

PROCON® Products

Series 1, 2, & 3 Pumps

- Positive Displacement Rotary Vane Pump
- Flow ranging from 45 to 430 liters per hour at discharge up to 1750 kPa
- Self Priming
- Maintenance Free
- Low Vibration and Pulsation Characteristics

Clamp-on or bolt-on available

- Stainless Steel, Brass and Low Lead Brass (0.25% Max Lead)
- Patented Relief Valve Configuration
- Models compatible with 48YZ Frame and 56C Frame Motors

(Adapter and Coupling required for 56C Frame Mounting)

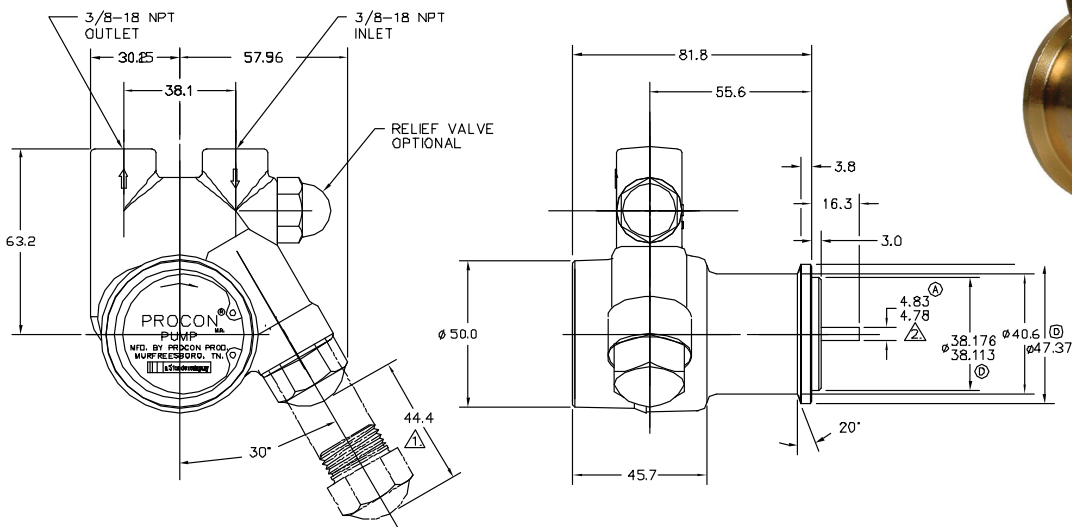


SPECIFICATIONS

Body Material	Type 303 stainless steel or brass
Capacity	45 to 425 lph
Nominal Speed	1400 RPM
Typical Horsepower Required	186 - 373 watts
Maximum Discharge Pressure	1750 kPa
Rotation (viewed from nameplate end)	Clockwise
Dry Weight	Approximately 1.13 kg
Dimensions	9cm X 8.8cm X 9.8cm
Self Priming (water)	1.8m Maximum Lift
Port Size	3/8" NPT and G 3/8" Inlet and Outlet

TYPICAL APPLICATIONS

- Carbonation
- Espresso/Coffee
- Welding
- Cold Carb Circulation
- Reverse Osmosis
- Beer Chillers
- Pesticide Systems
- Solar Applications



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SERIES 1, 2 & 3 Nominal Volume at 1400 RPM

NOMINAL FLOW RATE (l/h)	LITERS PER HOUR					BRAKE HORSEPOWER (kW)				
	PRESSURE (k Pa)					PRESSURE (k Pa)				
	350	700	1050	1400	1750	350	700	1050	1400	1750
430	439	433	426	420	414	0.10	0.17	0.24	0.31	0.38
380	393	387	380	374	368	0.10	0.16	0.21	0.28	0.34
330	341	334	328	322	316	0.09	0.15	0.20	0.26	0.32
300	313	307	301	295	288	0.08	0.12	0.17	0.21	0.25
245	252	245	239	233	227	0.07	0.11	0.15	0.19	0.23
215	221	215	209	202	196	0.07	0.10	0.14	0.18	0.22
180	190	184	178	172	166	0.06	0.10	0.14	0.17	0.21
150	160	153	147	141	135	0.05	0.09	0.13	0.16	0.20
100	114	107	101	95	89	0.05	0.08	0.11	0.14	0.17
75	83	77	71	64	58	0.04	0.07	0.10	0.13	0.16
45	52	46	40	34	-	0.04	0.06	0.09	0.11	-

