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HIGH PRESSURE HYDRAULIC HOSES



Working pressure 700 bar

4:1 Factor of safety

Special lengths available on request

Hi-Force high pressure hydraulic hoses provide the vital, high quality, safe connection for your hydraulic equipment. Available in black and red and supplied complete with an ergonomically designed protective strain reliever at both ends, Hi-Force high pressure hoses are suitable for working pressures up to 700 bar with a 4 : 1 safety factor.



Tip for double acting systems ...

By using black hoses for the advance lines and red hoses for the retract lines, identification is made easy and the possibility of incorrectly connected hoses is reduced.

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Hoses with threaded ends			
Model number Black	Model number Red	Length metres	Hose end thread
HH0.5	HH0.5R	0.5	3/8"-18NPT
HH1	HH1R	1.0	3/8"-18NPT
HH2	HH2R	2.0	3/8"-18NPT
HH3	HH3R	3.0	3/8"-18NPT
HH4	HH4R	4.0	3/8"-18NPT
HH5	HH5R	5.0	3/8"-18NPT
HH6	HH6R	6.0	3/8"-18NPT
HH10	HH10R	10.0	3/8"-18NPT
HH12	HH12R	12.0	3/8"-18NPT
HH15	HH15R	15.0	3/8"-18NPT
HH20	HH20R	20.0	3/8"-18NPT
HH25	HH25R	25.0	3/8"-18NPT
HH30	HH30R	30.0	3/8"-18NPT

Hoses with one male coupler				
Model number Black	Model number Red	Length metres	Hose end A	Hose end B
HC0.5	HC0.5R	0.5	3/8"-18NPT	CM1 coupler
HC1	HC1R	1.0	3/8"-18NPT	CM1 coupler
HC2	HC2R	2.0	3/8"-18NPT	CM1 coupler
HC3	HC3R	3.0	3/8"-18NPT	CM1 coupler
HC4	HC4R	4.0	3/8"-18NPT	CM1 coupler
HC5	HC5R	5.0	3/8"-18NPT	CM1 coupler
HC6	HC6R	6.0	3/8"-18NPT	CM1 coupler
HC10	HC10R	10.0	3/8"-18NPT	CM1 coupler
HC12	HC12R	12.0	3/8"-18NPT	CM1 coupler
HC15	HC15R	15.0	3/8"-18NPT	CM1 coupler
HC20	HC20R	20.0	3/8"-18NPT	CM1 coupler
HC25	HC25R	25.0	3/8"-18NPT	CM1 coupler
HC30	HC30R	30.0	3/8"-18NPT	CM1 coupler

Note : for hoses with CM1 quick connect coupler on both ends, please add suffix 'C' to model number, e.g. HC2C

HYDRAULIC OIL



Hi-Force premium grade hydraulic oil is specially formulated for use with Hi-Force hydraulic tools, providing optimum performance throughout all working conditions.

Model number	Capacity litres	For use with
HFO32-1	1	Manually operated pumps
HFO32-5	5	Manually operated pumps
HFO32-25	25	Manually operated pumps
HFO46-1	1	Powered pumps
HFO46-5	5	Powered pumps
HFO46-25	25	Powered pumps



Clear precise dual scale readings

Manufactured to EN837-1

Calibration certificates on request

Hi-Force hydraulic pressure gauges are your “window” to the system and are recommended for use within all hydraulic systems to allow the user to constantly monitor the system pressure. Hi-Force hydraulic pressure gauges are manufactured to EN837-1 and are accurate to +/- 1% of full scale. Standard range models up to 109 tonnes are featured in this catalogue, however gauges to suit Hi-Force high tonnage cylinders & digital pressure gauges are available on request. Always specify Hi-Force gauges for use with your Hi-Force hydraulic tools.

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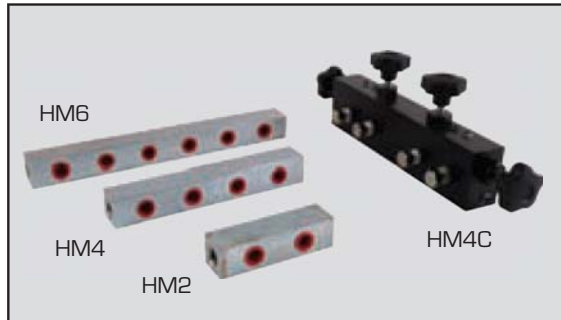
Gauges :

