MYERS[®] MODEL BXM High Pressure Reciprocating Pump

Understanding Your Needs

The Myers BXM series combines manufacturing expertise and understanding of applications to provide a pump with strength and versatility for any demanding high-pressure job. Contact your Pentair sales respresentative or customer service at 419-289-1144 for more details.

Wide Performance Range

- 3-8 gpm (11.4-30.3 lpm)
- Up to 1500 psi (103.4 bar)

Rugged design for continuous operation

- Solid one-piece cast iron power end.
- Extra-large oil sump for superior lubrication.
- Steel fluid end or optional aluminum bronze for long, corrosion-resistant life.

Designed for Simple, Routine Maintenance

• Easy access to suction and discharge valves – no need to remove pump from system.

Whisper Quiet Operation

• Oversized spherical suction and discharge valves allow complete filling of cylinder.

Dimensional Data [Dimensions in mm]



	Product Capabilities, Specifications												
					Sizes in inches (mm)								
Catalog Number	Max. Rated Canacity	Max. Rated Pressure	Temp. Rating °F (°C)	Approx. Weight lbs. (ka)	Cvlinder Bore	Piston Stroke	Suction Size NPT	Discharge Size NPT	Input Shaft	Keyway			
BXM6-15	8 gpm 30.3 lpm	1500 psi 103.4 bar	140 (60)	60 (27.2)	1 (25.4)	1-1/16 (26.99)	1 (25.4)	1/2 (12.7)	1 (25.4)	1/4 x 1/8 (6.35 x 3.18)			

Note: Consult factory for applications outside of these recommendations.



Fluid End

- 1. Body Steel monoblock optional aluminum-bronze.
- 2. Piston Assembly Fabric reinforced nitrile V-ring with aluminum-bronze piston.
- 3. Body Solid one-piece, cast iron crankcase. Acrylic window for oil level monitoring.
- 4. Crankshaft Automotive-type ductile iron. Standard is right-hand drive. Left-hand drive available.
- 5. Main Bearings Ball bearings for crankshaft.
- 6. Continuous Splash Lubrication.
- 7. Connecting Links High-strength zinc alloy for durability.
- 8. Crossheads High-strength zinc alloy.
- 9. Cylinder Liners Alumina-ceramic.
- 10. Valve Assemblies Three-piece stainless steel for less maintenance.
- 11. Inlet 1" NPT both sides.
- 12. Discharge 1/2" NPT both sides.

Horsepower Requirements

	ВХМ										
		Horsepower required for psi [bar]:									
GPM	RPM	200	400	600	800	1000	1200	1500			
[LPM]		psi [14]	psi [28]	psi [42]	psi [56]	psi [70]	psi [83]	psi [103]			
3 [11.4]	300	0.4	0.9	1.3	1.8	2.2	2.7	3.3			
4 [15.1]	400	0.6	1.2	1.8	2.4	3.0	3.6	4.4			
5 [18.9]	500	0.7	1.5	2.2	3.0	3.7	4.4	5.6			
6 [22.7]	600	0.9	1.8	2.7	3.6	4.4	5.3	*NR			
8 [30.3]	700	1.0	2.1	3.1	4.2	5.2	6.2	*NR			

*Not recommended. Consult factory for requirements beyond published performance data. Power based on 85% mechanical efficiency. Displacement is based on 100% volumetric efficiency.





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MYERS[®] MODEL CX 10 and 20 GPM High Pressure Reciprocating Pump

Strength and Versatility

The Myers[®] CX Series combines manufacturing expertise and understanding of applications to provide a pump with strength and versatility for any demanding high pressure job. Contact your Pentair sales representative or customer service at 419-289-1144 for more details.

Wide performance range

7.4 – 10.4 gpm (28.0 – 39.4 lpm)
400 – 1500 psi (27.6 – 103.4 bar) (CX10)

15 – 20.8 gpm (56.8 – 78.7 lpm) 300 – 1000 psi (20.7 – 68.9 bar) (CX20)

Rugged design for continuous operation

- Solid cast iron power end.
- Constant lubrication of all working parts.
- High-strength cast iron or aluminum-bronze fluid end.

Whisper quiet operation

• Large oversized in-line suction and discharge valves allow complete filling of cylinder.



Product Specifications										
		Approx.								
Temp. Rating	Piston	Piston Suction Size Discharge Input								
°F (°C)	Stroke	Stroke NPT Size NPT Shaft Keway								
180	1-1/4	1-1/2	1	1-1/8	1/4 x 1/8	104				
(82)	(31.75)	(38.1)	(25.4)	(28.58)	(6.35 x 3.18)	(47)				

	Product Capabilities											
Catalog Number	Max. Rated Capacity GPM (LPM)	Max. Rated Pressure psi (bar)	Max. Rated Speed RPM	Cylinder Bore inches (mm)	Max. HP (kW)	Fluid End Material						
CX10-15	10.4 (39.5)	1500 (103.4)	560	1-1/4 (31.75)	11.2 (8.4)	Cast iron or alum.–bronze						
CX20-10	20.8 (79.0)	1000 (68.9)	560	1-3/4 (44.45)	14.4 (10.7)	Cast iron or alum.–bronze						

* Pump performance data are based upon 100% volumetric efficiency and 85% overall efficiency.



Components

- 1. Suction, Discharge Three suction ports, one discharge. Threaded for easy connections.
- 2. Body High-strength cast iron or aluminum-bronze.
- 3. Cylinder Liners Solid ceramic.
- Body Solid cast iron crankcase. Oil reservoir for complete component lubrication. Removable end plate for inspection.
- 5. Crankshaft Ductile iron; ground, polished journals.
- 6. Main Bearings Ball bearings (CX10) and roller bearings (CX20) offer minimum friction, longer service.
- Connecting Links Lightweight aluminum alloy; replaceable bronze bushings and babbitt sleeve bearings.
- 8. Piston Assembly Molded Buna-N multi lip V-rings, backed by fabric-reinforced phenolic follower.
- 9. Valve Assembly Corrosion-resistant springs and valves for long-lasting performance.

Dimensional Data





	Performance Data											
Flow Capacity) required for: psi (bar)							
CX10 GPM	RPM	400 (28)	600 (42)	800 (56)	1000 (70)	1300 (91)	1500 (105)					
8.0	400	2.2	3.3	4.4	5.5	7.1	8.2					
9.0	450	2.5	3.7	4.9	6.1	8.0	9.2					
10.0	500	2.7	4.1	5.5	6.8	8.9	10.2					
11.1	560	3.1	4.6	6.1	7.6	9.9	11.5					
CX20 GPM	RPM	300 (21)	400 (28)	500 (34)	600 (41)	750 (52)	1000 (70)					
15.6	400	3.2	4.3	5.4	6.4	8.0	10.7					
17.6	450	3.6	4.8	6.0	7.2	9.0	12.0					
19.5	500	4.0	5.4	6.7	8.0	10.0	13.4					
21.8	560	4.5	6.0	7.5	9.0	11.2	15.0					

Power based on 85% mechanical efficiency.

