



MEGASYS® PRODUCT PROGRAMME

HYDRAULIC SYSTEM COMPONENTS



MEGASYS® PRODUCT PROGRAMME

mega Performance
mega Versatility
mega Simplicity
mega Value

MEGASYS® PRODUCTS - ONLY FROM GATES

Gates MegaSys® is an engineered hydraulic hose and coupling system that provides superior **Performance**, **Versatility**, **Simplicity** and **Value** delivering your best total cost of ownership solution.

Gates' isobaric approach to pressure ratings makes it easy to select hoses that meet system requirements based on pressure and temperature.






SAVE TIME, SPACE AND MONEY WITH THE MEGASYS® PRODUCT PROGRAMME

- › Simplifies hose selection with constant pressure ratings irrespective of hose bore
- › Covers the widest range of applications in construction, agriculture and processing & specialty comprising pressure lines of 21.0 MPa, 22.5 MPa, 28.0 MPa, 35.0 MPa and 42.0 MPa
- › Bends up to 30% of international standards
- › Saves overall hose assembly length
- › Facilitates easier plumbing and routing in tight applications
- › Requires fewer bent tube fittings
- › Eases installation with higher flexibility
- › Lowers inventory requirements
- › Extends life in bending, flexing applications
- › Eases hose identification in stock and service thanks to its distinctive design and colour coding system




















MEGASYS® SIZE/PRESSURE MATRIX

Use the chart below for easy hose selection. Just find the required pressure and the chart will show you which hose meets that pressure in the applicable size.

	-04	-05	-06	-08	-10	-12	-16	-20	-24	-32
22.5 MPa*	M3K	M3K	M3K	M3K	M3K	M3K	M3K	EFG3K	EFG3K	EFG3K
28.0 MPa	M4K	M4K	M4K	M4K	M4K	M4K		EFG4K	EFG4K	
35.0 MPa	M5K	M5K	M5K	M5K				EFG5K	EFG5K	EFG5K
42.0 MPa	M6K							EFG6K	EFG6K	EFG6K


* Max. working pressure EFG3K = 21.0 MPa

Exceeds 1SN/1SC	Exceeds 2SN/2SC	Exceeds 4SP	Exceeds 4SH
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 megaSYS® 8M3K Mega3000™ 22.5 MPa (3250 PSI) 1/2" (12.5 mm) ISO11237 R17 / SAE 100R17  Flame Resistant MSHA 2G-11C
 megaSYS® 20EFG3K MegaSpiral® 21.0 MPa (3000 PSI) 1-1/4" (31.5 mm) Exceeds ISO3862 R12 4SP / EN856 R12 4SP / SAE 100R12  Flame Resistant MSHA 2G-11C
 megaSYS® 10M4K Mega4000™ 28.0 MPa (4000 PSI) 5/8" (15.9 mm) ISO11237 R19 / SAE 100R19  Flame Resistant MSHA 2G-11C
 megaSYS® 12EFG4K MegaSpiral® 28.0 MPa (4000 PSI) 3/4" (19.0 mm) EN856 R12 / SAE 100R12  Flame Resistant MSHA 2G-11C
 megaSYS® 8M5K Mega5000™ 35.0 MPa (5000 PSI) 1/2" (12.5 mm)   Flame Resistant MSHA 2G-11C
 megaSYS® 12EFG5K MegaSpiral® 35.0 MPa (5000 PSI) 3/4" (19.0 mm) ISO3862 R13 / Exceeds EN856 R13 4SP / SAE 100R13  Flame Resistant MSHA 2G-11C
 megaSYS® 4M6K Mega6000™ 42.0 MPa (6000 PSI) 1/4" (6.3 mm)   Flame Resistant MSHA 2G-11C
 megaSYS® 32EFG6K MegaSpiral® 42.0 MPa (6000 PSI) 2" (51.0 mm)   Flame Resistant MSHA 2G-11C

MEGASYS® WIRE-BRAID CONSTANT PRESSURE HOSES AND MEGACRIMP® COUPLINGS

GATES MxK MEGASYS® HOSE BEND RADIUS COMPARISON

	ISO 11237 - EN 857 1SC/2SC	EN 853 - 1SN/2SN	M3K	M4K	M5K	M6K
-04	75	100	40	40	50	50
-05	85	115	45	45	55	
-06	90	130	50	50	65	
-08	130	180	70	70	90	
-10	150/170	200	75	75		
-12	180/200	240	95	95		
-16	200/250	300	115			

Note: Minimum bend radii also apply to the MegaTuff™ and XtraTuff™ cover.





