

System components



Single hoses - 720 bars



model	H 1 SO	H 2 SO	H 3 SO	H 4 SO	H 5 SO	H 6 SO	H 8 SO	H 10 SO	H 15 SO	H 20 SO
art no	100.571.101	100.571.102	100.571.103	100.571.104	100.571.105	100.571.106	100.571.108	100.571.110	100.571.115	100.571.120
length m	1	2	3	4	5	6	8	10	15	20

Standard hoses - 720 bars



model	H 1 SOU	H 2 SOU	H 3 SOU	H 4 SOU	H 5 SOU	H 6 SOU	H 8 SOU	H 10 SOU	H 15 SOU	H 20 SOU
art no	100.572.101	100.572.102	100.572.103	100.572.104	100.572.105	100.572.106	100.572.108	100.572.110	100.572.115	100.572.120
length m	1	2	3	4	5	6	8	10	15	20

Extension hoses - 720 bars



model	VL 1 SOU	VL 2 SOU	VL 5 SOU	VL 10 SOU	VL 15 SOU	VL 20 SOU
art no	100.572.301	100.572.302	100.572.305	100.572.310	100.572.315	100.572.320
length m	1	2	5	10	15	20

Specifications / important properties



- single hoses with:
 - 3/8" NPT male screw thread on both sides
 - anti-kink springs on both sides
 - 4:1 safety ratio
 - colour: orange
- standard hoses provided with:
 - idem single hoses
 - coupler male, A 119 on 1 side
- extension hoses with:
 - idem single hoses
 - coupler male, A 119 on 1 side
 - coupler female, A 118 on the other side

Available on request



- different lengths
- other colour

(1) single hose (2) standard hose (3) extension hose



1

2

3

Standard industry couplers - 720 bars


image	description	model	art no
	High Flow coupler, female, including steel dust cap <ul style="list-style-type: none"> • connection: 3/8" NPT, male • fits: A 119 	A 118	100.181.118
	High Flow coupler, male, including steel dust cap <ul style="list-style-type: none"> • connection: 3/8" NPT, female • fits: A 118, A 134N and A 418 	A 119	100.181.119
	High Flow coupler, female, like A 118, with built-in pressure relief valve <ul style="list-style-type: none"> • adjusted to ca. 750 bars • fits: A 119 	A 418	100.181.418
	High Flow coupler, female, like A 118, with built-in non-return valve <ul style="list-style-type: none"> • suitable for hose rupture security • not to be used with double-acting systems • fits: A 119 	A 134 N	100.181.434
	loose steel dust cap <ul style="list-style-type: none"> • with fixing thread • fits: A 118 	A 118 SK	100.181.828
	loose steel dust cap <ul style="list-style-type: none"> • with fixing thread • fits: A 119 	A 119 SK	100.181.829
	relief valve <ul style="list-style-type: none"> • for reducing any remnant pressure • suitable for: A 118 	-	100.181.840
	relief valve <ul style="list-style-type: none"> • for reducing any remnant pressure • suitable for A 119 	-	100.181.841

Pressure gauges - 720 bars







image	description	model	art no
	universal pressure gauge <ul style="list-style-type: none"> • 0 - 720 bars • housing Ø 100 mm • connection: ½" NPT male 	A 500	100.582.500
	rubber protection cover <ul style="list-style-type: none"> • suitable for Ø 100 mm pressure gauges 	-	350.581.160
	pressure gauge plug-in set <ul style="list-style-type: none"> • connection: couplers A 118 - A 119 	A 111 U	100.582.111
	pressure gauge <ul style="list-style-type: none"> • 0 - 720 bars • housing Ø 60 mm • connection: ¼" NPT male 	A 150	100.581.036
	rubber protection cover <ul style="list-style-type: none"> • suitable for Ø 60 mm pressure gauges 	-	350.581.152
	pressure gauge digital <ul style="list-style-type: none"> • 0 - 720 bars • peak pressure memory • connection: 1/4" BSP male 	-	150.581.091

