature range: -40 °C to +100 °C, limited to +70 °C for air and water-based fluids.
- Standards: Meets or exceeds SAE 100R7.
- Characteristics: R7NC is a medium pressure hose for use with petroleum, synthetic or water based hydraulic fluids in applications requiring high electrical insulation or non-conductivity; e.g. High voltage equipment, safety and rescue equipment, Aerial platforms, Cranes.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
3R7NC	03	5	3/16	9.6	3000	210	12000	840	25
4R7NC	04	6	1/4	12.2	3000	210	12000	840	35
5R7NC	05	8	5/16	14.3	2700	190	10800	760	45
6R7NC	06	10	3/8	16.0	2300	160	9200	640	55
8R7NC	08	12	1/2	20.3	2000	140	8000	560	75
12R7NC	12	19	3/4	27.1	1300	90	5200	360	140

THERMOPLASTIC HOSE

R7T

TWINLINE THERMOPLASTIC HOSE
BRAIDED FIBRE REINFORCED HOSE - SAE 100R7

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Medium pressure hydraulic applications requiring increased resistance to abrasion.
- Internal tube: Polyester elastomer.
- Reinforcement: One or two braids of synthetic fiber.
- External cover: Abrasion resistant polyurethane, black, pinpricked, white ink-jet branding.
- Temperature range: -40 °C to +100 °C, limited to +70 °C for air and water-based fluids.
- Standards: Meets or exceeds SAE 100R7.
- Characteristics: R7 is a medium pressure hose for use with petroleum, synthetic or water based hydraulic fluids. Suitable for general fluid power transmission like earthmoving, agricultural machinery and forklift trucks. Also suitable for many industrial gases (check for compatibility).
- Please note customised multi-line combinations of different hose types or diameters can also be produced to customer requirements.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4R7T	04	6	1/4	12.2	3000	210	12000	840	35
5R7T	05	8	5/16	14.3	2700	190	10800	760	45
6R7T	06	10	3/8	16.0	2300	160	9200	640	55

Hydraulink
Hose and Fittings

HYDRAULIC HOSE

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
8R7T	08	12	1/2	20.3	2000	140	8000	560	75
12R7T	12	19	3/4	27.1	1300	90	5200	360	140

THERMOPLASTIC HOSE

R8X

FIBRE BRAID THERMOPLASTIC HOSE
BRAIDED FIBRE REINFORCED SLIMLINE HOSE - SAE 100R8

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications requiring increased resistance to abrasion.
- Internal tube: Polyester elastomer.
- Reinforcement: One or two braids of aramid fiber.
- External cover: Abrasion resistant polyurethane, black, pinpricked, white ink-jet branding.
- Temperature range: -40 °C to +100 °C, limited to +70 °C for air and water-based fluids.
- Standards: Meets or exceeds SAE 100R8.
- Characteristics: R8X is a compact high pressure hose for use with petroleum, synthetic or water based hydraulic fluids. Suitable for general fluid power transmission like earthmoving, agricultural machinery and forklift trucks. Also suitable for many industrial gases (check for compatibility).

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
2R8X	02	4	1/8	8	6000	420	24000	1680	25
3R8X	03	5	3/16	8.9	5000	350	20000	1400	30
4R8X	04	6	1/4	11.5	5000	350	20000	1400	50
5R8X	05	8	5/16	13.4	4300	300	17200	1200	55
6R8X	06	10	3/8	15.5	4000	280	16000	1120	60
8R8X	08	12	1/2	19.9	3500	245	14000	980	80
12R8X	12	19	3/4	26.9	2300	165	9200	660	150

THERMOPLASTIC HOSE

R8XNC

FIBRE BRAID THERMOPLASTIC HOSE
NON-CONDUCTIVE FIBRE REINFORCED HOSE - SAE 100R8

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications requiring increased resistance to abrasion and electrical non-conductivity.
- Internal tube: Polyester elastomer.
- Reinforcement: One or two braids of aramid fiber.
- External cover: Abrasion resistant polyurethane, orange, non-pinpricked, black ink-jet branding.
- Temperature range: -40 °C to +100 °C, limited to +70 °C for air and water-based fluids.
- Standards: Meets or exceeds SAE 100R8.
- Characteristics: R8XNC is a compact high pressure hose for use with petroleum, synthetic or water based hydraulic fluids in applications requiring high electrical insulation or non-conductivity; e.g. High voltage equipment, Safety and rescue equipment, Aerial platforms, Cranes.

