

MOTOR VALVES

8950 SERIES

The 8950 Series:

Back Pressure or Pressure Reducing, Overbalanced Valve

Application:

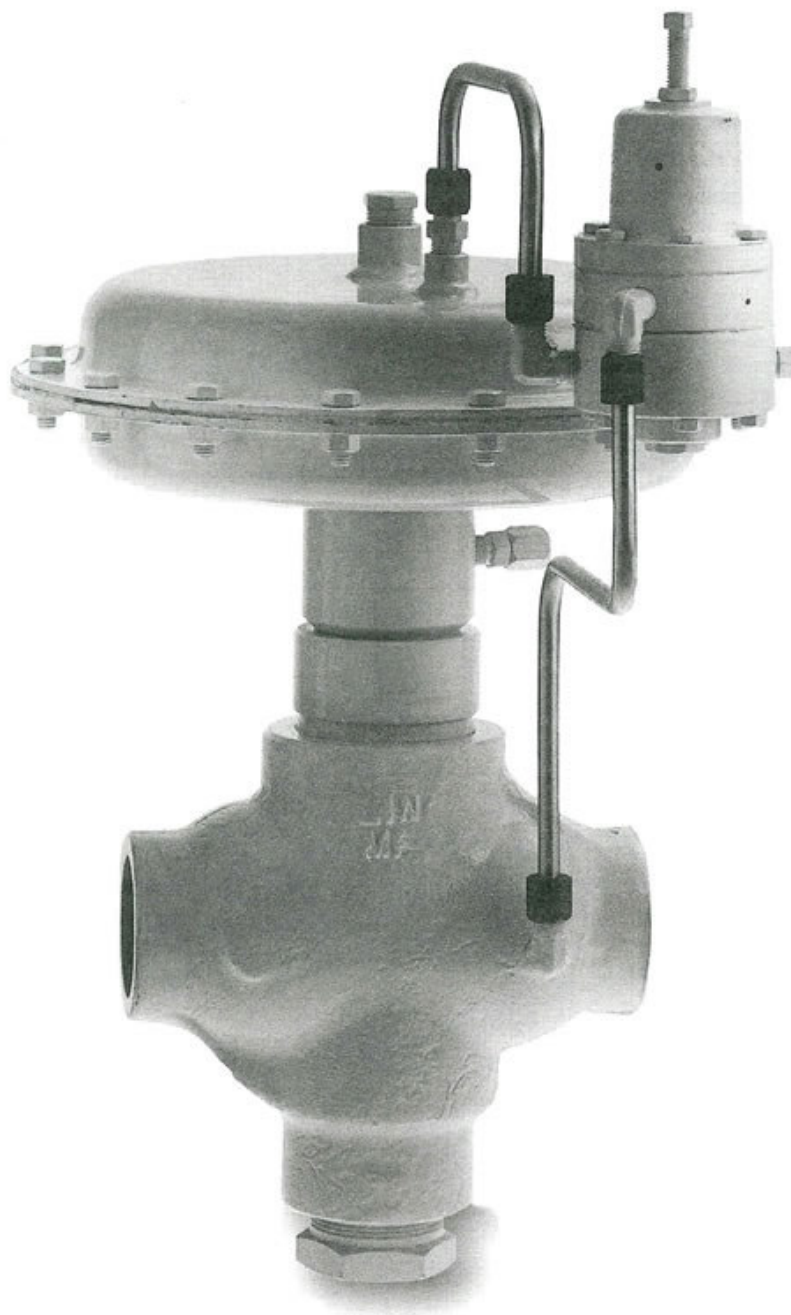
This Series can keep pressure constant upstream (back pressure) or downstream (pressure reducing). The back pressure unit is used to maintain pressure on separators, vessels or any location where constant pressure is vital. The pressure reducing version is suited on gas lift operations to protect surface equipment and to replace fixed orifice devices. The 8950 Series is available in a 316L stainless steel body to CF8M specification.

Operation:

Upstream pressure is applied to the plug and the piston. The piston is larger than the plug on the pressure reducing valve causing it to fail closed. It is smaller on the back pressure valve causing it to fail open. Pressure to be controlled is monitored by a pressure pilot. Output from the pilot throttles the valve to maintain a desired pressure.

Features:

- Fail safe operation by sizing the piston to the application.
- Soft trim provides for tight shut off.
- Easy maintenance because the trim is replaceable from the top of the valve without having to remove the valve body from the line.
- Stainless steel stem, piston housing and seat.
- Self-lubricating seal on the piston means less service.
- Bypass system is available.
- Available in a 316L stainless steel body to CF8M specification.



