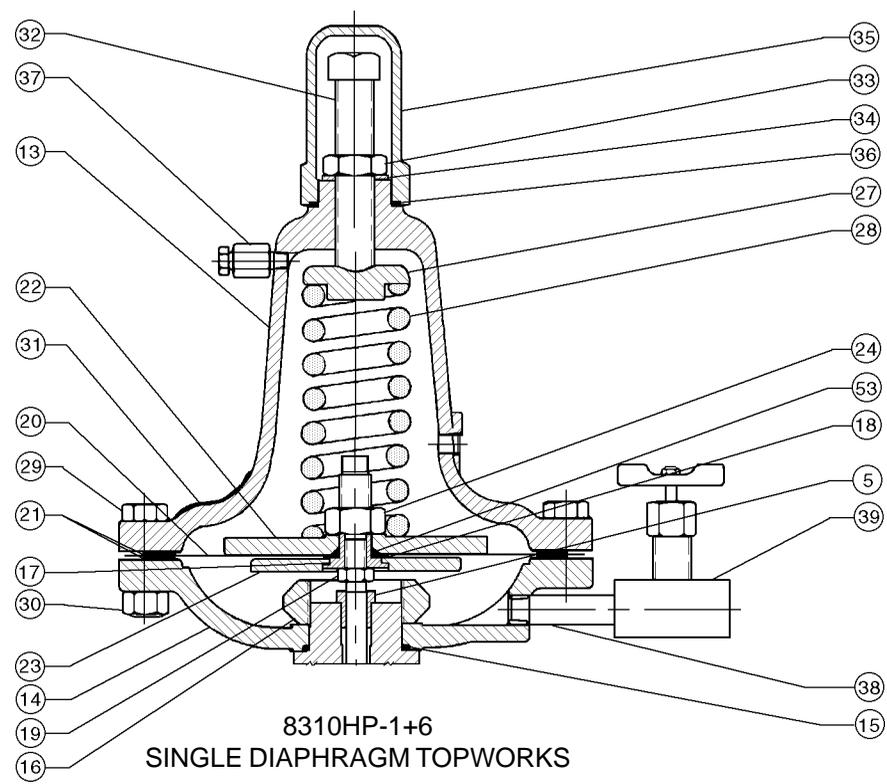


8310HP-1+8
DOUBLE DIAPHRAGM TOPWORKS
("HP" VARIATION ONLY)



8310HP-1+6
SINGLE DIAPHRAGM TOPWORKS

ITEM NO.	DESCRIPTION	ITEM NO.	DESCRIPTION
1	BODY	20	DIAPHRAGM
2	BONNET	21	DIAPHRAGM GASKET
3	BOTTOM FLANGE	22	PRESSURE PLATE
4	GUIDE BUSHING	23	LOWER PRESSURE PLATE
5	STEM BUSHING	24	PRESSURE PLATE NUT
6	BODY GASKET	25	BODY SPACER
7	BODY STUD	26	DIAPHRAGM SPACER
8	BODY STUD NUT	27	SPRING BUTTON
10	UPPER SEAT RING	28	RANGE SPRING
11	LOWER SEAT RING	29	FLANGE BOLT
12	VALVE PLUG ASSEMBLY	30	FLANGE NUT
12.1	PLUG	31	NAME PLATE
12.2	STEM	32	ADJUSTING SCREW
12.3	PIN (GROOVE)	33	ADJ. SCREW LOCK NUT
13	SPRING CHAMBER	34	SEAL WASHER
14	DIAPHRAGM CASE	35	CLOSING CAP
15	O-RING	36	CLOSING CAP GASKET
16	BONNET NUT	37	BLEEDER VALVE
17	PUSHER PLATE	38	PIPE NIPPLE
18	PUSHER PLATE GASKET	39	NEEDLE VALVE
19	STEM LOCK NUT	53	O-RING

INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS

Install with arrow on body (1) pointing in direction of flow.

Install an external sensing line (1/2" O.D. tubing min.) from the 3/8" NPT connection in needle valve (39) to a point downstream, preferably at gauge location.

Install oil loading pressure sensing line to spring chamber (13) connection.

For long operational life with minimum maintenance, install a strainer in the upstream line. If valve pipe line is expanded to a larger pipe line, always connect steam sensing line to the larger pipe line. To increase the differential setting, turn the adjusting screw (32) clockwise. To decrease the differential setting, turn the adjusting screw (32) counterclockwise.

Before disassembling the valve for maintenance work, always release the tension on the range spring (28) by turning the adjusting screw (32) counterclockwise.

For examination or replacement of diaphragms (20), remove spring chamber (13). Place wrench on flats of pusher plate (17). Remove nut (24), and pressure plate (22), then remove upper set of diaphragms (20), diaphragm spacer (26), body spacer (25), and lower set of diaphragms (20).

For examination or replacement of plug (12), proceed as noted above, then remove stem lock nut (19). Remove bottom flange (3) and remove plug and stem subassembly (12). Upon reassembly make certain the diaphragm case (14) is pulled down tight to make metal to metal contact.

The diaphragm setting must be flush to ensure proper valve travel (with plug against the seat, adjust the pusher plate (17) so that the gasket (18) face of the pusher plate (17) is flush with the top of the case (14) flange and then tighten the stem lock nut (19) by holding upper flats on the pusher plate (17)).

STABILIZING NEEDLE VALVE – The needle valve (39) is shipped in a full open position. If the system is unstable due to pressure fluctuations, slowly close this valve (39) until system becomes stable. This valve (39) should never be in a fully closed position.

Turn handle of bleeder valve (37) counterclockwise to bleed off air entrapped above oil to ensure stable operation.

**MODEL "8310HP-1+8", OR
MODEL "8310HP-1+6", OR
MODEL "8310LP-1+6"**
DIFFERENTIAL PRESSURE REDUCING REGULATOR

TEMPORARY LITHO

DATE
08/96

NB PB QB



Cashco, Inc.
P.O. Box 6
Ellsworth, KS 67439-0006
PH (785) 472-4461 • FAX (785) 472-3539
E-mail: sales@cashco.com or exportsales@cashco.com