•Special item - please contact Hydraulink for further details and availability.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4R8XNC	04	6	1/4	11.5	5000	350	20000	1400	50

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
5R8XNC	05	8	5/16	13.4	4300	300	17200	1200	55
6R8XNC	06	10	3/8	15.5	4000	280	16000	1120	60
8R8XNC	08	12	1/2	19.9	3500	245	14000	980	80

THERMOPLASTIC HOSE

R8XT

TWINLINE THERMOPLASTIC HOSE
BRAIDED FIBRE REINFORCED SLIMLINE HOSE - SAE 100R8

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: High pressure hydraulic applications requiring increased resistance to abrasion.
- Internal tube: Polyester elastomer.
- Reinforcement: One or two braids of aramid fiber.
- External cover: Abrasion resistant polyurethane, black, pinpricked, white ink-jet branding.
- Temperature range: -40 °C to +100 °C, limited to +70 °C for air and water-based fluids.
- Standards: Meets or exceeds SAE 100R8.
- Characteristics: R8X is a compact high pressure hose for use with petroleum, synthetic or water based hydraulic fluids. Suitable for general fluid power transmission like earthmoving, agricultural machinery and forklift trucks. Also suitable for many industrial gases (check for compatibility).
- Please note customised multi-line combinations of different hose types or diameters can also be produced to customer requirements.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4R8XT	04	6	1/4	11.5	5000	350	20000	1400	50
6R8XT	06	10	3/8	15.5	4000	280	16000	1120	60
8R8XT	08	12	1/2	19.9	3500	245	14000	980	80

THERMOPLASTIC HOSE

R18

FIBRE BRAID THERMOPLASTIC HOSE
LOW TEMP. FIBRE REINFORCED HOSE - SAE 100R18

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Medium pressure hydraulic applications exposed to low temperatures, or cyclic and quick temperature changes, such as cool-stores.
- Internal tube: Polyester elastomer.
- Reinforcement: -03; one braid of synthetic fibre. Balance of range; two braids of synthetic fiber.
- External cover: Special polyester for low temperature, black, pinpricked, white ink-jet branding.
- Temperature range: -55 °C to +100 °C, limited to +70 °C for air and water-based fluids.
- Standards: Meets or exceeds SAE 10018.
- Characteristics: R18 is a medium pressure hose suitable for petroleum or synthetic based hydraulic fluids in hydraulic systems of forklifts. Optimum bonding characteristics and special cover also make it an ideal for equipment operating in cold environments, while maintaining a high level of flexibility.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4R18	04	6	1/4	12.2	3000	210	12000	840	35
5R18	05	8	5/16	14.3	3000	210	12000	840	45
6R18	06	10	3/8	16.6	3000	210	12000	840	45

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
8R18	08	12	1/2	22.5	3000	210	12000	840	70
10R18	10	16	5/8	26.1	3000	210	12000	840	100

