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Standard Rotary Vane pumps - Model Number Matrix

1	1	1	A	100	F	1	1	A	A	828	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 MATERIAL/ NO AGENCY APPROVAL - (1.5% Max. Lead)
4 - NSF STD. 169 LISTED (.20% Max. Lead) - (SEE NOTE 1)
5 - NSF STD. 169 LISTED (.10% Max. Lead) - (SEE NOTE 1)
6 - WRC - (.20% Max Lead)
A - ATEX - (SEE NOTE 21)
D - DZR BRASS - AUSTRALIA ONLY - NO NSF - SERIES 1, 2 AND 4
M - ICIM / MOCA LOW LEAD BRASS
P - SPARE PARTS KIT
T - ICIM / MOCA STANDARD BRASS
W - 254 SMO (316 S/S) - NO AGENCY APPROVAL
Y - NON-FOOD GRADE (.10% Max. Lead)- NO AGENCY APPROVAL
Z - NON-FOOD GRADE (.20% Max. Lead)- NO AGENCY APPROVAL

SERIES
1 - SERIES 1 BRASS - INTEGRAL STRAINER - 3/8 NPT PORTS
2 - SERIES 2 BRASS - 3/8 NPT PORTS
3 - SERIES 3 STAINLESS STEEL - 3/8 NPT PORTS
4 - SERIES 4 BRASS - 1/2 NPT PORTS
5 - SERIES 5 STAINLESS STEEL- 1/2 NPT PORTS
6 - SERIES 6 STAINLESS STEEL - 1" NPT PORTS
7 - SERIES 7 BRASS MINI PRO - 3/8 NPT
8 - SERIES 8 STAINLESS STEEL - INTEGRAL STRAINER - 3/8 NPT PORTS
9 - SERIES 9 BRASS SHORT PUMP - G 3/8 PORTS
A - SERIES 1 BRASS - INTEGRAL STRAINER - G 3/8 PORTS
B - SERIES 2 BRASS - G 3/8 PORTS
C - SERIES 3 STAINLESS STEEL - G 3/8 PORTS
D - SERIES 4 BRASS - G 1/2 PORTS
E - SERIES 5 STAINLESS STEEL- G 1/2 PORTS
F - SERIES 7 BRASS MINI PRO - G 3/8 PORTS
G - SERIES 8 STAINLESS STEEL - INTEGRAL STRAINER - G 3/8 PORTS

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)
R - LONG CLAMP ON WITH DOUBLE FLAT DRIVE (SEE NOTE 11)
S - CLAMP ON WITH SINGLE FLAT DRIVE
T - BOLT-ON S-TYPE FAEMA STYLE MOUNT WITH FAEMA ROTOR
V - CLAMP-ON WITH METRIC KEYWAY ROTOR
W - BOLT-ON WITH METRIC KEYWAY ROTOR
Y - BOLT-ON WITH FAEMA DOUBLE FLAT DRIVE
X - (SEE NOTE 20)

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	(330 LPH)
125 - 125 GPH	(375 LPH)
140 - 140 GPH	(425 LPH)
XXX - (SEE NOTE 20)	

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) -	(1000 LPH) - (SEE NOTE 22)

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)

ELASTOMER
A - FDA GRADE EPDM O-RINGS AND EP TYPE 21 BALANCED SEAL W/ SILICON CARBIDE ST. RING
B - FDA GRADE EPDM O-RINGS, TYPE 21 SEAL, SILICON CARBIDE, HARD CARBON
F - FDA GRADE EPDM O-RINGS AND FDA GRADE NITRILE TYPE 21 OR TYPE 2106 SEAL 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

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

MOTOR NUMBER (OPTIONAL) (SEE NOTE 19)
828 - 1/3HP CARB MOTOR (EXAMPLE)

PRESSURE RANGE (RELIEF VALVE SPRING)
A - 151 TO 250 PSI - DEFAULT SETTING 170 PSI (SEE NOTE 4)
10 to 17 BAR - DEFAULT SETTING 12 BAR
B - 100 TO 150 PSI - DEFAULT SETTING 130 PSI
7 TO 10 BAR - DEFAULT SETTING 9 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
2 TO 4 BAR - DEFAULT SETTING 3.5 BAR
X - NO SETTING