Displacement based on 100% volumetric efficiency.



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MYERS® CXP SERIES HIGH PRESSURE RECIPROCATING PLUNGER PUMPS



The CXP Series plunger pump adds a new dimension of rugged versatility to Pentair's Myers line of high pressure industrial pumps. In one basic unit, the CXP offers seven interchangeable plunger and seal packages, allowing complete hydraulic coverage between 1200 PSI/30 gpm and 3500 PSI/5 gpm. The CXP handles liquids up to 160° F (71°C) with a maximum inlet pressure of 75 PSI. Optimum flow and pressure is easily converted, even in the field, by changing the plunger and seal kit. Three different valves with different flow areas (valves A. B and C) fit into the same valve deck and are also Interchangeable. The CXP Series combines Pentair's manufacturing expertise and understanding of applications to provide a pump with the strength and versatility for any demanding high pressure job.

DIMENSIONS (FOR ESTIMATING ONLY)



SPECIFICATIONS

Temperature		Size in Ir	nches (Mill	imeters)		Woight Lbo
Rating °F (°C)	Plunger Stroke	Suction Size (NPT)	Discharge Size (NPT)	Input Shaft	Keyway	(KG)
160 (71)	1 1/4 (31.75)	1 1/2 (38.10)	1 (25.40)	1 1/8 (28.58)	1/4 x 1/8 (6.35 x 3.18)	152 (69)

PUMP PERFORMANCE*

Catalog Number	Maximum Rated Capacity GPM (LPM)	Maximum Rated Pressure PSI (BAR)	Maximum Rated Speed RPM	Plunger Size Inch (mm)	Maximum HP (KW)	Valve**	Fluid End Material
CXP 30-12	30 (114)	1200 (82.7)	900	1 5/8 (41.3)	25 (18.6)	A	Ductile Iron
CXP 26-14	26 (98)	1400 (96.6)	900	1 1/2 (38.1)	25 (18.6)	A	Ductile Iron
CXP 22-16	22 (83)	1650 (113.8)	900	1 3/8 (34.9)	25 (18.6)	A	Ductile Iron
CXP 18-20	18 (68.1)	2000 (137.9)	900	1 1/4 (31.8)	25 (18.6)	В	Ductile Iron
CXP 14-24	14 (53.0)	2450 (169.07)	900	1 1/8 (28.6)	25 (18.6)	В	Ductile Iron
CXP 7-30	7 (26.5)	3000 (206.97)	560	1 (25.4)	15 (11.2)	С	Ductile Iron
CXP 5-35	5 (18.9)	3500 (241.47)	560	7/8 (22.2)	13 (9.7)	С	Ductile Iron

*Pump performance data are based upon 100% volumetric efficiency & 65% overall efficiency **Pump performance based on valve listed



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FLUID-END COMPONENTS

1. Cylinder body of high-strength ductile iron.

- 2. Ceramic plungers are non-scoring, high alumino ceramic with ground smooth surface of 12 RMS.
- 3. High pressure seals are wetted seal design, lubricated and cooled by suction fluid for longer seal life.
- 4. Seal plate of stainless steel features easy and quick replacement of seals.
- 5. Spring-loaded center post valves have acetal valves and stainless steel seats. Double springs for high speed and longer life.
- Valve caps of stainless steel with o-ring seals and back-up ring. Valves can be serviced without disturbing piping.
- Suction and discharge valves are located for easy service. Large threaded suction openings on sides and front. Discharge openings are tapped

POWER-END COMPONENTS

- 8. Crankcase of rugged cast iron supports the crankshaft and provides as an oil reservoir for continuous splash lubrication. Cover section quickly removable for easy service.
- 9. Automotive type crankshaft is high strength ductile iron.
- 10. Bearings feature roller bearings for high loads.
- II. Crankshaft journal bearings are automotive type, steel-backed babbit inserts.

HORSEPOWER REQUIREMENTS

CXP 30-12											
	RPM	Horsepower Required For:									
GPM		200 psi	400 psi	600 psi	800 psi	1000 psi	1200 psi				
25.2	750	3.5	6.9	10.4	13.8	17.3	20.8				
26.9	800	3.7	7.4	11.1	14.8	18.5	22.2				
28.6	850	3.9	7.9	11.8	15.7	19.6	23.6				
30.3	900	42	83	12.5	16.6	20.8	25 N				

CXP 18-20										
		Horsepower Required For:								
GPM	RPM	1000 psi	1200 psi	1400 psi	1600 psi	1800 psi	2000 psi			
14.9	750	10.2	12.3	14.3	16.4	18.4	20.5			
15.9	800	10.9	13.1	15.3	17.5	19.6	21.8			
16.9	850	11.6	13.9	16.2	18.6	20.9	23.2			
17.9	900	12.3	14.7	17.2	19.7	22.1	24.6			

	CXP 5-35									
		Horsepower Required For:								
GPM	RPM	2500 psi	2700 psi	2900 psi	3100 psi	3300 psi	3500 psi			
3.9	400	6.7	7.2	7.8	8.3	8.8	9.4			
4.4	450	7.6	8.2	8.8	9.4	10.0	10.6			
4.9	500	8.4	9.1	9.8	10.4	.	11.8			
55	560	9.4	10.2	10.9	11.7	125	13.2			

	CXP 26-14									
		Horsepower Required For:								
GPM	RPM	400 psi	600 psi	800 psi	1000 psi	1200 psi	1400 psi			
21.5	750	5.9	89	11.8	14.8	17.7	20.7			
22.9	800	6.3	9.4	12.6	15.7	18.9	22.0			
24.4	850	6.7	10.0	13.4	16.7	20.1	23.4			
25.8	900	7.1	10.6	14.2	17.7	21.3	24.8			

	CXP 14-24									
		Horsepower Required For:								
GPM	RPM	1400 psi	1600 psi	1800 psi	2000 psi	2200 psi	2450 psi			
12.1	750	11.6	13.3	14.	16.6	18.3	20.3			
12.9	800	12.4	14.2	15.9	17.7	19.5	21.7			
13.7	850	13.2	15.0	16.9	18.8	20.7	23.0			
14.5	900	13.9	15.9	17.9	19.9	21.9	24.4			

			CXP 2	22-16			
				sepower l		For:	
GPM	RPM	600 psi	800 psi	1000 psi	1200 psi	1400 psi	1650 psi
18.1	750	7.5	9.9	12.4	14.9	17.4	20.5
19.3	800	7.9	i0.6	13.2	15.9	18.5	21.9
205	850	8.4	11.2	14.1	16.9	19.7	23.2
21.7	900	8.9	11.9	14.9	17.9	209	24.6