Pressure gauges with scale division in ton - 720 bars



pressure gauge	pressure gauge	1 st scale from - to	1 st scale division per mark	2 nd scale from - to	2 nd scale division per mark	3 rd scale from - to	3 rd scale division per mark	4 th scale from - to	4 th scale division per mark
model	art no	t	kg	t	kg	t	kg	t	kg
A 501	100.582.501	0 - 5	100	0 - 11	200	0 - 21	500	-	-
A 502	100.582.502	0 - 25	500	0 - 33	500	0 - 51	1000	-	-
A 503	100.582.503	0 - 52	1000	0 - 77	1000	-	-	-	-
A 504	100.582.504	0 - 105	2000	0 - 160	2000	-	-	-	-
A 505	100.582.505	0 - 210	5000	0 - 305	5000	-	-	-	-
A 506	100.582.506	0 - 509	10000	0 - 382	10000	-	-	-	-
A 507	100.582.507	0 - 6	100	0 - 13	200	0 - 23	500	-	-
A 508	100.582.508	0 - 30	500	0 - 47	1000	0 - 63	1000	0 - 113	2000
A 509	100.582.509	0 - 63	1000	0 - 104	2000	-	-	-	-
A 510	100.582.510	0 - 12	200	0 - 31	500	0 - 63	2000	0 - 98	2000

pressure gauge adaptors - 720 bars


image	description	model	art no
	pressure gauge connecting block <ul style="list-style-type: none"> • suitable for single-acting hand pumps • provided with: 1 x 3/8" NPT female, 1 x 3/8" NPT male and 1/2" NPT female for pressure gauge • pressure gauge can be placed in an angle of 45° using elbow art no 100.581.240 	A 108	100.181.108
	pressure gauge connecting block for H/FTW *800 pumps <ul style="list-style-type: none"> • suitable for double-acting control valve M 321 • supplies pressure to port A or B, dependent on mounting • provided with: 1 x 1/2" NPT female 	M 306	100.182.306
	pressure gauge connecting block for H/FTW *800 pumps <ul style="list-style-type: none"> • suitable for double-acting control valve M 321 • supplies pressure to port A or B, dependent on which is highest • provided with: 1 x 1/2" NPT female 	M 307	100.182.307
	pressure gauge for Vari pumps <ul style="list-style-type: none"> • suitable for double-acting control valves M 322, M 323, M 324 and M 325 • supplies pressure to port A or B, dependent on which is highest • provided with: 1 x 1/2" NPT female 	M 308	100.182.308

Specifications / important properties


- pressure gauges:
 - pointer damped with glycerine
 - stainless steel
 - protection cover available for all models (except digital pressure gauge)



A 108 + A 500 + hose mounted on pump



Pump + M 321 + M 307 + A 500 (seperate: M 306 + A 500)

TECHNICAL SPECIFICATION SHEET | FlowPanel™ control manifolds | HMS / HMD 1

Specifications FlowPanel™ control manifolds - single acting - 720 bars

model	HMS 2 A	HMS 2 B	HMS 2 C	HMS 4 A	HMS 4 B	HMS 4 C	HMS 6 A	HMS 6 B	HMS 6 C
article number	100.172.048	100.172.049	100.172.050	100.172.045	100.172.046	100.172.047	100.172.052	100.172.053	100.172.054
outlet ports	2	2	2	4	4	4	6	6	6
couplers	-	√	√	-	√	√	-	√	√
pressure gauges	-	-	√	-	-	√	-	-	√
A mm	238	238	238	480	480	480	722	722	722
weight kg	6.2	7.1	9.0	12.5	13.9	17.8	18.5	20.5	26.6

Specifications FlowPanel™ control manifolds - double acting - 720 bars

model	HMD 2 A	HMD 2 B	HMD 2 C	HMD 4 A	HMD 4 B	HMD 4 C	HMD 6 A	HMD 6 B	HMD 6 C
article number	100.172.042	100.172.043	100.172.044	100.172.039	100.172.040	100.172.041	100.172.055	100.172.056	100.172.057
outlet ports	2	2	2	4	4	4	6	6	6
couplers	-	√	√	-	√	√	-	√	√
pressure gauges	-	-	√	-	-	√	-	-	√
A mm	238	238	238	480	480	480	722	722	722
weight kg	7.2	8.1	10.0	14.2	15.6	19.7	21.0	23.0	29.1

