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

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.

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

Reinforcement: Four 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.

Temperature Range: -40°F to $+250^{\circ}\text{F}$ (-40°C to $+121^{\circ}\text{C}$). For water emulsions see Temperature Limits Table.

Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):

GlobalSpiral™ Couplings (Section E) Stainless Steel "S" Couplings (Section H)



Order Code	Hose I.D.	Hose O.D.	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
EFG4K-06	3/8"	0.80	4,000	16,000	2.5
EFG4K-08	1/2"	0.94	4,000	16,000	3.5
EFG4K-10	5/8"	1.09	4,000	16,000	4.0
EFG4K-12	3/4"	1.21	4,000	16,000	4.7
EFG4K-16	1"	1.50	4,000	16,000	6.0
EFG4K-20	1-1/4"	1.85	4,000	16,000	8.2

Extremely High Pressure

EFG3K Spiral Wire Hose—SAE 100R12

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

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.

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.

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

Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):

GSP Couplings (-24 and -32) (Section E) GlobalSpiral™ Couplings (-6 through -20) (Section E) Stainless Steel "S" Couplings (Section H)



Order Code	Hose I.D. (In.)	Hose O.D. (In.)	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
EFG3K-20	1-1/4"	1.85	3,000	12,000	8.2
EFG3K-24	1-1/2"	2.11	3,000	12,000	10.0
EFG3K-32	2	2.63	3.000	12.000	25.0

Global M4K Mega4000™ Hose—SAE 100R19

(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.

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.

Temperature Range: -40°F to $+212^{\circ}\text{F}$ (-40°C to $+100^{\circ}\text{C}$). For water emulsions see Temperature Limits Table.

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

GlobalSpiral™ Couplings (Section E)
MegaCrimp® Couplings (Section G)
Stainless Steel "S" and "B" Couplings (Section H)



Order Code	Hose I.D.	Hose O.D. (In.)	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
M4K-04	1/4"	0.55	4,000	16,000	1.5
M4K-06	3/8"	0.70	4,000	16,000	2.0
M4K-08	1/2"	0.82	4,000	16,000	2.8
M4K-10	5/8"	0.99	4,000	16,000	3.0
M4K-12	3/4"	1.17	4,000	16,000	3.8
M4K-16	1"	1.52	4,000	16,000	4.5

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.

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.

Temperature Range: -40° F to $+212^{\circ}$ F (-40° C to $+100^{\circ}$ C). For water emulsions see Temperature Limits Table.

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)



Order Code	Hose I.D. (In.)	Hose O.D. (In.)	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
M3K-04	1/4"	0.48	3,250	13,000	1.5
M3K-06	3/8"	0.63	3,250	13,000	2.0
M3K-08	1/2"	0.80	3,250	13,000	2.8
M3K-10	5/8"	0.99	3,250	13,000	3.0
M3K-12	3/4"	1.15	3,250	13,000	3.8
M3K-16	1"	1.48	3,250	13,000	4.5

(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.

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.

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

Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):

GlobalSpiral™ Couplings (Section E) MegaCrimp® Couplings (Section G) Stainless Steel "B" Couplings (Section H)



Order Code	Hose I.D. (In.)	Hose O.D. (In.)	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
M2T-04	1/4"	0.56	6,000	24,000	1.5
M2T-06	3/8"	0.70	5,000	20,000	2.0
M2T-08	1/2"	0.82	4,300	17,200	2.8
M2T-10	5/8"	0.95	3,800	15,200	3.0
M2T-12	3/4"	1.11	3,500	14,000	3.8
M2T-16	1"	1.39	2,500	10,000	4.5

High Pressure

Global G2 2-Wire Braid Hose—SAE 100R2 Type AT

(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.

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

Reinforcement: Two braids of high-tensile steel wire.

Cover: Black, oil and abrasion resistant, thin synthetic rubber (Modified

Nitrile - Type C2). See Hose Stock Characteristics.

