

MAXIMATOR® AIR DRIVEN Liquid Pumps

PPO SERIES PRESSURES FROM 60 TO 14,500 PSI

S & S-D SERIES PRESSURES FROM 105 TO 14,500 PSI

PP SERIES PRESSURES FROM 60 TO 60,000 PSI

L SERIES PRESSURES FROM 165 TO 101,000 PSI

L-D SERIES PRESSURES FROM 165 TO 38,425 PSI

GX SERIES PRESSURES FROM 540 TO 22,500 PSI

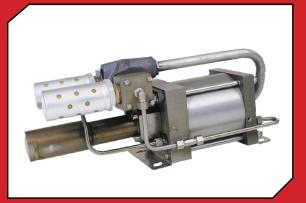
GPD SERIES PRESSURES FROM 450 to 43,500 PSI

PPSF SERIES PRESSURES FROM 60 TO 14,500 PSI

LSF SERIES PRESSURES FROM 165 TO 23,200 PSI

MAXPRO CUSTOM DESIGNED Power Packs, Pump Skids, Portable Test Carts and Test Benches







MAXIMATOR®

Liquid Pumps

AIR DRIVEN FROM 60 PSI TO 101,000 PSI

Maximator high efficiency pumps are ideal for a broad variety of oil, water, and chemical applications. They feature a large air piston joined to a smaller diameter plunger. The pressure ratio is the ratio of these two areas and is the method of determining maximum output pressure. Higher pressures are obtained by using higher pressure ratios. Maximator model numbers reflect the pump's nominal pressure ratios, while the technical data indicates exact ratios.

Maximator air driven pumps cycle automatically. The pump stops automatically when the output pressure forces and the air drive forces are equal. The pump restarts with a slight drop in the outlet pressure or an increase in the air drive pressure.

FEATURES

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- Easy to install and operate
- Pressure maintained without energy consumption
- A safe option for hazardous areas...no electrical power required
- Pilot air control for remote operation standard on many models
- External spool valve for quick maintenance on most models •
- Dry Air Spool valve option available for severe service application
- Chemical service pumps are standard with separation fitting .
- Optional seal materials, port connections, double acting, multiple air heads, single stroke, adjustable stroke, special pumps, just ask!

HOW TO SELECT A MAXIMATOR PUMP

- 1. Consider the type of fluid to be pumped and compatible materials.
- 2. Know the available minimum plant air pressure
- 3. Determine the required outlet pressure.
- 4. Determine the required flow rate.
- 5. Feel free to consult your distributor or MAXPRO for application assistance.

Flow rates for each pump, at various air drive pressures and outlet pressures, are provided in the catalog. These pumps run very rapidly at no load and slow down as pressure increases. The pump will eventually come to a stop at the "stall" pressure, which is the air drive pressure times the pressure ratio of the pump. At this "stall" point there is no flow and no air consumption. The pump will hold the outlet pressure indefinitely and will only stroke if the outlet pressure drops or the air drive pressure is increased.

INSTALLATION AND MAINTENANCE

- Maximator pumps can be installed in any position, but vertical is best for longest seal life.
 - All connections to the pump, both liquid (inlet and outlet) and air drive lines, must be run with equal or greater size than the connections to the pump.
- The maximum recommended height of a pump suction above the fluid level is 10 ft. for L pumps, 7 ft. for S pumps, and 3 ft. for PPO and PP pumps. Operate pump slowly during initial prime.
- Drive air should be filtered between 5µ and 40µ and have a maximum dewpoint of 50°F. Very wet air will wash out lubricant and cause exhaust icing. Very dry air (dew point below 0°F) will dry out lubricant and cause premature failure of spool O-rings and requires the use of the Dry Air Spool option.
- Pumped liquids should be filtered at 100µ or better, viscosity between 1-100 cst.
- Pump performance is affected by many operating conditions. Extreme temperatures, pressures, and high duty cycles will increase maintenance frequency.
- All units are lubricated at the factory with silicone free semi-synthetic grease. After 2-3 months of normal (50% duty) operation, the standard spool seals should be inspected for wear and re-lubricated. Based on this inspection, future maintenance intervals can be planned and further disassembly and lubrication of other moving seals may be necessary. Optional Dry Air Spool seals require less maintenance.
- MAXPRO offers complete technical and service support for all Maximator pumps Customer service is our priority!

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MAXPRO TECHNOLOGIES

OIL or OIL/WATER SERVICE

PPO pumps are lightweight and rugged making them ideal for portable power packs and are available in eight pressure ratios as listed below. PPO pumps are single acting, single air drive head.

- Anodized aluminum pump heads on the PPO4-PPO12, cast iron pump heads on the PPO22-PPO189. Tool steel plungers and polyurethane seals on all.
- All PPO series pumps are standard with bottom inlet. For a side inlet, add -S to the catalog number. (PPO22 and above only.)
- Maximum air drive pressure is 145 psi. PPO pumps require less drive pressure because the pump is driven in both directions with no spring under the piston. This design reduces noise and provides less chance of cavitation.
- Minimum air drive pressure 15 psi.
- For air control option, add -ACM to the catalog number.
- Double acting are available as a special order.

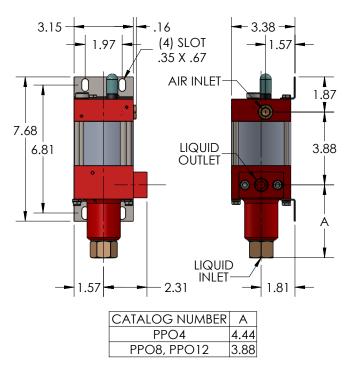
TECHNICAL DATA

NOTE:

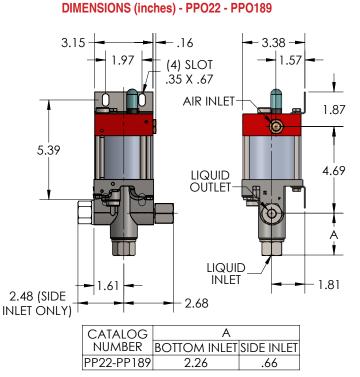
CATALOG	PRESSURE	MAXIMUM OUTLET	DISPL. PER	CONNE (FNP)	WEIGHT	
NUMBER	RATIO	O PRESSURE CYCLE (PSI) (IN. ³) INLET		INLET	OUTLET	(LBS.)
PPO4	1:4	580	1.86	1	1⁄2	
PPO8	1:9	1,305	0.90	3⁄4	1⁄2	6
PPO12	1:14	2,030	0.57	3⁄4	1⁄4	
PPO22	1:29	4,205	0.28	3/8	1⁄4	
PPO37	1:47	6,815	0.17	3/8	1⁄4	
PPO72	1:88	12,760	0.09	3/8	1⁄4	7
PPO111	1:133	14,500	0.06	3/8	1⁄4	
PPO189	1:225	14,500	0.04	3/8	1⁄4	

Air drive inlet connection on all PPO pumps is 1/4" FNPT. Maximum allowable oil temperature is 140°F. Air section temperature rating: 0°F to 140°F.

