

# **Rectangular Port Gate Valves**

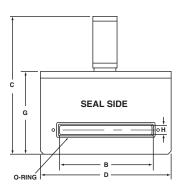


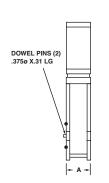






- Less Outgassing Than Stainless, See Page 40
- · Choose Full Throttle Control or Open/Close
- Motorized Soft Open and Close Available
- · Closing Speeds as Fast as 75 mSec. Available
- Aluminum or Stainless Steel
- Standard Quad Ring Shaft Seal
- · Leak Tested to Better Than 5 X 10-10 scc/sec
- · All Valves (RoHS) 2015/863/EU Compliant
- Port Sizes to Fit Any Wafer or Solar Substrate
- Bolt Pattern to Match Your Tool or Chamber
- Select Automatic Close or Open on Power Fail
- · Available with Viton®, Buna-N or Kalrez® Seals
- · NW Style Gauge & Roughing Ports on Any Side





Electronic Positi	on Indicators:
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Two reed switches activated by a magnet inside the pneumatic actuator provide contact closure for open and closed position. See page 41 for specifications. \$185/pair

### Gauge and Roughing Ports:

See page 43 for specifications and ordering information.

Model Number Bellows Seal-REB Quad Ring Seal-REQ	Port Size	Body Thick- ness	Overall Height	Body Width	Body Height	Price with Bellows (REB)	Price with Shaft Seal (REQ)
REB-1 X 6.3 REQ-1 X 6.3	1 X 6.30 in. (25 X 160 mm)	2.75 in. (70 mm)	16.375 in. (416 mm)	10.75 in. (273 mm)	9.5 in. (241 mm)	\$4,857	\$4,229
REB-1 X 8.3 REQ-1 X 8.3	1 X 8.30 in. (25 X 211 mm)	2.75 in. (70 mm)	16.375 in. (416 mm)	12.75 in. (324 mm)	9.5 in. (241 mm)	\$5,398	\$4,724
REB-1 X 10.4 REQ-1 X 10.4	1 X 10.40 in. (25 X 264 mm)	2.75 in. (70 mm)	16.375 in. (416 mm)	15 in. (381 mm)	9.5 in. (241 mm)	\$5,747	\$5,398
REB-1.25 X 8.75 REQ-1 25 X 8.75	1.25 X 8.75 in. (32 X 222 mm)	2.75 in. (70 mm)	16.375 in. (416 mm)	14 in. (356 mm)	9.5 in. (241 mm)	\$6,019	\$5,228
REB-1.81 X 9.3 REQ-1.81 X 9.3	1.81 X 9.30 in. (46 X 236 mm)	3.375 in. (86 mm)	16.53 in. (420 mm)	14.375 in. (406mm)	9.53 in. (242 mm)	\$6,199	\$5,398
REB-1.8 X 13.2 REQ-1.8 X 13.2	1.81 X 13.20 in. (46 X 335 mm)	3.375 in. (86 mm)	16.53 in. (420 mm)	16 in. (406 mm)	9.53 in. (242 mm)	\$11,018	\$10,291
REB-2 X 16	2 X 16 in.	4.625 in.	22.06 in.	21 in.	11.56 in.	Contact	Contact
REQ-2 X 16	(50 X 406 mm)	(117 mm)	(560 mm)	(533 mm)	(294 mm)	Factory	Factory
REB-2 X 27	2 X 27 in.	7 in.	36 in.	32 in.	24.5 in.	Contact	Contact
REQ-2 X 27	(51 X 686 mm)	(178 mm)	(914 mm)	(813 mm)	(610 mm)	Factory	Factory
REB-3 X 16	3 X 16 in.	6.5 in.	37 in.	20 in.	25 in.	Contact	Contact
REQ-3 X 16	(76 X 406 mm)	(165 mm)	(940 mm)	(508 mm)	(635 mm)	Factory	Factory
REB-3 X 30	3 X 30 in.	5.5 in.	35.13 in.	36 in.	21.75 in.	Contact	Contact
REQ-3 X 30	(75 X 762 mm)	(139.7 mm)	(892 mm)	(914 mm)	(552 mm)	Factory	Factory
REB-3 X 43	3 X 43 in.	5.56 in.	33.25 in.	51 in.	20 in.	Contact	Contact
REQ-3 X 43	(75 X 1100 mm)	(141 mm)	(845 mm)	(1297 mm)	(508 mm)	Factory	Factory
REB-4 X 20	4 X 20 in.	5.5 in.	35.13 in.	26 in.	21.75 in.	Contact	Contact
REQ-4 X 20	(100 X 508 mm)	(139.7 mm)	(892 mm)	(660 mm)	(552 mm)	Factory	Factory
REB-4 X 24	4 X 24 in.	5.5 in.	37.0 in.	30 in.	21.75 in.	Contact	Contact
REQ-4 X 24	(100 X 609 mm)	(139.7 mm)	(940 mm)	(762 mm)	(552 mm)	Factory	Factory
REB-4 X 27	4 X 27 in.	7 in.	39 in.	32 in.	27 in.	Contact	Contact
REQ-4 X 27	(100 X 686 mm)	(178 mm)	(990 mm)	(813 mm)	(686 mm)	Factory	Factory
REB-5 X 27	5 X 27 in.	7 in.	39 in.	32 in.	27 in.	Contact	Contact
REQ-5 X 27	(127 X 686 mm)	(178 mm)	(990 mm)	(813 mm)	(686 mm)	Factory	Factory
REB-15 X 27	15 X 27 in.	7 in.	67.8 in.	32 in.	44 in.	Contact	Contact
REQ-15 X 27	(381 X 686 mm)	(178 mm)	(1722 mm)	(813 mm)	(1118 mm)	Factory	Factory
REB-15 X 33.5	15 X 33.5 in.	5.56 in.	49 in.	40.75 in.	NA	Contact	Contact
REQ-15 X 33.5	(380 X 850 mm)	(1741 mm)	(1245 mm)	(1035 mm)		Factory	Factory
REB-22 X 24	22 X 24 in.	7.7 in.	92 in.	31 in.	61.25 in.	Contact	Contact
REQ-22 X 24	(560 X 610mm)	(195 mm)	(2337 mm)	(787 mm)	(1556 mm)	Factory	Factory
REB-24 X 35	4 X 55 in.	9.06 in.	101 in.	42.5 in.	66.125 in.	Contact	Contact
REQ-24 X 35	(100 X 1400 mm)	(230 mm)	(2565 mm)	(1080 mm)	(1680 mm)	Factory	Factory