Series 1 - 6 Rotary Vane pumps - Model Number Matrix

	1 1 1 A 100 F 1 1 A A 180	
PRODUCT CLASSIFICATION		PRESSURE SETTING (RELIEF VALVE) (SEE NOTE 5)
1 - ROTARY VANE PUMP		PRESSURE SETTING IN PSI (POUNDS PER SQ. IN.)
AGENCY APPROVALS		PRESSURE RANGE (RELIEF VALVE SPRING)
0 - NON-FOOD GRADE (1.5% Max. Lead) - NO AGENCY APPROVAL		A - 151 TO 250 PSI - DEFAULT SETTING 170 PSI (SEE NOTE 4)
1 - NSF STD. 169 LISTED (1.5% Max. Lead) - (SEE NOTE 1)		10 TO 17 BAR - DEFAULT SETTING 14 BAR
2 - WRC		B - 100 TO 150 PSI - DEFAULT SETTING 130 PSI
3 - FOOD GRADE - (1.5% Max. Lead) NO AGENCY LISTING		7 TO 10 BAR - DEFAULT SETTING 10 BAR
P - SPARE PARTS KIT		C - 60 TO 99 PSI - DEFAULT SETTING 99 PSI
Z - NON-FOOD GRADE (.20% Max. Lead) - NO AGENCY APPROVAL		4 TO 7 BAR - DEFAULT SETTING 7 BAR
4 - NSF STD. 169 LISTED (.20% Max. Lead) - (SEE NOTE 1)		D - 30 TO 59 PSI - DEFAULT SETTING 50 PSI (SEE NOTE 6)
Y - NON-FOOD GRADE (.10% Max. Lead) - NO AGENCY APPROVAL		2 TO 4 BAR - DEFAULT SETTING 3.5 BAR
5 - NSF STD. 169 LISTED (.10% Max. Lead) - (SEE NOTE 1)		X - NO SETTING
W - 254 SMO (316 S/S) - NO AGENCY APPROVAL		
SERIES		VALVE TYPE AND CONFIGURATION
1 - SERIES 1 BRASS - INTEGRAL STRAINER		A - PLASTIC, HI TEMP-BYPASS
2 - SERIES 2 BRASS		B - PLASTIC, HI TEMP-SOLID
3 - SERIES 3 STAINLESS STEEL		C - PLASTIC, HI TEMP BALANCED BYPASS
4 - SERIES 4 BRASS		D - PLASTIC, HI TEMP BALANCED SOLID
5 - SERIES 5 STAINLESS STEEL		F - PLASTIC, HI TEMP-EXTERNAL ADJUST BYPASS
6 - SERIES 6 STAINLESS STEEL		G - PLASTIC, HI TEMP-EXTERNAL ADJUST SOLID
7 - SERIES 7 BRASS MINI PRO		P - BRASS, HI TEMP-SOLID
8 - SERIES 8 STAINLESS STEEL - INTEGRAL STRAINER		R - STAINLESS STEEL, HI TEMP-SOLID
9 - SERIES 9 BRASS SHORT PUMP		1 - PLASTIC, LOW TEMP-BYPASS
		2 - PLASTIC, LOW TEMP-SOLID
		3 - PLASTIC, LOW TEMP BALANCED BYPASS
		4 - PLASTIC, LOW TEMP BALANCED SOLID
		5 - PLASTIC, LOW TEMP-EXTERNAL ADJUST BYPASS
		6 - PLASTIC, LOW TEMP-EXTERNAL ADJUST SOLID
		X - NO RELIEF VALVE
MOUNTING AND DRIVE CONFIGURATION		CLEARANCES
A - CLAMP ON WITH .188" DOUBLE FLAT DRIVE		1 - STANDARD CLEARANCE
B - CLAMP ON WITH 1143 BRONZE COUPLING		2 - SPCL CLEARANCE (1x) LINER & BRGS
C - CLAMP ON WITH 1143-2 PLASTIC COUPLING		3 - SPECIAL CLEARANCE (2x) LINER & (1x) BRGS.
D - CLAMP ON WITH SLOTTED SHAFT ONLY - NO COUPLING		4 - STANDARD CLEARANCE WITH SEAL CIRCULATION
E - BOLT ON WITH SINGLE FLAT DRIVE (SERIES 1-5 ONLY)		5 - SPCL CLEARANCE (1x) LINER AND (1x) SEAL CIRC. BRGS.
J - BOLT ON WITH .25 DOUBLE FLAT DRIVE (SEE NOTE 2)		6 - SPCL CLEARANCE (1x) LINER AND (2x) SEAL CIRC. BRGS.
K - BOLT ON WITH 3018 BRONZE COUPLING		