DIMENSIONS (inches) - PPO4 - PPO12

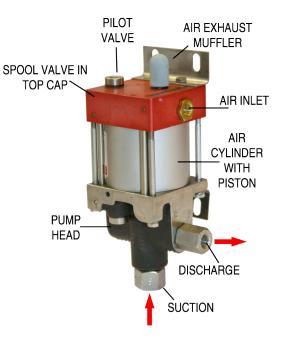


See page 7 PP Pump Flow Page for PPO Flow Chart



SERIES PRESSURES FROM

60 TO 14,500 PSI



OIL or OIL/WATER SERVICE

S pumps are compact and lightweight and are designed for simple installation in both static and portable applications. Available in six pressure ratios, S pumps are ideal for applications demanding fast response times.

- S pumps are single acting, single air drive head types.
- Cast iron pump heads, carbon steel plungers and polyurethane seals.
- All S pumps are standard with side inlet only.
- Maximum air drive pressure is 145 psi.
- Minimum air drive pressure 15 psi.
- For air control option, add -AC to the catalog number.
- No pilot port. Internally piloted.

TECHNICAL DATA S PUMPS

CATALOG	PRESSURE	MAXIMUM OUTLET	DISPL. PER CY-		CTIONS 「- IN.)	WEIGHT
NUMBER	RATIO	PRESSURE (PSI)			OUTLET	(LBS.)
S15	1:17	2,465	1.73	3⁄4	1⁄2	
S25	1:25	3,625	1.20	1⁄2	1⁄2	
S35	1:39	5,655	0.77	1⁄2	1⁄2	20
S60	1:61	8,845	0.49	1⁄2	1⁄2	20
S100	1:108	14,500	0.27	1⁄2	1⁄2	
S150	1:156	14,500	0.19	1⁄2	1⁄2	

S-D pumps are compact and lightweight and are designed for simple installation in both static and portable applications. Available in six pressure ratios, S-D pumps are ideal for high flow applications. The S-D pumps are the double acting version of the S pumps.

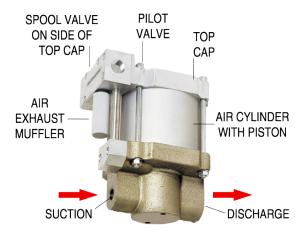
- S-D pumps are double acting, single air drive head types.
- Cast iron pump heads, carbon steel plungers and polyurethane seals.
- All S-D pumps are standard with side inlets only.
- There are two inlets (same side) and two outlets (same side).
- Maximum air drive pressure is 145 psi.
- Minimum air drive pressure 15 psi.
- For air control option, add -ACP to the catalog number.
- All S-D pumps come with an unregulated pilot port, 1/8" FNPT, in the top cap. This feature provides more accurate pressure control and is an ideal location for control instrumentation.

TECHNICAL DATA S-D PUMPS

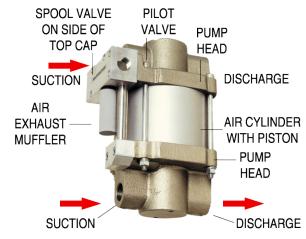
		MAXIMUM PRESSURE OUTLET		CONNE (FNP1	WEIGHT	
NUMBER	RATIO	PRESSURE (PSI)	CYCLE (IN. ³)	INLET	OUTLET	(LBS.)
S15-D	1:16	2,320	3.48	3⁄4	1⁄2	
S25-D	1:24	3,480	2.39	1⁄2	1⁄2	
S35-D	1:38	5,510	1.54	1⁄2	1⁄2	32
S60-D	1:60	8,700	0.98	1⁄2	1⁄2	32
S100-D	1:107	14,500	0.55	1⁄2	1⁄2	
S150-D	1:155	14,500	0.38	1⁄2	1⁄2	

NOTE:

Air drive inlet connection on all S and S-D pumps is ½" FNPT. Maximum allowable oil temperature is 140°F. Air section temperature rating: 0°F to 140°F.



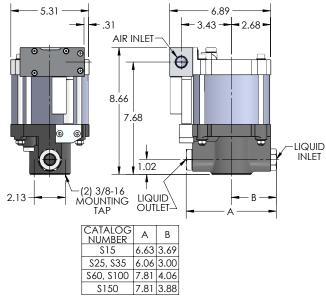


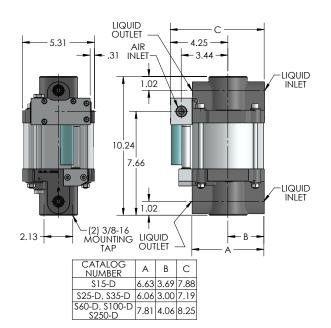




FLOW CHART - S SERIES

CATALOG	SAMPLE AIR DRIVE PRESSURE					OUTLET PRE	SSURE (PSI)				
NOMBER	(PSI)	0	500	1000	1500	2000	3000	4000	5000	7500	10000
S15	60 90	555 575	380 480	25 310	60						
S25	60 90	400 410	330 370	175 305	205	80					
S35	60 90	255 265	230 250	185 228	125 200	50 165	65				
S60	60 90	162 168	153 163	138 156	120 147	90 137	35 108	71	25		
S100	60 90	92 95	89 94	86 92	82 89	76 87	60 82	43 73	26 63	36	
S150	60 90	62 65	61 64	60 63	59 62	56 61	53 60	47 57	42 53	20 42	27





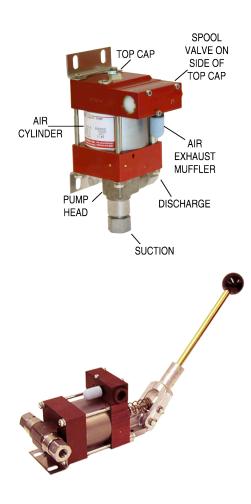
FLOW CHART - S-D SERIES

CATALOG NUMBER	SAMPLE AIR DRIVE PRESSURE					OUTLET PRES	SSURE (PSI)				
	(PSI)	0	500	1000	1500	2000	3000	4000	5000	7500	10000
S15-D	60 90	1050 1075	650 900	520							
S25-D	60 90	715 730	575 660	280 530	340	90					
S35-D	60 90	455 465	405 440	315 400	205 345	75 280	90				
S60-D	60 90	285 290	270 285	240 270	210 265	160 235	60 185	120	40		
S100-D	60 90	160 165	153 163	147 157	141 154	130 150	110 140	80 126	50 111	60	
S150-D	60 90	110 120	105 115	105 115	102 110	100 107	90 100	80 95	70 90	35 70	45

FLOW RATE IN CUBIC INCHES PER MINUTE. MAXIMUM AIR CONSUMPTION: 33 SCFM @ 90 PSI (WITH 0 PSI OUTLET).