CXP 7-30										
				sepower l		For:				
GPM	RPM	2000 psi	2200 psi	2400 psi	2600 psi	2800 psi	3000 psi			
5.1	400	7.0	7.7	8.4	9.1	9.8	10.5			
5.7	450	7.8	8.6	9.4	10.2	11.0	11.7			
6.4	500	8.8	9.7	10.5	11.4	12.3	13.2			
7.1	560	9.7	10.7	11.7	12.7	13.6	14.6			

- Horsepower required is based upon 85% overall efficiency.
 Flow is based upon 100% volumetric efficiency.
- Formula: (1) HP required = $\frac{GPM \times PSI}{1457}$ or $KW = \frac{LPM \times BAR}{511}$ (2) Expected GPM = Rated GPM x $\frac{Working RPM}{Rated RPM}$ or Rated RPM Expected LPM = Rated LPM x $\frac{Working RPM}{Rated RPM}$ or Rated RPM Motor shieve = $\frac{Pump}{0.D. size}$ Size $\frac{Pump}{PM}$ Notor RPM

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12. Connecting links are cast aluminum with bronze wrist-pin bearings.

15. Available configured for hydraulic drive.

14. Continuous splash lubrication is provided during either direction of rotation.

13. Crossheads are ground and chrome plated to reduce friction and wear in crosshead bores.

MYERS°CPM SERIESHigh PressureReciprocating Plunger Pump

Over a century of experience has proven that Pentair's line of Myers[®] reciprocating pumps are designed and built with performance you can rely on. Our CPM Series high pressure reciprocating pumps combine manufacturing expertise and application understanding for a pump that is perfect for a variety of high pressure jobs.

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							

FLUID END	STEEL	316 SST
Body Fluid End	CDS 1211	316 SST
Valve Cap	CDS 1211	316 SST
Valve	Acetal	Acetal
Valve Seat	303 SST	316 SST
Valve Spring	316 SST	316 SST
Plunger	Tech 23	Tech 23
Plunger Packing	Nitrile & Aramid Fiber	Nitrile & Aramid Fiber

PRODUCT CAPABILITIES, SPECIFICATIONS									
Temp.		SI	ze in inches	(mm)		Approx.			
Rating °F (°C)	Piston Stroke	Suction Size NPT	Discharge Size NPT	Input Shaft	Keyway	Wgt. Ibs. (kg)			
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)			

Horsepower Performance Data

CPM24-30									
GPM	RPM	250 psi	500 psi	1000 psi	1500 psi	2000 psi	2500 psi	3000 psi	
14	350	2.4	4.8	9.6	14.4	19.2	24.0	28.8	
16	400	2.7	5.5	11.0	16.5	22.0	27.5	32.9	
18	450	3.1	6.2	12.4	18.5	24.7	30.1	37.1	
20	500	3.4	6.9	13.7	20.6	27.5	34.3	41.2	
22	550	3.8	7.5	15.1	22.6	30.2	37.7	45.3	
24	600	4.1	8.2	16.5	24.7	32.9	41.2	49.4	
			C	PM18-4	0				
GPM	RPM	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	

Kilowatt Performance Data

CPM24-30									
LPM	RPM	17.2 bar	34.5 bar	68.9 bar	103.4 bar	137.9 bar	172.4 bar	206.8 bar	
53	350	1.8	3.6	7.2	10.7	14.3	17.9	21.5	
61	400	2.0	4.1	8.2	12.3	16.0	20.5	24.5	
68	450	2.3	4.6	9.2	13.8	18.4	22.4	27.7	
76	500	2.5	5.1	10.2	15.4	20.5	25.6	30.7	
83	550	2.8	5.6	11.3	16.9	22.5	28.1	33.8	
91	600	3.1	6.1	12.3	18.4	24.5	30.7	36.8	
			С	PM18-4	0				
LPM	RPM	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	

21

• Horsepower required is based upon 85% overall efficiency.

604

725

64

76

 Formula
 [1] hp required = <u>GPM x psi</u> or kW = <u>LPM x bar</u> [electric brake] 1457 511

12

14

17

(2) Expected GPM = Rated GPM x <u>Working RPM</u> Rated RPM

31

37

28

33

Expected LPM = Rated LPM x <u>Working RPM</u> Rated RPM

 Motor Sheave = Pump Sheave x Pump RPM

 O.D. size
 O.D. size

Motor RPM

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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Components

- 1. Valve Assemblies Stainless steel seats. Plastic acetal copolymer valves.
- 2. Plunger Assembly
- 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.





NOTE: Available with Hydraulic Flange



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MYERS[°]C SERIES High Pressure Reciprocating Piston Pump

Over a century of experience has proven that Pentair's Myers[®] line of reciprocating pumps are designed and built with performance you can rely on. Our C Series high pressure reciprocating pumps combine manufacturing expertise and application understanding for a pump that is perfect for a variety of high pressure jobs.

Advantages By Design

Handles wide range of demanding industrial applications.

- High-strength fluid end and spring-loaded flat valves for high pressure pumping of large water volumes.
- Pumps liquids in mine, mill, food processing, car wash, sewer cleaner and other applications.



Horsepower Requirements

	C25-25						C35-20					C40-20																
срм	ррм	700	1000	1300	1600	1900	2200	2500	срм	ллл	600	800	1000	1200	1400	1600	1800	2000	CDM	ррм	600	800	1000	1200	1400	1600	1800	2000
GPM	K M	psi	psi	psi	psi	psi	psi	psi	GPM	K P M	psi	psi	psi	psi	psi	psi	psi	psi	UPM	KPM	psi							
12.5	325	6.0	8.6	11.2	13.7	16.3	18.9	21.4	19.5	375	8.0	10.7	13.4	16.1	18.7	21.4	24.1	26.8	20.3	300	8.4	11.1	13.9	16.7	19.5	22.3	25.1	27.9
16.4	425	7.9	11.3	14.6	18.0	21.4	24.8	28.1	24.6	475	10.1	13.5	16.9	20.3	23.6	27.0	30.4	33.8	25.4	375	10.5	14	17.4	20.9	24.4	27.9	31.4	34.9
20.2	525	9.7	13.9	18.0	22.2	26.3	30.5	34.7	29.8	575	12.3	16.4	20.5	24.5	28.6	32.7	36.8	40.9	32.2	475	13.3	17.7	22.1	26.6	30.9	35.4	39.8	44.2
24.1	625	11.6	16.5	21.5	26.5	31.4	36.4	41.4	35.0	675	14.4	19.2	24.0	28.8	33.6	38.4	43.2	48.0	39.0	575	16.1	21.4	26.8	32.2	37.5	42.8	48.3	53.5