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Specifications: 8950 Overbalanced Pressure Control Valve

Size:	1"	2"
Working Pressure:	1500 psi	1500 psi
Temperature:	-20°F to +180°F	
Topworks:	Pressed steel with nylon reinforced nitrile diaphragm. 50 psi maximum supply pressure.	
Effective Area:	45 sq. in.	62 sq. in.
C_v Factor :	18	48
Trim:		
Seat:	Stainless steel, removable.	
Plug:	Steel with molded nitrile standard; optional fabricated acetal, polyurethane or TFE inserts.	
Material:		
Body:	Cast steel standard, available in 316L stainless steel (2" size only)	
Stem:	Stainless steel	
Packing:	Poly Pak	
Packing Block:	Stainless steel	

Ordering Chart:

8950 Series: Overbalanced control valve

Size:
 1 - 1"
 2 - 2"

Connection:
 1 - Threaded
 3 - Flanged specify type*
 4 - Beveled for weld
 6 - 2" threaded 316L ss (CF8M)
 8 - 2" flanged 316L ss (CF8M)
 9 - 2" beveled for weld, 316L ss (CF8M)

Type:
 3 - Back pressure
 4 - Pressure reducing

Trim Seat:
 1 - Removable, stainless steel

Trim Plug:
 1 - Steel with molded nitrile
 2 - Acetal (insert)
 3 - Polyurethane (insert)
 4 - TFE (glass filled - insert)
 5 - Options (specify your requirements)

Other:
 1 - No visual indicator
 2 - Visual indicator
 5 - Options (specify your requirements)

Option Number:
 () - Factory will assign an option number based on specified requirements.

*flanged models available in 150# to 1,500# RF or RTJ.
 Specify pressure required. Max controlled pressure with 2800 Series Pilot is 350#. Higher pressures available with your choice of pressure Pilots.

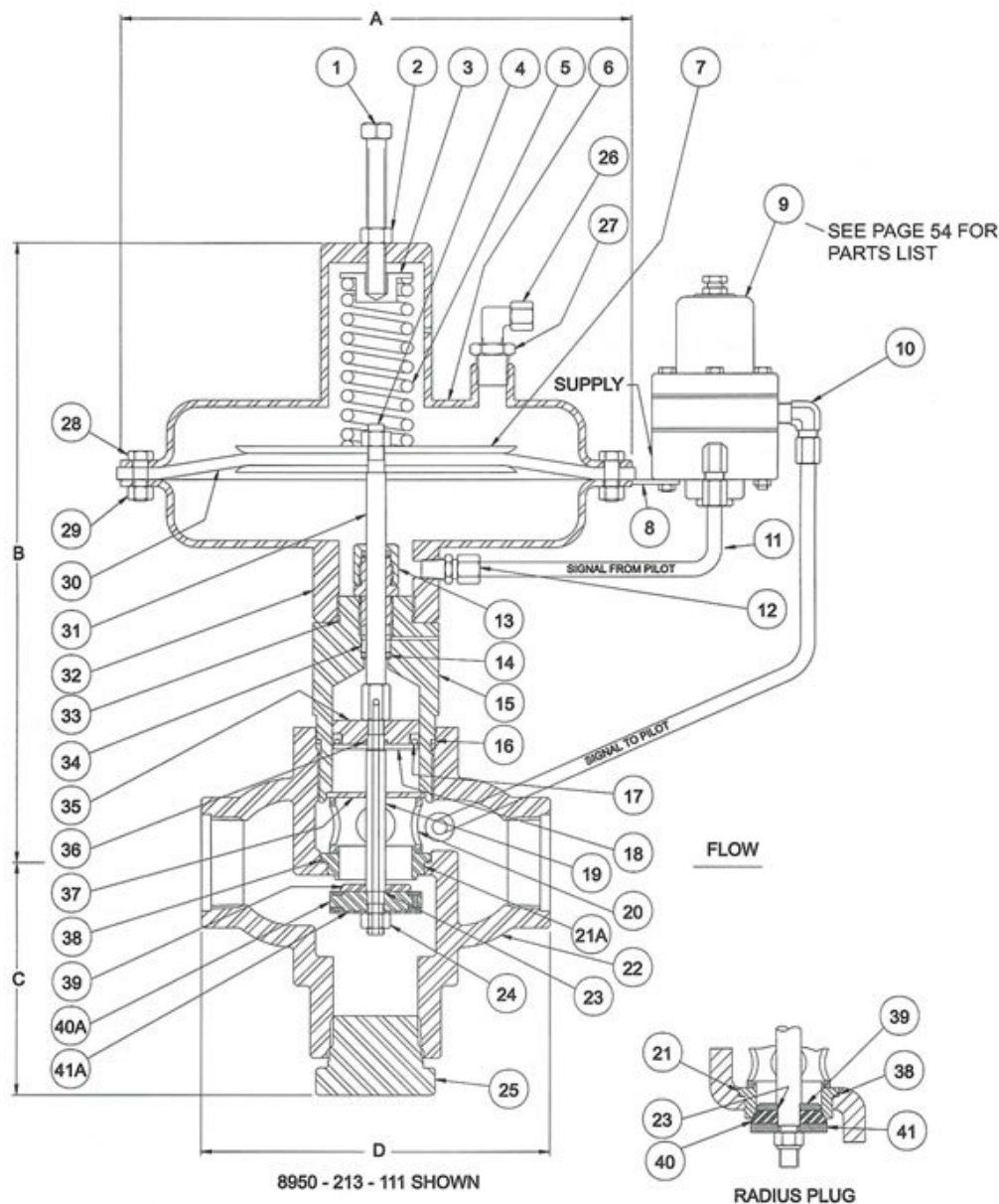
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Example: 8950-213-121

