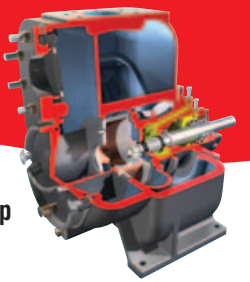
FLOWSERVE



MPT

Self-Priming Solids-Handling Pump

▸ Maintenance Checklist

⚠DANGER

Read User Instructions **before** installing, operating or maintaining this pump.
Copies available from Flowserve pump representatives.

Recommended Lubricants:

Mineral Oil: Quality mineral oil with rust and oxidation inhibitors.
ExxonMobil DTE – Light/Medium – Castrol Hyspin AWS 32/46

Synthetic Oil: Royal Purple only, all others consult factory.
Some synthetic lubricants require Viton® O-rings.

Grease: N/A

Relubrication Intervals[1]

Lubricant	External Housing Temperature[2]	
	0°C to 37°C (32°F to 99°F)	38°C to 75°C (100°F to 167°F)
Mineral Oil	4000 hr	2000 hr
Synthetic Oil	18 mo	18 mo

1. Assuming good maintenance and operation practices and no contamination.
2. Bearing temperature up to 17°C (30°F) higher than housing temperature.

Oil Viscosity Grades

Max. Temp	ISO VG	Min. Visc. Index
0°C to 37°C (32°F to 99°F)	32	95
38°C to 75°C (100°F to 167°F)	46	95

Maximum Recommended External Housing Temperature

Lubrication	Temperature
Oil bath	77°C (170°F)

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For sales and product information, go to www.flowserve.com.

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MPT pumps are manufactured in: Chesapeake, VA (USA), and Newark, (U.K.).

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	MPT 20	MPT 30	MPT 40	MPT 60	MPT 80
Operating Parameters					
Maximum Sphere, mm (in)	38.1 (1.5)	63.5 (2.5)	76.2 (3)	76.2 (3)	76.2 (3)
Minimum Flows, m^3/h (gpm)	10 (44)	27 (119)	40 (176)	63 (277)	100 (440)
Max. Working Pressure, bar (psi)	7 (95)				
Pumped Fluid Temperature[3]	0°C to 75°C (32°F to 167°F)				
Hydrostatic Test Pressure, bar (psi)	10 (145)				
Suction Lift, m (ft)	6 (20)				
Maximum Power Rating, kW (hp)	74 (100)				
Casing					
150# NPT	Standard				
150# FF Flange Spool	Optional				
Flange Finish, RMS	125				
Minimum Thickness, mm (in)	8.1 (0.32)	10.9 (0.43)	11.2 (0.44)	12.7 (0.5)	12.7 (0.5)
Bearings					
Inboard	6206	6308	6308	6308	6311
Outboard	6306	5309 AH	5309 AH	5309 AH	3311 A
Seal Chamber Dimensions, mm (in)					
Length/Depth	68.1 (2.68)	66.3 (2.61)	81.3 (3.2)	81.3 (3.2)	83.6 (3.29)
Inside Bore Diameter	44.5 (1.75)	54.0 (2.125)	54.0 (2.125)	54.0 (2.125)	66.7 (2.625)
Pump Shaft Dimensions, mm (in)					
Diameter at Seal Chamber	28.6 (1.125)	38.1 (1.5)			47.6 (1.875)
Diameter at Coupling Hub	28.6 (1.125)	38.1 (1.5)			44.5 (1.75)
I.B to O.B (Centerline)	102.6 (4.04)	159.8 (6.29)			212.6 (8.37)
Impeller to I.B. Bearing (Centerline)	140.5 (5.53)	152.9 (6.02)	175.8 (6.92)		202.7 (7.98)
Coupling Hub Length	87.4 (3.44)	85.6 (3.37)	122.7 (4.83)	121.9 (4.8)	160.3 (6.31)
At Impeller Threads	19.1 (0.75)	30.2 (1.188)			35.6 (1.4)
L^3/D^4	106	43	65	66	41

3. Heater option is required for service below 0°C (32°F).

Materials of Construction

Casing		Cast Iron - Class 30
Impeller	Standard	Cast Iron - Class 30
	Optional	CD4M
Wear Plate	Standard	Cast Iron - Class 30
	Optional	CD4M
Seal Plate	Standard	Cast Iron - Class 30
	Optional	CD4M
Shaft		17-4PH

Impeller

Balanced to ISO 1940-1, grade G6.3.

Direction of Rotation

Clockwise for all pumps when viewed from the coupling end.

Air Release Valve (ARV)

Required when discharge check valve is installed in the system.