Kilowatt Requirements

	C25-25								C35-20									
LDM	ррм	48.3	68.9	89.6	110.3	131	151.7	172.4	LDM	ррм	41	55	69	83	96	110	124	138
LMM	KP M	bar	bar	bar	bar	bar	bar	bar	LEIM	REM	bar							
47.4	325	4.5	6.4	8.3	10.2	12.2	14.1	16.0	73.8	375	6.0	8.0	10.0	12.0	13.9	16.0	18.0	20.0
62.1	425	5.9	8.4	10.9	13.4	15.9	18.4	21.0	93.1	475	7.5	10.1	12.6	15.1	17.6	20.1	22.7	25.2
76.7	525	7.2	10.3	13.4	16.6	19.7	22.8	25.9	112.8	575	9.2	12.2	15.3	18.3	21.3	24.4	27.4	30.5
91.3	625	8.6	12.3	16.0	19.7	23.4	27.1	30.8	132.5	675	10.7	14.3	17.9	21.5	25.1	28.6	32.2	35.8

				C40	-20				
LPM	RPM	41 bar	55 bar	69 bar	83 bar	96 bar	110 bar	124 bar	138 bar
76.8	300	6.3	8.3	10.4	12.6	14.5	16.6	18.9	20.8
96.1	375	7.8	10.4	13.0	15.6	18.2	20.8	23.4	26.0
121.9	475	9.9	13.2	16.5	19.8	23.0	26.4	29.7	33.0
147.6	575	12.0	16.0	20.0	24.0	28.0	32.0	36.0	40.0

Product Capabilities, Specifications

	Max.	Max. Rated Pressure psi (bar)	Temp.		Approx.					
Catalog Number	Capacity GPM (LPM)		Rating °F (°C)	Cylinder Bore	Piston Stroke	Suction Size NPT	Discharge Size NPT	Input Shaft	Keyway	Weight lbs. (kg)
C25-25 Triplex	25 (94.6)	2500 (172)	180 (82)	1 1/2 (38.1)	1 3/4 (44.45)	1 1/2	1	1 3/8 (34.93)	5/16 x 5/32 (7.94 x 3.97)	230 (104.2)
C35-20 Triplex	35 (132.49)	2000 (138)	180 (82)	1 3/4 (44.45)	1 3/4 (44.45)	1 1/2 (38.1)	1 (25.4)	1 3/8 (34.93)	5/16 x 5/32 (7.94 x 3.97)	230 (104.2)
C40-20 Triplex	40 (193.04)	2000 (138)	160 (71)	2 (50.80)	1 3/4 (44.45)	2 (50.80)	1	1 3/8 (34.93)	5/16 x 5/32 (7.94 x 3.97)	230 (104.2)

Horsenower required is based upon 85% overall efficiency

Note: Above bold line is continuous duty, Below bold line is intermittent.

ormula:	(1) hp required =	<u>GPM x psi</u> or kV	V = <u>LPM x bar</u>
	(electric brake)	1457	511
	(2) Expected GPM	= Rated GPM >	Working RPM
			Rated RPM
	Expected LPM	= Rated LPM x	Working RPM
			Rated RPM
	Motor sheave	= Pump sheave	x <u>Pump RPM</u>
	0.D. size	0.D. size	Motor RPM

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.

PENTAIR

Fluid End





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MYERS[®] MODELS D SERIES High Pressure Reciprocating Pumps

Proof Is In The Performance

Over a century of experience has proven that Pentair's line of Myers[®] reciprocating pumps are designed and built with performance you can rely on. The D Series high pressure reciprocating pumps perform under pressure for a long time. The D Series combines Pentair manufacturing expertise and understanding of applications to provide a pump that is perfect for every high pressure job.

D35-12 Triplex

A high strength fluid end with spring-loaded flat valves for pumping large volumes of water under high pressures up to 1200 psi. Handles liquids up to 160°F in mines, mills, food processing and car/truck washes.

D50-12 Triplex

This pump's high ratio of flow capacity to pressure provides top performance for any cleaning application (i.e. street cleaning), coal field spraying, or strata loosening. Slow operations speed for longer pump life and a built-in gear reduction give added benefits.

ENTAIR

Dimensional Data

D65-16 Triplex

This pump's large 65 gpm volume of flow up to 1600 psi makes it perfect for sewer blasting and heavy duty industrial and marine cleaning. The compact, powerful design is also right for strata loosening, long distance pumping in coal mines and oil fields.

D60-10 Triplex

Designed for industrial, oil and gas fields, mining and marine applications, this pump's slow crankshaft speed reduces parts wear and energy use. Valve and piston assemblies are easily serviced through front/ top openings. Specially effective for hull cleaning, barnacle removal, high pressure cleaning and sealing.



D65-20 Triplex

This is a high-volume, high pressure piston pump for hydraulic blasting and cleaning, sewer cleaning, fire truck application, injection and hydrostatic testing. Built rugged for dependable service in many industrial high pressure applications.



	Mari Datad	Max. Rated	C	Temp.			Sizes in	inches (mm						Dir	nensions i	in inches (mm)		
	Max.Rated Pressure psi (bar)	Capacity GPM (LPM)	Gear Reduct. Ratio	Rating °F (°C)	Cylinder Bore	Piston Stroke	Suction Size (NPT)	Disch. Size (NPT)	Input Shaft	Keyway	lbs. (kg)	A	В	С	D	E	F	G	Dia. of Mounting Hole
D35-12	1200	35	3.39	160	2.000	2.875	2	1¼	1%	³ / ₈ x ³ / ₁₆	410	19.5	31	13.25	12.5	7	14	9.5	.75
Triplex	(83)	(132.49)	to 1	(71)	(50.80)	(73.03)	(50.80)	(31.75)	(41.3)	(9.53 x 4.76)	(186)	(495.3)	(787.4)	(336.55)	(317.5)	(177.8)	(355.6)	(241.3)	(19.05)
D50-12	1200	50	3.95	140	2.250	3.750	3	1¼	1%	¾ x ¾	525	21	34.5	15.25	14	7.5	16	10.38	.75
Triplex	(83)	(189.27)	to 1	(60)	(57.15)	(95.25)	(76.20)	(31.75)	(41.3)	(9.53 x 4.76)	(238)	(533.4)	(876.3)	(387.35)	(355.6)	(190.5)	(406.4)	(263.65)	(19.05)
D60-10	1000	60	3.95	140	2.500	3.750	3	1¼	1%	¾ x ¾	525	21	34.5	17	14	7.5	16	10.38	.75
Triplex	(69)	(227.12)	to 1	(60)	(63.50)	(95.25)	(76.20)	(31.75)	(41.3)	(9.53 x 4.76)	(238)	(533.4)	(876.3)	(431.8)	(355.6)	(190.5)	(406.4)	(263.65)	(19.05)
D65-16	1600	65	3.95	160	2.125	3.750	3	1¼	1%	¾ x ¾	525	21	36.25	17	14	7.5	16	10.38	.75
Triplex	(110)	(246.05)	to 1	(71)	(53.98)	(95.25)	(76.20)	(31.75)	(41.3)	(9.53 x 4.76)	(238)	(533.4)	(920.75)	(431.8)	(355.6)	(190.5)	(406.4)	(263.65)	(19.05)
D65-20	2000	65	3.95	160	2.000	3.750	3	1¼	1%	³ / ₈ x ³ / ₁₆	525	21	36.25	17	14	7.5	16	10.38	.75
Triplex	(138)	(246.05)	to 1	(71)	(50.80)	(95.25)	(76.20)	(31.75)	(41.3)	(9.53 x 4.76)	(238)	(533.4)	(920.75)	(431.8)	(355.6)	(190.5)	(406.4)	(263.65)	(19.05)



