



DRIVEN BY POSSIBILITY™



# MEGASYS™ HOSES AND COUPLINGS

SUPERIOR PERFORMANCE AND VALUE

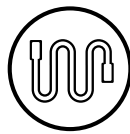


# GATES® MEGASYS PROVIDES NEXT-LEVEL PERFORMANCE THAT IS ENGINEERED TO MAXIMIZE UPTIME AND BOOST YOUR PRODUCTIVITY

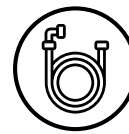
As advanced hydraulic systems are designed and engineered into more and more high-powered, high-pressure equipment, the importance of high-quality, flexible, durable hose assemblies that won't fail prematurely has never been more critical. Gates® MegaSys™ hydraulic hose and coupling products offer an integrated solution to combination of technology and performance.



**Superior performance**



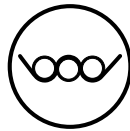
**Easy installation**



**Simple hose selection**



**Broad assortment of sizes and pressures**



**High flexibility**



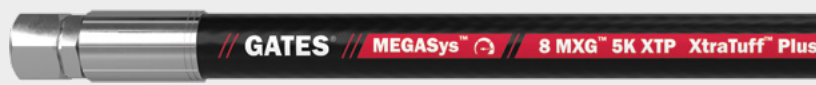
**Low total cost of ownership (TCO)**



## WIRE-BRAID HOSE FAMILIES:

MXT™, M3K, M4K, M5K, M6K, M2T

- Braided high-tensile steel wire
- Nitrile tube compatible with biodegradable hydraulic fluids
- Qualified to industry-leading 600,000 cycles
- Temperature range -40°F to +212°F (-40°C to +100°C)  
High/Low temperature versions available
- Available with different covers to address abrasion and ozone resistance requirements



## SPIRAL-WIRE & XPIRAL™ HOSE FAMILIES:

MXG™ 4K-XTP, MXG™ 5K-XTP, EFG3K, EFG4K, EFG5K, EFG6K

- Four or six alternating layers of spiraled, high-tensile steel wire. MXG uses the patented Xpiral construction
- Nitrile tube compatible with biodegradable hydraulic fluids
- Qualified to industry-leading 1,000,000 impulse cycles
- Temperature range -40°F to +250°F (-40°C to +121°C)  
Low temperature versions available
- MXG series comes standard with XtraTuff™ Plus cover  
EFG series hoses are available with different covers to address abrasion and ozone resistance requirements

 = MegaCrimp™

 = GlobalSpiral™

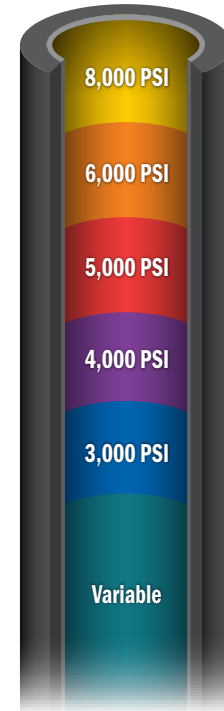
 = GlobalSpiral Plus

 = GlobalSpiral MAX Pressure



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**GATES MEGASYS  
HOSE PRESSURE COLOR KEY**



## PERFORMANCE SPECIFICATIONS

Gates MegaSys Hoses offer a broad assortment of sizes and pressures. They exceed or meet criteria\* of SAE, EN, ISO and are all MSHA approved.

WORKING PRESSURE		PRODUCT	INTERNATIONAL STANDARDS			MARINE TYPE APPROVALS			
CONSTANT/ VARIABLE	PSI	MPa	EN	SAE	ISO	DNV	LR	BV	ABS
Constant Pressure	6,000	42	EFG6K <i>EN 856 4SP (-8 to -32) EN 856 4SH (-12 to -32)</i>	SAE 100R15	ISO 3862 R15 ISO 18752 420CC	•	•	•	•
			M6K <i>EN 857 2SC</i>		ISO 18752 420BC	•	•	•	
	5,000	35	MXG5K-XTP <i>EN 856 R13 EN 856 4SP (-10 and -12)</i>	SAE 100R13	ISO 18752 350DC ISO 3862 R13	•	•	•	•
			EFG5K <i>EN 856 R13 EN 856 4SP (-10 to -32) EN 856 4SH (-20 to -32)</i>	SAE 100R13	ISO 3862 R13 ISO 18752 350DC (except -24)	•	•	•	•
			M5K		ISO 18752 350BC	•	•	•	
	4,000	28	MXG4K-XTP <i>EN 856 R12 EN 856 4SP (-16)</i>	SAE 100R19 SAE 100R12	ISO 3862 R12 ISO 18752 280DC	•	•	•	•
			EFG4K <i>EN 856 R12 EN 856 4SP (-16 and -20)</i>	SAE 100R12	ISO 3862 R12 ISO 18752 280DC	•	•	•	•
			M4K <i>EN 857 2SC</i>	SAE 100R19	ISO 11237 R19 ISO 18752 280BC	•	•	•	•
	3,000	21	EFG3K <i>EN 856 R12 EN 856 4SP</i>	SAE 100R12	ISO 3862 R12 ISO 18752 210DC	•	•	•	•
22.5		M3K <i>EN 857 1SC EN 857 2SC</i>	SAE 100R17	ISO 11237 R17 ISO 18750 210BC	•	•	•	•	
Variable Pressure			MXT <i>EN 857 2SC EN 853 2SN</i>	SAE 100R16 SAE 100R17 (-4 to -12) SAE 100R2 SAE 100R19 (-4 to -8)	ISO 11237 R16 ISO 1436 2SN R2	•	•	•	•
			M2T <i>EN 857 2SC EN 853 2SN</i>	SAE 100R16 SAE 100R2	ISO 11237 R16 ISO 1436 2SN R2	•	•	•	•

