Pressure Regulator 921 Series

Pressure Reducing or Back Pressure Relief Valve



The Trerice Series 921 Pressure Regulator is fully self-contained and requires no external power source. This regulator requires that a user-supplied pressure sensing line be connected from the controlled point to the diaphragm actuator. Pressure in this line acts upon the diaphragm to develop the necessary thrust to stroke the valve, thereby maintaining the system at the desired condition.

- For pressure reducing applications, the pressure sensing line is mounted downstream, and the valve closes as this sensed pressure increases.
- For back pressure relief applications, the sensing line is mounted upstream, and the valve opens as the sensed pressure increases.

These valves can be used in any application where the pressure reduction is not more than 90% of the inlet pressure.

For optimal performance, the service conditions (medium, flow, temperature, inlet and outlet pressures) of the application must be considered when selecting a valve. Please refer to the Valve Selection Section of this catalog. Improper application may cause failure of the valve, resulting in possible personal injury or property damage.

Specifications

Mod	leb
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921

Housing

Cast ductile iron, black finished

Pressure Plate

Cast-Iron

Diaphragm Material

Nylon reinforced Neoprene

Maximum Inlet Pressure

200 psi

Pressure Connection

1/4 NPT

Adjustment Nut

Steel

Adjustment Screw

Brass

Adjustment Spring Cadmium plated steel

Body Material 1/2" - 2": Bronze

21/2"- 6": Cast-iron

Trim Material Stainless steel

Trim Style

Quick-opening

Connection

1/2" - 2": Threaded, malleable iron union ends

21/2"- 6": Class 125 flanged

Pressure & Temperature Rating

¹/₂" - 2["]: 250 psi @ 410°F (210°C)

21/2" - 6": 125 psi @ 350°F (175°C)

How To Order

Sample Order Number: 921PRV-A55-075060								
921PRV		A55		075	060			
Model	_	Valve	_	Inlet Pressure	Outlet Pressure			
921PRV (Pressure Reducing Valve)		See Available		Specify Upstream	Specify Downstream			
921BPR (Back Pressure Relief)		Valves		Pressure in psig	Pressure in psig			
		(over)		(i.e., 75 psig = 075)	(i.e., $60 \text{ psig} = 060$)			
					Omit if 921BPR			

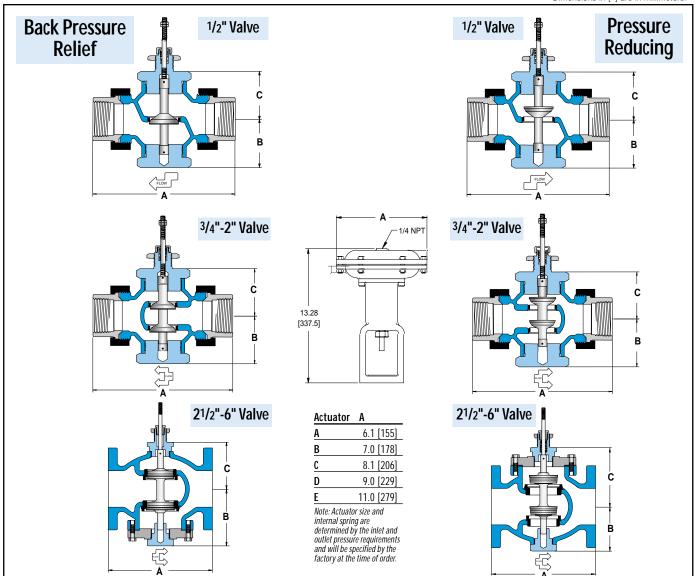


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Pressure Reducing or Back Pressure Relief Valve

All dimensions are nominal.

Dimensions in [] are in millimeters



Valve Selection

valve selection										
(BPR) Back Pressure Relief	(PRV) Pressure Reducing	Size Connection	Nominal Port	Number of Seats	C _v *	Maximum Inlet (psig)	A	Dimensions B	С	Approximate Shipping Wt.
A15	A14	1/2 NPT	1/2"	1	2.8	200	4.8 [122]	1.8 [46]	1.8 [46]	3.0 lbs [1.35 kg]
A24	A21	3/4 NPT	3/4"	2	8	200	5.6 [142]	2.3 [58]	2.3 [58]	5.0 lbs [2.25 kg]
A33	A29	1 NPT	1"	2	12	200	6.0 [152]	2.3 [58]	2.3 [58]	6.1 lbs [2.75 kg]
A44	A39	11/4 NPT	11/4"	2	21	200	7.2 [183]	2.6 [66]	2.6 [66]	10.1 lbs [4.55 kg]
A55	A50	11/2 NPT	11/2"	2	30	200	7.7 [196]	2.6 [66]	2.6 [66]	11.1 lbs [5.00 kg]
A66	A61	2 NPT	2"	2	47	200	7.6 [218]	3.1 [79]	3.1 [79]	17.0 lbs [7.65 kg]
B74	B73	21/2"	21/2"	2	78	200	7.8 [198]	4.8 [122]	5.4 [137]	45 lbs [20 kg]
B79	B78	3"	3"	2	110	200	9.0 [229]	5.0 [127]	5.6 [142]	70 lbs [32 kg]
B84	B83	4"	4"	2	220	200	11.4 [290]	6.3 [160]	6.5 [165]	100 lbs [45 kg]
B89	B88	5"	5"	2	275	200	12.0 [305]	6.9 [175]	7.3 [185]	155 lbs [70 kg]
B94	B93	6"	6"	2	378	200	14.1 [358]	7.5 [191]	8.0 [203]	180 lbs [82 kg]

^{*}The valve selected should have a C_v approximately two times that required by the service conditions. This will allow the valve to operate in approximately the 50% open position.