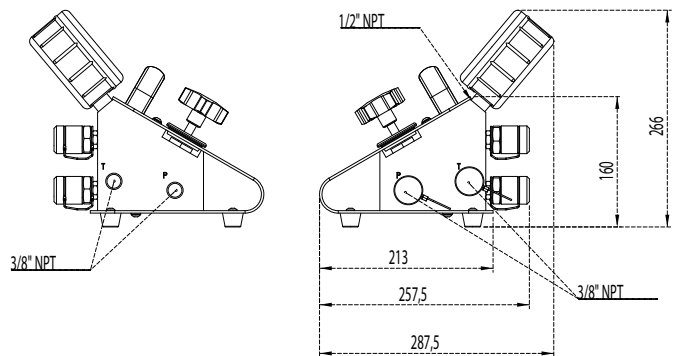
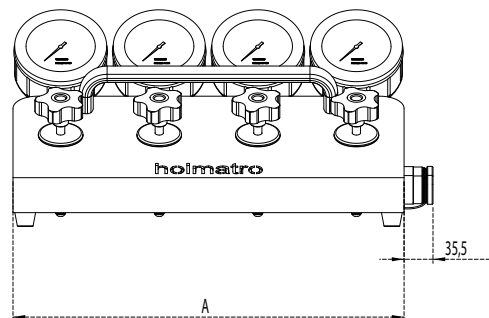
HMS 2 B



HMS 4 A



HMD 6 C



Valves - 720 bars


image	hydraulic scheme	description	model	art no
		needle valve <ul style="list-style-type: none"> for more accurate control of the oil flow, also under maximum pressure connection: 3/8" NPT female (2x) 	A 109 N	100.581.609
		ball valve <ul style="list-style-type: none"> very suitable for quick shut-off valve (open-close) can be operated under maximum pressure connection: 3/8" NPT female (2x) 	A 195	100.581.200
		needle valve, as mounted on valve blocks <ul style="list-style-type: none"> for accurate control of the oil flow, also under maximum pressure connection: 3/8" NPT male and 3/8" NPT female 	A 130	100.181.130
		breaking safety (load security) valve <ul style="list-style-type: none"> protects against sudden pressure drop in the supply pipe, for example in case of hose rupture to be mounted between pump and cylinder as close to the cylinder as possible provided with pressure relief valve, set at 830 bars while pumping: valve closed, safety valve active for relief: open valve, safety valve not active connection: 3/8" NPT female and 3/8" NPT male 	A 110	100.181.110
		High Flow coupler, female, like A 118, with built-in non-return valve <ul style="list-style-type: none"> suitable for hose rupture security not to be used with double-acting systems fits: A 119 	A 134 N	100.181.434
		non-return valve <ul style="list-style-type: none"> spring-loaded connection: 3/8" NPT male (2x) 	A 209	100.581.209
		pressure relief valve <ul style="list-style-type: none"> set to 750 bars connection: 1x 3/8" NPT female and 1x 3/8" NPT male 	A 135	100.181.135

Accessories hydraulics - 720 bars

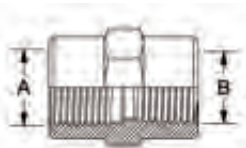
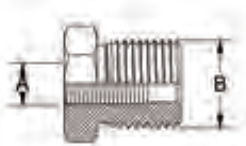







no	description	art no
	45° elbow with 1x 1/2" NPT (T) female and 1x 1/2" NPT (T) male	100.581.240
1	adjustable pin key, complete with 4 pairs of exchangeable pins	100.581.132
2	cross piece with 4x 3/8" NPT (T) female	100.581.139
3	T-piece with 3x 3/8" NPT (T) female	100.581.106
4	swivel connector with 1x 3/8" NPT (T) male and 1x 3/8" NPT (C) female	100.581.115
5	90° elbow with 1x 3/8" NPT (T) female and 1x 3/8" NPT (T) male	100.581.113
6	90° elbow with 2x 3/8" NPT (T) male	100.581.213
7	45° elbow with 1x 3/8" NPT (T) female and 1x 3/8" NPT (T) male	100.581.114
8	90° bend with 1x 1/4" BSP (C) female swivel nut and 1x 1/4" BSP (V) male	150.581.219
9	straight tube coupling for 12 mm tube with 3/8" NPT (T) male	100.581.136
10	90° tube coupling for 12 mm tube with 3/8" NPT (T) male	100.581.137
11	plug with 3/8" NPT (T)	100.581.105
12	sealing ring for M12 (V)	190.593.275
	sealing ring for 1/4" BSP (V)	150.581.230
	sealing ring for M14 (V)	190.593.075
	sealing ring for M18 (V)	100.581.158
13	manifold, model A 125, with 5 interconnected ports with 3/8" NPT female	100.181.125
T = Teflon seal V = flat seal C = cone seal		



