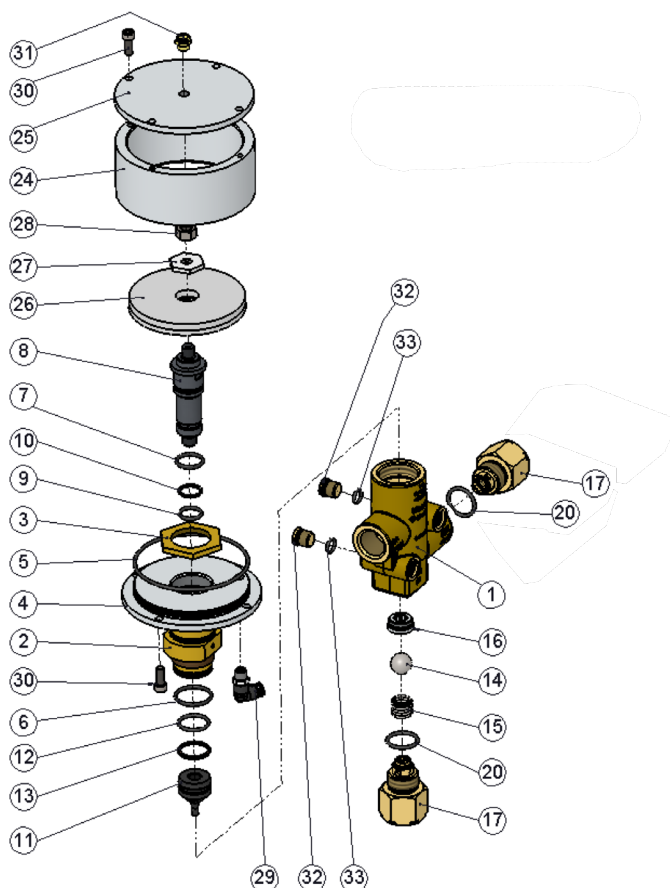


# Model 22973CRP-GV

# Pneumatically-Actuated Regulator

## Operating Specifications

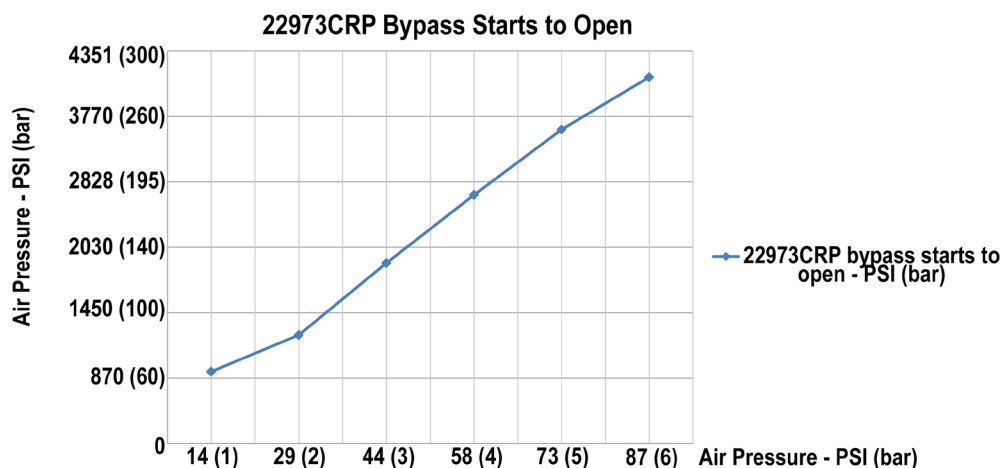
	U.S.	Metric
Minimum Flow:	2.1 GPM	8 L/min
Maximum Flow:	35.7 GPM	135 L/min
Pressure Range:	580-4000 PSI	40-280 Bar
Air Pressure Range:	14.5-87 PSI	1-6 Bar
Max. Temperature:	160 °F	70 °C
Inlet/Outlet Port:		3/4" FNPT
Bypass:		3/4" BSP