# **Model Numbering System**



Vacuum Research valves are available with dozens of options to allow you to select exactly the features you need for your vacuum system. The model number system illustrated below will accurately describe most valves, but if you have any questions about the best way to specify what you need, just call or fax our customer service department and we will be happy to help you. All Valves are (RoHS) 2015/863/EU Compliant.

## **Basic Valve Style**

LPWA..... Bonnet Style, Large Port Aluminum TBWA ...... Thick Body Valves for Dirty Environments X-LPWA...... Bonnet Style, Extra Large Port Aluminum LPSS..... Bonnet Style, Large Port Stainless Steel X-LPSS...... Bonnet Style, Extra Large Port Stainless Steel

BEL ..... Bellows Seal, Welded Aluminum END STD ..... Standard Port Aluminum Gate Valves

**END LP......** Oversize Large Port Aluminum Gate Valves **AVAL**..... Aluminum Poppet Style Valves

AVMS..... Mild Steel Poppet Valves REB..... Rectangular Port, Bellows Seal REQ ..... Rectangular Port, Quad Ring Seal

### Flange Bolt Pattern

ASA.....ANSI Bolt Pattern **CF** ......Conflat® Flanges CF-MET.... Metric Conflat® JIS.....Japan Industrial Std.

**DEP.....** Dependex Flanges ISO ..... ISO Bolt Pattern

SPEC ...... Customer Special Flange BLANK ..... No Holes or O-Ring

### **Roughing & Gauge Ports**

Specify location (R-1, R-2, etc.) and size of port (NW-16, NW-25, etc.) Refer to page 42 in this catalog: Roughing and Gauge Ports, for the range of port sizes available in each location for your basic valve style.

### **Limit Switches (Position Indicators)**

Visual Position Indicators are included on All Bonnet Gate Valves. Limit switches are described in the "Optional Features and Accessories" section on page 41. (Sold by the pair, 1 for open, 1 for closed)

LSS ...... Enclosed Limit Switch (SPDT)

LSD...... Enclosed Limit Switch (DPDT)

LSO...... Open Type Limit Switch (SPDT)

LSE ...... Electronic Type Limit Switch (SPDT) LSX-C... Explosion Proof, Grps. C, D (SPDT)

LSX-B ... Explosion Proof, Grp. B (SPDT)

# LPWA - 12 - ASA - N8 - 20 - B - R2 - NW-16

Flange O-Rings

20 O-Rings both flanges

NO No flange O-Rings

10 O-Ring Open Side

**1S** O-Ring Seal Side

### Port Flange Neck Style

N1...... Tapped Holes Both Sides N5..... Neck Flange on Both Sides

N6 ..... Neck Flange on Seal Side

N8...... Neck Flange on Open Side

TAP .... Tapped Holes on Neck Flanges

Our standard neck style valves (N5, N6, N8) have slots rather than holes for bolts. For tapped holes instead of slots add "TAP" to Model number.

No extra charge.

## Type of Operator

EP..... Electro-Pneumatic

A.....Air Pilot

3 POS .... 3 Position

Electro-Pneumatic

P.....Pneumatic only

(no solenoid)

M..... Manual Lever

T..... Manual Throttle

MO ...... Motor Actuator

#### **Normal Valve Port Size**

Inches: 2, 3, 4, 6, 8, 10, 12, 16, 20, 24, 32

ISO: 63 mm to 630 mm JIS: 63 mm to 630 mm

Conflat®: 2.75, 4.5, 6, 8, 10, 12 inch OD

### **O-Ring Material**

Buna-N

Viton®

Silicone

Kalrez®

Chemraz®

## Solenoid Voltage (Only Used with EP Operator)

**115**......115V, 50/60 Hz 220 .....220-240 V, 50 Hz

**24D** .....24 VDC

115 EX...... Expl. Proof 115V, 50/60 Hz 220 EX ..... Expl. Proof 220V, 50 Hz 24 EX ...... Expl. Proof 24 VDC

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