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

Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):

Field Attachable Type T Couplings (Section O) GSP Couplings (-24 and -32) (Section E) GlobalSpiral™ Couplings (Section E)

MegaCrimp® Couplings (except -24 and -32) (Section G)

Stainless Steel "B" Couplings (Section H)



Order Code	Hose I.D. (In.)	Hose O.D. (In.)	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
G2-04	1/4"	0.59	5,800	23,200	4.0
G2-06	3/8"	0.74	4,800	19,200	5.0
G2-08	1/2"	0.86	4,000	16,000	7.0
G2-10	5/8"	0.99	3,625	14,500	8.0
G2-12	3/4"	1.15	3,100	12,400	9.5
G2-16	1"	1.48	2,400	9,600	12.5
G2-20	1-1/4"	1.86	1,825	7,300	16.5
G2-24	1-1/2"	2.11	1,300	5,200	20.0
G2-32	2"	2.62	1,175	4,700	25.0

(Meets Flame Resistance Acceptance Designation "MSHA 2G")

Recommended For: Hydraulic jack applications. Meets Material Handling Institute specification IJ 100 for hydraulic hose and assemblies used with jacking systems. 10,000 Static Pressure Only

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

Stock Characteristics.

Reinforcement: Two braids of high-tensile steel wire.

Cover: Black, oil and abrasion resistant, synthetic rubber (Modified Nitrile - Type C2). Also available with unique abrasion resistant MegaTuff® cover. See Hose Stock Characteristics.

Temperature Range: -40°F to +120°F (-40°C to +49°C).

Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):

Use MegaCrimp® Male Pipe Long Nose Couplings on jack end of assembly for engagement. (Section G)



Order Code	Hose I.D. (In.)	Hose O.D. (In.)	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
J2AT-04	1/4"	0.59	10,000	20,000	4.0
J2AT-06	3/8"	0.74	10,000	20,000	5.0

Medium Pressure

G1 1-Wire Braid Hose—SAE 100R1 Type AT

(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. **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.

Temperature Range: $-40^{\circ}F$ to $+212^{\circ}F$ ($-40^{\circ}C$ to $+100^{\circ}C$). For water

emulsions see Temperature Limits Table.

Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):

Field Attachable Type T Couplings (Section O)

GSP Couplings (-3 only) (Section E)

MegaCrimp® Couplings (except -3, -24 and -32) (Section G)

Stainless Steel "B" Couplings (Section H)



Order Code	Hose I.D.	Hose O.D. (In.)	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
G1-04	1/4"	0.53	3,275	13,000	4.0
G1-06	3/8"	0.68	2,600	10,400	5.0
G1-08	1/2"	0.80	2,325	9,300	7.0
G1-10	5/8"	0.93	1,900	7,600	8.0
G1-12	3/4"	1.09	1,525	6,100	9.0
G1-16	1"	1.40	1,275	5,100	12.0
G1-20	1-1/4"	1.71	925	3,700	16.0
G1-24	1-1/2"	1.96	725	2,900	20.0
G1-32	2"	2.51	600	2,400	25.5

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.

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.

Temperature Range: Petroleum-base fluids: -40° F to $+300^{\circ}$ F (-40° C to $+149^{\circ}$ C). Phosphate esters fluids as recommended by the fluid manufacturer, but within a range of -40° F to $+212^{\circ}$ F (-40° C to $+100^{\circ}$ C). For water emulsions see Temperature Limits Table.

Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):

MegaCrimp® Couplings (Section G)



Order Code	Hose I.D. (In.)	Hose O.D. (In.)	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
MEGATECH1000-04	1/4"	0.52	1,000	4,000	2.0
MEGATECH1000-06	3/8"	0.66	1,000	4,000	2.5
MEGATECH1000-08	1/2"	0.80	1,000	4,000	3.5
MEGATECH1000-10	5/8"	0.93	1,000	4,000	4.0
MEGATECH1000-12	3/4"	1.15	1,000	4,000	4.7
MEGATECH1000-16	1"	1.37	1,000	4,000	6.0
MEGATECH1000-20	1-1/4"	1.64	1,000	4,000	8.5

NOTE: Federal law requires registration with the Department of Transportation for anyone producing air brake hose assemblies with swaged or crimped fittings. See Engineering and Technical Data Section for compliance.

