

Gates Global MegaSys® Pressure hose line

Together with the Gates MxK wire braid hoses, the new EnviroFluid™ GxK spiral hoses fit perfectly within the MegaSys® Pressure hose line. The tube of the M3K, M4K+, M5K and M6K wire braid hoses has always been made of nitrile, offering you compatibility with biodegradable fluids. The Gates MegaSys® Pressure hose line features constant working pressure ratings of 21.0, 28.0, 35.0 and 42.0 MPa, comprising highly flexible wire braid and spiral-wire hose for a wide range of high-pressure applications.

Working pressure	ID		-4 (1/4")	-5 (5/16")	-6 (3/8")	-8 (1/2")	-10 (5/8")	-12 (3/4")	-16 (1")	-20 (1.1/4")	-24 (1.1/2")	-32 (2")
	MPa	PSI										
	42.0	6000	M6K		EFG6K	EFG6K	EFG6K	EFG6K	EFG6K	EFG6K		
	35.0	5000	M5K	M5K	M5K	EFG5K	EFG5K	EFG5K	EFG5K	EFG5K	G5K*	G5K*
	28.0	4000	M4K+	M4K+	M4K+	M4KE+	M4K+	M4K+	EFG4K	EFG4K		
	21.0	3000	M3K	M3K	M3K	M3K	M3K	M3K	M3K	G3K	G3K*	G3K*

(*) : EnviroFluid™ version in development

EnviroFluid™ hose: technical data

EF-G6K

Inside diameter			Outside diameter		Burst pressure		Working pressure		Bend radius	Weight		
-size	DN	"	"	mm	PSI	MPa	PSI	MPa	mm	kg/100m	REF.	Prod. No.
-8	12	1/2	0.95	23.9	24000	168.0	6000	42.0	178	89	8EFG6K	4651-01371
-10	16	5/8	1.09	27.7	24000	168.0	6000	42.0	203	115	10EFG6K	4651-01368
-12	19	3/4	1.24	31.5	24000	168.0	6000	42.0	241	144	12EFG6K	4651-01288
-16	25	1	1.53	38.9	24000	168.0	6000	42.0	305	223	16EFG6K	4651-01289
-20	31	1.1/4	1.97	50.0	24000	168.0	6000	42.0	419	399	20EFG6K	4651-01290

EF-G5K

Inside diameter			Outside diameter		Burst pressure		Working pressure		Bend radius	Weight		
-size	DN	"	"	mm	PSI	MPa	PSI	MPa	mm	kg/100m	REF.	Prod. No.
-8	12	1/2	0.95	24.1	20000	140.0	5000	35.0	178	89	8EFG5K	4651-01372
-10	16	5/8	1.09	27.9	20000	140.0	5000	35.0	203	113	10EFG5K	4651-01340
-12	19	3/4	1.24	31.5	20000	140.0	5000	35.0	241	144	12EFG5K	4651-01285
-16	25	1	1.53	38.9	20000	140.0	5000	35.0	305	223	16EFG5K	4651-01286
-20	31	1.1/4	1.97	50.0	20000	140.0	5000	35.0	419	399	20EFG5K	4651-01287

EF-G4K

Inside diameter			Outside diameter		Burst pressure		Working pressure		Bend radius	Weight		
-size	DN	"	"	mm	PSI	MPa	PSI	MPa	mm	kg/100m	REF.	Prod. No.
-8	12	1/2	0.95	24.13	16000	112.0	4000	28.0	89	89	8EFG4K	4651-01339
-10	16	5/8	1.09	27.7	16000	112.0	4000	28.0	102	113	10EFG4K	4651-01367
-12	19	3/4	1.21	30.7	16000	112.0	4000	28.0	122	128	12EFG4K	4651-01282
-16	25	1	1.50	38.1	16000	112.0	4000	28.0	152	188	16EFG4K	4651-01283
-20	31	1.1/4	1.85	47.0	16000	112.0	4000	28.0	211	283	20EFG4K	4651-01284

Your Distributor:



New EnviroFluid™ hydraulic spiral hose from Gates.

Environmentally friendly oils are anything but friendly to hydraulic high-pressure hoses. They seep right through the tube, through the different layers of reinforcement, eventually blistering or permeating the cover. Traces of oil appear on the surface and an unsightly, possibly unsafe problem remains. Premature replacement used to be the only solution....

