

## 8900 Series

Two-Way, Balanced Piston, Higher Pressure Valve

### Application

- Designed for bubble tight shut off on high differential pressures
- 8900 Series Valves replaces high pressure, double ported valves and provides positive closure
- Commonly used for shutting in of oil or gas wells
- NACE compliant materials available

### Features and Benefits of the 8900 Series Valve

- Carbon steel body standard
- 316L stainless steel body available to CF3M specifications in 1" size and CF8M in 2" size
- Fails closed at high pressure without depending on an internal spring; provides added safety
- In-line serviceability of internal components
- Stainless steel stem, piston housing and seat provides longer field life
- Soft trim provides bubble tight shut off
- Variety of trim plug and seat materials available including hard trim
- Packing gland and seals material options
- Rebuild kits available for all Pathway valves

### Benefits of ALL Pathway Control Products

- Personalized service and support expertise
- Responsive, on-time delivery
- Time-tested & proven design providing dependable, long-term service
- Valves and castings Made in USA



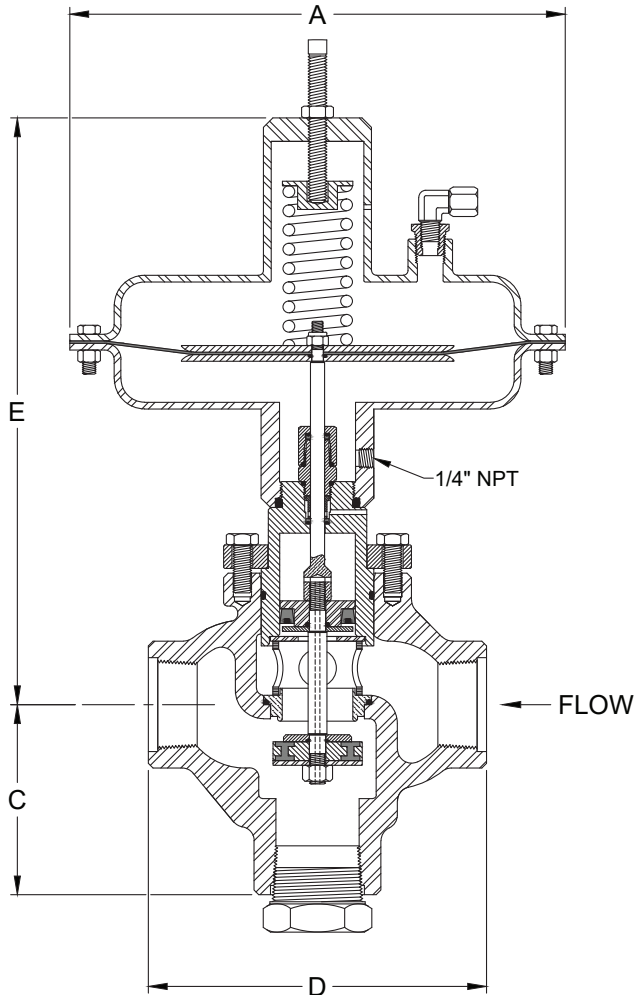
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### Sample Models

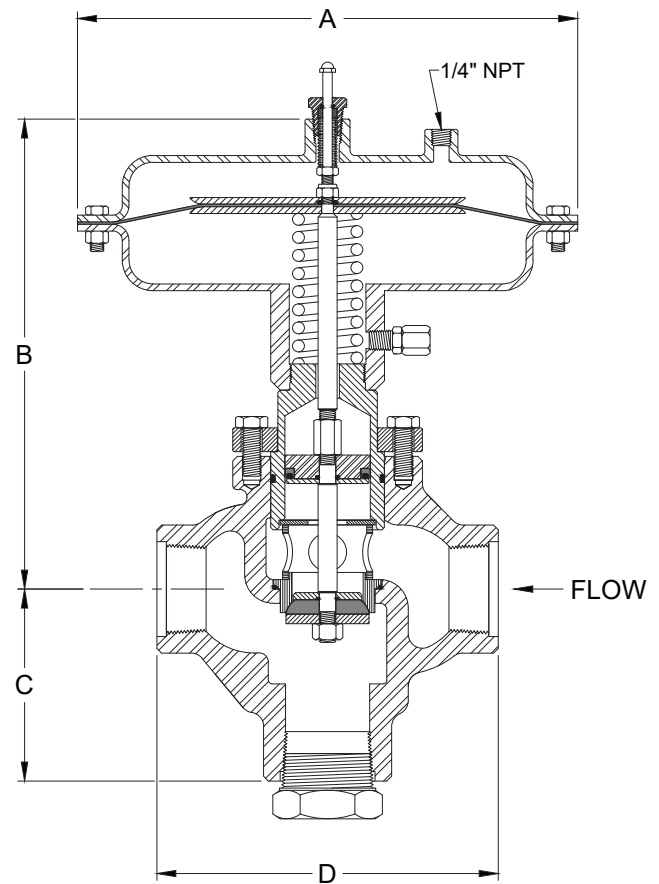
**8900-211-11A1**

**Fail Open**



**8900-212-12A2**

**Fail Closed**



### Flanged Models Dimensions

Flange	Face to Face	W.P. @ 100°F
1" 150# RF or RTJ	7"	275 psig
2" 150# RF or RTJ	9 <sup>5</sup> / <sub>8</sub> "	275 psig
1" 300# RF or RTJ	7 <sup>1</sup> / <sub>4</sub> "	720 psig
2" 300# RF or RTJ	10 <sup>1</sup> / <sub>4</sub> "	720 psig
1" 600# RF or RTJ	7 <sup>3</sup> / <sub>4</sub> "	1440 psig
2" 600# RF or RTJ	10 <sup>3</sup> / <sub>8</sub> "	1440 psig
1" 900# RF or RTJ	10 <sup>3</sup> / <sub>4</sub> "	1500 psig
2" 900# RF or RTJ	14"	1500 psig