WATER or OIL SERVICE









PP pumps are compact and lightweight and feature rugged construction. They are available as single acting with either single, double, or triple air drive heads and double acting with single air drive head.

- PP4 through PP12 pumps have anodized aluminum pump heads and stainless steel plungers. PP22 through PP189 have stainless steel pump heads and plungers. All PP pumps have polyurethane seals with Buna-N O-rings standard.
- All PP series pumps are standard with a bottom inlet. For a side inlet, add -S to the catalog number. For a hand lever, add -HL (PP22 and above only.).
- Air drive pressure range is 15 145 psi.
- For air control option, add -ACM to the catalog number.
- With the hand lever option, the pump can operate with air or hand lever.
- Multiple air heads increase the effective pressure ratio of the pump. This provides higher pressure capabilities using less air pressure to achieve a given outlet pressure.

TECHNICAL DATA

Single Air Drive Head

CATALOG	PRESSURE	MAXIMUM OUTLET	DISPL. PER	CONNE (FNP	WEIGHT	
NUMBER	RATIO	PRESSURE (PSI)	CYCLE (IN. ³)	INLET	OUTLET	(LBS.)
PP4	1:4	580	1.86	1	1⁄2	
PP8	1:9	1,305	0.90	3⁄4	1⁄2	
PP12	1:14	2,030	0.57	3⁄4	1⁄2	
PP22	1:28	4,060	0.28	³ / ₈	1⁄4	7
PP37	1:46	6,670	0.17	³ / ₈	1⁄4	/
PP72	1:86	12,470	0.09	³ / ₈	1⁄4	
PP111	1:130	15,000	0.06	³ / ₈	1⁄4	
PP189	1:220	31,900	0.04	³ / ₈	14 HP	

Single Air Drive Head with Hand Lever

CATALOG PRESSURE		MAXIMUM OUTLET	DISPL. PER	CONNE (FNP1	WEIGHT	
NUMBER	RATIO	PRESSURE (PSI)	CYCLE (IN. ³)	INLET	OUTLET	(LBS.)
PP22-HL	1:28	4,060	0.28	³ / ₈	1⁄4	
PP37-HL	1:46	6,670	0.17	³ / ₈	1⁄4	
PP72-HL	1:86	12,470	0.09	³ / ₈	1⁄4	9
PP111-HL	1:130	15,000	0.06	³ / ₈	1⁄4	
PP189-HL	1:220	31,900	0.04	³ / ₈	1⁄4 HP	

Double Air Drive Head

CATALOG	PRESSURE	MAXIMUM OUTLET	DISPL. PER	CONNE (FNPT	CTIONS - IN.)	WEIGHT	
NUMBER	RATIO	PRESSURE (PSI)	CYCLE (IN. ³)	INLET	OUTLET	(LBS.)	
PP111-2	1:261	36,250	0.06	3/8"	14 HP	9	
PP189-2	1:440	60,000	0.04	3/8"	14 HP	9	

Triple Air Drive Head

	CATALOG	PRESSURE	MAXIMUM OUTLET	DISPL. PER		CTIONS - IN.)	WEIGHT				
	NUMBER	RATIO	PRESSURE (PSI)	CYCLE (IN. ³)	INLET	OUTLET	(LBS.)				
	PP111-3	1:391	36,250	0.06	³ / "	14 HP	9				
	PP189-3	1:660	60,000	0.04	³ / ₈ "	1⁄4 HP	9				
Ν	NOTE: Air drive inlet connection on all PP pumps is ¼" FNPT.										

Air drive inlet connection on all PP pumps is 1/4" FNPT.

All connections listed are FNPT unless otherwise noted. Maximum allowable oil temperature is 140°F. Air section temperature rating: 0°F to 140°F.

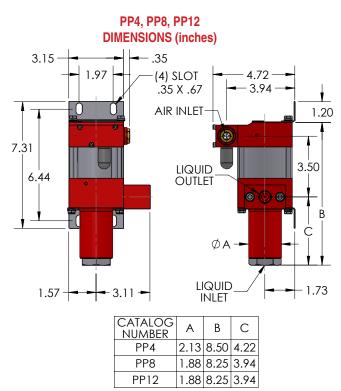


FLOW CHART - PP SERIES

CATALOG	SAMPLE AIR DRIVE					OUTLE	T PRESSUR	E (PSI)				
NUMBER	PRESSURE (PSI)	0	500	1500	3000	5000	7500	10000	15000	25000	40000	55000
PP4	60 90	885 905										
PP8	60 90	422 430	50 240									
PP12	60 90	272 275	160 218									
PP22	60 90	132 136	110 126	22 82							Above 35, intermitten	
PP37	60 90	81 83	74 80	47 68	37							
PP72	60 90	43 44	42 43	37 41	22 36	3 24	3					
PP111	60 90	28 29	27 28	26 27	20 26	12 22	2 16	8				
PP189	60 90	17 17	15 17	14 17	13 16	12 15	9 12	5 11	6			
PP111-2	60 90	21 21	20 21	20 20	20 20	19 19	16 17	15 16	9 12			
PP189-2	60 90	12 12	12 12	12 12	11 12	11 12	10 11	10 11	7 10	1 7		
PP111-3	60 90	18 19	18 19	18 19	17 18	17 18	15 16	14 16	10 14	8		
PP189-3	60 90	11 11	11 11	11 11	10 11	10 11	10 11	9 10	9 10	6 8	5	

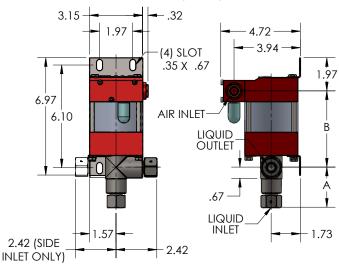
FLOW RATE IN CUBIC INCHES PER MINUTE.

MAXIMUM AIR CONSUMPTION FOR "PP" pumps: 20 SCFM @ 90 PSI (WITH 0 PSI OUTLET). MAXIMUM AIR CONSUMPTION FOR "PP-2" pumps: 30 SCFM @ 90 PSI (WITH 0 PSI OUTLET). MAXIMUM AIR CONSUMPTION FOR "PP-3" pumps: 35 SCFM @ 90 PSI (WITH 0 PSI OUTLET).



FLOW RATES SHOWN ARE FOR 1-10 CST FLUIDS.

PP22-189 DIMENSIONS (inches)



CATALOG	A	D	
NUMBER	BOTTOM INLET	SIDE INLET	В
PP22-PP189	2.38	.71	4.53
PP111-2, PP189-2	2.38	.71	6.93
PP111-3, PP189-3	2.38	.71	9.33

L pumps are available as single acting pumps with either a single or double air drive head and double acting with single air drive head (See L-D).

