

# PROCON® Products

## Series 1, 2, & 3 Pumps

- Positive Displacement Rotary Vane Pump
- Flow ranging from 15 to 140 gallons per hour at discharge up to 250 psi
- Self Priming
- Maintenance Free
- Low Vibration and Pulsation Characteristics

Clamp-on or bolt-on available

- Stainless Steel, Brass and Low Lead Brass (0.20% Max Lead)
- Patented Relief Valve Configuration
- Models compatible with 48YZ Frame and 56C Frame Motors

*(Adapter and Coupling required for 56C Frame Mounting)*

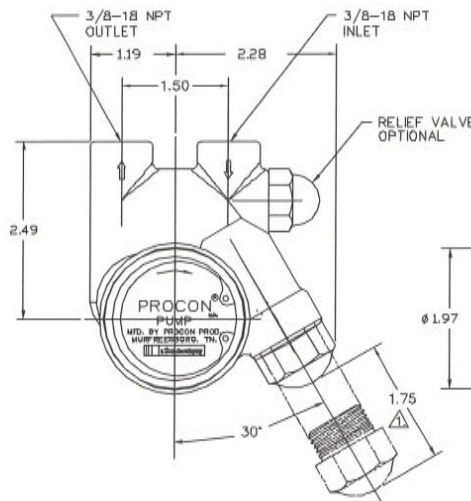
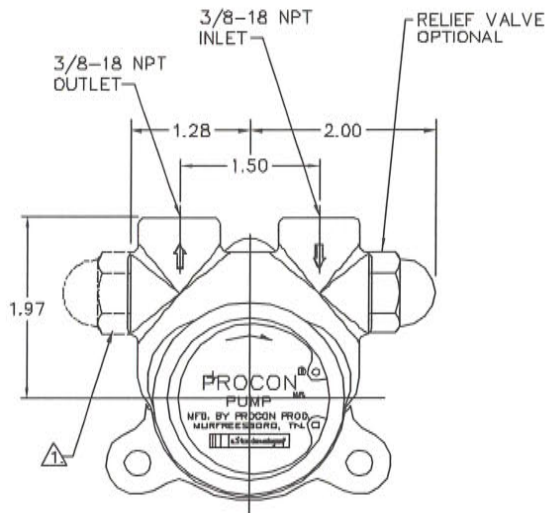


### SPECIFICATIONS

Body Material	Type 303 stainless steel or brass
Capacity	15 to 125 GPH
Nominal Speed	1725 RPM
Typical Horsepower Required	.25 to .50 HP
Maximum Discharge Pressure	250 PSI
Rotation (viewed from nameplate end)	Clockwise
Dry Weight	Approximately 2.5 lbs.
Dimensions	3.56" x 3.49" x 3.86"
Self Priming (water)	6 ft. Maximum Lift
Port Size	3/8 NPT Inlet and Outlet

### TYPICAL APPLICATIONS

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



# SERIES 1, 2 & 3 Nominal Volume at 1725 RPM (See note on Series 6)

FLOW RATE (GPH)	GALLONS PER HOUR					BRAKE HORSEPOWER				
	PRESSURE (PSI)					PRESSURE (PSI)				
	50	100	150	200	250	50	100	150	200	250
140	143	141	139	137	135	.17	.28	.40	.52	.63
125	128	126	124	122	120	.16	.26	.36	.47	.57
110	111	109	107	105	103	.15	.25	.34	.44	.54
100	102	100	98	96	94	.13	.20	.28	.35	.42
80	82	80	78	76	74	.12	.18	.25	.32	.39
70	72	70	68	66	64	.11	.17	.24	.30	.37
60	62	60	58	56	54	.10	.16	.23	.29	.35
50	52	50	48	46	44	.09	.15	.21	.27	.33
35	37	35	33	31	29	.08	.14	.19	.24	.29
25	27	25	23	21	19	.07	.12	.17	.22	.27
15	17	15	13	11	-	.06	.10	.15	.19	-

## Series 1 - 6 Rotary Vane pumps - Model Number Matrix

**1 1 1 A 100 F 1 1 A A 180**

**PRODUCT CLASSIFICATION**  
1 - ROTARY VANE PUMP

**AGENCY APPROVALS**  
0 - NON-FOOD GRADE (1.5% Max. Lead) - NO AGENCY APPROVAL  
1 - NSF STD. 169 LISTED (1.5% Max. Lead) - (SEE NOTE 1)  
2 - WRC  
3 - FOOD GRADE (1.5% Max. Lead) NO AGENCY LISTING  
P - SPARE PARTS KIT  
Z - NON-FOOD GRADE (.20% Max. Lead) - NO AGENCY APPROVAL  
4 - NSF STD. 169 LISTED (.20% Max. Lead) - (SEE NOTE 1)  
Y - NON-FOOD GRADE (.10% Max. Lead) - NO AGENCY APPROVAL  
5 - NSF STD. 169 LISTED (.10% Max. Lead) - (SEE NOTE 1)  
W - 254 SMO (316 S/S) - NO AGENCY APPROVAL

