

September 2009

Type 75A Water Pressure Regulator

Application

The Type 75A is designed to reduce domestic or industrial water pressures to a constant pressure, thus protecting plumbing fixtures and meters from high-pressure surges. As shown in Figure 1, it is self-contained, requiring no external control line for operation.

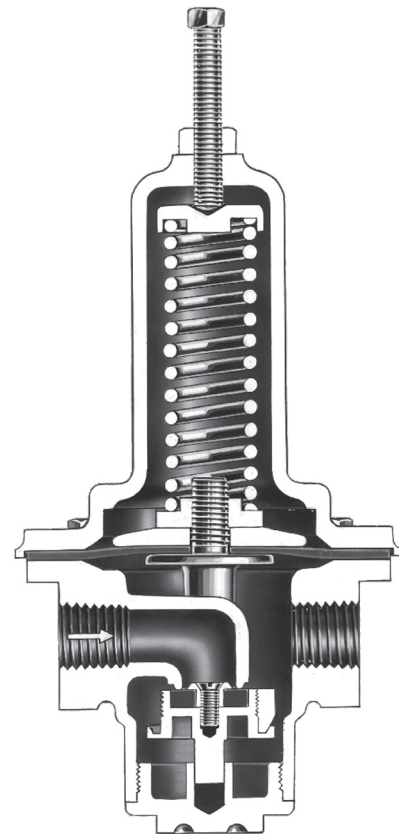
Installation

Check the unit for shipment damage. Clean all foreign material from the pipelines and regulator interior. Install the Type 75A in a horizontal line with the spring case above or below the line, and with flow through the regulator as indicated by the arrow cast on the body. Coat the external threads with pipe compound and draw up the connections tightly but not severely. If a snap-acting valve (solenoid valve) is used in the system, the snap-acting valve should be installed upstream of the Type 75A. The Type 75A may be damaged by high shutoff pressure if a snap-acting valve is installed downstream.

Adjustment

One spring for each size regulator allows operation over an outlet pressure range of 20 to 80 psi (1,4 to 5,5 bar). Maximum inlet pressure is 200 psi (13,8 bar). Minimum operating differential pressure is 5 psi (0,34 bar).

To change the reduced pressure, loosen the adjusting screw locknut (key 9) and turn the adjusting screw (key 8) into the spring case to increase the reduced pressure, or out of the case to decrease it. Re-tighten the locknut.



W0057-1

Figure 1. Type 75A Water Pressure Regulator

Maintenance

To replace the valve disk (key 13), unscrew the guide plug (key 3) from the body. The valve disk holder (key 5) may now be unscrewed from the yoke (key 4). Be careful not to twist and rupture the diaphragm (key 12).



Type 75A

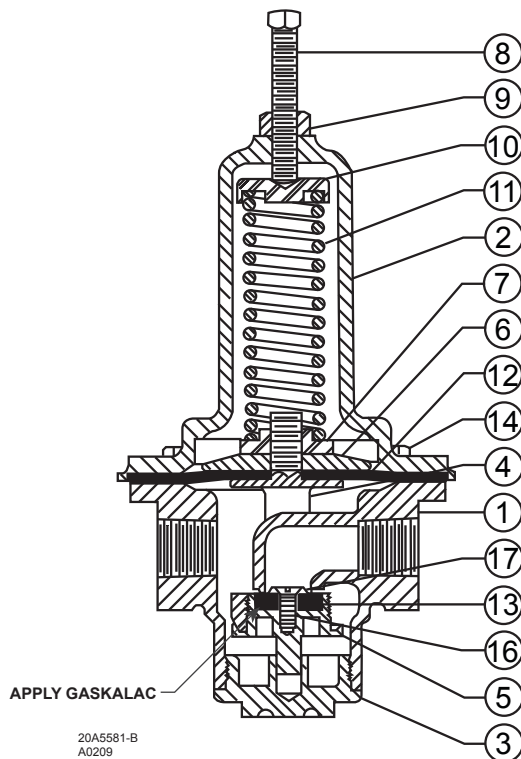
Note

A piece of hex bar stock can be drilled out and slipped over the disk holder shaft to fit inside the holder. This simplifies removal of the holder from the yoke.

Use the following sizes of hex bar:
NPS 1/2 (DN 15) body – 7/8-inch (22 mm) hex;
NPS 3/4 (DN 20) body – 1-inch (25 mm) hex;
NPS 1 or 1-1/2 (DN 25 or 40) body – 1-1/4-inch (32 mm) hex;
NPS 2 (DN 50) body – 2-inch (51 mm) hex;
NPS 2-1/2 (DN 65) body – 2-1/2-inch (63 mm) hex.

To replace valve disk, unscrew the disk retaining screw (key 16), remove old disk (key 13), apply gasket sealer to new disk and install.

To replace the diaphragm, first remove tension of the regulator spring (key 11) by turning out the adjusting screw (key 8). Remove the bolting that holds the spring case (key 2) to the body and lift off the casing and regulator spring. Unscrew the diaphragm nut (key 7) and diaphragm head (key 6). Replace the diaphragm.