- L pumps have stainless steel pump heads and 17-4 plungers.
- All L pumps have UHMWPE (Ultra High Molecular Weight Polyethylene) seals and Viton² O-rings (-VE), except as noted.
- L pumps come standard with bottom or side inlet. For a side inlet, add -S to the catalog number.
- Air drive pressure range is 15-145 psi unless limited by outlet pressure.
- Air drive inlet is 1/2" FNPT.
- For air control option, add -ACP to the catalog number.
- All L pumps come with an unregulated pilot port, 1/8" FNPT, in the top cap. This
 feature provides more accurate pressure control and is an ideal location for control
 instrumentation.
- All L pumps are available with a double air drive head. This doubles the pressure ration of the pump, allowing the use of a lower ratio base pump, to provide higher flow rates. It is also used to achieve a given outlet pressure with less air drive pressure.

TECHNICAL DATA

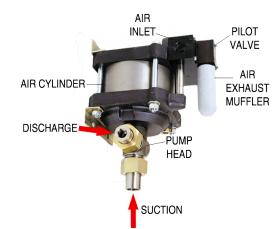
Single Air Drive Head

CATALOG	PRESSURE	MAXIMUM OUTLET	DISPL. PER CY-	CONNECTIO	ONS (FNPT - IN.)	WEIGHT
NUMBER	RATIO	PRESSURE (PSI)	CLE (IN.3)	INLET	OUTLET ¹	(LBS.)
L10-VE	1:11	1,595	5.49	1	1/2	36
L15-VE	1:16	2,320	3.78	1	1/2	
L25-VE	1:28	4,060	2.15	1⁄2	1/2	32
L35-VE	1:40	5,800	1.49	1⁄2	1⁄2	52
L60-VE	1:63	9,135	0.94	1⁄2	1/2	
L100-VE	1:113	15,000	0.54	1⁄2	1/2	
L150-VE	1:151	21,025	0.40	1⁄2	¼ HP	
L250-VE*	1:265	38,425	0.23	1⁄2	1⁄4 HP	30
L300-VE*	1:314	45,530	0.20	1⁄2	1⁄4 HP	
L400-VE*	1:398	57,710	0.15	1⁄2	¼ HP	
L500-S	1:519	65,250	0.12	1⁄2	1⁄4 HP	

Double Air Drive Head

CATALOG	PRESSURE	MAXIMUM OUTLET	DISPL. PER	CONNE	CTIONS (FNPT - IN.)	WEIGHT
NUMBER	RATIO	PRESSURE (PSI)	CYCLE (IN. ³)	INLET	OUTLET ¹	(LBS.)
L10-2-VE	1:22	3,190	5.49	1	1/2	46
L15-2-VE	1:32	4,640	3.78	1	1/2	40
L25-2-VE	1:56	8,120	2.15	1⁄2	1/2	42
L35-2-VE	1:80	11,600	1.49	1⁄2	1/2	42
L60-2-VE	1:126	15,000	0.94	1⁄2	1/2	
L100-2-VE*	1:226	30,450	0.54	1⁄2	¼ HP	40
L150-2-VE*	1:300	42,050	0.40	1⁄2	1⁄4 HP	
L250-2-VE*	1:530	60,000	0.23	1⁄2	¼ HP	
L300-2-VE*	1:628	60,000	0.20	1⁄2	1⁄4 HP	
L400-2-VE*	1:796	60,000	0.15	1⁄2	¼ HP	49
L400-2S-5U	1:796	79,750	0.15	1⁄2	⁵ / ₁₆ UHP	
L500-2S-5U-771	1:1038	101,500	0.12	1⁄2	⁵ / ₁₆ UHP	









NOTE: L500 pumps have polyurethane seals and Buna-N O-rings and are available side inlet only. *These pumps have UHMWPE seals and Buna-N O-rings. Maximum allowable oil/water temperature is 140°F. Air section temperature rating: 0°F to 140°F. *Viton is a registered trademark of E.I. DuPont de Nemours & Co., Inc.



FLOW CHART - L SERIES

CATALOG	SAMPLE AIR DRIVE PRES-					OUTLE	ET PRESSUR	E (PSI)				
NUMBER	SURE (PSI)	0	500	1500	3000	5000	7500	10000	15000	25000	40000	55000
L10-VE	60 90 120	1100 1125 1150	350 790 915									
L15-VE	60 90 120	775 790 800	540 650 705	280								
L25-VE	60 90 120	435 445 450	365 410 425	60 265 340	90							
L35-VE	60 90 120	300 305 310	270 290 300	150 240 270	95 180							
L60-VE	60 90 120	192 195 200	182 190 195	145 173 185	45 130 158	43 105	10					
L100-VE	60 90 120	108 110 113	105 108 110	97 105 107	78 95 103	37 78 92	47 73	5 48				000 psi for t duty only
L150-VE	60 90 120	81 83 84	79 82 83	76 80 82	66 75 78	49 67 73	19 53 66	35 55	25			
L250-VE	60 90 120	46 47 48	45 46 47	44 45 47	42 44 46	37 43 45	26 40 43	20 36 41	2 26 34	17		
L300-VE	60 90 120	39 40 41	38 39 40	37 38 39	36 38 38	33 37 38	29 35 37	23 32 36	10 26 32	8 21		
L400-VE	60 90 120	30 31 32	29 31 32	29 31 31	28 30 31	27 30 31	26 29 30	23 27 29	15 24 27	15 22	8	
L500-S	60 90 120	23 24 24	23 24 24	22 23 24	21 23 23	21 23 23	20 22 23	19 22 23	16 20 22	8 15 19	6 13	5
L10-2-VE	60 90 120	880 890 900	720 800 840	350 570								
L15-2-VE	60 90 120	615 625 630	550 575 600	200 410 500	225							
L25-2-VE	60 90 120	345 350 355	330 335 345	265 300 320	60 208 265	15 150						
L35-2-VE	60 90 120	240 242 245	230 232 235	210 225 230	115 190 210	115 170	95					
L60-2-VE	60 90 120	150 155 157	148 152 154	145 147 152	120 136 145	70 117 133	2 80 112	33 82	8			
L100-2-VE	60 90 120	86 87 89	84 86 88	82 84 86	77 82 84	72 78 82	53 70 77	30 61 72	36 57	13		
L150-2-VE	60 90 120	64 65 66	64 65 66	63 64 65	60 62 64	57 60 63	50 57 61	38 53 58	14 41 51	9 32		
L250-2-VE	60 90 120	37 37 37	36 36 37	36 36 36	35 36 36	35 36 36	34 35 36	32 34 35	27 31 34	12 25 30	10 21	9
L300-2-VE	60 90 120	31 31 31	31 31 31	30 31 31	30 30 31	29 30 30	29 30 30	28 29 30	26 27 29	16 23 27	14 21	2 14
L400-2-VE	60 90 120	24 24 25	24 24 25	23 24 25	23 24 24	23 24 24	22 23 24	22 23 23	21 23 23	14 20 22	5 15 19	10 16
L500-2-S	60 90 120	18 19 19	18 18 19	18 18 18	18 18 18	18 18 18	17 18 18	17 18 18	17 17 18	14 16 17	11 14 16	5 11 14

FLOW RATE IN CUBIC INCHES PER MINUTE. MAXIMUM AIR CONSUMPTION FOR "L" pumps: 45 SCFM @ 90 PSI (WITH 0 PSI OUTLET). MAXIMUM AIR CONSUMPTION FOR "L-2" pumps: 80 SCFM @ 90 PSI (WITH 0 PSI OUTLET).