MegaTech® 500 High-Temp Oil/Air Return

Fleet Application

Recommended For: 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.

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.

Temperature Range: Petroleum-base fluids: -40° F to $+300^{\circ}$ F (-40° C to $+149^{\circ}$ C). Phosphate esters fluids as recommended by the fluid manufacturer, but within a range of -40° F to $+212^{\circ}$ F (-40° C to $+100^{\circ}$ C). For water emulsions see Temperature Limits Table.

Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):

GL Couplings (Section J)

GSP Couplings (-24 and -32) (Section E)



Order Code	Hose I.D. (In.)	Hose O.D.	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
MEGATECH500-24	1-1/2"	1.95	500	2,000	15.0
MEGATECH500-32	2"	2.48	500	2,000	18.0
MEGATECH500-40	2-1/2"	2.97	500	2,000	22.0
MEGATECH500-48	3"	3.50	500	2,000	24.0

TR500 High-Temp/Air Brake/Engine Hose

Recommended For: 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.

Tube: Black (Nitrile - Type C). See Hose Stock Characteristics.

Reinforcement: One braid of high-tensile steel wire.

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

Temperature Range: -40°F to +250°F (-40°C to +121°C). For water

emulsions see Temperature Limits Table.

Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):

GLP Couplings (Section J)

MegaCrimp® Couplings (Section G)



Order Code	Hose I.D. (In.)	Hose O.D. (In.)	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
TR500-04	1/4"	0.51	500	2,000	1.0
TR500-06	3/8"	0.66	500	2,000	1.8
TR500-08	1/2"	0.80	500	2,000	2.3
TR500-10	5/8"	0.93	500	2,000	2.8
TR500-12	3/4"	1.04	500	2,000	3.5
TR500-16	1"	1.30	500	2,000	4.5

NOTE: Federal law requires registration with the Department of Transportation for anyone producing air brake hose assemblies with swaged or crimped fittings. See Engineering and Technical Data Section for compliance.

Medium Pressure

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

Recommended For: Hydraulic oil lines, anti-freeze solutions or water. Meets or exceeds requirements of SAE 100R3.

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.

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.

Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):

MegaCrimp® Couplings (-4, -6, -8, -10) (Section G)



Order Code	Hose I.D. (In.)	Hose O.D.	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
G3H-04	1/4"	0.56	1,250	5,000	3.0
G3H-06	3/8"	0.75	1,125	4,500	4.0
G3H-08	1/2"	0.94	1,000	4,000	5.0
G3H-10	5/8"	1.10	900	3,600	5.5
G3H-12	3/4"	1.25	750	3,000	6.0
G3H-16	1"	1.50	565	2,260	8.0
G3H-20	1-1/4"	1.75	375	1,500	10.0
G3H-24	1-1/2"	1.94	300	1,200	12.0

Recommended For: Hydraulic oil lines, heavy-duty transmission oil cooler lines and glycol anti-freeze solutions. Meets or exceeds requirements of SAE 100R6.

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.

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.

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)



Order Code	Hose I.D.	Hose O.D. (In.)	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
GTH-03	3/16"	0.44	500	2,000	2.0
GTH-04	1/4"	0.50	400	1,600	2.5
GTH-05	5/16"	0.56	400	1,600	3.0
GTH-06	3/8"	0.63	400	1,600	3.0
GTH-08	1/2"	0.78	400	1,600	4.0
GTH-10	5/8"	0.90	350	1,400	5.0
GTH-12	3/4"	1.06	300	1,200	5.5
GTH-16	1"	1.13	250	1,000	8.0

LOL Plus Lock-On Hose

Low Pressure

(Black Cover Meets Flame Resistance Acceptance Designation "MSHA 2G")

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.