THERMOPLASTIC HOSE

R18T

TWINLINE THERMOPLASTIC HOSE
BRAIDED FIBRE REINFORCED HOSE - SAE 100R18

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Medium pressure hydraulic applications exposed to low temperatures, or cyclic and quick temperature changes, such as cool-stores.
- Internal tube: Polyester elastomer.
- Reinforcement: -03; one braid of synthetic fibre. Balance of range; two braids of synthetic fiber.
- External cover: Special polyester for low temperature, black, pinpricked, white ink-jet branding.
- Temperature range: -55 °C to +100 °C, limited to +70 °C for air and water-based fluids.
- Standards: Meets or exceeds SAE 10018.
- Characteristics: R18 is a medium pressure hose suitable for petroleum or synthetic based hydraulic fluids in hydraulic systems of forklifts. Optimum bonding characteristics and special cover also make it an ideal for equipment operating in cold environments, while maintaining a high level of flexibility.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4R18T	04	6	1/4	12.2	3000	210	12000	840	35
5R18T	05	8	5/16	14.3	3000	210	12000	840	45
6R18T	06	10	3/8	16.6	3000	210	12000	840	45
8R18T	08	12	1/2	22.5	3000	210	12000	840	70
10R18T	10	16	5/8	26.1	3000	210	12000	840	100

PAINTSPRAY HOSE

PS1B

ONE WIRE BRAID THERMOPLASTIC
BRAIDED WIRE REINFORCED HOSE FOR PAINT/SOLVENTS

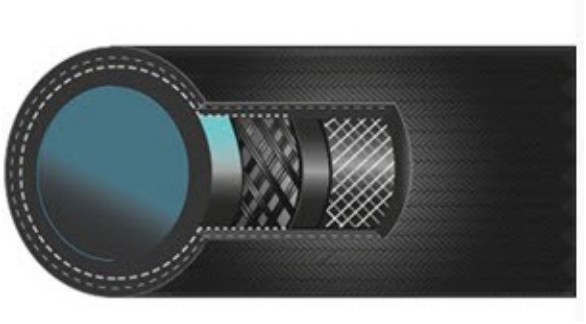
- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Airless paint spray systems or applications requiring high chemical resistance to solvents and aggressive fluids.
- Internal tube: Polyamide PA6.
- Reinforcement: One braid of high tensile steel wire.
- External cover: Polyurethane, blue, non-pinpricked, black ink-jet branding.
- Temperature range: -40 °C to +100 °C, limited to +70 °C for air and water-based fluids.
- Characteristics: PS1B is a high pressure hose with blue cover, particularly designed for paint spray and solvent applications with increased resistance to abrasion, mechanical strength and providing electrical conductivity. Due to low dissipation rate of tube, the hose is also suitable for many industrial gases (check for compatibility).

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
4PS1B	04	6	1/4	11.6	4400	310	12000	840	40
6PS1B	06	10	3/8	15.5	3200	225	12800	900	65

AUTOMOTIVE HOSE

LPG

LPG SERVICE HOSE
WIRE AND FIBRE REINFORCED HOSE FOR LPG



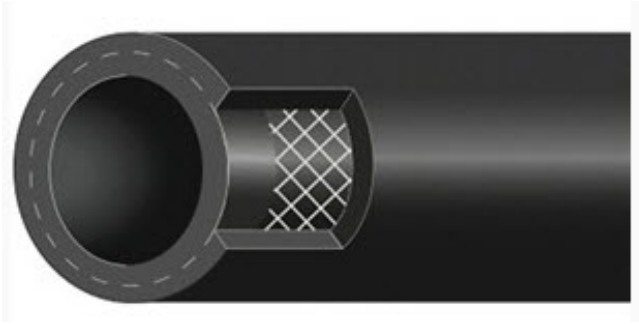
- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: LPG service line for mobile plant, particularly forklift trucks.
- Internal tube: Synthetic rubber, LP Gas, oil and low temp resistant.
- Reinforcement: One textile and one stainless wire braid.
- External cover: Textile braid.
- Standards: Meets AS/NZ 1869 Class D, AGA Certificate no. AGA5318

Part Number	Internal Size	Internal Diameter (mm)	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
5LPG	05	8	5/16	17.1	350	24	1400	96	

AUTOMOTIVE HOSE

MVAP

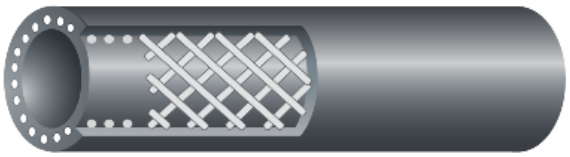
LPG VAPORISER HOSE
UNREINFORCED VAPORISER HOSE FOR LPG



- Due to manufacturing tolerances, the external dimension is an average.
- the 18mm ID will clamp down to suit 5/8, or stretch over 3/4.
- Recommended for: High temperature gas transportation hose up to +125C.
- Internal tube: Synthetic rubber, LP Gas resistant.
- Reinforcement: n/a
- External cover: Textile braid.