Item	Part #	Description	Qty.
1	12232	Valve Body	1
2	04625	Guide Plug	1
3	04626	Hexagon Nut	1
4	04627	Cylinder Cover	1
5	08005	O-Ring	1
6	12057	O-Ring	1
7	10011	O-Ring	1
8	04628	Piston Rod	1
9	04629	O-Ring	1
10	04630	Support Ring for 9	1
11	04631	Piston Body	1
12	04011	O-Ring	1
13	04639	Support Ring	1
14	12207	Ball	1
15	04632	Valve Spring	1
16	03402	Valve Seat	1
17	12243	Fitting, 3/4" NPT	2
20	07035	O-Ring	2
24	04633	Cylinder	1
25	04634	Cylinder Cover	1
26	04635	Sleeve	1
27	04636	Hexagon Nut	1
28	08040	Hexagon Nut	1
29	04637	90° Elbow, Air Plug	1
30	08503	Cylinder Screw	8
31	04638	Silencer	1
32	06685	Plug	4
33	12017	O-Ring for 32	4

09461RP Repair Kit (Items 5-7, 9, 10, 12-16, 20, 26, 33)

Air Pressure - PSI (bar)	Bypass Starts to Open - PSI (bar)	Bypass Fully Open - PSI (bar)
14 (1)	798 (55)	870 (60)
29 (2)	1204 (83)	1450 (100)
44 (3)	2001 (138)	2030 (140)
58 (4)	2755 (190)	2828 (195)
73 (5)	3480 (240)	3770 (260)
87 (6)	4061 (280)	4351 (300)



### INSTALLATION OF 22973CRP REGULATOR

- 1) The regulator is to be positioned on the discharge side of the pumping unit.
- 2) The bottom port (inlet) receives the pump discharge.
- 3) The side port (outlet) is the pressure outlet. Make sure all side ports are tightened securely.
- 4) The backside port (bypass) redirects the pumped media when the pressure outlet is closed.
- 5) The proper sized bypass line can be directed to a holding tank, to atmosphere, or back to the pump inlet.

**NOTE:** Bypass lines returning to the pump inlet should be equipped with a thermal relief valve to prevent excessive heat buildup in the bypass line that can damage the pumping system during periods of prolonged bypass.

- 6) If a pulsation dampener (accumulator) is used in your pumping system, the pulsation dampener (accumulator) must be positioned on the downstream side of the regulator. **REMEMBER:** IMPROPER PLACEMENT OF THE PULSATION DAMPENER (ACCUMULATOR) CAN AFFECT THE UNLOAD CAPACITY OF THE REGULATOR AND CAN LEAD TO SEVERE SYSTEM DAMAGE AND POSSIBLE BODILY INJURY.

**CAUTION:** A properly sized pressure gauge must be used when attempting to adjust the regulator to its pressure setting. Position the gauge between the pump and the regulator.

**NOTE:** Cracking pressures at which the regulator is activated can rise 300-400 PSI over the rated operating pressures depending on your system.

- 7) Always adjust the regulator via air pressure to the system pressure with the system open (see chart above). Before adjusting, be sure that the spray nozzle orifice is properly sized for the volume and pressure you desire and then fine tune the regulator.

**CAUTION:** NEVER USE THE REGULATOR TO COMPENSATE FOR A WORN NOZZLE AS YOU RISK BOTTOMING-OUT THE REGULATOR, WHICH CAN CAUSE THE REGULATOR TO MALFUNCTION AND LEAD TO SEVERE SYSTEM DAMAGE AND POSSIBLE BODILY INJURY.

- 8) Giant Industries, Inc. strongly recommends the use of a pop-off valve positioned downstream of the regulator as a safety backup in case of regulator malfunction.



**WARNING:** This product might contain a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**GIANT**

Performance Under Pressure

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