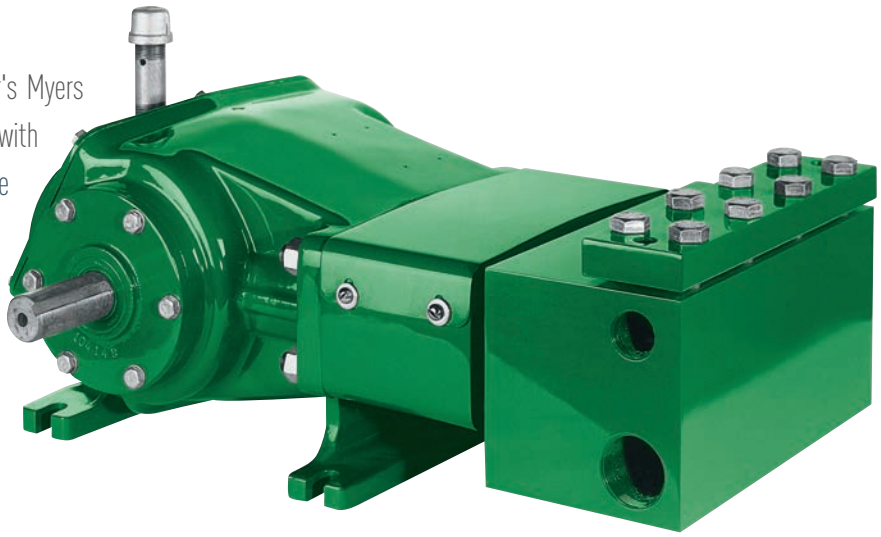
MYERS® MODEL CPM18-40
High Pressure Reciprocating Plunger Pump

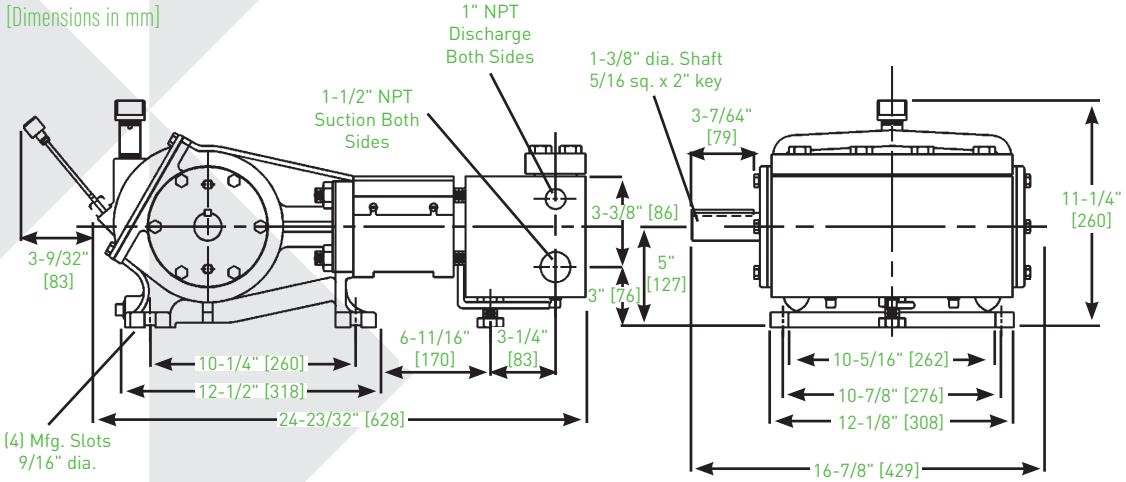
Rely On Us

Over a century of experience has proven that the Pentair's Myers line of reciprocating pumps are designed and built with performance you can rely on. Our CPM18-40 high pressure reciprocating pump combines manufacturing expertise and application understanding for a pump that is perfect for a variety of high pressure jobs. For details, contact your Pentair sales representative, or customer service at 419-289-1144.



Dimensional Data

[Dimensions in mm]



Product Capabilities, Specifications						
Temp. Rating °F (°C)	Sizes in inches (mm)					Approx. Weight lbs. (kg)
	Piston Stroke	Suction Size NPT	Discharge Size NPT	Input Shaft	Keyway	
180 (82)	1-3/4 (44.5)	1-1/2 (38.1)	1 (25.4)	1-3/8 (34.9)	5/16 x 5/32 (7.9 x 3.9)	278 (126)

NOTE: Available with Hydraulic Flange.

