

# Pressure Regulator 921 Series

Pressure Reducing or Back Pressure Relief Valve



Self-Contained Design

Spring Loaded/  
Diaphragm Actuated

Cast Ductile Iron Housing and Yoke

1/2" through 6" Valve Sizes

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

<b>Model</b> 921	<b>Maximum Inlet Pressure</b> 200 psi	<b>Adjustment Spring</b> Cadmium plated steel	<b>Connection</b> 1/2" - 2": Threaded, malleable iron union ends 2 1/2" - 6": Class 125 flanged
<b>Housing</b> Cast ductile iron, black finished	<b>Pressure Connection</b> 1/4 NPT	<b>Body Material</b> 1/2" - 2": Bronze 2 1/2" - 6": Cast-iron	<b>Pressure &amp; Temperature Rating</b> 1/2" - 2": 250 psi @ 410°F (210°C) 2 1/2" - 6": 125 psi @ 350°F (175°C)
<b>Pressure Plate</b> Cast-Iron	<b>Adjustment Nut</b> Steel	<b>Trim Material</b> Stainless steel	
<b>Diaphragm Material</b> Nylon reinforced Neoprene	<b>Adjustment Screw</b> Brass	<b>Trim Style</b> Quick-opening	

## How To Order

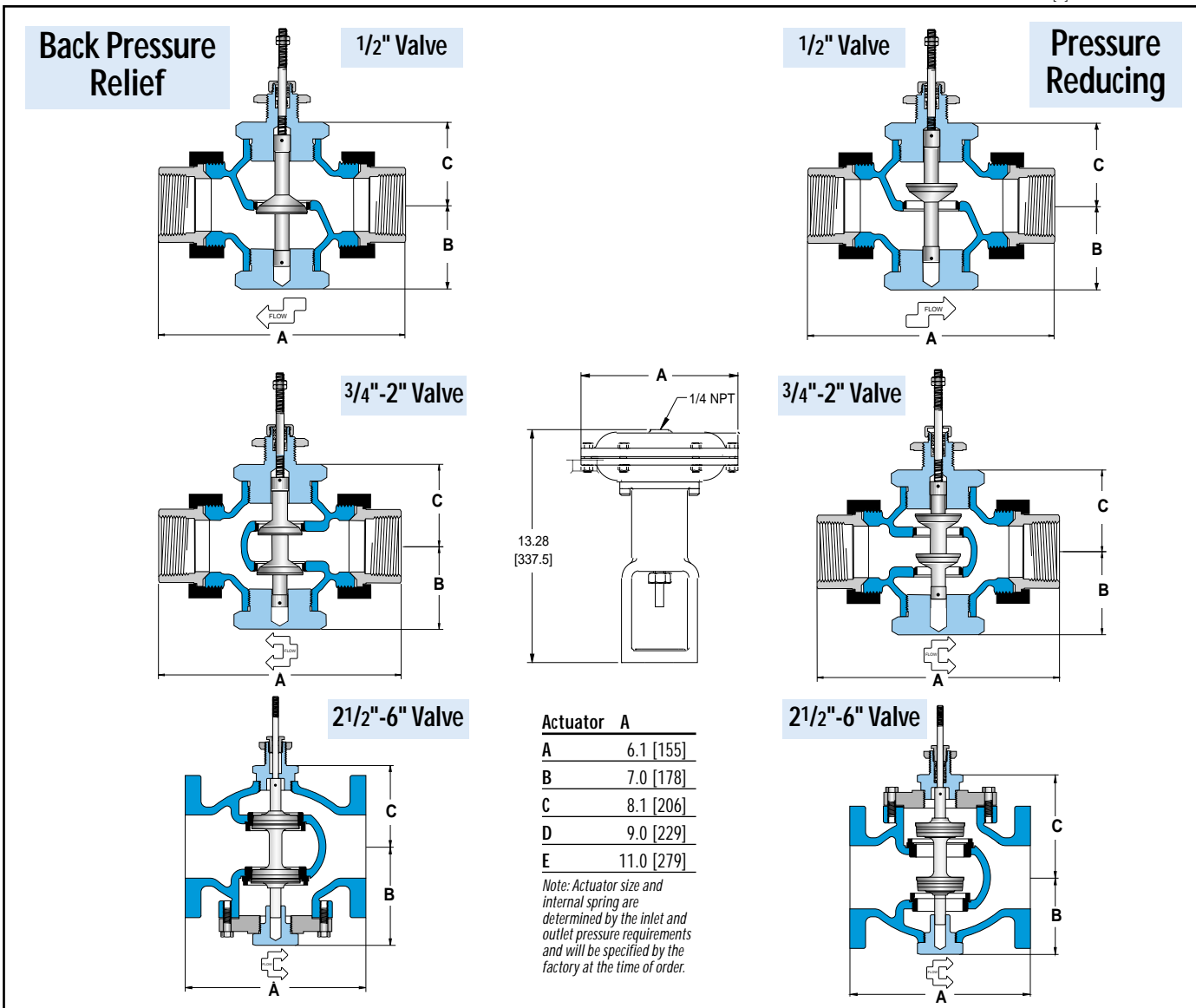
Sample Order Number: 921PRV-A55-075060

Model	Valve	Inlet Pressure	Outlet Pressure
921PRV (Pressure Reducing Valve)	See Available Valves (over)	Specify Upstream Pressure in psig (i.e., 75 psig = 075)	Specify Downstream Pressure in psig (i.e., 60 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

(BPR) Back Pressure Relief	(PRV) Pressure Reducing	Size Connection	Nominal Port	Number of Seats	C <sub>v</sub> *	Maximum Inlet (psig)	Dimensions			Approximate Shipping Wt.
							A	B	C	
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	1 1/4 NPT	1 1/4"	2	21	200	7.2 [183]	2.6 [66]	2.6 [66]	10.1 lbs [4.55 kg]
A55	A50	1 1/2 NPT	1 1/2"	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	2 1/2"	2 1/2"	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<sub>v</sub> approximately two times that required by the service conditions. This will allow the valve to operate in approximately the 50% open position.