Now you can say goodbye to cover blisters and greasy hoses with the introduction of Gates' new EnviroFluid™ spiral hose. The secret is the special nitrile-tube compound similar to the modified-nitrile used in Gates' popular wire braid hoses. EnviroFluid™ stands for a unique spiral hose construction offering you even more unbeatable advantages.



EnviroFluid™ compatibility

The new EnviroFluid™ hoses combine all the qualities from the existing G4K, G5K and G6K spiral-wire constructions with an outstanding compatibility with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils.

When used with traditional petroleum based fluids, the special nitrile tube offers a significant reduction in the permeation caused by low-viscosity or viscosity improved oils. It is designed to resist the aggressive influence of oil additives.

Therefore EnviroFluid™ G4K, G5K and G6K hoses are more than ever fit for the harshest applications such as the continuous duty cycles in pump feed applications or the high frequency impulse cycles in hydraulic hammers.

A spiral hose easy to bend and bend and bend again

Though featuring a robust construction, Gates' spiral hoses have always been easier to manipulate than conventional hoses. With the EnviroFluid™ product development Gates has paid special attention to the flexibility of its spiral hoses by minimizing the force that is needed to bend the hose.

Also featuring ...

- Sizes ranging from 1/2" up to and including 1-1/4" ID. Larger 1-1/2" and 2" hoses, as well as 3/8", are in development.
- Constant working pressure ratings of 28.0, 35.0 and 42.0 MPa.
- Superior impulse performance: tested with GlobalSpiral™ couplings up to 1 million impulse cycles at 133% of working pressure.
- High temperature resistance from -40°C up to +120°C.
- Tight bend radii surpassing European standards :
 - 80% or less of the EN 856 4SP/4SH standard bend radius.
 - 50% of the EN 856 R12 standard bend radius for the EF-G4K range.



EnviroFluid™ spiral hose and GlobalSpiral™ no-skive couplings: a unique combination in the industry

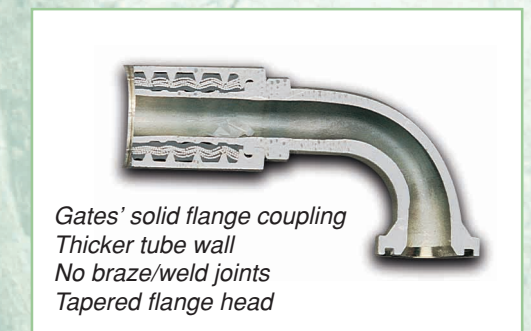
Convinced of the Gates EnviroFluid™ spiral hose performance? Then we have made it very easy for you: just use Gates' standard line of GlobalSpiral™ no-skive couplings for all hose sizes.

GlobalSpiral™ couplings are specially engineered for high-pressure spiral hose

- Gates' GlobalSpiral™ no-skive hose and coupling programme surpassed one million impulse cycles at 133% of working pressure without failure. After one million cycles, the hose/coupling interface was sectioned to reveal no stress cracks in the hose tube, a major requirement today from the OE industry around the world.
- The stem of all GlobalSpiral™ no-skive couplings is one solid piece instead of brazed constructions to provide extra reliability. The couplings are fitted with solid back nuts for increased resistance to overtorque and burst-tested to a safety factor of 4:1 of the maximum working pressure.
- Stems and ferrules of GlobalSpiral™ no-skive couplings meet worldwide OEM and international standards.



Competitor's 90°
flange coupling
Brazed



Gates' solid flange coupling
Thicker tube wall
No braze/weld joints
Tapered flange head

No-skive convenience

GlobalSpiral™ couplings have a unique no-skive ferrule for ALL Gates' spiral-wire hoses. The engineered ferrule design is the secret of the "bite-the-wire" ultra high-pressure hose/coupling retention technology.

- No-skive design eliminates the odour and dust given off when skiving, offering a significant reduction of the contamination internal to the hose.
- No-skive design reduces assembly time and eliminates the need for skiving equipment.
- No-skive design eliminates the risk of couplings blowing off improperly skived hoses.
- No-skive avoids exposure of the hose reinforcement thereby offering an extra protection of the hose-coupling interface against corrosion.