\*Non-italic texts: exceed or meet all requirements; Italic texts: exceed or meet performance requirements.



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# GATES MEGASYS LATEST INNOVATION

ADVANCED PERFORMANCE. EASIER INSTALLATION.  
LESS WEIGHT. STREAMLINED SELECTION.

## INNOVATIVE XPIRAL CONSTRUCTION

### MXG™ 5K-XTP

- Comes with our latest material breakthrough, it is engineered for exceptional durability, excellent flexibility and lower force-to-bend for faster and more ergonomic installation
- Utilizes both Gates GS GlobalSpiral couplings (all sizes, 1,000,000 cycle impulse rating) and G MegaCrimp couplings (size -6 and -8, 600,000 cycle impulse rating)
- Exceeds all criteria of ISO 18752 350DC and performance criteria of SAE 100R13, EN856 R13 and ISO 3862 R13. Sizes -10 and -12 also rated per EN 856 4SP
- Temperature -40°F to +250°F (-40°C to +121°C)
- With XtraTuff Plus cover, for abrasion and ozone resistance, MSHA approved



SIZE	ID		OD		WORKING PRESSURE		BURST PRESSURE		MBR		WEIGHT		COUPLINGS
	Dash	mm	inch	mm	Inch	MPa	psi	MPa	psi	mm	inch	kg/100m	
-6	10	3/8	18.0	0.71	35.0	5075	140.0	20300	65.0	2.6	43.8	0.29	GlobalSpiral; MegaCrimp
-8	12	1/2	21.6	0.85	35.0	5075	140.0	20300	90.0	3.5	61.0	0.41	GlobalSpiral; MegaCrimp
-10	16	5/8	26.1	1.03	35.0	5075	140.0	20300	100.0	3.9	88.3	0.59	GlobalSpiral
-12	19	3/4	29.6	1.16	35.0	5075	140.0	20300	120.0	4.7	107.0	0.72	GlobalSpiral

### MXG™ 4K-XTP

- Exceeds the performance of wire spiral constructions, but with the lower weight and flexibility, meeting ever tougher industrial and mobile equipment requirements
- Utilizes both Gates GS GlobalSpiral couplings (all sizes, 1,000,000 cycle impulse rating) and G MegaCrimp couplings (size -6 to -12, 600,000 cycle impulse rating)
- Exceeds all criteria of ISO 18752 280DC, SAE 100R19 and exceeds performance criteria of SAE 100R12, EN 856 R12, and ISO 3862 R12. 16 MXG 4K exceeds performance requirements of EN 865 4SP
- Temperature -40°F to +250°F (-40°C to +121°C)
- With XtraTuff Plus cover, for abrasion and ozone resistance, MSHA Approved

SIZE	ID		OD		WORKING PRESSURE		BURST PRESSURE		MBR		WEIGHT		COUPLINGS
	Dash	mm	inch	mm	Inch	MPa	psi	MPa	psi	mm	inch	kg/100m	
-6	10	3/8	17.7	0.70	28.0	4060	112.0	16000	65.0	2.6	38.0	0.26	GlobalSpiral; MegaCrimp
-8	12	1/2	20.7	0.82	28.0	4060	112.0	16000	90.0	3.5	52.0	0.35	GlobalSpiral; MegaCrimp
-10	16	5/8	25.2	0.99	28.0	4060	112.0	16000	100.0	3.9	69.0	0.46	GlobalSpiral; MegaCrimp
-12	19	3/4	28.9	1.14	28.0	4060	112.0	16000	120.0	4.7	95.0	0.64	GlobalSpiral; MegaCrimp
-16	25	1	38.0	1.50	28.0	4060	112.0	16000	150.0	5.9	157.0	1.05	GlobalSpiral



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## INNOVATIVE WIRE BRAID CONSTRUCTION

### MXT™, MXT™-XTP

Designed to address our customers' evolving application challenges, MXT is a universally applicable premium product. Lighter, stronger, and more flexible, its diversified application allows you to consolidate inventory while giving you exactly the hose you need, when you need it.