**SERIES**  
1 - SERIES 1 BRASS - INTEGRAL STRAINER  
2 - SERIES 2 BRASS  
3 - SERIES 3 STAINLESS STEEL  
4 - SERIES 4 BRASS  
5 - SERIES 5 STAINLESS STEEL  
6 - SERIES 6 STAINLESS STEEL  
7 - SERIES 7 BRASS MINI PRO  
8 - SERIES 8 STAINLESS STEEL - INTEGRAL STRAINER  
9 - SERIES 9 BRASS - SHORT PUMP

**MOUNTING AND DRIVE CONFIGURATION**  
A - CLAMP ON WITH .188" DOUBLE FLAT DRIVE  
B - CLAMP ON WITH 1143 BRONZE COUPLING  
C - CLAMP ON WITH 1143-2 PLASTIC COUPLING  
D - CLAMP ON WITH SLOTTED SHAFT ONLY - NO COUPLING  
E - BOLT ON WITH SINGLE FLAT DRIVE (SERIES 1-5 ONLY)  
J - BOLT ON WITH .25 DOUBLE FLAT DRIVE (SEE NOTE 2)  
K - BOLT ON WITH 3018 BRONZE COUPLING  
L - BOLT ON WITH 3018-1 OVERSIZE BRONZE COUPLING  
M - BOLT ON WITH SLOTTED SHAFT ONLY  
N - BOLT ON WITH KEY SLOT DRIVE (SERIES 6 ONLY)  
P - CLAMP ON WITH 1143-3 OVERSIZE BRONZE COUPLING  
R - LONG CLAMP ON WITH DOUBLE FLAT DRIVE (SEE NOTE 11)  
S - CLAMP ON WITH SINGLE FLAT DRIVE  
T - BOLT ON WITH FAEMA STYLE MOUNT

**FLOWRATE (SEE NOTE 10)**

**SERIES 1, 2 AND 3**

015 - 15 GPH	(45 LPH)
025 - 25 GPH	(75 LPH)
035 - 35 GPH	(100 LPH)
050 - 50 GPH	(150 LPH)
060 - 60 GPH	(180 LPH)
070 - 70 GPH	(210 LPH)
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)

**PRESSURE SETTING (RELIEF VALVE) (SEE NOTE 5)**  
PRESSURE SETTING IN PSI (POUNDS PER SQ. IN.)

**PRESSURE RANGE (RELIEF VALVE SPRING)**  
A - 151 TO 250 PSI - DEFAULT SETTING 170 PSI (SEE NOTE 4)  
10 to 17 BAR - DEFAULT SETTING 14 BAR  
B - 100 TO 150 PSI - DEFAULT SETTING 130 PSI  
7 TO 10 BAR - DEFAULT SETTING 10 BAR  
C - 60 TO 99 PSI - DEFAULT SETTING 99 PSI  
4 TO 7 BAR - DEFAULT SETTING 7 BAR  
D - 30 TO 59 PSI - DEFAULT SETTING 50 PSI (SEE NOTE 6)  
2 TO 4 BAR - DEFAULT SETTING 3.5 BAR  
X - NO SETTING

**VALVE TYPE AND CONFIGURATION**  
A - PLASTIC, HI TEMP-BYPASS  
B - PLASTIC, HI TEMP-SOLID  
C - PLASTIC, HI TEMP BALANCED BYPASS  
D - PLASTIC, HI TEMP BALANCED SOLID  
F - PLASTIC, HI TEMP-EXTERNAL ADJUST BYPASS  
G - PLASTIC, HI TEMP-EXTERNAL ADJUST SOLID  
P - BRASS, HI TEMP-SOLID  
R - STAINLESS STEEL, HI TEMP-SOLID  
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

**CLEARANCES**  
1 - STANDARD CLEARANCE  
2 - SPCL CLEARANCE (1x) LINER & BRGS  
3 - SPECIAL CLEARANCE (2x) LINER & (1x) BRGS.  
4 - STANDARD CLEARANCE WITH SEAL CIRCULATION  
5 - SPCL CLEARANCE (1x) LINER AND (1x) SEAL CIRC. BRGS.  
6 - SPCL CLEARANCE (1x) LINER AND (2x) SEAL CIRC. BRGS.

**ROTATION / SLINGER / PASSIVATION / STRAINER**  
1 - CLOCKWISE  
2 - COUNTERCLOCKWISE  
3 - CLOCKWISE / SLINGER  
4 - COUNTERCLOCKWISE / SLINGER  
7 - CLOCKWISE / COARSE STRAINER  
8 - CLOCKWISE / SLINGER / COARSE STRAINER

**ELASTOMER**  
F - FDA GRADE NITRILE - TYPE 21 OR TYPE 2106  
USED INTERCHANGEABLY  
G - ETHYLENE PROPYLENE - TYPE 21 SEAL (SEE NOTE 8)  
R - FLUOROCARBON - TYPE 21 SEAL  
S - NEOPRENE - TYPE 21 SEAL (SEE NOTE 9)  
W - ETHYLENE PROPYLENE - TYPE 21 SEAL -  
WRC APPROVED COMPOUND

**NOTES:**

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

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