SERIES PRESSURES FROM 165 to 101,000 PSI





DIMENSIONS (inches) Single Air Drive Head

CATALOG NUMBER	A	AS	В	С	D	E	F
L10-VE L15-VE	12.19		8.25	5.06	6.88	7.81	
L25-VE L35-VE	11.62	9.75	8.25	3.63	6.88	7.81	3.19
L60-VE L100-VE L150-VE	12.13	10.19	8.38	3.44	6.88	7.81	3.81
L250-VE L300-VE L400-VE	11.81	10.25	8.38	4.00	6.88	7.81	3.31
L500-S	15.69		12.38	4.00	6.88	7.81	

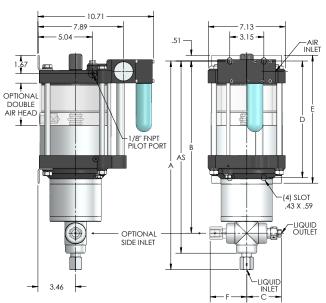
Double Air Drive Head

CATALOG NUMBER	A	AS	В	с	D	E	F
L10-2-VE L15-2-VE	16.12	13.63	12.13	3.88	10.81	11.81	4.38
L25-2-VE L35-2-VE	15.50	13.75	12.13	3.63	10.81	11.81	3.19
L60-2-VE	16.00	14.06	12.38	3.44	10.81	11.81	3.81
L100-2-VE L150-2-VE	15.50	14.00	12.25	4.00	10.81	11.81	3.81
L250-2-VE L300-2-VE L400-2-VE L500-2-S	19.63	18.13	16.25	2.75	10.81	11.75	3.38

NOTE: ¹ Mounting hole dimensions. Dimension are subject to change. Consult factory.

10.71 -(4) SLOT .43 X .59 - 7.89 7.13 5.04 -- 3.15 -.51 AIR INLET 1.67 OPTIONAL DOUBLE AIR HEAD b 1 В -1/8" FNPT PILOT PORT AS Ð TT ⊕ OPTIONAL SIDE INLET -LIQUID OUTLET -LIQUID INLET - 3.46 - C

L10-VE THROUGH L400-VE AND L10-2-VE THROUGH L150-2-VE



L500-S AND L250-2-VE THROUGH L500-2-S



L-D pumps are double acting versions of the workhorse L series pumps.

- L-D pumps deliver approximately 50% more flow with less pulsation.
- All are single air head style, 8 pressure ratios available.
- Stainless steel bodies and plunger with UHMWPE (Ultra High Molecular Weight Polyethylene) seals and Viton² O-rings (-VE).
- L10D-L35D pumps are standard with bottom inlet. For a side inlet, add -S. .
- L60-DS L250DS pumps are only available with side inlet. .
- Operating pressure range is 15-145 psi. .
- For air control option, add -ACP to the catalog number.
- All L-D pumps come with an unregulated pilot port, 1/8" FNPT. This standard feature allows easy on/off pump control with a very small valve or pilot port.

TECHNICAL DATA

CATALOG	PRESSURE	MAXIMUM OUTLET	DISPL. PER		ECTIONS PT (IN.)	WEIGHT	
NUMBER	RATIO	PRESSURE (PSI)	CYCLE (IN. ³)	INLET (2)	OUTLET (2)	(LBS.)	
L10D-VE	1:10	1,450	10.98	1	1/2	40	
L15D-VE	1:15	2,175	7.56	1	1/2	48	
L25D-VE	1:27	3,915	4.31	1⁄2	1/2	42	
L35D-VE	1:40	5,800	2.99	1⁄2	1/2	42	
L60DS-VE	1:63	9,135	1.92	1/2	1/2		
L100DS-VE	1:113	15,225	1.07	1⁄2	1⁄2	07	
L150DS-VE	1:151	21,025	0.81	1⁄2	1⁄4 HP	37	
L250DS-VE	1:265	38,425	0.46	1⁄2	14 HP		



NOTE: Air drive inlet connection on all L-D pumps is 1/2" FNPT. Air pilot connection is 1/8" and is required for operation. Maximum allowable liquid temperature is 140°F. Air section temperature rating: 0°F to 140°F. Consult factory for L-D pump dimensions. ²Viton is a registered trademark of E.I DuPont de Nemours & Co., Inc.

FLOW CHART - L-D SERIES

CATALOG NUMBER	SAMPLE AIR DRIVE PRESSURE	IVE OUTLET PRESSURE (PSI)										
	(PSI)	0	500	1000	1500	2000	3000	4000	5000	7500	10000	15000
L10D-VE	60 90	1700 1750	650 1200									
L15D-VE	60 90	1150 1200	775 1000	550								
L25D-VE	60 90	660 680	580 630	385 540	120 220	220						
L35D-VE	60 90	460 460	420 450	350 415	250 370	140 300	140					
L60D-VE	60 90	300 300	285 290	260 285	230 270	190 250	100 200	135				
L100D-VE	60 90	165 165	162 163	155 161	150 160	140 157	120 134	97 132	65 120	69		
L150D-VE	60 90	125 125	123 124	120 123	116 122	113 121	103 117	90 110	77 103	32 76	50	
L250D-VE	60 90	70 72	69 71	68 70	67 69	66 68	63 67	62 66	60 66	50 62	38 56	7 38

FLOW RATE IN CUBIC INCHES PER MINUTE. MAXIMUM AIR CONSUMPTION: 45 SCFM @ 90 PSI (WITH 0 PSI OUTLET).



GX pumps are high-flow pumps designed for rugged installations and built with environmental resistant materials. They are ideal for offshore applications with stainless steel wetted parts and corrosive resistant external components.

- GX series pumps have stainless steel bodies and plunger with UHMWPE (Ultra High Molecular Weight Polyethylene) seals and Viton² O-rings.
- Inlet is in end of head and outlet is on side of head.
- Operating pressure range is 15 145 psi.
- · For air control option, add -ACG to the catalog number.
- All GX pumps come with a pre-plumbed pilot port.