Fluid-End Components

- 1. Cylinder body standard high-strength ductile iron or aluminum-bronze for salt water applications in D35 and D65 series.
- 2. Cylinders are tapered steel shells with smooth, hard coating. Easily replaceable.
- 3. Packing D35 and D65: Buna-N and cotton duck multi-lip V-ring supported by a phenolic follower (bronze on D65-20). D50 and D60: Buna-N and cotton duck cup supported by a ductile iron follower.
- 4. Piston assembly: Stud, pressure ring, spring, adjustment nut retainer and cap screw are all solid stainless steel.

Horsepower Requirements

	D35-12										
	CDM	ррм	Horsepower Required For:								
UPM		RPM	600 psi	800 psi	1000 psi	1200 psi					
	28.5	825	11.8	15.7	19.6	23.5					
	32	925	13.2	17.6	22	26.4					
	35.5	1025	14.6	19.5	24.3	29.2					
	37.2	1075	15.3	20.4	25.5	30.6					

CDM	ррм	Horsepower Required For:								
UPIM	RPM	1000 psi	1200 psi	1400 psi	1600 psi					
48.6	1112	33.4	40	46.7	53.4					
54.5	1247	37.4	44.9	52.4	59.8					
63.2	1446	43.4	52	60.7	69.4					
65.1	1490	44.7	53.6	62.6	71.5					
68.6	1570	/7 1	565	65.9	753					

Kilowatt Requirements

D35-12											
LDM	DDM	Kilowatts Required For:									
LLIII	REM	41 bar	55 bar	69 bar	83 bar						
108.1	825	8.8	11.7	14.6	17.5						
121.2	925	9.8	13.1	16.4	19.7						
134.3	1025	10.9	14.5	18.2	21.8						
140.8	1075	11.4	15.2	19	22.8						

	D65-16									
LDM	ррм	Kilowatts Required For:								
LPIM	KPM	69 bar 83 bar 97 bar		110 bar						
184	1112	24.9	29.8	34.8	39.8					
206.3	1247	27.9	33.5	39	44.6					
239.2	1446	32.3	38.8	45.3	51.7					
246.5	1490	33.3	40	46.7	53.3					
259.8	1570	35.1	42.1	49.2	56.2					

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- 5. Valve assemblies (two types depending on use). Springloaded flat valves have stainless steel seats, springs and valves with long-wearing bronze spring retainer and valve cage. Optional stainless steel center post-type features acetal valves. (Standard on D65-20)
- 6. Valve and cylinder caps of tough cast iron (D65 cylinder caps are steel) with Buna-N O-ring seals. Caps are rigidly held in place by removable steel clamps.
- 7. Suction and discharge located for easy service. Large threaded suction openings on sides and/or front. Discharge openings are flanged and tapped.



	D50-12										
CDM	RPM	Horsepower Required For:									
UPM		400 psi	600 psi	800 psi	1000 psi	1200 psi					
40.4	825	11.1	16.6	22.2	27.7	33.3					
45.3	925	12.4	18.7	24.9	31.1	37.3					
50.2	1025	13.8	20.7	27.6	34.5	41.4					
52.7	1075	14.5	21.7	28.9	36.2	43.4					

CDM	אחח		Horsepower Required For:								
θΡΜ	RPM	1000 psi	1200 psi	1600 psi	1800 psi	2000 psi					
38.7	1000	26.6	31.9	42.5	47.8	53.1					
46.4	1200	31.9	38.2	51	57.4	63.7					
54.2	1400	37.2	44.6	59.5	66.9	74.4					
61.9	1600	42.5	51	68	76.5	85					
69.7	1800	47.8	57.4	76.5	86.1	95.6					

	D50-12										
LDM	אחת	Kilowatts Required For:									
LFIM	INF IMI	28 bar	41 bar	55 bar	69 bar	83 bar					
153	825	8.3	12.4	16.6	20.7	24.8					
171.6	925	9.3	13.9	18.6	23.2	27.8					
190.2	1025	10.3	15.4	20.6	25.7	30.8					
199.4	1075	10.8	16.2	21.6	27	32.4					

	D65-20											
LDM	DDM	Kilowatts Required For:										
	INF IMI	69 bar	83 bar	110 bar	124 bar	138 bar						
146.5	1000	19.8	23.8	31.7	35.7	39.6						
175.8	1200	23.8	28.5	38	42.8	47.5						
205.1	1400	27.7	33.3	44.4	49.9	55.5						
234.4	1600	31.7	38	50.7	57	63.4						
263.7	1800	35.7	42.8	57	64.2	71.3						

28 bar 41 bar 55 bar 69 bar 189 825 10.2 15.3 20.4 25.5 211.9 925 11.5 17.2 22.9 28.6 1025 12.7 234.8 19 25.4 31.7 246.2 1075 13.3 20 33.3 26.6

Power is based on 85% mechanical efficiency Displacement is based on 100% volumetric efficiency

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Power-End Components

- 8. Gearcase of rugged cast iron protects the gears and serves as oil reservoir for continuous lubrication. Cover section quickly removable for easy service.
- 9. Pinion and main gear are helical cut and machined from high-strength alloy steel, and can rotate in either direction. Integral pinion shaft is also machined from high-strength alloy steel.
- 10. Automotive-type crankshaft is forged from alloy steel.
- 11. Shaft bearings feature tapered roller bearings.
- 12. Crankshaft journal bearings are automotive-type, steelbacked inserts.
- 13. Connecting links are cast iron (D35) or ductile iron with replaceable bronze wrist-pin bearings.
- 14. Crossheads/piston pony rods are heavy-duty ductile iron and are smoothly ground and polished stainless steel, threaded and pinned.
- 15. Continuous splash lubrication is provided during either direction of rotation.