NPS 1/2, 3/4, 1, AND 1-1/2 BODY (DN 15, 20, 25, AND 40)

Figure 2. Type 75A Assemblies

Parts Ordering

When corresponding with your local Sales Office or sales representative about this regulator, always reference the type number which is found on the nameplate (key 21).

When ordering replacement parts, reference the key number of each needed part as found in the following parts list.

Parts List

Key	Description	Part Number
1	Body Bronze	
	NPS 1/2 (DN 15)	2A940812012
	NPS 3/4 (DN 20)	2D226312012
	NPS 1 (DN 25)	2V361512012
	NPS 1-1/2 (DN 40)	3D174012012
	NPS 2 (DN 50)	3D626712012
	NPS 2-1/2 (DN 65)	3E231012012
2	Spring Case Cast Iron	
	NPS 1/2 (DN 15)	1D878619042
	NPS 3/4 (DN 20)	00085719042
	NPS 1 (DN 25)	2A480119042
	NPS 1-1/2 (DN 40)	3V361319042
	NPS 2 and 2-1/2 (DN 50 and 65)	00132019042

Key	Description	Part Number
3	Guide Plug Bronze	
	NPS 1/2 (DN 15)	0W099412012
	NPS 3/4 (DN 20)	1A971912012
	NPS 1 (DN 25)	1A950812012
	NPS 1-1/2 (DN 40)	1A974612012
	NPS 2 (DN 50)	1A975212012
	NPS 2-1/2 (DN 65)	0D023212012
4	Valve Yoke Bronze	
	NPS 1/2 (DN 15)	1A942712012
	NPS 3/4 (DN 20)	1A945512012
	NPS 1 (DN 25)	1A951412012
	NPS 1-1/2 (DN 40)	2V361412012
	NPS 2 (DN 50)	2V361612012
	NPS 2-1/2 (DN 65)	2V361712012
5	Valve Disk Holder Bronze	
	NPS 1/2 (DN 15)	1B590112012
	NPS 3/4 (DN 20)	1B590212012
	NPS 1 (DN 25)	1B867312012
	NPS 1-1/2 (DN 40)	1B867712012
	NPS 2 (DN 50)	1B867912012
	NPS 2-1/2 (DN 65)	1B869812012
6	Diaphragm Head	
	NPS 1/2 (DN 15), Steel	1A941524092
	NPS 3/4 (DN 20), Cast Iron	1A945619042
	NPS 1 (DN 25), Cast Iron	1A950919052
	NPS 1-1/2 (DN 40), Cast Iron	1V361219042
	NPS 2 and 2-1/2 (DN 50 and 65), Cast Iron	1A975819042

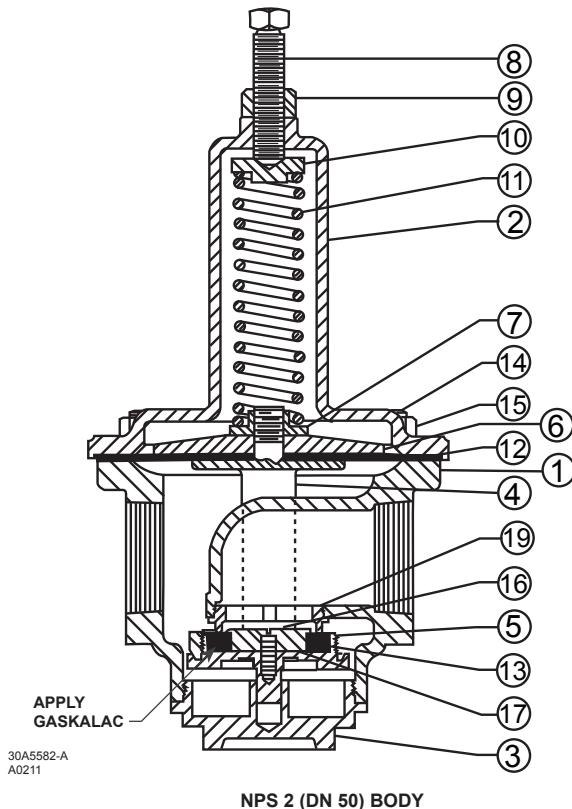


Figure 2. Type 75A Assemblies (continued)