TECHNICAL DATA

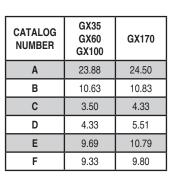
CATALOG	PRESSURE	MAXIMUM OUTLET	DISPL. PER	CONNECTIO	NS (FNPT-IN.)	WEIGHT
NUMBER	RATIO	PRESSURE (PSI)	CYCLE (IN. ³)			(LBS.)
GX35	1:36	5,220	6.71	1	3/8	
GX60	1:66	8,700	3.97	1	3/8	53
GX100	1:117	14,500	2.20	1	3/8	
GX170	1:177	22,500	2.20	1	3/8 MP	66

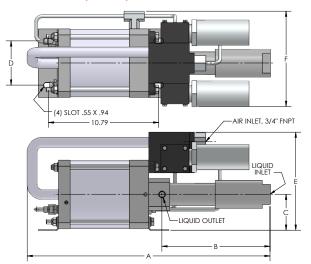
NOTE: All connections listed are FNPT unless otherwise noted Air drive inlet connection on all GX pumps is 3/4" FNPT.

Maximum allowable liquid temperature is 140°F.

Air section temperature rating: 0°F to 140°F. 2Viton is a registered trademark of E.I DuPont de Nemours & Co., Inc.

DIMENSIONS (inches)





FLOW CHART - GX SERIES

CATALOG NUMBER	SAMPLE AIR DRIVE PRESSURE		OUTLET PRESSURE (PSI)									
NOMBEN	(PSI)	0	500	1000	2000	3000	4000	5000	7500	10000	15000	
GX35	60 90	1525 1525	1400 1450	1100 1360	180 635	150						
GX60	60 90	850 850	820 840	750 815	570 720	310 590	420	180				
GX100	60 90	470 470	465 465	460 460	410 455	360 430	280 390	210 350	220			
GX170	60 90	335 335	329 332	323 330	314 329	287 319	261 308	232 293	153 254	18 183	30	

FLOW RATE IN CUBIC INCHES PER MINUTE. MAXIMUM AIR CONSUMPTION: 190 SCFM @ 90 PSI (WITH 0 PSI OUTLET). FLOW RATES SHOWN ARE FOR 1-10 CST FLUIDS.



SERIES

PRESSURES FROM

540 TO 22,500 PSI

GPD pumps are high-flow pumps designed for rugged installations and built with environmental resistant materials. They are ideal for offshore applications with stainless steel wetted parts and corrosive resistant external components.

- GPD series pumps have stainless steel bodies and plungers, UHMWPE (Ultra High Molecular Weight Polyethylene) seals and Viton² O-rings.
- Double acting design for high flow rate
- Separation sleeves to prevent contamination of the air drive.

TECHNICAL DATA

GPD Single Air Drive Head

CATALOG	PRESSURE	MAXIMUM OUTLET	DISPL. PER	CONNECTION	IS (FNPT -IN.)	WEIGHT
NUMBER	RATIO	PRESSURE (PSI)	CYCLE (IN ³)	INLET (2)	OUTLET (2)	(LBS)
GPD30	1:30	4350	31	3⁄4	3⁄4	
GPD60	1:60	8700	15.7	3⁄4	3⁄4	
GPD120	1:129	17400	7.4	3⁄4	13/16-16 (9MF)	128
GPD180	1:192	27840	4.2	1⁄4	3/4-16 (6HF)	
GPD260	1:227	40165	2.9	1/4	3/4-16 (6HF)	

GPD Double Air Drive Head

GPD30	-2	1:60	8700	31	3⁄4	3⁄4	
GPD60	-2	1:120	17400	15.7	3⁄4	13/16-16 (9MF)	
GPD120)-2	1:258	37400	7.4	3⁄4	3/4-16 (6HF)	172
GPD180)-2	1:384	43500	4.2	1⁄4	3/4-16 (6HF)	
GPD260)-2	1:554	43500	2.9	1⁄4	3/4-16 (6HF)	



NOTE: All connections listed are FNPT unless otherwise noted. Air drive inlet connection on all GPD pumps is 3/4" FNPT. Maximum allowable liquid temperature is 140°F. Air section temperature rating: 0°F to 140°F. ²Viton is a registered trademark of E.I DuPont de Nermours & Co., Inc.

FLOW CHART - GPD SERIES

CATALOG NUMBER	SAMPLE AIR DRIVE PRESSURE (PSI)		OUTLET PRESSURE (PSI)									
		0	500	1500	3000	5000	7500	10000	15000	20000	30000	40000
GPD30	60 80	2550 2775	1750 2050	375 900								
GPD60	60 80	1125 1200	950 1025	600 750	175 375							
GPD120	60 80	590 630	560 600	440 500	310 400	160 260	10 120					
GPD180	60 80	395 425	390 420	360 390	255 300	190 250	105 180	25 110				
GPD260	60 80	255 275	250 270	240 260	200 220	165 200	125 165	90 135	20 75	20		
GPD30-2	60 80	1375 1450	1150 1250	750 925	225 500							
GPD60-2	60 80	690 740	640 700	520 600	370 470	200 320	140					
GPD120-2	60 80	330 350	320 355	300 330	250 280	210 250	150 200	100 160	10 80	10		
GPD180-2	60 80	235 250	225 245	210 235	190 215	165 195	135 175	105 150	55 115	10 80	10	
GPD260-2	60 80	150 160	150 160	145 155	135 150	125 140	105 130	95 120	75 100	55 85	10 50	20

FLOW RATE IN CUBIC INCHES PER MINUTE. MAXIMUM AIR CONSUMPTION: 190 SCFM @ 90 PSI (WITH 0 PSI OUTLET).



CHEMICAL SERVICE





PPSF pumps are rugged and designed for chemical service applications. These pumps are available as single acting pumps with single air drive head and distance piece which provides a separation between the liquid and air drive sections.

- PPSF pumps have stainless steel pump heads and plungers.
- PPSF pumps have PTFE seals with Viton² O-rings.
- PPSF pumps are standard with bottom inlet. For a side inlet, add -S to the catalog number.
- Maximum air drive pressure is 145 psi. PPSF pumps require less drive pressure because the pump is driven in both directions with no spring under the piston. This design reduces noise and provides less chance of cavitation.
- Minimum air drive pressure 15 psi.
- For air control option, add -ACM to the catalog number.

TECHNICAL DATA

PPSF Single Air Drive Head and Distance Piece

CATALOG	PRESSURE	MAXIMUM OUTLET	DISPL. PER	CONNECTIO	ONNECTIONS (FNPT - IN.)		
NUMBER	RATIO	PRESSURE (PSI)	E CYCLE (IN. ³)	INLET	OUTLET	(LBS.)	
PPSF4	1:4	580	1.86	1	1/2		
PPSF8	1:9	1,305	0.90	3⁄4	1/2	15	
PPSF12	1:14	2,030	0.57	3/8	1⁄4		
PPSF22	1:28	4,060	0.28	3/8	1⁄4		
PPSF37	1:46	6,670	0.17	3/8	1⁄4	8	
PPSF72	1:86	12,470	0.09	3/8	1⁄4	0	
PPSF111	1:130	14,500	0.06	3/8	1⁄4		

NOTE: Air drive inlet connection on all PPSF pumps is 1/4" FNPT. All connections listed are FNPT unless otherwise noted. Maximum allowable liquid temperature is 140°F.