Part Number	Internal Size	Internal Diameter (mm)	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
18MVAP	10-12	18	5/8-3/4	25.4	110	8	440	32	

AUTOMOTIVE HOSE



27000FUEL

FUEL LINE

FUEL LINE SAE 30R6 AND 30R7

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Use on fuel lines, PCV and EEC systems, and for fuel return hose connections on diesel fuel injection systems.
- Approved for use with leaded and unleaded petrol, diesel, methanol, and ethers.
- Internal tube: Nitrile.
- Reinforcement: Spiral reinforced construction.
- External cover: Oil resistant NBR/PVC cover.
- Temperature: -40°C to 125°C with gasoline blends.
- Standards: Meets SAE 30R6 and 30R7.

Part Number	Internal Size	Internal Diameter (mm)	Working Pressure (psi)	Working pressure (bar)
27000	1/8	3.2	50	4
27001	3/16	4.8	50	4
27002	1/4	6.3	50	4
27003	5/16	8	50	4
27004	3/8	9.5	50	4
27005	7/16	11.1	35	2.4
27006	1/2	12.7	35	2.4
27008	5/8	15.9	35	2.4
27010	3/4	19	35	2.4

AUTOMOTIVE HOSE

27000VAC

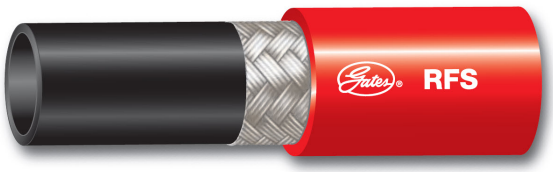
VACUUM HOSE

VACUUM HOSE

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Windshield washers, vacuum operated accessories, and radiator overflow.
- Vacuum rated to 24in/Hg.
- Temperature: -40°C to 125°C
- Standards: Meets SAE J1037, J942b specifications.

Part Number	Internal Size	Internal Diameter (mm)	Internal Diameter (in)	External Diameter (mm)	Suction (In. Hg)	Suction (mm Hg)
27042	5/32	4	0.16	4.8	24	610
27043	7/32	6	0.22	10.7	24	610
27041	7/64	3	0.11	5.6	24	610
27050	5/16	8	0.31	12.7	24	610
27044	1/4	6	0.25	11.4	24	610

FIRE SUPPRESSION HOSE



RFS

ONE WIRE BRAID HOSE
RED FIRE SUPPRESSANT BRAIDED WIRE REINFORCED HOSE - SAE 100R1 Type AT

- Due to manufacturing tolerances, the external dimension is an average.
- Recommended for: Low pressure powder fire suppressant applications in mining, forestry and firefighting equipment.
- Internal tube: Black, oil and heat resistant synthetic nitrile rubber.
- Reinforcement: One braid of high tensile steel wire.
- External cover: Red, oil and abrasion resistant nitrile and PVC.
- Temperature range: -40°C to +100°C.
- Standards: Meets performance requirements of SAE 100R1.

