

MCR Hydraulic Power Pack with a DC Motor



Description

The MCR Hydraulic Power Pack offers the flexibility to perform numerous hydraulic functions within a compact design. With 0.3 to 3kW 12V and 24VDC Motors the gear pump can produce pressures up to 310bar. Two types of central manifold house numerous pressure and flow control valves with manifolds for directional control valves.

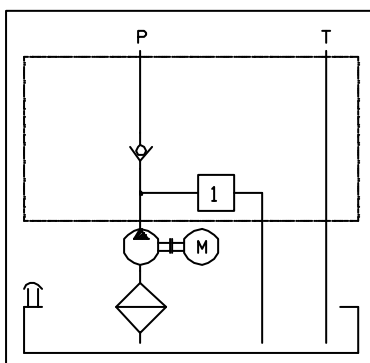
Available Types

DC Motor	12V DC 300W, 800W, 1.6kW, 2.1kW, 3kW Fan-cooled options	24V DC 300W, 800W, 2.0kW 2.2kW, 3kW Fan-cooled options
	Gear Pump Group 0 with displacements of 0.16; 0.24; 0.45; 0.56; 0.75; 0.98; 1.27; 1.48; 2.28 cc/rev Group 1 with displacements of 0.85; 1.0; 1.2; 1.7; 2.2; 2.6; 3.2; 3.7; 4.3; 4.7; 6.0; 7.8; 7.9; 9.8 cc/rev	
Reservoir Volumes (Litres)	Thermo-Plastic W H L 5L 130x140x295 10L 130x140x635 Aluminium (vertical) W H D 6L 280x206x200 10L 340x250x247 16L 368x275x290 25L 490x317x340	Steel 1,5L ? 123 x 150 2,5L ? 123 x 235 5L ? 174 x 295 8L ? 174 x 419 10L ? 224 x 262 12L ? 224 x 380
	Controls Integral Control Options are shown overleaf Directional control manifolds are available	

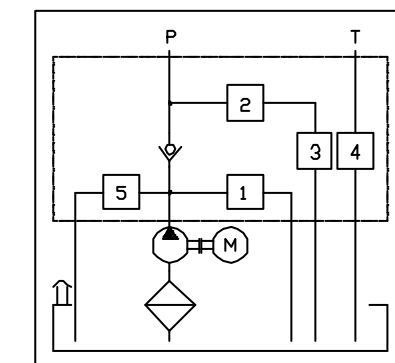
Technical data

Max Flow	30 LPM
Max Continuous Pressure	250 bar
Max Peak Pressure	310 bar
Ambient Temperature	-15 to +50°C
Oil Temperature	-15 to +70°C
IP Rating	IP54 (others on request)
Supply voltage	12 and 24VDC others on request
Recommended Oil	Hydraulic Mineral Oil ISO 6743/4 DIN 51519 Viscosity ISO3448
Permissible contamination	17/14 ISO 4406 class
Central Manifold Connection	Pressure (1) = 1/4" BSP Return (2) = 1/4" BSP

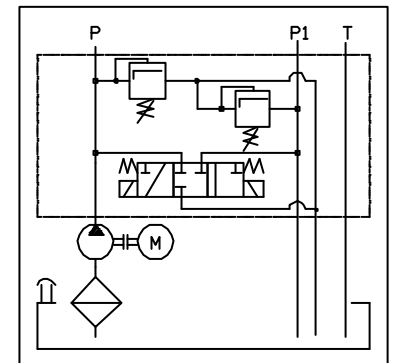
**Double Acting
Central Manifold Type 'DA'**



**Single Acting
Central Manifold Type 'SA'**



**Reversible System
Central Manifold Type 'RE'**



Integral Control Options and Circuit locations (see Manifold Type 'SA', 'DA' and 'RE' overleaf)

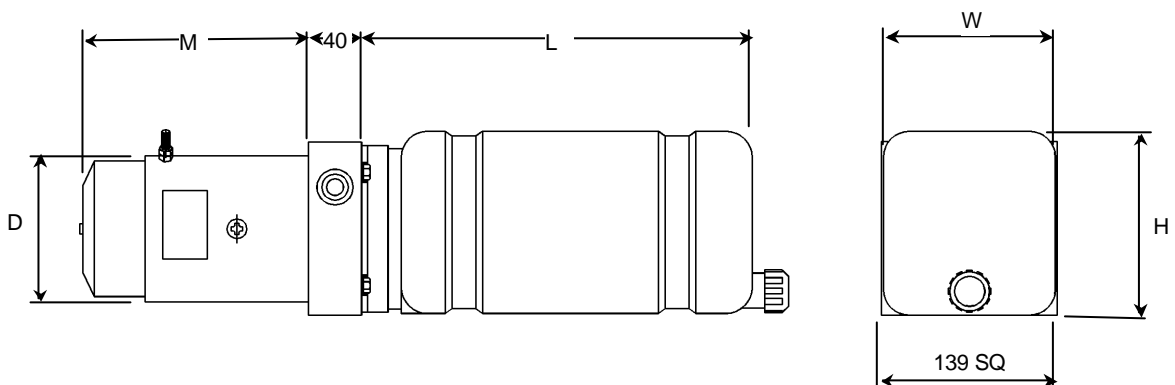
Relief valve (5-100)-(10-210)-(20-350)	Cavity No	Control Valves	Cavity No
Direct Acting Socket Adjust (VMP20)	1,2,5	Solenoid N.C Lowering valve	1,2,5
Direct Acting Knob Adjust (VMP20)	1,2,5	Solenoid N.C Lowering Valve with emergency	1,2,5
Direct Acting Sealed (VMP20)	1,2,5	Solenoid N.C Double seat Lowering Valve	1,2,5
		Manual Lowering with micro switch	1,2,5
		Manual Lowering without micro switch	1,2,5
		Manual device with switch and safety lever	1,2,5
		Check valve	1,2,5
		1/4" Gauge/Pressure Port (P)	1,2,5
		Return Plug (R)	4
		1/4" Return Port (T)	1,2,5
		Externally adjusted flow control valve P and T	1,2,5
		Non-Compensated adjustable flow control	1,2,5
		Manual emergency Lowering valve	1,2,5
		Single acting hand pump 2cc	2
		Single acting hand pump 1cc	2
		Direct Acting Relief	1,2,5
Pressure Compensated Flow Control Insert			
Rating 2, 2.5, 4, 5, 6.5, 7.5, 9.5, 12, 16, 20 lpm	3		
Cetop03 Manifolds			
C3 Adaptor 1 Valve (C03B1)			
C3 Adaptor Multi stack (C03D)			
Distance block 30mm (C03DIS30)			
Distance block 50mm (C03DIS50)			
POC Valve on A (C03NRA)			
POC Valve on B (C03NRB)			
POC Valve on A&B (C03NRD)			
Relief Valve A-B (C03NRVA)			
Relief Valve B-A (C03NRVB)			
Relief Valve A-B & B-A (C03NRVD)			

For further manifold mounted directional control options refer to the manufacturer.

Performance Graphs

See TI-100-01 for DC Motor Graphs

Dimensions (Typical) in millimetres



Motor Power	Motor Length (M)	Motor Diameter (D)
300/800W	151	80
1.5kW/2KW	173	112
2.1Kw	202	112
2.4kW/3.0kW	237	125

Dimensions W, H and L see Available Types overleaf.

Full installation drawings are available upon request.