Air section temperature rating: 0°F to 140°F.

FLOW CHART - PPSF Series

CATALOG NUMBER	SAMPLE AIR DRIVE PRESSURE		OUTLET PRESSURE (PSI)						
NUMBER	(PSI)	0	500	1500	3000	5000	7500	10000	14500
PPSF4	60 90	885 905							
PPSF8	60 90	422 430	50 240						
PPSF12	60 90	272 275	160 218						
PPSF22	60 90	132 136	110 126	22 82					
PPSF37	60 90	81 83	74 80	47 68	37				
PPSF72	60 90	43 44	42 43	37 41	22 36	3 24	3		
PPSF111	60 90	28 29	27 28	26 27	20 26	12 22	2 16	8	

FLOW RATE IN CUBIC INCHES PER MINUTE.

MAXIMUM AIR CONSUMPTION: 20 SCFM @ 90 PSI (WITH 0 PSI OUTLET).

CHEMICAL SERVICE

LSF series pumps are rugged and designed for chemical service applications. These pumps are available as single acting pumps with single or double air drive head and distance piece which provides a separation between the liquid and air drive sections.

- LSF pumps have stainless steel pump heads and plungers.
- LSF pumps have PTFE seals with Viton² O-rings.
- Pumps are standard with bottom inlet. For a side inlet, add -S.
- Maximum air drive pressure is 145 psi.
- Minimum air drive pressure 15 psi.
- For air control option, add -ACP to LSF catalog number.

TECHNICAL DATA

LSF Single Air Drive Head and Distance Piece

CATALOG	PRESSURE	MAXIMUM OUTLET	DISPL. PER	CONNECTI	ONS (FNPT - IN.)	WEIGHT (LBS.)
NUMBER	RATIO	PRESSURE (PSI)	CYCLE (IN.3)	INLET	OUTLET	
LSF10	1:11	1,595	5.49	1	1/2	44
LSF15	1:16	2,320	3.78	1	1/2	44
LSF25	1:28	4,060	2.15	1/2	1/2	42
LSF35	1:40	5,800	1.49	1/2	1/2	
LSF60	1:63	9,135	0.94	1/2	1/2	
LSF100	1:113	15,225	0.54	1/2	1/2	
LSF150	1:151	21,025	0.40	1/2	1⁄4 HP	40
LSF250	1:265	23,200	0.23	1/2	1⁄4 HP	

LSF Double Air Drive Head and Distance Piece

LSF10-2	1:22	3,190	5.49	1	1/2	
LSF15-2	1:32	4,640	3.78	1	1/2	
LSF25-2	1:56	8,120	2.15	1/2	1/2	
LSF35-2	1:80	11,600	1.49	1/2	1/2	50
LSF60-2	1:126	15,000	0.94	1/2	1/2	
LSF100-2	1:226	23,200	0.54	1/2	1⁄4 HP	
FLOW CHART - I SE Series						



NOTE: Air drive inlet connection on all LSF pumps is 1/2° FNPT. Air pilot connection on all LSF pumps is 1/8° FNPT. All connections listed are FNPT unless otherwise noted. Maximum allowable liquid temperature is 140°F. Air section temperature rating: 0°F to 140°F. ²Viton is a registered trademark of E.I. DuPont de Nemours & Co., Inc.

	- LOL OGUG	5									
CATALOG	SAMPLE AIR DRIVE				OUTLET PRESSURE (PSI)						
NUMBER	PRESSURE (PSI)	0	500	1500	3000	5000	7500	10000	15000		
LSF10	60 90	1100 1125	350 790								
LSF15	60 90	775 790	540 650								
LSF25	60 90	435 445	365 410	60 265							
LSF35	60 90	300 305	270 290	150 240	95						
LSF60	60 90	192 195	182 190	145 173	45 130	43					
LSF100	60 90	108 110	105 108	97 105	78 95	37 78	47	5			
LSF150	60 90	81 83	79 82	76 80	66 75	49 67	19 53	35			
LSF250	60 90	46 47	45 46	44 45	42 44	37 43	26 40	20 36	2 26		
LSF10-2	60 90	880 890	720 800	350							
LSF15-2	60 90	615 625	550 575	200 410							
LSF25-2	60 90	345 350	330 335	265 300	60 208	15					
LSF35-2	60 90	240 242	230 232	210 225	115 190	115					
LSF60-2	60 90	150 155	148 152	145 147	120 136	70 117	2 80	33			
LSF100-2	60 90	86 87	84 86	82 8	77 82	72 78	53 70	30 61	36		



PORTABLE SYSTEMS

POWER PACKS

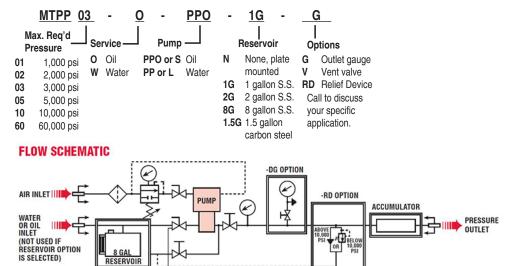
Portable systems are ideal for generating elevated hydraulic or water pressures, using only shop air, at a variety of locations throughout a facility. They are completely portable and require only a shop air line to operate if the reservoir option is selected.

A variety of pressure ranges are available to fit your specific requirements, from low pressures of 1,000 psi to high pressures of 101,000 psi. You may choose from a number of options to complete the test system best suited for your application.

Power Packs - OIL OR WATER

- Lightweight, portable
- Economical hydraulic power
- Totally self-contained package

ORDERING INFORMATION*



TEST CARTS



Test Carts - OIL OR WATER

OPTIONAL

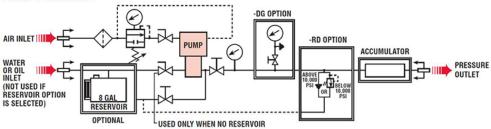
- Hydrostatic testing
 Hydraulic power
- Cycle testing
 Leak testing

ORDERING INFORMATION*

MT	TC 10	-	<u>o</u> -	L	-	<u>8GP</u> -	RD	
	. Req'd	Service —] Pump -		F	 Reservoir	 Optio	ns
01	1,000 psi	O Oil	PPO or S	Oil	Ν	None	ACC	Outlet gauge
03	3,000 psi	W Water	PP, L or	Water	2G	2 gallon S.S.	DG	Vent valve
05	5,000 psi		GX		8G	8 gallon	DV	Relief Device
10	10,000 psi					polyethylene		
60	60,000 psi				8GSS	8 gallon S.S.	RD	

USED ONLY WHEN NO RESERVOIR

FLOW SCHEMATIC









PUMP SKIDS

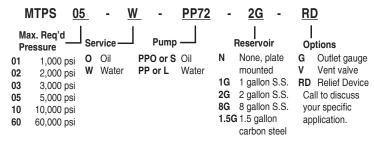
Pump Skids - OIL OR WATER

- Compact, complete packaged systems ٠
- Standard powder coated or stainless steel frame

Pump skids are compact systems with most components mounted within the boundaries of the frame. The systems can be built for water or oil service and have a control panel to contain all gauges and valves.