	D60-10									
срм	ррм	He	Horsepower Required For:							
UPM	KPM	400 psi	600 psi	800 psi	1000 psi					
49.9	825	13.7	20.6	27.4	34.3					
56	925	15.4	23	30.7	38.4					
62	1025	17	25.5	34	42.6					
65	1075	17.9	26.8	35.7	44.6					

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MYERS[®] DP SERIES High Pressure Reciprocating Plunger Pumps

Designed with Strength and Versatility

The DP Series plunger pump adds a new dimension of rugged versatility to Pentair's line of Myers[®] high pressure industrial pumps. In one power end, two fluid ends, the DP offers seven interchangeable plunger and seal packages, allowing complete hydraulic coverage between 1200 psi/120 gpm and 5500 psi/27 gpm. The DP handles liquids of PH4~11, up to 180°F (82°C) with a maximum inlet pressure of 100 psi. Optimum flow and pressure are easily converted, even in the field, by changing the plunger and seal kit. Two sets of different valve seats with different flow areas (valves A and B) fit into the same valve deck and are also interchangeable.

The DP Series combine Pentair's manufacturing expertise and understanding of applications to provide a pump with the strength and versatility for any demanding high pressure job.

Dimensional Data (For estimating only)





Product Specifications									
Gear Reduction Ratio	3.95 to 1								
Temperature Rating °F (°C)	180	82							
Plunger Stroke	3.750"	95.25 mm							
Suction Size (NPT)	3''	76.20 mm							
Discharge Size*	1-1/2''	38.10 mm							
Input Shaft	1-5/8''	41.3 mm							
Keyway	3/8" x 3/16"	9.53 mm x 4.76 mm							
Weight	725 lbs.	328.8 kg							

*Discharge Part Connections (both sides) SAE 1-1/2 Hydraulic 4 Bolt Flange .3000# for Fluid End A SAE 1-1/2 Hydraulic 4 Bolt Flange .6000# for Fluid End B

	Pump Performance*												
Catalog Number***	Maximum Rated Capacity GPM (LPM)	Maximum Rated Pressure psi (Bar)	Maximum Rated Speed RPM/SPM	Plunger Size Inch (mm)	Maximum HP (kW)	Valve** (Set)	Fluid End Material	Fluid End Size					
DP120-12	120 (454)	1,200 (82.7)	1800/456	2-5/8 (66.7)	99 (73.9)	А	Ductile Iron	A					
DP90-18	88 (333)	1,700 (117.2)	1800/456	2-1/4 (57.2)	103 (76.8)	А	Ductile Iron	A					
DP85-20	85 (322)	2,000 (137.9)	1800/456	2-1/4 (57.2)	117 (87.2)	А	Ductile Iron	A					
DP80-20	79 (299)	2,000 (137.9)	1800/456	2-1/8 (54.0)	108 (80.5)	А	Ductile Iron	A					
DP70-22	70 (265)	2,150 (148.3)	1800/456	2 (50.8)	103 (76.8)	А	Ductile Iron	A					
DP55-28	53 (201)	2,800 (193.1)	1800/456	1-3/4 (44.5)	103 (76.8)	В	Ductile Iron	В					
DP40-38	40 (151)	3,800 (262.1)	1800/456	1-1/2 (38.1)	102 (76.1)	В	Ductile Iron	В					
DP28-55	27 (102)	5,500 (379.3)	1800/456	1-1/4 (31.8)	103 (76.8)	В	Ductile Iron	В					

*Pump performance data are based upon 100% volumetric efficiency & 85% overall efficiency. ** Pump performance based on valve listed. ***Catalog number listed does not define maximum rated capacity and pressure.



Fluid-End Components

- 1. Cylinder body of high-strength ductile iron.
- 2. Tungsten carbide coated, stainless steel plungers are superhard, nonscoring, with ground smooth surface of 12u.
- 3. High pressure plunger seals are spring-loaded, self-lubricated, braided packing where strength, lubricating qualities and heat dissipation are needed for various applications.
- 4. Seal housing of aluminum-bronze features easy and quick replacement of seals.
- 5. Spring-loaded center post valves have acetal valves and stainless steel seats.
- 6. Valve caps of ductile iron/stainless steel Buna-N O-ring seals and backup ring. Valves can be serviced individually.
- 7. Suction and discharge located for easy service. Large threaded suction openings on sides and front. Discharge openings are tapped.



Horsepower Requirements

	UP1Z0-12											
			Ho	rsepower I	Required F	or:						
GPM	RPM	200 psi	400 psi	600 psi	800 psi	1000 psi	1200 psi					
66.7	1000	9.2	18.3	27.5	36.6	45.8	54.9					
80.1	1200	11.0	22.0	33.0	44.0	55.0	66.0					
93.4	1400	12.8	25.6	38.5	51.3	64.1	76.9					
116.8	1750	16.0	32.1	48.1	64.1	80.2	96.2					
120.1	1800	16.5	33.0	49.5	65.9	82.4	98.9					

		DP80-20										
			Horsepower Required For:									
	GPM	RPM	900 psi	1100 psi	1300 psi	1500 psi	1700 psi	2000 psi				
	43.7	1000	27.0	33.0	39.0	45.0	51.0	60.0				
1	52.5	1200	32.4	39.6	46.8	54.1	61.3	72.1				
	61.2	1400	37.8	46.2	54.6	63.0	71.4	84.0				
	76.5	1750	47.3	57.8	68.3	78.8	89.3	105.0				
	78.7	1800	48.6	59.4	70.2	81.0	91.8	108.0				

• Horsepower required is based upon 85% overall efficiency.

• Displacement is based on 100% volumetric efficiency.