Assembly materials - 720 bars








image	type	thread A	thread B	art no
	connection socket	1/4" NPT (T) 1/4" NPT (T) 1/4" BSP (V) 3/8" NPT (T) 3/8" NPT (T)	1/4" NPT (T) 1/4" BSP (V) M18x1.5 (V) 3/8" NPT (T) M18x1.5 (V)	100.581.238 150.581.228 100.181.227 100.581.102 100.181.228
	reducing bushing	1/4" NPT (T) 3/8" NPT (T) 3/8" NPT (T) 1/8" BSP (V)	3/8" NPT (T) 1/2" NPT (T) 3/4" NPT (T) 1/2" BSP (V)	100.581.128 100.581.103 100.581.133 150.581.085
	nipple	1/8" NPT (V) 1/4" NPT (T) 1/4" NPT (T) 1/4" BSP (V) 1/4" BSP (V) 1/4" BSP (V) 1/4" BSP (V/C) 1/4" BSP (V) 3/8" NPT (T) 3/8" NPT (T) 3/8" NPT (T) 1/2" BSP (V) 1/4" BSP (V) 1/4" NPT (T) 3/8" NPT (T) 1/2" BSP (V) 1/4" NPT (T)	1/4" BSP (V) 1/4" BSP (V) M14x1,5 (V) M12x1,75 (V) M14x1,5 (V/C) M14x2 (V) 1/4" BSP (V/C) 3/8" NPT (T) 3/8" NPT (T) M14x2 (V) 1/2" NPT (T) M10x1 (V) 3/8" NPT (T) 3/8" BSP 3/8" NPT (V) 1/4" NPT(T)	110.013.004 150.581.227 100.581.226 110.013.044 100.581.211 100.181.156 150.581.216 150.581.218 100.581.101 100.181.151 150.581.088 110.013.005 150.581.244 100.581.233 150.581.087 100.581.239
	connector	1/4" BSP (V) 1/4" BSP (V) 1/4" BSP (V) 3/8" NPT (T) 3/8" NPT (T) 3/8" NPT (T) 1/4" NPT (T) M14x1,5 (V) M14x1.5 (V) M18x1.5 (V) M18x1.5 (V) 3/8" NPT (T) 1/4" BSP (V)	1/4" NPT (T) 3/8" BSP (C) M14 x 2 (V) 1/4" BSP (V) 1/4" NPT(T) M14 x 2 (V) 3/8" NPT (T) 3/8" NPT (T) 1/4" BSP (V) 3/8" NPT (T) 1/4" BSP (V) 3/8" NPT (T) 1/4" BSP (V) M10x1 (V) 3/8" NPT (T)	100.181.223 100.581.235 100.181.159 150.581.217 100.581.107 100.181.153 100.581.104 100.181.129 150.581.058 100.181.154 100.181.157 100.181.047 150.000.398
		T = teflon seal	V = flat seal	C = cone seal

Oils ↓		
image	description	art no
	hydraulic oil ECO Power ISO VG 36, DIN 51524.3 HVLP, bottle 1 litre	180.000.857
	hydraulic oil ECO Power ISO VG 36, DIN 51524.3 HVLP, bottle 5 litres	180.000.815
	hydraulic oil ECO Power ISO VG 36, DIN 51524.3 HVLP, drum 60 litres	130.103.025
	hydraulic oil ECO Power ISO VG 15, DIN 51524.3 HVLP, bottle 1 litres	100.581.051
	hydraulic oil ECO Power ISO VG 15, DIN 51524.3 HVLP, bottle 5 litres	100.581.055
	motor oil 10 W 30, API SJ/CH-4, bottle 0.6 litre	150.581.103



Lubricants



image	description	art no
	<p>Molykote grease paste</p> <ul style="list-style-type: none"> • for mounting and lapping of metal parts • tube 100 g 	100.581.081
	<p>high-quality Molykote grease</p> <ul style="list-style-type: none"> • for metal/metal combinations at slow to fast movements with medium to heavy load • cartridge 400 g 	100.581.082
	<p>brake cleaner (degreasant) Motip</p> <ul style="list-style-type: none"> • for cleaning and pre-treatment of surfaces • spray can 500 ml 	170.000.252
	<p>Teflon lubricating oil Sir John</p> <ul style="list-style-type: none"> • high-quality lubricant and maintenance oil • spray can 400 ml 	150.581.095
	<p>anti-friction coating Bel Ray</p> <ul style="list-style-type: none"> • dry spray coating for protection under dusty, dirty and abrasive conditions • spray can 400 ml 	150.581.093