A variety of pressure ranges and flows are available, for testing components, ranging from 500 psi to 60,000 psi. These systems can be supplied with a reservoir or a city water valved inlet. Reservoirs come with a fill/breather cap, liquid level sight gauge and drain connection.

ORDERING INFORMATION*



POWER CUBE

FLOW SCHEMATIC (See Test Carts)

Test Benches - OIL OR WATER, AIR OR GAS

- Hydrostatic testing ٠
 - **Burst testing**

specific application.

Cycle/fatigue testing

MAXPRO test benches are designed for durability, ease of use and accessibility. These test benches can be equipped for use with oil, water, air, gas or any combination of test medium. The same test

MAXPRO test benches can be provided with manual control or push button PLC control to handle your

Test chambers can be included and can be horizontal or vertical. When specifying a test bench that is

Leak testing

to include a test chamber with a windowed door, please specify the required chamber size.

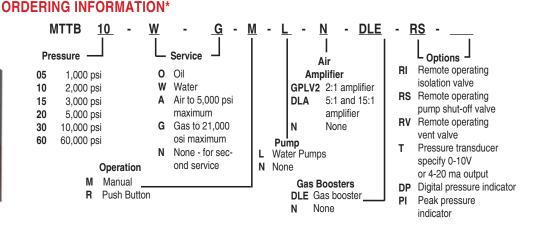
bench could be set up for hydrostatic testing with water and/or leak testing with gas.

information are shown to indicate capabilities and options. Each system is custom designed to meet specific operating requirements.



TEST BENCHES





The photos and ordering

ACCESSORIES

HIGH PRESSURE RELIEF VALVES

MT10RV - PRESSURES FROM 1,000 TO 10,000 PSI MT25RV - PRESSURES FROM 2,500 TO 25,000 PSI

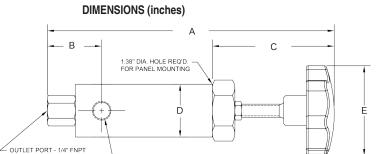
MT10RV



MT25RV



Dimension MT10RV MT25RV А 8.13" 9.94" В 1.56" 2.13" С 3.50" 1.68" D 1.50" 2.00" Е 2.50" 5/16" Allen Wrench F 1/4" FNPT (2) 1/4" H.P.



F (INLET PORT)

Catalog	Connectio	on Size	Orifice	Service	Pressure Ratin	Valve Panel	Body	
Number	Inlet	Outlet	(in.)) Service	Minimum Setting	Maximum Setting	Hole	Diameter
MT10RV	1/4" FNPT	1/4 FNPT	0.070	Liquid/Gas	1,000	10,000	1.38	1.50
MT25RV	1/4" H.P.	1/4 FNPT	0.070	Liquid/Gas*	2,500	25,000	1.625	2.00

All dimensions are for reference only and are subject to change.

When selecting multiple items, the pressure rating would be that of the lowest rated components. * Not bubble tight on gas service.

All general terms and conditions of sale, including limitations of our liability, apply to all products and services sold.

DRY AIR SPOOLS For severe duty service

In applications where very dry air or nitrogen is used to drive Maximator pumps or boosters, there is a spool seal option available to provide longer duty between maintenance.

This Dry Air Spool (DAS) option should be considered for extreme operating conditions involving air or gas drive mediums below 0°F. dewpoint, and similarly, very cold climate applications (-40°C.).

This design can be retrofitted to existing pumps and boosters as it only involves the spool, spool sleeve, and seals. The spool block remains the same. Be sure to use an appropriate tool to pull the spool sleeve! Minimum air drive with this option is 30 psig.

To order with a pump simply add - DAS to model number. To retrofit to an existing pump, order "Dry Air Spool" and specify the pump model and serial number.





HIGH PRESSURE DATA LOGGER

Maxpro Technologies offers an electronic pressure logger to simplify the recording of testing data.

The unit is designed to digitally record pressure during tests, complementing Maxpro pump and booster packaged power systems as well as other types of power systems.

- Pressure loggers are useful in any industry that has need for an easy, accurate way to record pressure tests.
- The complete Pressure Logger comes with a pressure transducer, 2 pre-formatted jump drives and instructions, including step by step instructions on how to create customized test reports.

CUSTOMER NAME ACME VALVE

PART NAME PUP JOINT

00:03

14:53:07

II 🕨 M

PASS

PART NUMBER 123654

SERIAL NUMBER 14-0124

Pressure Logger Features:

- 7" Color touch screen
- Instant Test Report
- USB Memory Port
- Ethernet Port
- 120 V 60 Hz or 230 V 50/60 Hz

MAXPRO TECHNOLOGIES

7728 KLIER DRIVE

FAIRVIEW PA 16415

WWW.MAXPROTECH.COM

- Digital Indication of Realtime Pressure and Peak Pressure
- Trending On screen
- Data Storage for import into Spreadsheets or Test Report
- Auto Peak Reset

09/17/2014 14:49:0

0:00

┥ ◀ 🔲

2000

2500

15000

Pressure ranges available from 0-100 psi to 0-100,000 psi



Dimensions					
	Maxpro Pressure Logger:				
Height	12"				
Width	10"				
Depth	8"				
Weight	12 lb.				
Transducer Cable	2 feet long				

Options Available:

Keyboard with touchpad

Thermocouple and RTD temperature sensors

Multiple transducers for different pressure ranges

Single channel logger standard, up to 10 channels optional



AIR CONTROL PACKAGES

Consisting of a filter, regulator with gauge, shut-off valve and required fittings

ACM....For all PPO, PP & PPSF pumps, and MPLV air amplifiers AC......For all S Pumps

ACP.....For all L & LSF pumps, DLA & GPLV air amplifiers and DLE gas boosters

00:02

ACG....For all GX pumps



PUMP CYCLE COUNTERS To order: add suffix to pump P/N, eq. PPO12-CCW

CCP....Panel mount, 0 - 999,999 max. cycles, 1" high x 2" wide hole *CCW*...Wall mount, 0 - 999,999 max cycles Reset button on both models Direct pump mounting is available

OTHER PRODUCTS

Valves, Fittings & Tubing

- Highest quality for superior product performance
- Standard material high strength stainless steel
- Pressures to 152,000 PSI

Air Amplifiers & Systems

- Air driven to 4,350 PSI
- Deliver increased air pressure to
 - shop floor equipment and work stations
- Require no electrical power
- Single or double acting models

Gas Boosters & Systems

- Air driven to 36,000 PSI
- Ideal for gas salvage
- Units are contaminant free
- For use with a variety of gases
- Require no lubrication or electrical power

Repair Service Available

- Guaranteed quality workmanship
- Cost effective quick turnaround
- Use original manufacturer parts
- Factory support