• Formula (1) HP required = $\frac{GPM \times psi}{1457}$ or kW = $\frac{LPM \times BAR}{511}$

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

Motor Sheave = Pump Sheave x Pump RPM 0.D. size 0.D. size

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1100 psi 1300 psi 1500 psi 700 psi 900 psi 1700 psi 23.5 49.0 1000 30.3 37.0 43.7 50.4 57.2 58.8 1200 28.3 36.3 44.4 52.5 60.5 68.6 1400 33.0 68.6 42.4 51.8 61.2 70.6 80.0 85.7 1750 41.2 52.9 64.7 76.5 88.2 100.0 88.2 1800 42.4 54.5 66.6 78.7 90.8 102.9

DP70-22											
			Ho	rsepower l	Required F	or:					
GPM	RPM	1150 psi	1350 psi	1550 psi	1750 psi	1950 psi	2150 psi				
38.7	1000	30.5	35.9	41.2	46.5	51.8	51.7				
46.5	1200	36.7	43.1	49.5	55.9	62.2	68.6				
54.2	1400	47.8	50.2	57.7	65.1	72.5	80.0				
67.8	1750	53.5	62.8	72.1	81.4	90.7	100.1				
69.7	1800	55.0	64.6	74.2	83.7	93.3	102.9				

DP40-38											
	RPM	Horsepower Required For:									
GPM		2800 psi	3000 psi	3200 psi	3400 psi	3600 psi	3800 psi				
21.8	1000	41.9	44.9	47.9	50.9	53.9	56.9				
26.1	1200	50.2	53.7	57.3	60.9	64.5	68.1				
30.5	1400	58.6	62.8	67.0	71.2	75.4	79.6				
38.1	1750	73.2	78.5	83.7	88.9	94.1	99.4				
39.5	1800	75.3	80.7	86.1	91.5	96.9	102.2				

Power-End Components

- 8. Gear case of rugged cast iron protects the gears and serves as oil reservoir for continuous lubrication. Cover section quickly removable for easy service.
- 9. Pinion and main gear are helical cut and machined from high-strength alloy steel, and can rotate in either direction. Integral pinion shaft is also machined from high-strength alloy steel.
- 10. Automotive type crankshaft is forged heat-treated alloy steel.
- 11. Main bearings feature tapered roller bearings.
- 12. Crankshaft journal bearings are automotive type, steelbacked inserts.
- 13. Connecting links are ductile iron with replaceable bronze wrist-pin bearings. Wrist-pins are press-fitted into crossheads.
- 14. Crossheads/"pony" rods: Heavy-duty ductile iron crossheads "pony" rods are smoothly ground and highlypolished stainless steel, threaded and pinned axially to crosshead.
- 15. Continuous splash lubrication is provided during either direction of rotation.
- 16. Oil seals for "pony" rods are designed for quick and easy replacement without taking the fluid end off.

	DP85-20										
0.014	2.214	Horsepower Required For:									
GPM	КРМ	900 psi	1100 psi	1300 psi	1500 psi	1700 psi	2000 psi				
49.0	1000	30.3	37.0	77.4	50.4	57.2	67.3				
58.8	1200	36.3	44.4	92.8	60.5	68.6	80.7				
68.8	1400	42.5	51.9	108.6	70.8	80.3	94.4				
85.8	1800	53.0	64.8	135.4	88.3	100.1	117.8				

	DP55-28											
0.014	2214		Ho	rsepower	Required F	uired For:						
GPM	RPM	1800 psi	2000 psi	2200 psi	2400 psi	2600 psi	2800 psi					
29.7	1000	36.7	40.8	44.8	48.9	53.0	57.1					
35.6	1200	44.0	48.9	53.8	58.6	63.5	68.4					
41.5	1400	51.3	57.0	62.7	68.4	74.1	79.8					
51.9	1750	64.1	71.2	78.4	85.5	92.6	99.7					
53.4	1800	66.0	73.3	80.6	88.0	95.3	102.6					

	DP28-55											
0.514	2214	Horsepower Required For:										
GPM	RPM	4500 psi	4700 psi	4900 psi	5100 psi	5300 psi	5500 psi					
15.1	1000	46.6	48.7	50.8	52.9	54.9	57.0					
18.2	1200	56.2	58.7	61.2	63.7	66.2	68.7					
21.2	1400	65.5	68.4	71.3	74.2	77.1	80.0					
26.5	1750	81.9	85.5	89.1	92.8	96.4	100.0					
27.2	1800	84.0	87.7	91.5	95.2	98.9	102.7					

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MYERS[®] E54-30, E70-23, E80-20, E110-14 HIGH PRESSURE RECIPROCATING PUMPS

A high performance reciprocating pump line suited for varied and tough applications that require dependable flow and pressure.

The E Series combines Pentair's manufacturing expertise and understanding of applications to provide a pump that is perfect for every high pressure job. At Pentair, we know what you need and we deliver. For more details, contact your Pentair sales representative or customer service at 419-289-1144.





	SPECIFICATIONS																		
	pa	pa	_			Size in Inches (Millimeters)													
Catalog Number	Maximum Rat Pressure PSI (BAR)	Maximum Rat Capacity GPM (LPM)	Gear Reductio Ratio	Temperature Rating °F (°C)	Cylinder Bore	Piston Stroke	Suction Size (NPT)	Discharge Size (NPT)	Input Shaft*	Keyway*	Weight Lbs. (Kg)	A	В	С	D	E	F	G	Diameter of Mounting Hole
E54-30 Triplex	3000 207	54 204	3.95 to 1	160 71	1.750 44.45	3.750 95.25	3 76.20	1 ¼ 31.75	1 5/8 41.3	3/8 x 3/16 9.53 x 4.76	525 238	21 533.4	36.25 920.75	17 431.8	14 355.6	7.5 190.5	16 406.4	10.38 263.65	.75 19.05
E70-23 Triplex	2300 159	70 265	3.95 to 1	160 71	2.000 50.80	3.750 95.25	3 76.20	1 1⁄4 31.75	1 5/8 41.3	3/8 x 3/16 9.53 x 4.76	525 238	21 533.4	36.25 920.75	17 431.8	14 355.6	7.5 190.5	16 406.4	10.38 263.65	.75 19.05
E80-20 Triplex	2000 138	80 303	3.95 to 1	160 71	2.125 53.97	3.750 95.25	3 76.20	1 ¼ 31.75	1 5/8 41.3	3/8 x 3/16 9.53 x 4.76	525 238	21 533.4	36.25 920.75	17 431.8	14 355.6	7.5 190.5	16 406.4	10.38 263.65	.75 19.05
E110-14 Triplex	1477 50	110 416	3.95 to 1	160 71	2.500 63.50	3.750 95.25	3 76.20	1 1/4 31.75	1 5/8 41.3	3/8 x 3/16 9.53 x 4.76	525 238	21 533.4	36.25 920.75	17 431.8	14 355.6	7.5 190.5	16 406.4	10.38	.75 19.05

*Hydraulic driven unit shown. Shaft drive available.





FLUID-END COMPONENTS

- 1. Cylinder body of high-strength ductile iron.
- Cylinders are tapered steel shells with supersmooth, hard chrome oxide ceramic coating. Easily replaceable.
- 3. Piston cups are a proprietary HSN material with aramid fiber.
- Piston assembly is made up of stainless steel and bearing bronze. The piston hub has 5/8" NC pulling threads to ease replacement of piston cups.
- Abrasion resistant valve assemblies with replaceable polyurethane insert and stainless steel valve spring.
- 6. Valve and cylinder caps are steel with molded nitrile seals.
- Suction & discharge located for easy service. Large threaded suction openings on sides and/or front. Discharge openings are flanged and tapped.