- Meets all criteria of SAE 100R16, SAE 100R17 (-4 to -12) and meets performance criteria of SAE 100R2, SAE 100R19 (-4 to -8), EN 853 2SN and EN 857 2SC
- Temperature -40°F to +212°F (-40°C to +100°C)
- Superior flex impulse performance: qualified to 600,000 impulse cycles, which is 3 times the impulse criteria of industry standard
- Standard cover or XtraTuff Plus cover, MSHA Approved



SIZE	ID		OD		WORKING PRESSURE		BURST PRESSURE		MBR		WEIGHT		COUPLINGS	
	Dash	mm	inch	mm	Inch	MPa	psi	MPa	psi	mm	inch	kg/100m		lbs/ft
-4	6		1/4	14.0	0.56	42.0	6000	168.0	24000	40.0	1.6	30.0	0.20	MegaCrimp
-5	8		5/16	15.2	0.60	38.0	5500	152.0	22000	45.0	1.8	33.0	0.22	MegaCrimp
-6	10		3/8	17.1	0.68	33.0	4800	132.0	19200	65.0	2.6	39.0	0.26	MegaCrimp
-8	12		1/2	20.2	0.80	28.0	4000	112.0	16000	70.0	2.8	46.0	0.31	MegaCrimp
-10	16		5/8	24.0	0.95	25.0	3625	100.0	14500	75.0	3.0	57.0	0.38	MegaCrimp
-12	19		3/4	27.4	1.08	21.5	3100	86.0	12400	120.0	4.7	70.0	0.47	MegaCrimp
-16	25		1	35.1	1.38	16.5	2400	66.0	9600	150.0	5.9	100.0	0.67	MegaCrimp





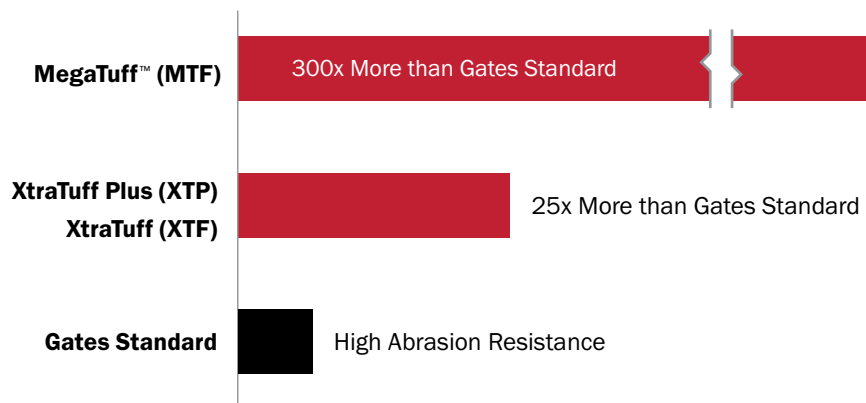
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# MEGATUFF™ AND XTRATUFF™ COVERS

Nothing is harder on hydraulic hose covers than constant abrasion. Rubbed against metal or other hose, most standard hydraulic hoses – even ones with spring guards or nylon sleeving – can't take the punishment.

Our hose cover options utilize modern cover extrusion process technologies and compounds formulated specifically for both abrasion resistance and ozone resistance. Gates innovative material science protects the hose from damage in extreme hydraulics applications. Historically, Gates leads the pack in establishing engineering specs, and hose covers are no exception.

## ABRASION RESISTANCE COMPARISON



## GATES XTRATUFF (AND XTRATUFF PLUS)

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

- Reducing impact of environmental hazards
- Lowering hose replacement downtime
- Eliminating the need for costly hose protectors

8 MXT™ XTP XtraTuff™ Plus 

## GATES MEGATUFF

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

- Maintain their flexibility and minimum bend radius
- Resistant to oil, ozone and UV rays
- Tested to 1,000,000 abrasion cycles without failure

16EFG5K-MTF MegaTuff™ 



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# MEGACRIMP™ & GLOBALSPIRAL™ COUPLINGS

## TWO FAMILIES. COMPLETE COVERAGE

The hose-coupling interface is key to high performance of assemblies and safe hydraulics. From selecting the parts to the final crimp O.D., and everything in between, the interface is essential to keep equipment running and workers safe. Gates believes in safe, reliable, foolproof components that mitigate the risk associated with high-pressure hydraulics. Gates hose, couplings and crimpers are qualified as a system so you can get OE-quality assemblies in the factory or the field.