Part Number	Internal Size	Internal DN	Internal Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min bend radius (mm)
3RFS	03	5	3/16	11.4	3000	205	12000	820	75
4RFS	04	6	1/4	13.5	2750	190	11000	760	100
6RFS	06	10	3/8	17.3	2250	155	9000	620	130
8RFS	08	12	1/2	20.3	2000	140	8000	560	180
12RFS	12	19	3/4	27.7	1250	85	5000	340	240

MULTIPURPOSE HOSE

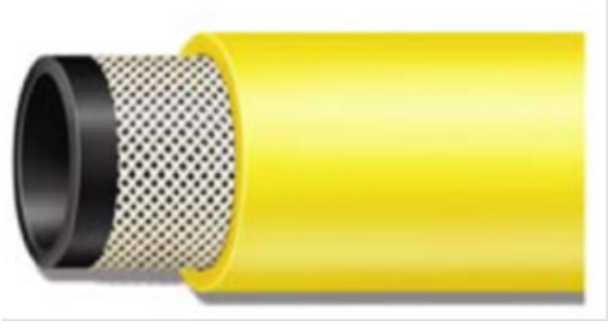
PREMOFLEX

Premoflex MULTI-PURPOSE HOSE
TWO YARN SPIRAL REINFORCED INDUSTRIAL HOSE

- Recommended for: Premo Flex is the perfect choice for multiple applications requiring a highly flexible and cost-effective hose with maximum resistance to petroleum oils/kerosene/fuel oil (to 120°F) and lubricating oils (to 212°F). Premo Flex can be used for transferring gasoline or diesel fuels. It is also suitable for air and water applications; It offers excellent weather and ozone resistance and is nonconductive at 1000 volts D.C.
- Temperature range: -40°F to +212°F(-40°C to +100°C) continuous service.
- Tube: Type C (Nitrile). Black. RMA (Class A) high oil resistance.
- Reinforcement: Synthetic high tensile cord.
- Cover: Type C2 (Modified Nitrile). Red (black cover available on special order). All sizes thru 1/2 are perforated. RMA(Class B) medium oil resistance.

Part Number	Internal Size	Internal Size (mm)	External Diameter (in)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Min burst pressure (bar)	Min. bend radius (in)	Min bend radius (mm)
PREMOFLEX-04	04	6.4	.5	12.7	250	17	750	52	2	50
PREMOFLEX-06	06	9.5	.66	16.8	250	17	750	52	3	75
PREMOFLEX-08	08	12.7	.85	21.6	250	17	750	52	4	100
PREMOFLEX-10	10	15.8	1	25.4	250	17	750	52	5	130
PREMOFLEX-12	12	19.1	1.15	29.2	250	17	750	52	5	130
PREMOFLEX-16	16	25.4	1.47	37.3	250	17	750	52	8	205

MULTIPURPOSE HOSE



TERMINATOR

Terminator MULTI-PURPOSE HOSE
CORD REINFORCED INDUSTRIAL HOSE

- Recommended for: Terminator is one tough hose with a rugged cover for outstanding abrasion resistant capability and extended service life where constant flexing and bending is required. This top-of-the-line industrial and oil-resistant hose is designed for applications involving air/oil/water transfer as well as grease sprays/paraffin waxes/salt solutions and a variety of chemicals. It offers excellent durability for extra long life in mining/air drill/construction/poultry plants/quarries/shipyards/food processing/ railroads and other severe service environments. Excellent industrial hose with weather and ozone resistance; Nonconductive at 1000 volts D.C.
- Temperature range:-40°F to +212°F (-40°C to +100°C) continuous service.
- Tube: Type C (Nitrile) hose. Black. RMA (Class A) high oil resistance.
- Reinforcement: Synthetic high tensile cord.
- Cover: Type C4 (Carboxylated Nitrile). Yellow. RMA (Class A) high oil resistance.

Part Number	Internal Size	Internal Size (mm)	External Diameter (mm)	Working Pressure (psi)	Working pressure (bar)	Min burst pressure (psi)	Max suction pressure - (mm Hg)	Min bend radius (mm)
TERMINATOR-04	04	6.4	14.5	501	35	750	762	76
TERMINATOR-06	06	9.5	19.1	501	35	750	635	76
TERMINATOR-08	08	12.7	22.6	501	35	750	635	127
TERMINATOR-12	12	19.1	31	501	35	30	381	152
TERMINATOR-16	16	25.4	38.4	501	35	30	254	203