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8950 SERIES BACK PRESSURE VALVE



Flanged Valves

Flange	Face to Face	W.P. @ 100° F
1" 150# RF or RTJ	6 3/4"	275 psig
1" 300# RF or RTJ	6 3/4"	720 psig
1" 600# RF or RTJ	6 3/4"	1440 psig
1" 900# RF or RTJ	7 1/4"	1500 psig
1" 1500# RF or RTJ	7 1/4"	1500 psig
2" 150# RF or RTJ	9 5/8"	275 psig
2" 300# RF or RTJ	10 1/4"	720 psig
2" 600# RF or RTJ	10 3/8"	1440 psig
2" 900# RF or RTJ	12"	1500 psig
2" 1500# RF or RTJ	12"	1500 psig

Dimensions for Standard Models

Size	1"	2"
A	10 1/2"	13 1/16"
B	11 1/8"	15 1/2"
C	3 1/8"	6 1/8"
D	6 1/4"	9"

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8950 Series Back Pressure Valve

Model	1"	2"				
Item	Part #	Part #	Description	Material	Qty	
1	10210	10213	Adjustment Screw	Plated	1	
2	10177	10182	Jam Nut	Plated	1	
3	20628	20602	Spring Retainer	Carbon Steel	1	
4	10172	10172	Lock Nut	Plated	1	
5	10075	10043	Spring	Oil Tempered Steel	1	
6	30045	30051	Upper Diaphragm Housing	Fabricated Carbon Steel	1	
7	20696	20696	Diaphragm Plate	Cold Rolled Carbon Steel Plate	2	
8	20888	20888	Bracket	Carbon Steel	1	
9	30222	30222	Pilot Assembly	See Parts List	1	
10	11000	11000	Tubing Elbow	Plated	3	
11	18365	18365	Tubing	316 ss	1	
12	11001	11001	Tubing Fitting	Plated	1	
13	21669	21669	Packing Gland Assembly	Brass/Nitrile	1	
14	10156	10156	Packing	Molythane	1	
15	30060	30063	Packing Housing	303 ss	1	
16	10149	10140	O-Ring	Nitrile	1	
17	10158	10164	Packing	Molythane	1	
18	20322	20340	Packing Retainer	Brass	1	
19	20321	20339	Lower Stem	303 ss	1	
20	20712	20666	Cage	Carbon Steel	1	
21	20514	20331	Seat (Radius Plug)	303 ss	1	
21A	20699	20330	Seat (Molded Plug)	303 ss	1	
22	See Chart Below		Body	Cast Steel		
23	10111	10111	O-Ring	Nitrile	1	
24	10181	10181	Lock Nut	18-8 ss	1	
25	10224	10225	Pipe Plug	Carbon Steel	1	
26	23339	23339	Vent Assembly	Plated	1	
27	10748	10748	Bushing	Plated	1	
28	10207		Cap Screw	Plated	12	
28		10207	Cap Screw	Plated	16	
29	10175		Hex Nut	Plated	12	
29		10175	Hex Nut	Plated	16	
30	10094	10028	Diaphragm	Nylon Reinforced Nitrile	1	
31	20472	20342	Upper Stem	303 ss	1	
32	30056	30052	Lower Diaphragm Housing	Fabricated Carbon Steel	1	
33	10149	10149	O-Ring	Nitrile	1	
34	20324	20343	Packing Spacer	Brass	1	
35	20323	20341	Piston	Brass	1	
36	10121	10121	O-Ring	Nitrile	1	
37	20713	10367	Travel Stop	Carbon Steel	1	
38	10134	10132	O-Ring	Nitrile	1	
39	20471	20338	Throttling Plug	303 ss	1	
40	21599	20329	Plug	Polyurethane, Radius	1	
	21718	21150	Plug	Acetal, Radius	1	
		23747	Plug	Glass Filled TFE, Radius	1	
40A	20710	20326	Plug	Molded Nitrile	1	
41	20719	20325	Plug Backup Plate	303 ss	1	
41A	20711		Plug Backup Plate (Nitrile Plug)	303 ss	1	
		20327	Plug Backup Plate (Nitrile Plug)	Carbon Steel	1	
	10016	10016	Name Plate (not shown)	18-8 ss	1	
	10324	10324	Drive Screw (not shown)	18-8 ss	2	

