ENGINE HOSEHOT OIL LINES

MEGATECH®



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-size	DN	"		mm	PSI	MPa	PSI	MPa	mm	mm/Hg	kg/100m	REF.
-4	6	1/4	0.52	13.2	1000	7.0	4000	28.0	50	760	18	4MEGATECH1000
-6	10	3/8	0.66	16.8	1000	7.0	4000	28.0	65	760	28	6MEGATECH1000
-8	12	1/2	0.80	20.3	1000	7.0	4000	28.0	90	760	36	8MEGATECH1000
-10	16	5/8	0.93	23.6	1000	7.0	4000	28.0	100	760	45	10MEGATECH1000
-12	19	3/4	1.15	29.2	1000	7.0	4000	28.0	120	760	60	12MEGATECH1000
-16	25	1	1.37	34.8	1000	7.0	4000	28.0	150	760	71	16MEGATECH1000
-20	31	1.1/4	1.64	41.7	1000	7.0	4000	28.0	210	760	124	20MEGATECH1000
-24	38	1.1/2	1.95	49.5	500	3.5	2000	14.0	380	760	149	24MEGATECH500
-32	51	2	2.48	63.0	500	3.5	2000	14.0	460	760	205	32MEGATECH500
-40	63	2.1/2	2.97	75.4	500	3.5	2000	14.0	560	760	219	40MEGATECH500
-48	76	3	3.50	88.9	500	3.5	2000	14.0	610	760	274	48MEGATECH500

RECOMMENDED FOR Pressurised hot oil return lines and air compressor lines, power steering,

tilt cab cylinders, engine and transmission coolant and filtration lines.

TUBE CPE (Chlorinated polyethylene) based.

REINFORCEMENT One braid of high tensile steel wire.

COVER Oil resistant textile braid, impregnated with synthetic rubber.

TEMPERATURE RANGE -40°C to +150°C. Air: -40°C to +121°C. Phosphate ester fluids: -40°C to +100°C.

For water emulsions, etc. see Temperature Limits Table.

STANDARDS Meets the requirements of SAE J1405 performance specifications for use in

high-temperature transmission oil systems and high-temperature lubrication oil

systems using petroleum based oils.

-4 to -10: meets SAE J1402.

COUPLINGS -4 to -20: MegaCrimp®; -24, -32: GlobalSpiral Plus.

CHARACTERISTICS/BENEFITS Very good resistance to weathering and ozone.

MegaTech® is compatible with a variety of fluids such as hydraulic oil, phosphate

esters, diesters.

IMPORTANT



Not recommended for gasoline or diesel fuel applications.

SELECTING THE CORRECT HOSE

ENGINEERING AND TECHNICAL DATA

Water temperature limits for hydraulic hoses

According to ISO 8330 "Rubber and plastic hoses and hose assemblies - Vocabulary", the working temperature is the "maximum or minimum temperature at which a hose is designed to be serviceable". This temperature range is indicated in the hose pages. However, note that the nature of the hydraulic fluid used can lower the maximum working temperature. The below chart shows the maximum working temperature for Gates hoses when used with water-based hydraulic fluids.

The main reasons for lowering maximum working temperatures of hydraulic systems using water-based hydraulic fluids are:

- > Hot water can leach the plasticiser out of the rubber compound, whereby the hose becomes stiff and brittle.
- > Heated water even under pressure can de-gas and cause gas bubbles. These gas bubbles contain about 20% oxygen which will lead to oxidation of the metal parts of the system.
- > Mixed phases of hot water and steam can occur, which causes several issues like tube popcorning, permeation of steam through the walls of the hose and even steam hammer.

Maximum Temperature limits for Water, Water/Oil Emulsions and Water/Glycol Solutions.									
HOSE	Pressure lines	Return lines							
EFGxK, MxK, HD-UHP, CM2T, M2T, G2, G1, G2L, LOL, EFGxKL, M4KL, GP80 PLUS	+93°C	+82°C							
G2H, G1H, Megatech, G2XH, G3H, GTH, M4KH, M3KH, GMV	+107°C	+82°C							
TH8, TH7	+70°C	+70°C							

CAUTION!

The fluid manufacturer's recommended maximum temperature for any given fluid must not be exceeded. If different from the above listed hose temperatures, the lower limit must be chosen.