



# Technical Bulletin

## NEW Gates ID5K Hydraulic Hose

Gates compact hose designs, including the new ID5K Hydraulic Hose, provide many advantages due to smaller outside diameters, tighter minimum bend radii, and reduced force required to bend.

While the ISO 18752 specification allows for a standard hose design with larger outside diameters, Gates hose solutions meet the stricter ISO 18752 compact hose design dimensions. With a smaller hose outside diameter for the same hose inside diameter, Gates hoses can often provide substantial space savings compared to other hoses. The smaller Gates hose size reduces weight and facilitates routing in tight areas - for example, the hose bundle size on a lift boom arm can be greatly reduced.

12.5 (-8) Class 350 (5000 psi) Hose Maximum Outside Diameter Comparison				
		O.D. (mm)	O.D. (in.)	% to Gates Area
	SAE J517100R15	26.8	1.055	34% Larger
	ISO 18752 Compact	25.0	0.984	24% Larger
	Gates M5K	21.8	0.860	Optimized



Gates hoses are also designed for improved flexibility with minimum bend radii much smaller than SAE and ISO standards. The increased flexibility reduces the overall hose lengths required, allows system components to be located closer together for the most compact design, reduces the number of bent tube fittings, and reduces the effort required for installation.

### ID5K 35 MPa (5,000 psi) HOSE – EXCEEDS ISO18752 Class 350 – Grade D – Type DC MEETS SAE J517 100R13

**TESTED:** Tested and performs at 133% of working pressure for 2,300,000 impulse cycles and ½ SAE bend radius

**RECOMMENDED FOR:** Extremely high-pressure, high impulse applications

**TUBE:** Black, oil resistant, synthetic rubber (HNBR)

**REINFORCEMENT:** Four alternating layers of spiralled, high tensile strength steel

**COVER:** Black, oil, abrasion and weather resistant synthetic rubber (Polychloroprene)

**TEMPERATURE:** -40°C to +121°C

**PRESSURE:** 5000 PSI Working Pressure

**COUPLING RECOMMENDATION:** Permanent no-skive GlobalSpiral (with GSID1F-4 ferrules)



MegaSys® II	12ID5K MegaSpiral™	35.0 MPa (5000 PSI) 3/4" (19.0 mm) ISO18752-DC / Exceeds ISO3862 R13 4SP / Exceeds EN856 R13 4SP / Exceeds SAE 100R13	Flame Resistant MSHA 26-11C
MegaSys® II	16ID5K MegaSpiral™	35.0 MPa (5000 PSI) 1" (25.4 mm) ISO18752-DC / Exceeds ISO3862 R13 / Exceeds SAE 100R13	Flame Resistant MSHA 26-11C

Description	Hose I.D. (In.)	Hose O.D. (In.)	Working pressure (psi)	Minimum burst pressure (psi)	Minimum bend radius mm (In.)	Weight per MT (kg)
12ID5K	3/4	1.14	5,000	20,000	119 (4.7)	0.11
16ID5K	1	1.45	5,000	20,000	152 (6.0)	0.18