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.

Temperature Range: -40°F to $+212^{\circ}\text{F}$ (-40°C to $+100^{\circ}\text{C}$). Air to $+160^{\circ}\text{F}$ ($+71^{\circ}\text{C}$) only. For water emulsions see Temperature Limits Table.

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.



Order Code	Hose I.D. (In.)	Hose O.D.	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
LOLA-03	3/16"	0.41	300	1,200	3.0
LOLA-04	1/4"	0.47	300	1,200	3.0
LOLA-05	5/16"	0.55	300	1,200	3.0
LOLA-06	3/8"	0.63	300	1,200	3.0
LOLA-08	1/2"	0.77	300	1,200	5.0
LOLA-10	5/8"	0.94	300	1,200	6.0
I OI A-12	3/4"	1.06	300	1.200	7.0

GMV Global MegaVac® Return Line and Suction Hose

(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. Uses half the bend radius of SAE 100R4. Meets marine ABS with use of HeatGuard® high temp sleeve.

Tube: Black, synthetic rubber is specifically designed for resistance to high temperatures (Nitrile - Type C). See Hose Stock Characteristics.

Reinforcement: Double spiral textile (braid for -12, -16 and -20) 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.

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

Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):

GL Couplings (Section J)

MegaCrimp® Couplings (-12 through -20) (Section G)



Order Code	Hose I.D. (In.)	Hose O.D. (In.)	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
GMV-12	3/4"	1.22	350	1,400	2.5
GMV-16	1"	1.45	300	1,200	3.0
GMV-20	1-1/4"	1.76	250	1,000	4.0
GMV-24	1-1/2"	2.01	162	648	5.0
GMV-32	2"	2.51	112	448	6.0
GMV-36	2-1/4"	2.76	88	352	7.0
GMV-40	2-1/2"	3.02	68	272	7.0
GMV-48	3"	3.51	62	248	9.0
GMV-56	3-1/2"	4.01	56	224	10.0
GMV-64	4"	4.51	56	224	12.0

^{*} Stem and clamp only, no Gates couplings available.

Low Pressure

G4H MegaVac® Return Line and Suction Hose

(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.

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.

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

Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):

GL Couplings (Section J)
MegaCrimp® Couplings (Section G)
Use clamp over beaded nipple.



Order Code	Hose I.D. (In.)	Hose O.D. (In.)	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
G4H-12	3/4"	1.17	300	1,200	2.5
G4H-16	1"	1.43	212	848	3.0
G4H-20	1-1/4"	1.68	200	800	4.0

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.

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.

Temperature Range: -40°F to $+212^{\circ}\text{F}$ (-40°C to $+100^{\circ}\text{C}$). Air to $+160^{\circ}\text{F}$ ($+71^{\circ}\text{C}$) only. For water emulsions see Temperature Limits Table.

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)



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Order Code	Hose I.D. (In.)	Hose O.D. (In.)	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
RLA-03	3/16"	0.41	250	1,000	3.0
RLA-04	1/4"	0.50	250	1,000	3.0
RLA-05	5/16"	0.56	250	1,000	4.0
RLA-06	3/8"	0.66	250	1,000	4.0
RLA-08	1/2"	0.81	200	800	5.0
RLA-10	5/8"	0.94	200	800	6.0
RLA-12	3/4"	1.09	200	800	6.0
RLA-16	1"	1.34	160	640	8.0

RLC 3-Fiber Braid Return Line and Low Pressure Hose

Low Pressure

Recommended For: 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.

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

Reinforcement: Three fiber braids.

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

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); air to +160°F (+71°C) only. For water emulsions see Temperature Limits Table.

Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):

Use barbed stem or beaded-tube with clamps only.