### Valve Dimensions

Size	1"	2"
A	10 <sup>1</sup> / <sub>2</sub> "	13 <sup>3</sup> / <sub>16</sub> "
B	7 <sup>5</sup> / <sub>8</sub> "	12 <sup>3</sup> / <sub>8</sub> "
C	2 <sup>1</sup> / <sub>8</sub> "	5 <sup>1</sup> / <sub>16</sub> "
D	6 <sup>1</sup> / <sub>4</sub> "	9"
E	N/A	15 <sup>5</sup> / <sub>8</sub> "

Special Face to Face available on flanged and beveled connections.

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### Specifications

<b>Size:</b>	1" Tee Body	2" Tee Body
<b>Working Pressure:</b>	1500 psig	1500 psig
<b>Temperature:</b>	20°F to +180°F standard; available to +240°F	
<b>Topworks:</b>	Pressed steel with nylon reinforced nitrile diaphragm; 50 psig maximum supply pressure.	
<b>Effective Area:</b>	45 sq. in.	62 sq. in.
<b>Cv Factor:</b>	18	48

### Material

<b>Body:</b>	8900 - Cast steel 8900SS - 316L Stainless steel
<b>Stem:</b>	Stainless steel; Nitronic 50 available
<b>Piston:</b>	Brass; Nitronic 50 available
<b>Packing:</b>	Molythane; fluorocarbon available
<b>Trim Seat:</b>	Stainless steel, removable; available 316 SST, Hastelloy, 17-4 PH SST
<b>Trim Plug:</b>	Steel with molded nitrile standard; trim plug inserts available in acetal, polyurethane, PTFE; hard trim available in 303 SST; 316 SST; Hastelloy; 17-4 PH SST
<b>Piston Housing:</b>	Stainless steel; 316 SST Available
<b>NACE Package:</b>	NACE materials include 316L SST body and internal wetted components, fluorocarbon/316 SST packing gland, fluorocarbon seals, 316 SST lower stem, Nitronic 50 piston, PTFE or molded fluorocarbon trim plugs, or hard trim selection

### Maintenance

<b>Rebuild Kits:</b>	Rebuild Kits available which include: valve packing, seals, trim plug, valve stem, lock nuts and diaphragm
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### Ordering Chart Example:

**8900- 2 1 2 - 1 2 A 1**

(#) Option #, see Special Materials & Features below

8900 VALVE SIZE	
8900	
1	1" Carbon steel body
2	2" Carbon steel body

or

8900SS VALVE SIZE	
8900SS	
1	1" 316L Stainless steel body
2	2" 316L Stainless steel body

CONNECTION	
1	Threaded
3	Flanged - add letter from Flange Chart
4	Beveled for weld

FLANGE CLASS/TYPE CHART	
Add when using connection 3	
A	150# RF
B	300# RF
C	600# RF
D	900# RF
E	1500# RF
F	150# RTJ
G	300# RTJ
H	600# RTJ
J	900# RTJ
K	1500# RTJ

TOPWORKS	
Diaphragm Operated	
1	Spring on top - fail open
2	Spring under - fail closed
Adaptor for Hydraulic Electric Actuator	
6	Adaptor, actuator H10/11-B2
7	Adaptor, actuator H30/31-B10/21

TRIM SEAT	
1	303 SST standard
2	316 SST
H	Hastelloy
P	17-4 PH SST

Other (as needed, add to end of model number)	
1	No visual indicator
2	Heavy duty sealed visual indicator
4	Open Yoke (for high temperature or position indicator)
N	NACE material - also choose: Trim Seat 2, H or P (with exception) Trim Plug exclude 8; P (available with exception) Seals & Packing C or D
P	Nickel-plated non-stainless wetted parts
S	Stress relief for welded flanges

SEALS & PACKING	
A	Molythane packing, nitrile seals; brass piston
B	Fluorocarbon packing, fluorocarbon seals; brass piston
C	Molythane packing, nitrile seals; Nitronic 50 piston, 316 SST retainer, Nitronic 50 lower stem
D	Fluorocarbon packing, fluorocarbon seals; Nitronic 50 piston; 316 SST packing, fluorocarbon seals, Nitronic 50 lower stem

TRIM PLUG	
1	Molded nitrile/steel
2	Acetal
3	Polyurethane
4	TFE glass-filled
7	Molded fluorocarbon/steel
8	303 SST hard trim
9	316 SST hard trim
H	Hastelloy hard trim
P	17-4 PH SST hard trim

SPECIAL MATERIAL & FEATURES	
5	Used by Pathway to indicate custom material and/or feature. Placed in model number in the position it relates to (eg. trim plug, trim seat, etc.). When used, an option number will be assigned by Pathway (see below)
(#)	Option # (in parentheses at end of model number) Pathway will assign option number unique to custom material and/or features