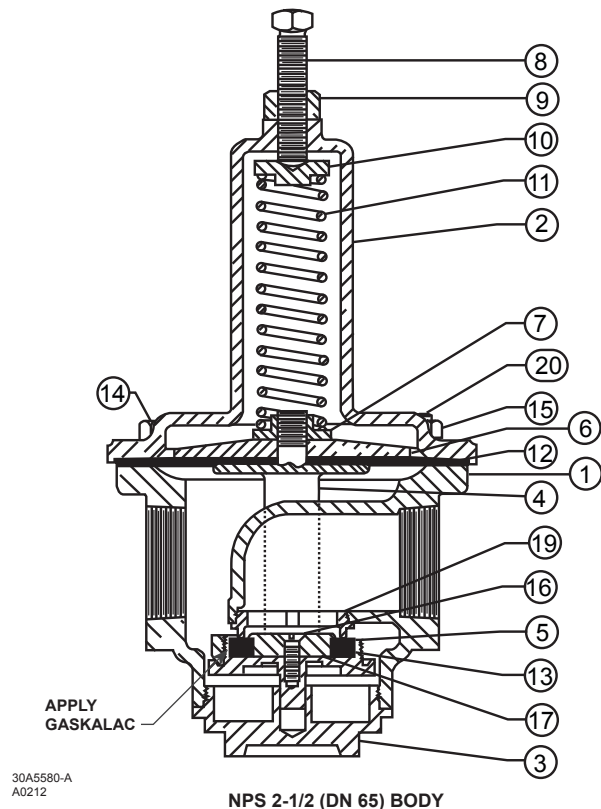


Figure 2. Type 75A Assemblies (continued)

Key	Description	Part Number
7	Diaphragm Nut Steel	
	NPS 1/2 (DN 15)	1A941424092
	NPS 3/4 (DN 20)	1E478524092
	NPS 1 (DN 25)	1V361124092
	NPS 1-1/2 (DN 40)	1A974824092
	NPS 2 and 2-1/2 (DN 50 and 65)	1A982424092
8	Set Screw Zinc-plated steel	
	NPS 1/2 (DN 15)	1C216032992
	NPS 3/4 (DN 20)	1A514428992
	NPS 1 and 1-1/2 (DN 25 and 40)	1F575328992
	NPS 2 and 2-1/2 (DN 50 and 65)	1V360928982
9	Hex Nut Brass	
	NPS 1/2 and 3/4 (DN 15 and 20)	1A518014012
	NPS 1 and 1-1/2 (DN 25 and 40)	1A352414012
	NPS 2 and 2-1/2 (DN 50 and 65)	1A599314012
10	Spring Seat Steel	
	NPS 1/2 and 3/4 (DN 15 and 20)	1E478424092
	NPS 1 (DN 25)	1V361024092
	NPS 1-1/2 to 2-1/2 (DN 40 to 65)	1A975424092
11	Spring Spring wire	
	NPS 1/2 (DN 15)	1V360527022
	NPS 3/4 (DN 20)	1V360627142
	NPS 1 (DN 25)	1V360727142
	NPS 1-1/2 (DN 40)	1V360827142
	NPS 2 and 2-1/2 (DN 50 and 65)	1C398227042

Key	Description	Part Number
12*	Diaphragm Neoprene (CR)	
	NPS 1/2 (DN 15)	1A941002112
	NPS 3/4 (DN 20)	1A946102112
	NPS 1 (DN 25)	1A951102112
	NPS 1-1/2 (DN 40)	1A974302112
	NPS 2 and 2-1/2 (DN 50 and 65)	1A975502112
13*	Valve Disk Nitrile (NBR)	
	NPS 1/2 (DN 15)	1C158203022
	NPS 3/4 (DN 20)	1C158603022
	NPS 1 (DN 25)	1C158703022
	NPS 1-1/2 and 2 (DN 40 and 50)	1C158903022
	NPS 2-1/2 (DN 65)	1C159803022
14	Cap Screw Zinc-plated steel	
	NPS 1/2 (DN 15) (6 required)	1B720924052
	NPS 3/4 (DN 20) (6 required)	1A352624052
	NPS 1 (DN 25) (8 required)	1A368324052
	NPS 1-1/2 (DN 40) (8 required)	1A353024052
	NPS 2 (DN 50) (10 required)	1A569824052
	NPS 2-1/2 (DN 65) (4 required)	1A582324052
15	Hex Nut Zinc-plated steel	
	NPS 1/2 (DN 15) (6 required)	1A3915X0022
	NPS 3/4 (DN 20) (6 required)	1A352724122
	NPS 1 and 1-1/2 (DN 25 and 40) (8 required)	1A346524122
	NPS 2 (DN 50) (10 required)	1A353724122
	NPS 2-1/2 (DN 65) (6 required)	1A341224122

*Recommended spare part.

Type 75A

Key	Description	Part Number	Key	Description	Part Number
16	Machine Screw Brass NPS 1/2 (DN 15) NPS 3/4 and 1 (DN 20 and 25) NPS 1-1/2 and 2 (DN 40 and 50) NPS 2-1/2 (DN 65)	1A8991X0012 0V070414012 1D567314012 J17796X0012	19*	Orifice Bronze NPS 2 (DN 50) NPS 2-1/2 (DN 65)	1A980512012 1A981012012
17	Disk Retainer Washer Brass NPS 3/4 (DN 20) NPS 1 (DN 25) NPS 1-1/2 and 2 (DN 40 and 50) NPS 2-1/2 (DN 65)	0B078214012 00147614012 1A975014012 0D023314012	20	Cap Screw Zinc-plated steel NPS 2-1/2 (DN 65) (6 required)	1A344424052
			21	Nameplate (not shown)	11B6112X012
			22	Drive Screw (not shown)	1A676728992

*Recommended spare part.

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