Model number	Gauge diameter mm	Gauge type	Reading Inner scale	Reading Outer scale	Inlet thread	Compatible Hi-Force cylinders	Weight kg
HG63G	63	glycerine	0-16.000 Psi	0-1.000 Bar	¼"-18NPT	All models	0.2
HG1	100	dry	0-700 Bar	0-10.000 Psi	½"-14NPT	All models	0.9
HG1G	100	glycerine	0-700 Bar	0-10.000 Psi	½"-14NPT	All models	1.0
HG5	100	dry	0-700 Bar	0-4.5 tonnes	½"-14NPT	All 4.5 tonnes models	0.9
HG10	100	dry	0-700 Bar	0-10 tonnes	½"-14NPT	All 10 tonnes models	0.9
HG11	100	dry	0-700 Bar	0-11 tonnes	½"-14NPT	All 11 tonnes models	0.9
HG20	100	dry	0-700 Bar	0-20 tonnes	½"-14NPT	All 20 tonnes models	0.9
HG23	100	dry	0-700 Bar	0-23 tonnes	½"-14NPT	All 23 tonnes models	0.9
HG25	100	dry	0-700 Bar	0-25 tonnes	½"-14NPT	All 25 tonnes models	0.9
HG32	100	dry	0-700 Bar	0-32 tonnes	½"-14NPT	All 32 tonnes models	0.9
HG33	100	dry	0-700 Bar	0-33 tonnes	½"-14NPT	All 33 tonnes models	0.9
HG50	100	dry	0-700 Bar	0-50 tonnes	½"-14NPT	All 50 tonnes models	0.9
HG61	100	dry	0-700 Bar	0-61 tonnes	½"-14NPT	All 61 tonnes models	0.9
HG102	100	dry	0-700 Bar	0-102 tonnes	½"-14NPT	All 102 tonnes models	0.9
HG109	100	dry	0-700 Bar	0-109 tonnes	½"-14NPT	All 109 tonnes models	0.9
HG2	150	dry	0-700 Bar	0-10.000 Psi	½"-14NPT	All models	1.6
HG2G	150	glycerine	0-700 Bar	0-10.000 Psi	½"-14NPT	All models	1.7

Gauge mounting blocks :

Model number	Dimensions			Gauge thread	Inlet thread	Outlet thread	Weight kg
	Length mm	Width mm	Height mm				
HGA1	75	32	32	½"-14NPT	⅜"-18NPT male	⅜"-18NPT female	0.25
HGA2	170	32	32	½"-14NPT	⅜"-18NPT male	⅜"-18NPT female	0.85
HGA1-25	75	32	32	¼"-18NPT	⅜"-18NPT male	⅜"-18NPT female	0.30

MANIFOLDS



Working pressure 700 bar

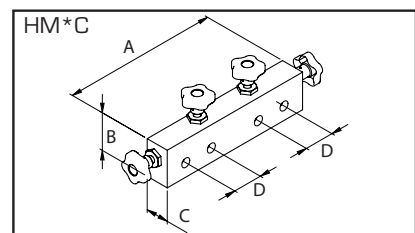
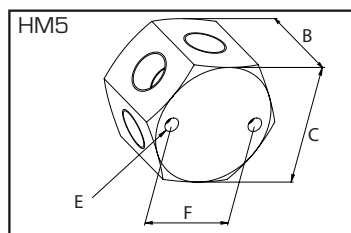
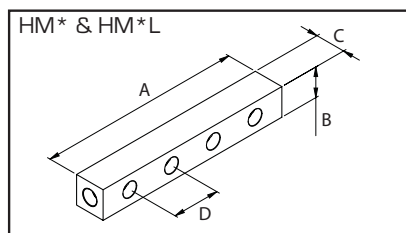
Choice of open or controlled manifolds

2, 4, 5, 6 or 8 outlet port models available

Hi-Force manifolds are designed specifically to allow easy control of the direction of flow of the system's hydraulic fluid. Supplied either as open manifold blocks or with individual needle type shut off/throttle valves on each 3/8" NPT outlet, Hi-Force manifolds provide even greater versatility in your hydraulic system. The range offers 9 models with a choice of up to 8 outlets per manifold and is suitable for 700 bar maximum working pressure. Always specify Hi-Force manifolds for use with your Hi-Force hydraulic tools.

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Model number	Type	Design	Number of outlets	Inlet thread	Outlet thread	Weight kg
HM2	manifold	parallel	2	3/8"-18NPT	2 x 3/8"-18NPT	1.0
HM4	manifold	parallel	4	3/8"-18NPT	4 x 3/8"-18NPT	1.5
HM5	manifold	hexagon	5	3/8"-18NPT	5 x 3/8"-18NPT	0.7
HM6	manifold	parallel	6	3/8"-18NPT	6 x 3/8"-18NPT	2.0
HM8	manifold	parallel	8	3/8"-18NPT	8 x 3/8"-18NPT	2.5
HM4L	manifold	extended parallel	4	3/8"-18NPT	4 x 3/8"-18NPT	2.4
HM6L	manifold	extended parallel	6	3/8"-18NPT	6 x 3/8"-18NPT	3.7
HM2C	controlled manifold	parallel	2	3/8"-18NPT	2 x 3/8"-18NPT	2.0
HM4C	controlled manifold	parallel	4	3/8"-18NPT	4 x 3/8"-18NPT	3.5



Model number	Dimensions in mm					
	A	B	C	D	E	F
HM2	114	32	32	50	-	-
HM4	214	32	32	50	-	-
HM5	-	41	51	-	M6	38
HM6	314	32	32	50	-	-
HM8	414	32	32	50	-	-
HM4L	394	32	32	110	-	-
HM6L	614	32	32	110	-	-
HM2C	122	40	50	50	-	-
HM4C	270	65	40	51	-	-

HIGH PRESSURE COUPLERS AND FITTINGS

Hi-Force high pressure couplers and fittings are designed for easy system connection and assembly of your Hi-Force hydraulic equipment. All Hi-Force couplers and fittings are suitable for 700 bar maximum working pressure. Hi-Force recommends the use of threaded dust caps with quick connect couplers to protect the thread of the coupler and at the same time prevent any contaminants entering your hydraulic system. Always specify Hi-Force couplers and fittings for use with your Hi-Force hydraulic tools.



