



DH10/-SERIES SELF ACTUATED HIGH PRESSURE DOWNSTREAM PRESSURE CONTROL VALVE



REF. : DH10/04/RO PAGE 1 OF 2

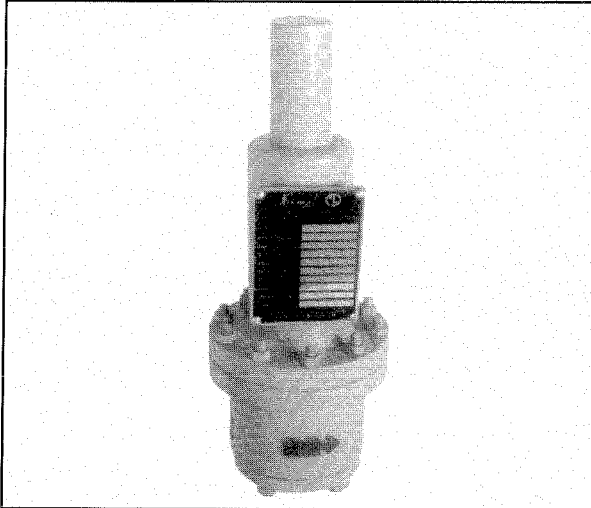


Figure 1 : Typical DH10/- Series Pressure Control Valve

These type of Self-actuated downstream pressure control valves are used for high inlet pressure range. These valves have handled pressure as high as 280 Barg. These valves are immune to drastic changes in the inlet pressure as long as inlet pressure is higher than the outlet set pressure. Since, these valves have high flow capacity, the controlled downstream pressure remains constant irrespective of large changes in the flow through the valve.

The high pressure valve bodies are manufactured from bar stock or forged steel to ensure the rigidity of the material.

FEATURES

- **Easy to Maintain** : Sturdy and compact design with minimum number of moving parts. Actuator internals, Valve Disc & trim parts can be replaced, without removing the regulator from the pipe line.
- **Glandless Construction** : Where positive zero gland leakage is required, the design scores over conventional solutions such as bellow seals etc., as the gland itself is eliminated and hence there can't be gland leakage. Glandless construction eliminates hysteresis, resulting in improvement of sensitivity & repeatability of the valve.
- **Tight Shut Off Capability** : Special trim design eliminates wear and erosion of seating, providing excellent tight shut off capability over long working life.
- **Tamper Resistant** : An adjusting screw lock nut and protective cap is standard to discourage tampering with pressure setting.

SPECIFICATIONS

- Max inlet pressure** : Upto 4000 PSIG
- Body Size** : ½", ¾" & 1"
- End Connections** : Screwed (welded flange on request)
- Available Configurations** : Refer Table 1.
- Flow Coefficients** : Refer Table 1.
- Material of Construction**
- Body *** : C.S., S.S. 304, S.S. 316
- Bottom Diaphragm Casing** : Steel (Std.), S.S. -304, S.S-316 or same as body material.
- Spring Casing** : Steel
- Internal Trim Parts*** : S316 (Standard), Monel, Copper, Brass (* NACE & other special materials available on request.)
- Diaphragm** : Nitrile (Standard), Neoprene, EPDM, Silicon, PTFE, Fluro Elastomer, S. S.
- Temperature Capabilities** :
-25°C to 80°C with nitrile elastomeric parts.
-25°C to 180°C with Fluropolymer elastomeric parts.
Cryogenic & high temperature options available
- Pressure Setting Adjustment** : May be adjusted throughout a spring range by turning the adjusting screw.
- Pressure Registration** : Internal (Standard)
- Dimensions & Approx. Weight** : Refer Figure 1.