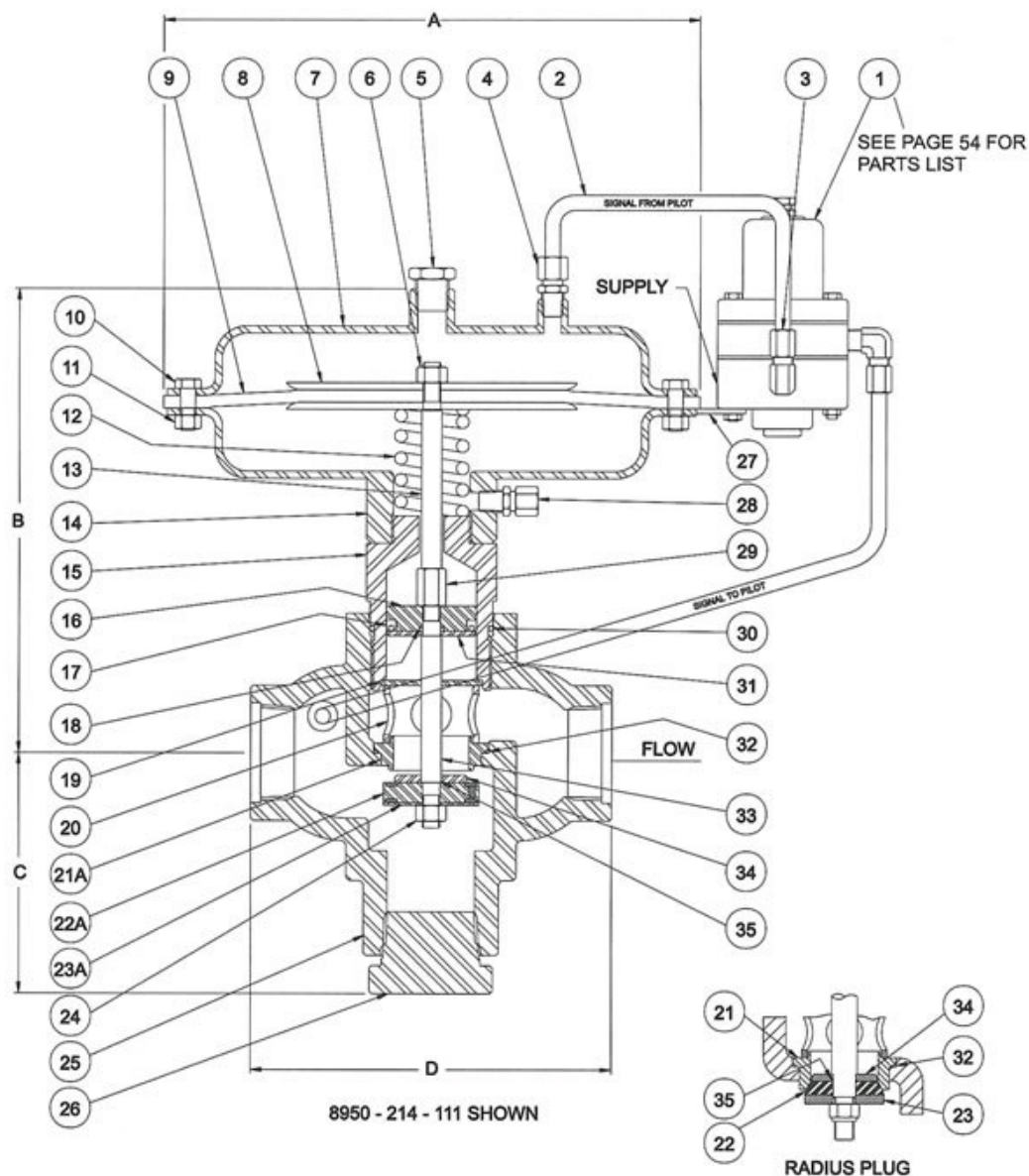
Body Chart

30122	40063	NPT Threaded
40465	41426	Flanged, 150# RF
40121	40137	Flanged, 300# RF
40124	40140	Flanged, 600# RF
40130	40146	Flanged, 600# RTJ
40127	40143	Flanged, 1500# RF
40133	40149	Flanged, 1500# RTJ
Other Flange Options Available, Contact Factory		

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8950 SERIES PRESSURE REDUCING VALVE



Flanged Models

Flange	Face to Face	W.P. @ 100° F
1" 150# RF or RTJ	6 3/4"	275 psig
2" 150# RF or RTJ	9 5/8"	275 psig
1" 300# RF or RTJ	6 3/4"	720 psig
2" 300# RF or RTJ	10 1/4"	720 psig
1" 600# RF or RTJ	6 3/4"	1440 psig
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1" 1500# RF or RTJ	7 1/4"	1500 psig
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Dimensions for Standard Models

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B	11 7/8"	12 1/2"
C	3 1/8"	5 1/16"
D	6 1/4"	9"

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8950 Series Pressure Reducing Valve

Model	1"	2"			
Item	Part #	Part #	Description	Material	Qty
1	30222	30222	Pilot Assembly	See Parts List	1
2	18365	18365	Tubing	304 ss	1
3	11000	11000	Tubing Elbow	Plated	3
4	11001	11001	Tubing Fitting	Plated	1
5	10346	10346	Plug	Plated	1
6	10172	10172	Lock Nut	Plated	1
7	30049	30101	Upper Diaphragm Housing	Fabricated Carbon Steel	1
8	20696	20696	Diaphragm Plate	Cold Rolled Carbon Steel Plate	2
9	10094	10028	Diaphragm	Nylon Reinforced Nitrile	1
10	10207		Cap Screw	Plated	12
		10207	Cap Screw	Plated	16
11	10175		Hex Nut	Plated	12
		10175	Hex Nut	Plated	16