L - BOLT ON WITH 3018-1 OVERSIZE BRONZE COUPLING		ROTATION / SLINGER / PASSIVATION / STRAINER
M - BOLT ON WITH SLOTTED SHAFT ONLY		1 - CLOCKWISE
N - BOLT ON WITH KEY SLOT DRIVE (SERIES 6 ONLY)		2 - COUNTERCLOCKWISE
P - CLAMP ON WITH 1143-3 OVERSIZE BRONZE COUPLING		3 - CLOCKWISE / SLINGER
R - LONG CLAMP ON WITH DOUBLE FLAT DRIVE (SEE NOTE 11)		4 - COUNTERCLOCKWISE / SLINGER
S - CLAMP ON WITH SINGLE FLAT DRIVE		7 - CLOCKWISE / COARSE STRAINER
T - BOLT ON WITH FAEMA STYLE MOUNT		8 - CLOCKWISE / SLINGER / COARSE STRAINER
FLOWRATE (SEE NOTE 10)		ELASTOMER
SERIES 1, 2 AND 3		F - FDA GRADE NITRILE - TYPE 21 OR TYPE 2106
015 - 15 GPH (45 LPH)		USED INTERCHANGEABLY
025 - 25 GPH (75 LPH)		G - ETHYLENE PROPYLENE - TYPE 21 SEAL (SEE NOTE 8)
035 - 35 GPH (100 LPH)		R - FLUOROCARBON - TYPE 21 SEAL
050 - 50 GPH (150 LPH)		S - NEOPRENE - TYPE 21 SEAL (SEE NOTE 9)
060 - 60 GPH (180 LPH)		W - ETHYLENE PROPYLENE - TYPE 21 SEAL -
070 - 70 GPH (210 LPH)		WRC APPROVED COMPOUND
080 - 80 GPH (240 LPH)		
100 - 100 GPH (300 LPH)		
110 - 110 GPH (HIGH FLOW) (330 LPH)		
125 - 125 GPH (HIGH FLOW) (375 LPH)		
140 - 140 GPH (HIGH FLOW) (425 LPH)		
SERIES 4 AND 5		
115 - 115 GPH (350 LPH)		
140 - 140 GPH (425 LPH)		
165 - 165 GPH (500 LPH)		
190 - 190 GPH (575 LPH)		
215 - 215 GPH (650 LPH)		
240 - 240 GPH (725 LPH)		
265 - 265 GPH (800 LPH)		
330 - 330 GPH (HIGH FLOW) - NO RELIEF VALVE (1000 LPH)		
SERIES 6		
300 - 300 GPH - NO RELIEF VALVE (900 LPH)		
360 - 360 GPH - NO RELIEF VALVE (1080 LPH)		
420 - 420 GPH - NO RELIEF VALVE (1260 LPH)		
480 - 480 GPH - NO RELIEF VALVE (1440 LPH)		
540 - 540 GPH - NO RELIEF VALVE (1620 LPH)		
600 - 600 GPH - NO RELIEF VALVE (1800 LPH)		
660 - 660 GPH - NO RELIEF VALVE (2000 LPH)		

NOTES:

1. Brass pumps are NSF listed for potable water only. Stainless steel pumps are NSF listed for potable and carbonated water. (Nitrile elastomer only.)
2. Bolt on model with .25" double flat drive for use in Japan only. (No NSF available.)
3. Counterclockwise rotation not available for Series 1 pumps.
4. For the Beverage Industry - the default relief valve pressure setting is 250 PSI.
5. The relief valve pressure setting is not part of the model matrix number. It is for customer reference only.
6. This pressure range is not available in valve configurations C, D, K or L.
7. Passivation is defined as a passivated housing only. No other parts are passivated.
8. The EP elastomer is no longer available for Series 6 pumps.
9. Neoprene elastomer not available for the following relief valve configurations: C, D, F, 3, 4, 5, and 6.
10. GPH rating at 60HZ (1750 RPM) - LPH rating at 50HZ (1400 RPM).
11. Long clamp on pumps are series 1 and 4 only