Construction features

- › Exceeds ISO 11237/EN 857 and EN 853 standard performance requirements
- › M3K now available with a higher working pressure of 22.5 MPa
- › Bends up to 40% of the EN 853 minimum bend radius and 50% of the ISO 11237/EN 857
- › Tested to industry-leading 600,000 impulse cycles at 100°C and at 133% working pressure
- › Available with MegaTuff™ cover offering 300 times the abrasion resistance of the standard MxK cover, as well as superior ozone and weathering resistance
- › Available with XtraTuff™ cover offering 25 times the abrasion resistance of the standard MxK cover
- › MSHA flame resistant cover
- › No-skive coupling solution, fully qualified to EN performance and designed to fit 1- and 2- wire-braid hoses, including large bore dimensions
- › Robust “Bite-the-wire” crimp with Gates patented “C” insert
- › Full-Torque Nut™ technology


Benefits

- › Eliminates the need for spring guards and protective sleeving thanks to the high abrasion-resistant cover types
- › Reduces downtime by eliminating damaged hose/coupling interfaces
- › Provides stronger and more durable coupling solutions than with traditional staked-nut fittings
- › The patented insert ensures crimping forces are evenly distributed to form a concentric crimp
- › Provides a robust coupling design for a leak-free seal
- › Eliminates contamination, odours and dust normally created by skiving
- › Reduces inventory requirements since one MegaCrimp® coupling size can accommodate various hose outside diameters
- › One coupling fits all as the MegaCrimp® coupling is designed to fit 1- and 2- wire-braid hoses as well as fibre-braid hoses
- › Provides a further plus on inventory management, HSE and performance with the GlobalSpiral™ Plus (GSP) coupling. The stem of this no-skive 2-piece coupling can also be used for 4-spiral hoses in size -24 and -32



**MEGASYS® SPIRAL-WIRE CONSTANT PRESSURE HOSES
AND GLOBALSPIRAL™ COUPLINGS**

GATES EFGxK MEGASYS® HOSE BEND RADIUS COMPARISON

	EN 856 4SP	EN 856 4SH	EFG3K	EFG4K	EFG5K	EFG6K
-06	180			65	65	65
-08	230			90	90	90
-10	250			100	100	100
-12	300	280		120	120	120
-16	340	340		150	150	150
-20	460	460	210	210	210	210
-24	560	560	250		250	250
-32	660	700	315		315	635

Note: Minimum bend radii also apply to the MegaTuff™ cover.





Construction features

- › Exceeds ISO 3862/EN 856 standard performance requirements
- › Bends up to 40% of the ISO 3862/EN 856 minimum bend radius requirements
- › Tested to industry-leading 1,000,000 impulse cycles at 120°C and at 133% working pressure for EFG3K and EFG4K / 120% working pressure for EFG5K and EFG6K
- › Available with the Gates special MegaTuff™ cover which offers 300 times the abrasion resistance of the standard EFGxK cover, as well as superior ozone and weathering resistance
- › MSHA flame resistant cover
- › Introduces a no-skive solution across the range
- › 2-piece coupling design, except for the new GlobalSpiral™ Maximum (GSM) coupling
- › A 1-piece stem on all GlobalSpiral™ couplings
- › Robust “Bite-the-wire” crimp for improved coupling retention