DH10/-SERIES SELF ACTUATED HIGH PRESSURE DOWNSTREAM PRESSURE CONTROL VALVE



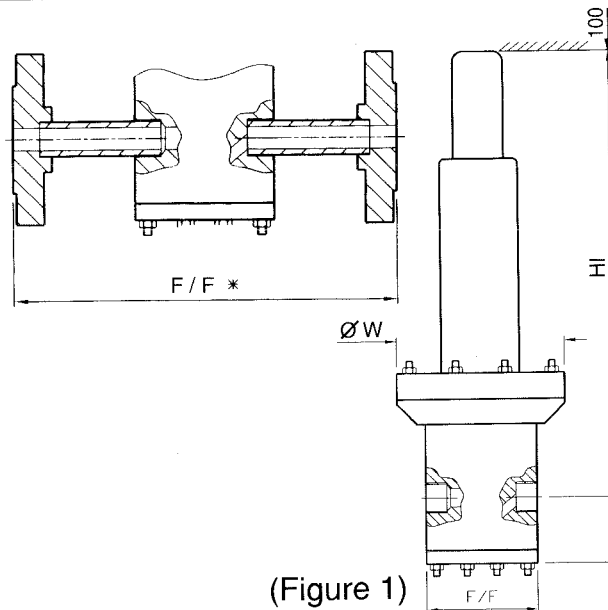
REF. : DH10/04/RO PAGE 2 OF 2

PRODUCT DESCRIPTION

High pressure media enters the regulator through the inlet into high-pressure chamber. When the adjusting screw is turned clockwise, it compresses the set pressure spring and exerts a force on the diaphragm, which pushes the valve stem open. This releases gas into the low-pressure chamber, exerting an opposing force on the diaphragm. An equilibrium is reached when the spring force on the diaphragm is equal to the opposing force of the gas in the low-pressure chamber.

Table 1

Model	Valve Size Set Pr. Range	1/2"	3/4"	1"
		Valve Cv		
DH 10-1	6 TO 9 Kg/cm ² g	0.1	--	--
DH 10-2	3.0 - 10.5 Kg/cm ² g	0.2	0.25	0.3
DH 10-3A	8 - 22 Kg/cm ² g			
-3B	11 - 30 Kg/cm ² g			
-3C	13 - 45 Kg/cm ² g	0.2	0.25	0.3
-3D	20 - 55 Kg/cm ² g			



(Figure 1)

MODEL	DH 10-1		DH 10-2		DH 10-3	
SIZE	WEIGHT		WEIGHT		WEIGHT	
	FLANGED 1500#	NPTF/ BSPF	FLANGED 1500#	NPTF/ BSPF	FLANGED 1500#	NPTF/ BSPF
1/2" (15 NB)	17 Kg	10 Kg	29 Kg	21.5 Kg	30 Kg	23 Kg
3/4" (20 NB)	--	--	30 Kg	21.5 Kg	31 Kg	23 Kg
1" (25 NB)	--	--	31 Kg	21.5 Kg	32 Kg	23 Kg

MODEL	DH 10-1					DH 10-2					DH 10-3					
	SIZE	Ø W	H0	H1	F/F	F/F	Ø W	H0	H1	F/F	F/F	Ø W	H0	H1	F/F	F/F
			(MAX)		FLANGED 1500#	NPTF/ BSPF	(MAX)				FLANGED 1500#	NPTF/ BSPF	(MAX)		FLANGED 1500#	NPTF/ BSPF
1/2" (15NB)	115	325	66	230	80	165	410	90	268	118	165	410	90	268	118	
3/4" (20NB)	--	--	--	--	--	165	410	90	268	118	165	410	90	268	118	
1" (25 NB)	--	--	--	--	--	165	410	90	268	118	165	410	90	268	118	

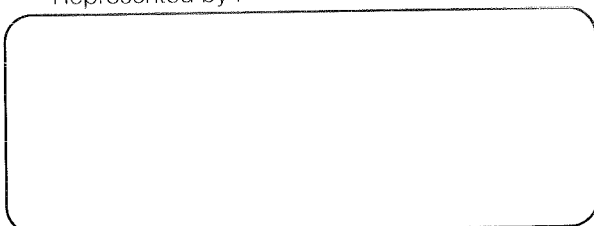
* Optional F/F equal to 14" (356mm) with flanged end.

ALL DIMENSIONS ARE IN MM

• ENQUIRY SPECIFICATIONS •

INLET PRESSURE	SERVICE FLUID
OUTLET PRESSURE	FLOW MIN / MAX
LINE / SIZE	PERMISSIBLE DROOP
SPECIFIC GRAVITY	MAX. TEMPERATURE

Represented by :



INDUSTRIAL CONTROLS PVT. LTD.

4, NAHUR INDUSTRIAL ESTATE, L. B. S. MARG,
MULUND (W), MUMBAI - 80. INDIA.
PH. : 2560 86 68 / 2591 60 16
FAX : 91-22-2568 27 71.

E-mail : info@nirmalindustries.com
WEBSITE : www.nirmalindustries.com

NIRMAL INDUSTRIAL CONTROLS PVT. LTD., MUMBAI - 80.