POWER-END COMPONENTS

- Gearcase of rugged cast iron protects the gears and serves as oil reservoir for continuous lubrication. Cover section quickly removable for easy service.
- Pinion & main gear are helical cut and machined from high-strength alloy steel, and can rotate in either direction. Integral pinion shaft is also machined from high-strength alloy steel.
- 10. Automotive type crankshaft is forged from alloy steel.
- 11. Shaft bearings feature tapered roller bearings.
- 12. Crankshaft journal bearings are automotive type, steel-backed inserts.
- Connecting links are cast iron (D35) or ductile iron with replaceable bronze wrist-pin bearings. Wrist pins are press-fitted into the crossheads.
- Crossheads/piston "pony" rods: Heavy-duty ductile iron crossheads "pony" rods are smoothly-ground and highly-polished stainless steel, threaded and pinned axially to crosshead.
- 15. Continuous splash lubrication is provided during either direction of rotation.
- 16. Oil seals for "pony" rods are designed for quick and easy replacement without removing the fluid end.

	E54-30										
CDM		Horsepower/Kilowatts Required For:									
LPM	RPM	1800 PSI 124 BAR	2100 PSI 145 BAR	2400 PSI 165 BAR	2700 PSI 186 BAR	3000 PSI 207 BAR					
30	1012	37	43	49	55	62					
113		28	32	36	41	46					
36	1215	44	52	59	66	74					
136		33	39	44	49	55					
42	1417	51	60	69	79	86					
158		38	45	51	59	64					
48	1620	59	69	79	89	98					
181		44	51	59	66	73					
54	1823	66	79	89	100	111					
204		49	59	66	75	83					

HORSEPOWER REQUIREMENTS

	E80-20										
CDM			Horsepow	er/Kilowatts Rec	quired For:						
LPM	RPM	1200 PSI 83 BAR	1400 PSI 97 BAR	1600 PSI 110 BAR	1800 PSI 124 BAR	2000 PSI 138 BAR					
40	914	33	38	44	49	55					
151		24	29	33	37	41					
50	1143	41	48	55	62	69					
189		31	36	41	46	51					
60	1371	49	58	66	74	82					
227		37	43	49	55	61					
70	1600	58	67	77	86	96					
265		43	50	57	64	72					
80	1828	66	77	88	99	110					
303		49	57	65	74	82					

NOTE: Flow (GPM/LPM) based on 100% volumetric efficiency. Horsepower and kilowatts required are based on 85% overall efficiency.



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E70-23									
CDM		Horsepower/Kilowatts Required For:							
LPM	RPM	1900 PSI 131 BAR	2000 PSI 138 BAR	2100 PSI 145 BAR	2200 PSI 152 BAR	2300 PSI 159 BAR			
30	774	39	41	43	45	47			
113		29	31	32	34	35			
40	1032	52	55	57	60	63			
151		39	41	42	45	47			
50	1290	65	69	72	75	80			
189		48	51	54	56	60			
60	1549	78	82	86	90	95			
227		58	61	64	67	71			
70	1807	91	96	100	105	110			
265		68	72	75	78	82			

E110-14									
CDM		Horsepower/Kilowatts Required For:							
LPM	RPM	800 PSI 55 BAR	1000 PSI 69 BAR	1200 PSI 83 BAR	1400 PSI 97 BAR				
70	1157	38	48	58	67				
265		28	36	63	50				
80	1322	44	55	66	77				
302		33	4	49	57				
90	1/.97	49	62	74	86				
340	1407	37	46	55	64				
100	1652	55	69	82	96				
378	1052	41	51	61	72				
110	1017	60	75	90	106				
416	416		56	67	79				

MYERS° HPL120-30 120 GPM HIGH PRESSURE RECIPROCATING PUMP

CUTTING EDGE TECHNOLOGY

The HPL Series brings you the latest in sewer jet pump technology. The HPL keeps your truck running with industry-leading serviceability, a breakthrough in jetting. New cartridge valves, an open cradle for packing and plunger maintenance, and an external lube filter minimize maintenance time, keeping your equipment on the job making you money.



HIGH PERFORMANCE.

• True 120 GPM at 3,000 psi, not nominal. When you need the flow and pressure, it's there.

TRUE CONTINUOUS DUTY.

• The HPL120-30 is a true continuous duty pump.

WHISPER QUIET OPERATION.

• Heavy castings, urethane valve inserts, internal gear reduction all translate to industryleading noise reduction.

Product Specifications						
Temp. Rating ºF (ºC)	Sizes in inches (mm)					Approx.
	Stroke Length	Suction Size NPT	Discharge Size NPT	Input Shaft Diameter	Keyway	Weight lbs. (kg)
140 (60)	4.00 (101.6)	4.00 (101.6)	2.5 (63.5)	2.5 (63.5)	.875 x .875 x 2.5 (22.2 x 22.2 x 63.5)	2880 (1302)

Product Capabilities						
Catalog Number	Max. Rated Capacity GPM (LPM)	Max. Rated Pressure psi (bar)	Max. Rated Speed RPM	Plunger Diameter inches (mm)	Max. Power Input HP (kW)	Fluid End Material
HPL120-30	125 (475)	3000 (206.7)	1770	2.75 (69.85)	274 (204.4)	Ductile Iron

Performance Data						
Flow Capacity	Speed	Horsepower (Kilowatts) required for: psi (bar)				
GPM (LPM)	RPM	1000 (69.0)	1500 (103.4)	2000 (137.9)	2500 (172.4)	3000 (206.9)
125 (475)	1770	91 (68)	136.5 (102)	182 (136)	227.5 (169.7)	274 (204)
120 (454)	1691	87.6 (65.4)	131.4 (98.1)	175.2 (130.7)	219 (163.4)	263 (196)
100 (379)	1394	72.3 (53.9)	108.5 (80.8)	144.6 (107.8)	180.7 (134.8)	219 (163.4)
80 (303)	1115	57.8 (43.1)	86.7 (64.6)	115.6 (86.2)	144.5 (107.8)	175 (130.6)
60 (227)	837	43.4 (32.3)	65.1 (48.5)	86.8 (64.6)	108.5 (80.9)	131.5 (98.1)

Power based on 85% mechanical efficiency and 94% to 95% volumetric efficiency. Displacement based on 100% volumetric efficiency. Internal gear reduction is 4.087 to 1.0.

Above performance data based on following equations:

Liquid HP =	GPM x psi 1714	Overall Eff.=	
Vol. Eff. =	Actual GPM	Mech. Eff. =	

Theor, GPM

Mech. Eff. = Overall Pump Eff.

Output Liq. HP



ADVANTAGES BY DESIGN



DIMENSIONS







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