Benefits

- › Provides superior performance for extreme high-pressure, high-impulse spiral-wire hydraulic applications
- › The MegaTuff™ cover eliminates the need for spring guards and protective sleeves and is ideal for the harshest conditions in mining, construction, oil field and quarries
- › Reduces downtime by eliminating damaged hose/coupling interfaces
- › Eliminates contamination, odours and dust normally created by skiving
- › Reduces inventory because only one stem is required for all spiral-wire hose types
- › Provides a further plus on inventory management, HSE and performance with the GlobalSpiral™ Plus (GSP) coupling. The stem of this no-skive 2-piece coupling can also be used for 1- and 2-wire-braid hoses in size -24 and -32
- › Provides a no-skive 1-piece coupling solution with the GlobalSpiral™ Maximum (GSM) coupling for the large bore hose dimensions (-24 and -32) up to 42.0 MPa while featuring all the advantages of the Gates GlobalSpiral™ design



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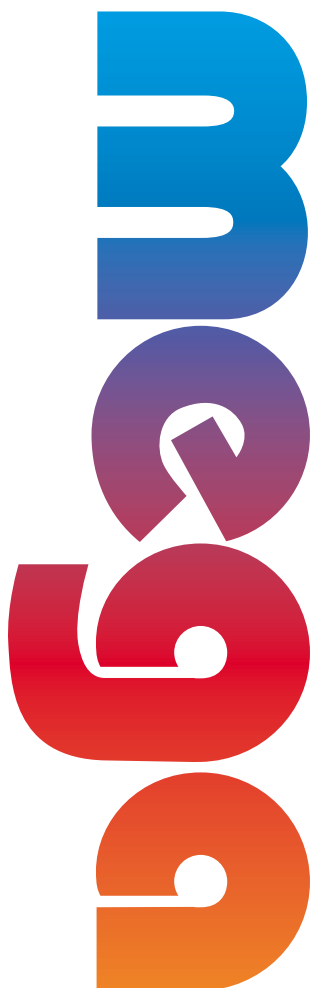
GATES HYDRAULICS, YOUR TOTAL FLUID POWER SOLUTION

Rigorous testing and product validation have always been central to the Gates philosophy. Gates' Next Generation Hydraulics - the Gates Integrated System Approach including all components of the MegaSys® hose and coupling family - offer a combination of technology, performance and flexibility unmatched by anything on the market today - or for the foreseeable future!

Find out more about the Gates Integrated System Approach on www.Gates.com/europe/integrated-system



Gates produces high-performance hydraulic hoses, couplings, tube fittings, adaptors and manipulated tube for original equipment manufacturers and replacement market customers. Gates hydraulic products work together and offer complete and fully integrated port-to-port solutions to your fluid power needs. You decide.



› PERFORMANCE

All MegaSys® constant pressure hoses are characterised by superior flex impulse performance, excellent pressure resistance and compact bend radii, exceeding international standards. Furthermore, you can count on the MegaCrimp® and GlobalSpiral™ couplings for a leak-free performance up to maximum working pressures as high as 42.0 MPa.

› VERSATILITY

The MegaSys® product programme can handle a wide range of hydraulic applications in the agricultural, construction and processing and specialty markets. All MegaSys® hoses stand up to the harshest operating conditions thanks to the abrasion-resistant covers.

› SIMPLICITY

Proper hose selection has never been easier thanks to the constant pressure ratings through all sizes.

Additionally, coupling selection is very simple: you only have to choose between two types. Gates MegaCrimp® couplings are developed to fit wire-braid hoses, whereas Gates GlobalSpiral™ couplings are specifically designed for spiral-wire hoses.

Thanks to the new layline, bringing a distinctive design and pressure colour coding system, hose identification in stock or in service is done in no time.

› VALUE

MegaSys® products deliver the best total cost of ownership as they keep the equipment up and running longer, more economically and in the safest conditions. Reduced bending radii enable the use of shorter hose lengths and facilitate easier plumbing and routing in tight applications, thus saving space and costs. Both the MegaCrimp® and GlobalSpiral™ couplings are no-skive. The no-skive design reduces assembly time, labour, fabrication errors and contamination of the fluid systems.



POWERING PROGRESS™

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