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304 Series Three-Way, Two Position, Low Pressure Valve

Application:

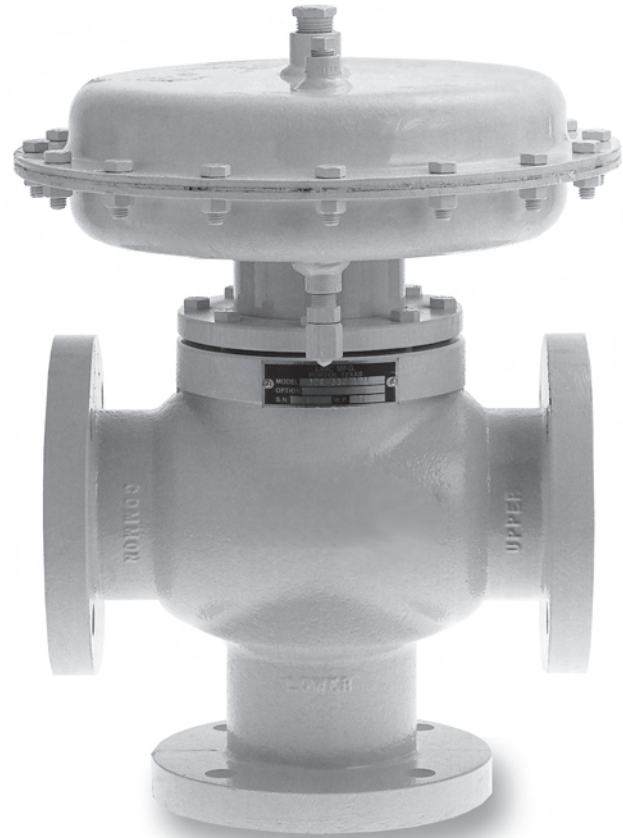
This valve is used for diverting, blending or metering. One port is common while a plug travels from the lower to the upper seat to divert the flow between the upper and lower ports. Ideal for well test manifolds, metering skids and anywhere a diverting flow is required.

Operation:

Applying supply pressure to the diaphragm causes the stem and plug to move from the upper to the lower seat, diverting flow. When supply pressure is removed, the spring moves the stem and plug to the upper seat. Topworks are available with the spring in the top position, spring under or pressure balanced providing a choice of which port is normally closed. The valve may also be used with a hydraulic electric actuator.

Features:

- Long packing life provided due to stainless steel stem operating in a replaceable bushing.
- Stainless steel seats are removable for easier servicing.
- Soft trim for bubble tight shut off.
- Durability and dependability built into every component.



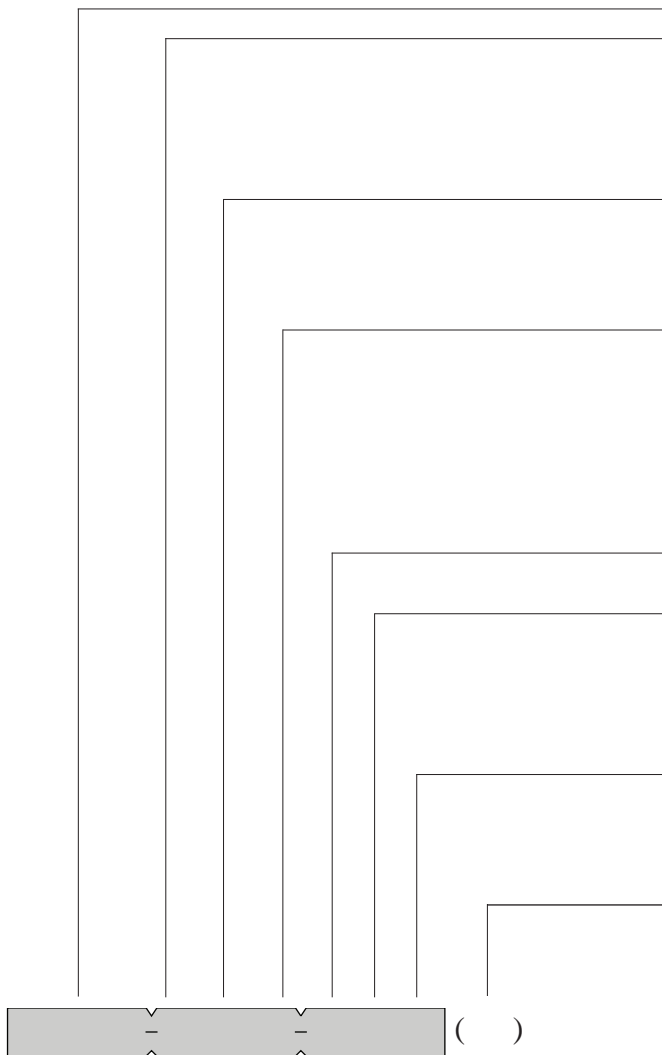
304 Series

Three-Way, Two Position, Low Pressure Valve

Specifications:

Size:	2"	3"	4"
Working Pressure:	600 psig	300 psig	300 psig
Temperature:	-20°F to +180°F, std.; available to +240°F		
Topworks:	Pressed steel with nylon reinforced nitrile diaphragm. 50 psig maximum supply pressure.		
Effective Area:	62 sq. in.	62 sq. in.	62 sq. in.
C_v Factor:			
C to U	48	118	180
C to L	64	189	227
Trim:			
Seat:	Stainless steel, removable.		
Plug:	Fabricated acetal, polyurethane or TFE inserts.		
Material:			
Body:	Ductile standard		
Stem:	Stainless steel		
Packing:	Poly Pak		

Ordering Chart:



304 Series: Three-way, two position valve

Size:

- 1 - 1"
- 2 - 2"
- 3 - 3"
- 4 - 4"

Connection:

- 1 - Threaded
- 2 - Grooved
- 3 - Flanged, *specify type**

Topworks:

- 1 - Spring top (62 sq. in.)
- 2 - Spring under (62 sq. in.)
- 3 - Pressure balanced (62 sq. in.)
- 6 - Spring top (45 sq. in.)
- 7 - Spring under (45 sq. in.)
- 8 - Pressure balanced (45 sq. in.)

Trim Seat:

- 1 - Removable, stainless steel

Trim Plug:

- 2 - Acetal
- 3 - Polyurethane
- 4 - TFE (fluorocarbon o-rings)
- 5 - Other (*see common options list*)

Other:

- 1 - No visual indicator
- 2 - Visual indicator
- 5 - Options (*see common options list*)

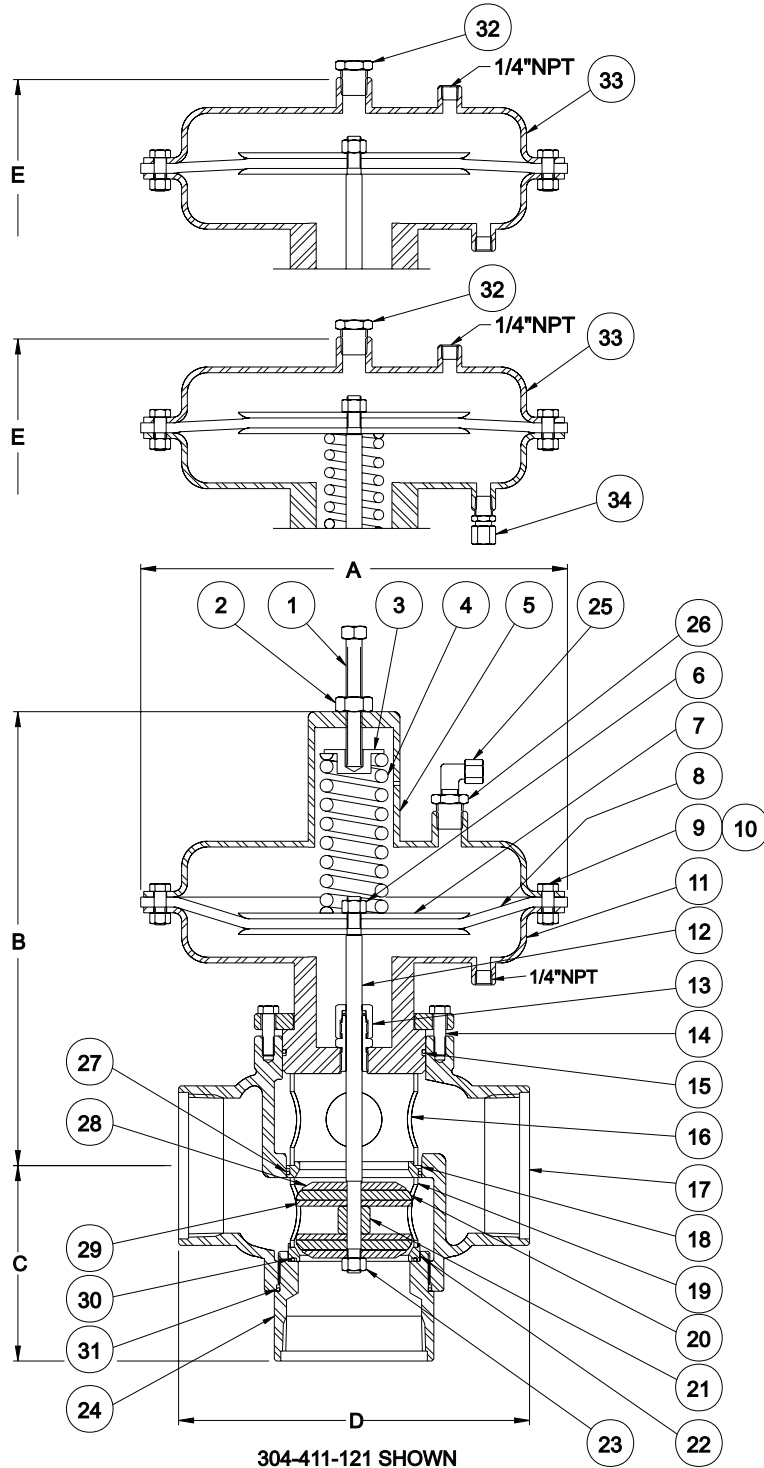
Option Number:

- () - Pathway will assign an option number based on specified requirements.

**flanges available
2"-150# or 300# RF, 3"-150# or 300# RF, 4"-150# RF*

Example: 304-211-121

304 Series
Three-Way, Two Position, Low Pressure Valve



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Three-Way, Two Position, Low Pressure Valve

Model	2"	3"	4"			
Item	Part #	Part #	Part #	Description	Material	Qty
1	10213	10213	10213	Adjustment Screw	Plated	1
2	10182	10182	10182	Jam Nut	Plated	1
3	20602	20602	20602	Spring Retainer	Carbon Steel	1
4	10043	10060	10060	Spring	Oil Tempered Steel	1
5	30051	30051	30051	Upper Diaphragm Housing	Fabricated Carbon Steel	1
6	10180	10180	10180	Lock Nut	Plated	1
7	30071	30071	30071	Diaphragm Plate	Cold Rolled Steel Plate	2
8	10028	10028	10028	Diaphragm	Nylon Reinforced Nitrile	1
9	10207	10207	10207	Cap Screw	Plated	16
10	10175	10175	10175	Hex Nut	Plated	16
11	30100	30050	30050	Lower Diaphragm Housing	Fabricated Carbon Steel	1
12	20589	20590	20594	Stem	303 ss	1
13	21348	21348	21348	Packing Gland Assembly	Brass/Nitrile	1
14	10205	10207	10207	Cap Screw	Plated	8
15	10142	10147	10147	O-Ring	Nitrile	1
16	20592	20591		Upper Cage	304 ss	1
			20593	Upper Cage	Carbon Steel	1
17	40070	40069	40090	Body, Threaded	Ductile ASTM A395	1
17B	40072	40071	40089	Body, Grooved	Ductile ASTM A395	1
17C	50024	50025	40088	Body, Flanged, 150# RF	Ductile ASTM A395	1
17D	50030	50084	N/A	Body, Flanged, 300# RF	Ductile ASTM A395	1
18	20585	20245	20595	Upper Seat	303 ss	1
19	20592	20247		Lower Cage	304 ss	1
			20599	Lower Cage	Carbon Steel	1
20A	20587	20249	20597	Plug	Polyurethane	2
20B	21149	21104	21471	Plug	Acetal	2
20C	23429	22307	22722	Plug	Glass filled TFE	2
21	20588	20248	20601	Plug Spacer	303 ss	1
22	20584	20246	20600	Lower Seat	303 ss	1
23	10181	10181	10181	Lock Nut	18-8 ss	1
24			30104	Connector, Threaded	Carbon Steel	1
24B			30103	Connector, Grooved	Carbon Steel	1
25	23339	23339	23339	Vent Assembly	Plated	1
26	10748	10748	10748	Bushing	Plated	1
27	10141	10146	10146	O-Ring	Nitrile	1
28	20586	20583	20598	Plug Retainer	303 ss	2
29			20596	Plug Backup Plate	303 ss	2
30	10137	10143	10981	O-Ring	Nitrile	1
31			11064	O-Ring	Nitrile	1
32	10346	10346	10346	Plug	Plated	1
33	30101	30101	30101	Upper Diaphragm Housing	Fabricated Carbon Steel	1
34	23338	23338	23338	Vent Assembly	Plated	1
	10016	10016	10016	Name Plate (not shown)	18-8 ss	1
	10324	10324	10324	Drive Screw (not shown)	18-8 ss	2

Flanged Models

Flange	Face to Face	CL to Face	W.P. @100°F
2" 150# RF	9"	4 1/2"	275 psi
3" 150# RF	11 3/4"	6 1/2"	275 psi
4" 150# RF	11"	6 1/8"	275 psi
2" 300# RF	9 1/4"	4 5/8"	600 psi
3" 300# RF	12"	6 3/4"	300 psi

Dimensions

Size	2"	3"	4"
A	13 1/16"	13 1/6"	13 1/16"
B	11 3/4"	13 1/2"	13 7/8"
C	4 1/2"	5 3/8"	6 1/8"
D	9"	10 3/4"	11"
E	9 3/4"	10 1/2"	10 7/8"