VALVE TYPE AND CONFIGURATION
A - PLASTIC, HIGH TEMP, BYPASS - W/SS INSERT
B - PLASTIC, HIGH TEMP, SOLID - W/SS INSERT
C - PLASTIC, HIGH TEMP, BALANCED BYPASS - W/SS INSERT
D - PLASTIC, HIGH TEMP, BALANCED SOLID - W/SS INSERT
F - PLASTIC, HIGH TEMP, EXTERNAL ADJUST, BYPASS - W/SS INSERT
G - PLASTIC, HIGH TEMP, EXTERNAL ADJUST, SOLID - W/SS INSERT
H - PLASTIC, HIGH TEMP, BALANCED BYPASS - W/PLASTIC PISTON & SS INSERT
J - PLASTIC, HIGH TEMP, BALANCED SOLID - W/PLASTIC PISTON & SS INSERT
P - BRASS, HIGH TEMP, SOLID - W/SS INSERT
Q - PLASTIC, HIGH TEMP, BALANCED SOLID - W/SS INSERT, HEX SCREW, & NUT
R - STAINLESS STEEL, HIGH TEMP, SOLID - W/SS INSERT
S - STAINLESS STEEL, HIGH TEMP, SOLID, EXTERNAL ADJUST - W/SS INSERT
W - PLASTIC, HIGH TEMP, BALANCED BYPASS - W/SS INSERT, HEX SCREW, & NUT
Y - PLASTIC, HIGH TEMP, BALANCED SOLID - W/SS INSERT & HEX SCREW
Z - PLASTIC, HIGH TEMP, BALANCED BYPASS - W/SS INSERT & HEX SCREW
1 - PLASTIC, HIGH TEMP, BYPASS - NO INSERT
2 - PLASTIC, HIGH TEMP, SOLID - NO INSERT
3 - PLASTIC, HIGH TEMP, BALANCED BYPASS - NO INSERT
4 - PLASTIC, HIGH TEMP, BALANCED SOLID - NO INSERT
5 - PLASTIC, HIGH TEMP, EXTERNAL ADJUST, BYPASS - NO INSERT
6 - PLASTIC, HIGH TEMP, EXTERNAL ADJUST, SOLID - NO INSERT
7- STAINLESS STEEL, HIGH TEMP, EXTERNAL ADJUST, BALANCED SOLID - NO INSERT
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.
X - (SEE NOTE 20)

ROTATION / SLINGER / VANES / PINS
1 - CLOCKWISE (SEE NOTE 18)
2 - COUNTERCLOCKWISE (SEE NOTE 18)
3 - CLOCKWISE / SLINGER (SEE NOTE 18)
4 - COUNTERCLOCKWISE / SLINGER (SEE NOTE 18)
A - CLOCKWISE / PEEK VANES WITH PEEK VANE PINS (SEE NOTE 23)
B - CLOCKWISE / PEEK VANES WITHOUT VANE PINS (SEE NOTE 23)
C - CLOCKWISE / SLINGER / PEEK VANE WITH PEEK VANE PINS (SEE NOTE 23)
D - CLOCKWISE / SLINGER / PEEK VANE WITHOUT VANE PINS (SEE NOTE 23)
E - CLOCKWISE / CARBON VANES WITHOUT VANE PINS
F - CLOCKWISE / SLINGER / CARBON VANES WITHOUT VANE PINS
V - COUNTERCLOCKWISE / PEEK VANES WITH PEEK VANE PINS (SEE NOTE 23)
X - (SEE NOTE 20)
Y - COUNTERCLOCKWISE / SLINGER / PEEK VANE WITH PEEK VANE PINS (SEE NOTE 23)

NOTES:
1. Brass pumps are NSF listed for potable water only. Stainless steel pumps are NSF listed for potable and carbonated water.
2. Bolt on model with .25" double flat drive for use in Japan only. (No NSF.)
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. (DELETED 2/2/2018)
7. Passivation is defined as a passivated housing only.
8. The EP and Neoprene elastomers are no longer available for Series 6 pumps.
9. Neoprene elastomer not available for the following relief valve configurations: C, D, F, G, H, J, Q, 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
12. Series 6 pumps do not have a slinger.
13. All longneck Series 1 pumps must have relief valve.
14. Type"F", "A", and "B" elastomers are NSF approved.
15. Type"F" elastomer is TIFQ approved.
16. Type "W" elastomer is WRAS approved.
17. Series 8 and G are not available at this time.
18. Unless otherrwise indicated, pumps use carbon vanes and vane pins.
19. Motor numbers range from 600 to 999 and alphabetically from AAA to ZZZ. Pressure settings range from 30 to 250 PSI. Both pressure setting and motor number may appear simutaneously.
20. Applicable only for thermostatic valve and valve kit.
21. ATEX approved must have vane pins removed and use the ATEX label with the EX symbol and additional remark "EX II 2G(i) c IIB T3 -20°C < Ta < 50° C"
22. For 330 GPH applications:
(i) For 50 Hz - Maximum operating pressure 200 PSI (14 Bar) w/ RV set to 275 PSI (19 Bar)
(ii) For 60 Hz - Maximum operating pressure 120 PSI (8 Bar) w/ RV set to 170 PSI (12 Bar)
20 PSI inlet pressure required for both 50/60 Hz
23. Only available in series 1, 2, 3, 4, 5, and 8

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