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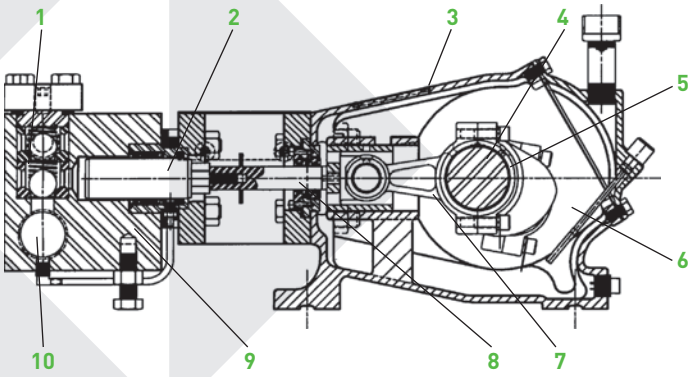
Components

1. Valve Assemblies – Stainless steel seats. Plastic acetal copolymer valves.
2. Plunger Assembly – K-ramic coating.
3. Body – Rugged cast iron crankcase serves as oil reservoir. Removable cover section for easy service.
4. Crankshaft – Rotates in either direction. Automotive-type heat-treated alloy steel.
5. Main Bearings – Tapered roller bearings.
6. Continuous Splash Lubrication – In either rotation direction.
7. Connecting Links – Cast iron with replaceable bronze bearings.
8. Crossheads – Heavy-duty ductile iron. "Pony" rods are axially threaded and pinned, polished stainless steel.
9. Body – High strength steel (available stainless steel).
10. Suction, Discharge Openings – Threaded for easy connections.



Fluid End		
Fluid End	Steel	316 SST
Body Fluid End	CDS 1211	316 SST
Valve Cap	CDS 1211	316 SST
Valve	Delrin®	Delrin®
Valve Seat	303 SST	316 SST
Valve Spring	316 SST	316 SST
Plunger	Tech 23	Tech 23
Plunger Packing	Nitrile & Kevlar®	Nitrile & Kevlar®

Power End	
Crankcase	Cast Iron, CL30
Crankshaft	4140 Heat Treated Forging
Link	Ductile Iron, ASTM A536
Crosshead	Ductile Iron, ASTM A536
Pony Rod	303 SST
Wrist Pin	CDS C1018 Carburize and Hardened
Crankshaft Main Bearing	Tapered Roller
Crankshaft Journal Bearing	Steel/Babbitt Inserts
Wrist Pin Bearing	Bronze Bushing
Bearing Cap	Cast Iron, CL30
Crankcase Cover	Cast Iron, CL30
Drain Plug	Magnetic

Horsepower Requirements

CPM18-40								
GPM	RPM	Horsepower Required For:						
		1200 psi	1600 psi	2000 psi	2800 psi	3200 psi	3600 psi	4000 psi
10	363	8	11	14	19	22	25	28
13	483	11	15	18	26	29	33	37
17	604	14	18	23	32	37	41	46
20	725	17	22	28	39	44	50	55

- Horsepower required is based upon 85% overall efficiency.
- Displacement is based on 100% volumetric efficiency.
- Formula (1) HP required (electric brake) = $\frac{\text{GPM x psi}}{1457}$ or kW = $\frac{\text{LPM x BAR}}{511}$

(2) Expected GPM = Rated GPM x $\frac{\text{Working RPM}}{\text{Rated RPM}}$ or

Expected LPM = Rated LPM x $\frac{\text{Working RPM}}{\text{Rated RPM}}$ or

Motor Sheave O.D. size = Pump Sheave O.D. size x $\frac{\text{Pump RPM}}{\text{Motor RPM}}$

Kilowatt Requirements

CPM18-40								
LPM	RPM	Kilowatts Required For:						
		83 bar	110 bar	138 bar	193 bar	221 bar	248 bar	276 bar
38	363	6	8	10	14	17	19	21
51	483	8	11	14	19	22	25	27
64	604	10	14	17	24	28	31	34
76	725	12	17	21	29	33	37	41

NOTE: Horsepower requirements for an internal combustion engine (gas or diesel) may be obtained by multiplying the figures listed by 1.3. Do not exceed 80% of the manufacturer's advertised horsepower at operating RPM.

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