Safety first !

Be sure to use genuine Hi-Force couplers and fittings which are designed to withstand the full 700 bar working pressure.

Large selection of standard adaptors

Working pressure 700 bar

Model number	See picture	Description	Thread specification
HF7	1	Nipple	1/4" NPT male to 1/4" NPT male
HF10	2	Elbow	3/8" NPT female to 3/8" NPT female
HF12	3	Equal tee	3/8" NPT female
HF13	4	Cross	3/8" NPT female
HF14	5	Adaptor	3/8" NPT female to 3/8" NPT female
HF15	5	Reducer	3/8" NPT female to 1/4" NPT female
HF16	6	Elbow	3/8" NPT female to 3/8" NPT male
HF17	1	Nipple	3/8" NPT male to 3/8" NPT male
HF19	1	Long nipple	3/8" NPT male to 3/8" NPT male
HF24	7	Adaptor	3/8" NPT male to 3/8" BSP female
HF27	1	Nipple	1/4" NPT male to 3/8" NPT male
HF30	7	Reducer	3/8" NPT male to 1/4" NPT female
HF31	8	Tee	3/8" NPT female to 3/8" NPT male
HF33	7	Reducer	3/8" NPT male to 1/4" BSPT female
HF55	7	Reducer	3/8" NPT female to 1/4" NPT male
HF69	7	Adaptor	1/2" BSP male to 3/8" NPT female
CF1	9	Female coupler	3/8" NPT male
CM1	10	Male coupler	3/8" NPT female
CMF1	9 + 10	Complete coupler	3/8" NPT
CF2	9	Female coupler	1/4" NPT male
CM2	10	Male coupler	1/4" NPT female
CMF2	9 + 10	Complete coupler	1/4" NPT
CFD1	11	Metal dust cap for CF1	
CMD1	12	Metal dust cap for CM1	
CFD2	11	Metal dust cap for CF2	
CMD2	12	Metal dust cap for CM2	
PPC1	13	Moulded universal dust cap to suit CF1 & CM1	



DIRECTIONAL & FLOW CONTROL VALVES



Working pressure 700 bar

Pump or remote mounted design

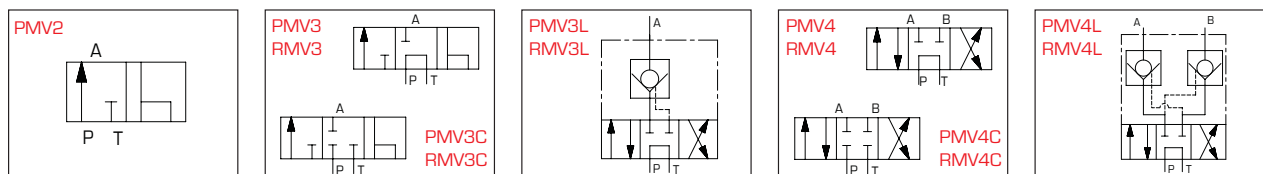
Manual or solenoid options available

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Hi-Force control valves are designed to provide precise control of the hydraulic system either by accurate pressure or directional flow control. The PMV range of pump mounted valves is identical to the valves fitted to the Hi-Force powered pumps featured on pages 26 - 32 and can be easily interchanged, making your powered pump even more versatile. The RMV range allows for remote mounting away from the pump. Other Hi-Force control valves featured on this page include adjustable pressure relief, shut off and check valves. Always specify Hi-Force control valves for use with your Hi-Force hydraulic tools.

Directional control valves :

Description	Model number			
	Manual valve no load holding	Manual valve with load holding	Solenoid valve 24V incl. control	Manual valve closed centre
Pump mounted, 2-way, 2 position valve	PMV2	-	-	-
Pump mounted, 3-way, 3 position valve	PMV3	PMV3L	PMV3S	PMV3C
Pump mounted, 4-way, 3 position valve	PMV4	PMV4L	PMV4S	PMV4C
Remote mounted, 3-way, 3 position valve	RMV3	RMV3L	RMV3S	RMV3C
Remote mounted, 4-way, 3 position valve	RMV4	RMV4L	RMV4S	RMV4C



Flow control valves :

Model number	Description	Usage
HM1C	Manual shut off valve, needle type control	Load holding & throttling functions
HFV66	Manual check valve	Automatic load locking, manually opened
HFV17	Safety check valve	Prevents shock load & pressure drops
HPV152	Adjustable pressure relief valve	Pressure setting below pump pressure
HFV42	Pilot operated check valve	Safety valve for double acting cylinders