Order Code	Hose I.D.	Hose O.D. (In.)	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
RLC-16	1"	1.62	200	800	9.0
RLC-20	1-1/4"	1.88	200	800	10.0
RLC-24	1-1/2"	2.12	200	800	11.0
RLC-28	1-3/4"	2.38	200	800	12.0
RLC-32	2"	2.56	200	800	13.0
RLC-36	2-1/4"	2.87	150	600	14.0
RLC-40	2-1/2"	3.12	150	600	16.0
RLC-48	3"	3.62	150	600	20.0
RLC-56	3-1/2"	4.12	150	600	24.0
RLC-72	4-1/2"	5.19	100	400	54.0

C5C Hydraulic Hose—SAE 100R5

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 (CAUTION: Intended for heavyduty 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.

Tube: -4 and -5: black, oil and heat resistant synthetic rubber (Neoprene - Type A); -6 through -40: (Nitrile - Type C). See Hose Stock Characteristics.

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

Cover: Black, oil and mildew resistant, polyester braid.

Temperature Range: 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.

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



Order Code	Hose I.D. (In.)	Hose O.D.	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
C5C-04	3/16"	0.52	3,000	12,000	3.0
C5C-05	1/4"	0.58	3,000	12,000	3.4
C5C-06	5/16"	0.67	2,250	9,000	4.0
C5C-08	13/32"	0.77	2,000	8,000	4.6
C5C-10	1/2"	0.92	1,750	7,000	5.5
C5C-12	5/8"	1.08	1,500	6,000	6.5
C5C-16	7/8"	1.23	800	3,200	7.4
C5C-20	1-1/8"	1.50	625	2,500	9.0
C5C-24	1-3/8"	1.75	500	2,000	10.5
C5C-32	1-13/16"	2.22	350	1,400	13.3
C5C-40	2-3/8"	2.88	350	1,400	24.0

NOTE: Federal law requires registration with the Department of Transportation for anyone producing air brake hose assemblies with swaged or crimped fittings. See Engineering and Technical Data Section for compliance.

Nylon Air Brake Tubing

Recommended For: Truck, bus and mobile air brake, and service lines where heat and battery acids are not present. Conforms to SAE J844 specifications. Meets D.O.T. FMVSS 106-74.

Tube: Heat and light stabilized seamless extruded nylon.

Reinforcement: Type A: Non-reinforced in sizes 1/8", 5/32", 3/16" and 1/4". NOTE: 1/8" and 5/32" are NOT recognized by D.O.T. for air brake systems, these are for service lines only.

Type B: Reinforced with one open ply of fibrous nylon in sizes 5/16", 3/8", 1/2", 5/8" and 3/4".

Cover: Nylon. Available in black (NABTA), blue (NABTB), green (NABTG), red (NABTR), yellow (NABTY), orange (NABTO), purple (NABTP), brown (NABTN), silver (NABTS) and white (NABTW) colors. Other colors available upon request.

 $\label{eq:continuity} \begin{tabular}{ll} \textbf{Temperature Range:} -40°F to $+200^\circ$F (-40^\circ$C to $+93^\circ$C). \\ \textbf{Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):} \\ \textbf{Gates DOT SureLok}^{TM} \ \textbf{Couplings (Section Q)} \\ \end{tabular}$



Order Code	Hose I.D. (In.)	Hose O.D.	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
NABTA-02		1/8"	150	800	0.37
NABTA-04		1/4"	150	800	1.0
NABTA-05		5/16"	150	800	1.25
NABTA-06		3/8"	150	800	1.5
NABTA-08		1/2"	150	760	2.0
NABTA-10		5/8"	150	720	2.5
NABTA-12		3/4"	150	640	3.0

C14 PTFE Hose—SAE 100R14 Type A—Nonconductive

Recommended For: Air compressor discharge, hot oil and fluids, hot and greasy environments.

Cover/Reinforcement: One braid of 300 Series stainless steel wire. **Temperature Range:** Dynamic: -65°F to +400°F (-54°C to +204°C).