12	10074	10043	Spring	Oil Tempered Steel	1
13	20717	20328	Upper Stem	303 ss	1
14	30056	30052	Lower Diaphragm Housing	Fabricated Carbon Steel	1
15	30059	30091	Piston Housing	303 ss	1
16	20715	20336	Piston	Brass	1
17	10160	10161	Packing	Molythane	1
18	10121	10121	O-Ring	Nitrile	1
19	20713	10367	Travel Stop	Carbon Steel	1
20	20712	20666	Cage	Carbon Steel	1
21	20514	20331	Seat (Radius Plug)	303 ss	1
21A	20699	20330	Seat (Molded Nitrile Plug)	303 ss	1
22	21599	20329	Plug	Polyurethane, Radius	1
	20718	21150	Plug	Acetal, Radius	1
		23747	Plug	Glass Filled TFE, Radius	1
22A	20710	20326	Plug	Molded Nitrile	1
23	20719	20325	Plug Backup Plate	303 ss	1
23A	20711		Plug Backup Plate (Molded Plug)	303 ss	1
		20327	Plug Backup Plate (Molded Plug)	Carbon Steel	1
24	10181	10181	Lock Nut	18-8 ss	1
25	See Chart Below		Body	Cast Steel	1
26	10224	10225	Plug	Carbon Steel	1
27	20888	20888	Bracket	Carbon Steel	1
28	23338	23338	Vent Assembly	Plated	1
29	20716	20716	Stem Connector	303 ss	1
30	10149	10140	O-Ring	Nitrile	1
31	20714	20337	Piston Retainer	Brass	1
32	10134	10132	O-Ring	Nitrile	1
33	20319	20332	Lower Stem	303 ss	1
34	20471	20338	Throttling Plug	303 ss	1
35	10111	10111	O-Ring	Nitrile	1
	10016	10016	Name Plate (not shown)	18-8 ss	1
	10324	10324	Drive Screw (not shown)	18-8 ss	2

Body Chart

30123	40135	NPT Threaded
40466	44322	Flanged, 150# RF
40122	44322	Flanged, 300# RF
40125	40141	Flanged, 600# RF
40131	41047	Flanged, 600# RTJ
40128	41044	Flanged, 1500# RF
40134	40150	Flanged, 1500# RTJ
Other Flange Options Available, Contact Factory		