### **MegaCrimp Couplings** The Versatile, “No-Weep” Coupling with the Patented “C” Insert

MegaCrimp is a one-piece coupling that offers a weep free C-insert design, full insertion indication, low insertion force, and doesn't require skiving. The “C” insert allows usage with different hose constructions and wall thicknesses. In addition, the C-insert ensures an even distribution of crimping forces to form a concentric seal. That simplifies your inventory requirements since one size can accommodate many different hose ODs, on both one- and two-wire braid hoses.

MegaCrimp couplings are tested to one million impulse cycles, proving its high performance and maximum service life. MegaCrimp couplings are fully qualified for SAE, EN, and ISO performance.



### **GlobalSpiral Couplings** No-Skive Convenience, Reduced Inventory

GlobalSpiral couplings are specially engineered to provide superior performance for extreme high-pressure, high-impulse spiral-wire hydraulic hose applications. They can be used with all Gates MegaSys Xpiral, four- and six-spiral wire hose up to 42MPa (6,000psi).

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



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**COUPLING/FERRULE SELECTION TABLE\***

HOSE	SIZE DASH	-4	-5	-6	-8	-10	-12	-16	-20	-24	-32
	ID MM	DN 6	DN 8	DN 10	DN 12	DN 16	DN 19	DN 25	DN 31	DN 38	DN 51
	ID INCH	1/4	5/16	3/8	1/2	5/8	3/4	1	1 1/4	1 1/2	2
MXG 4K	STEM			GS	GS	GS	GS	GS			
	FERRULE	-	-	GS GS1F-2	GS GS1F-2	GS GS1F-2	GS GS1F-2	GS GS1F-4	-	-	-
	ONE-PIECE DESIGN			G	G	G	G	-			
MXG 5K	STEM			GS	GS	GS	GS	GS			
	FERRULE	-	-	GS GS1F-2	GS GS1F-2	GS 10 GSD1F-4	GS GS1F-2	GS	-	-	-
	ONE-PIECE DESIGN			G	G	-	-	-			
MXT	ONE-PIECE DESIGN	G	G	G	G	G	G	G	-	-	-
M2T	ONE-PIECE DESIGN	G	G	G	G	G	G	G	G	G	G
EFG3K	STEM								GS	GSP	GSP
	FERRULE	-	-	-	-	-	-	-	GS GS1F-4	GSP GS1F-4	GSP GS1F-4
EFG4K	STEM			GS	GS	GS	GS	GS	GS		
	FERRULE	-	-	GS GS1F-4	GS GS1F-4	GS GS1F-4	GS GS1F-4	GS GS1F-4	GS GS1F-4	GS GS1F-4	-
EFG5K	STEM			GS	GS	GS	GS	GS	GS	GS	GS
	FERRULE	-	-	GS GS1F-4	GS GS1F-4	GS GS1F-4	GS GS1F-4	GS GS1F-4	GS GS1F-4	GS GS1F-4	GSM
EFG6K	STEM			GS	GS	GS	GS	GS	GS	GS	GS
	FERRULE	-	-	GS GS1F-4	GS GS1F-4	GS GS1F-4	GS GS1F-4	GS GS1F-4	GS GS1F-4	GS GS1F-4	GSM
M3K	ONE-PIECE DESIGN	G	G	G	G	G	G	G	-	-	-
M4K	STEM								GS		
	FERRULE	-	-	-	-	-	-	-	GS GS1F-4	-	-
	ONE-PIECE DESIGN	G	G	G	G	G	G				
M5K	ONE-PIECE DESIGN	G	G	G	G	-	-	-	-	-	-
M6K	ONE-PIECE DESIGN	G	-	-	-	-	-	-	-	-	-

\*Please find crimp data on [ecrimp.gates.com](http://ecrimp.gates.com) or the eCrimp™ mobile app



**BUILT FOR HIGH-PRESSURE SITUATIONS**

**GATES ECRIMP™ MOBILE APP**

Available for iPhone and Android, allows users to identify unknown couplings and adapters through a series of simple questions. The app can be downloaded for free on iOS and Android using these QR codes.

Using advancements in Gates R&D, we leveled up our Gates Integrated System Approach including all components of the MegaSys hose and coupling family to meet ever-tougher industrial and mobile equipment requirements.

**GATES CORPORATION**

1144 15th Street, Suite 1400  
Denver, CO 80202  
(303) 744-5070