Static: -65°F to +450°F (-54°C to +232°C).

C14 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)



Order Code	Hose I.D.	Hose O.D.	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)	72°F (22°C)	72°F (22°C)	450°F (232°C)	450°F (232°C)
C14-04	3/16"	0.31	1,500	6,000	2.0	3,000	12,000	1,500	6,000
C14-05	1/4"	0.38	1,500	6,000	3.0	3,000	12,000	1,500	6,000
C14-06	5/16"	0.45	1,500	6,000	4.0	2,500	10,000	1,500	6,000
C14-08	13/32"	0.55	1,000	4,000	5.3	2,000	8,000	1,000	4,000
C14-10	1/2"	0.65	800	3,200	6.5	1,500	6,000	800	3,200
C14-12	5/8"	0.79	800	3,200	7.8	1,200	4,800	800	2,600
C14-16	7/8"	1.03	800	3,500	9.0	1,000	4,000	800	2,000

NOTE: Electrostatic Discharge: Many applications involving PTFE hose do not require a conductive tube. But you must review the potential for electrostatic discharge for every application and be aware that static electricity can be hazardous. In those cases where electrostatic discharge can occur, conductive PTFE hose with a conductive tube (Gates C14CT) is recommended. For more information on electrostatic discharge, refer to Technical Data Section.

TH8 Hydraulic Hose—SAE 100R8

Thermoplastic

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.

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: Two polyester braids.

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

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.

Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):

MegaCrimp® Couplings (-4 through -16) (Section G) Swage PCTS Couplings (-3 only) (Section N)



Order Code	Hose I.D. (In.)	Hose O.D. (In.)	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
TH8-03	3/16"	0.50	5,000	20,000	1.5
TH8-04	1/4"	0.61	5,000	20,000	2.0
TH8-06	3/8"	0.75	4,000	16,000	2.5
TH8-08	1/2"	0.87	3,500	14,000	4.0
TH8-12	3/4"	1.13	2,250	9,000	6.5
TH8-16	1"	1.45	2.000	8.000	10.0

Thermoplastic

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. TH7 hose meets or exceeds performance requirements of SAE 100R7 with a significantly tighter bend radius.

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: Braided synthetic fiber (-2, -8, -12 and -16). Spiraled synthetic fiber (-3, -4, -5 and -6).

Cover: Black polyurethane that resists hydraulic fluids, high temperatures, aging and weathering. Black TH7 is perforated for use in general hydraulic and pneumatic service.

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.

Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):

MegaCrimp® Couplings (Section G)

Swage PCTS Couplings (-2 and -3) (Section N)



Order Code	Hose I.D.	Hose O.D.	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
TH7-02	1/8"	0.32	3,000	12,000	0.5
TH7-03	3/16"	0.41	3,000	12,000	0.8
TH7-04	1/4"	0.50	2,750	11,000	1.3
TH7-05	5/16"	0.56	2,500	10,000	1.8
TH7-06	3/8"	0.64	2,250	9,000	2.0
TH7-08	1/2"	0.80	2,000	8,000	3.0
TH7-12	3/4"	1.05	1,250	5,000	5.0
TH7-16	1"	1.32	1,000	4,000	10.0

Thermoplastic

TH7DL Dual Line Hydraulic Hose—SAE 100R7

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.

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: Spiraled 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.

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

Coupling Recommendation (See Crimp Data Manual 35019 or E-crimp):

MegaCrimp® Couplings (Section G)



Order Code	Hose I.D. (In.)	Hose O.D.	Working Pressure (psi.)	Min. Burst Pressure (psi.)	Min. Bend Radius (In.)
TH7DL-04	1/4"	0.50	2,750	11,000	1.3
TH7DL-05	5/16"	0.56	2,500	10,000	1.8
TH7DL-06	3/8"	0.64	2,250	9,000	2.0
TH7DL-08	1/2"	0.80	2,000	8,000	3.0