DUCTILE IRON

DIAPHRAGM TYPE PRESSURE REDUCING VALVE

INTRODUCTION

Leader Diaphragm Type Pressure Reducing Valves automatically reduces a higher inlet pressure to a steady lower downstream pressure, regardless of changing flow rate and/or varying inlet pressure. This valve is an accurate, diaphragm regulator capable of holding downstream pressure to a pre-determined limit. No matter how the flow rate or pressure before the valve fluctuates and changes the valve can reduce the pre-valve high pressure to the post-valve low pressure and keep it stable, even if the valve does not have user water. It can keep the outlet pressure stable.

PRINCIPAL FEATURES

- Body made of sturdy construction in Ductile Iron.
- SS304 internals offers long life.
- Designed to suite precise application requiring accurate pressure rating, pressure drop being less.
- Top & bottom guided stem and diaphragm assembly for long life and reliable performance.
- Preferred horizontal installation for better performance, can be installed in vertical position.
- Performs perfect modulation in variable flows.
- No external source of energy required.
- Very rugged type of construction leads to low damages and self operating in nature.
- Maximum inlet pressure range 17.24 Kg/Cm2.
- Set Pressure range 0.6 Kg/Cm2 to 6 Kg/Cm2.
- Flanged ends as per BS:10 Table 'H' (FF).

END CONNECTION

Flanges as per BS:10 Table 'H' (FF), Drilled.
Flange drilling as per other standards also available upon request.

UTILISATION & SERVICE

"LEADER" Ductile Iron Pressure Reducing Valves are suitable for above-ground installations.
Best suited for Water & Air application.

WORKING PRESSURE

Maximum Working Pressure: 17.24 Bar.
See Pressure / Temperature Diagram.

TEMPERATURE LIMITS

Maximum Working temperature: 120°C.
See Pressure / Temperature Diagram.

Item Code:	DI0050
Pressure Rating:	PN-20
Testing Standard:	BSEN 12266 Part-1
Size Range:	25mm to 150mm
Product Standard:	Mfg. Standard

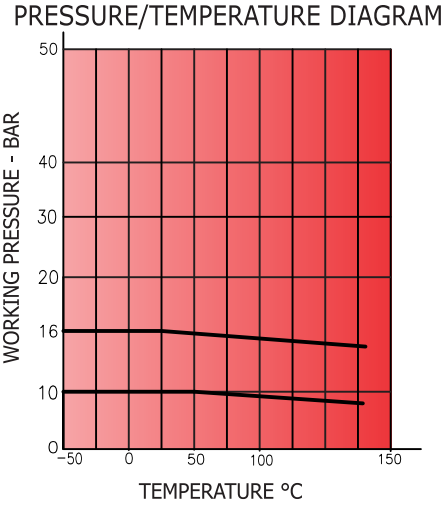
SUITABLE FOR

Water	Oil	Air	Gases	Steam
✓		✓		

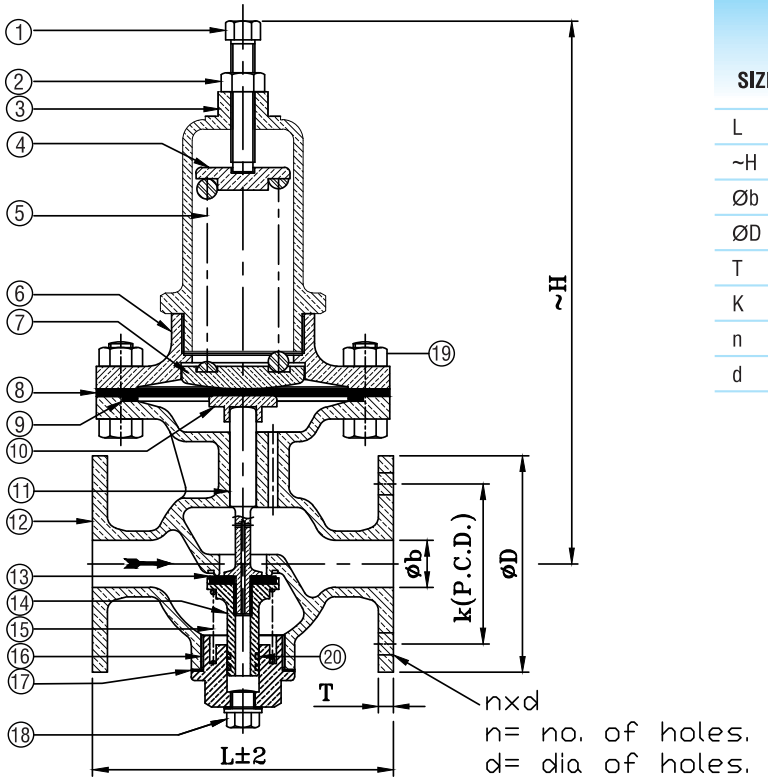
TEST PRESSURE (Hydrostatic)

Rating	PN-20
Body (Hyd.)	30 Bar

PRESSURE/TEMPERATURE DIAGRAM



Note : The above data is subject to change without notice due to our continuing product improvement program.



DIMENSIONAL DATA

SIZE (mm)	25	32	40	50
L	160	180	195	230
~H	280	340	350	440
Øb	25	32	40	50
ØD	120.7	133.5	139.7	165.1
T	11.1	11.1	12.7	12.7
K	87.3	98.4	104.8	127
n	4	4	4	8
d	17.5	17.5	17.5	17.5

MATERIAL SPECIFICATION

P.No.	NAME OF PART	MATERIAL	SPECIFICATION
1	ADJUSTING SCREW	STAINLESS STEEL	TYPE 410
2	LOCK NUT	DUCTILE IRON	ASTM A395
3	SPRING CHAMBER	CAST IRON	BSEN 1561 EN GJL250
4	UPPER SPRING DISC	DUCTILE IRON	ASTM A395
5	DIAPHRAGM SPRING (CADMIUM PLATED)	SPRING STEEL	BS 910 EN-44
6	COVER	CAST IRON	BSEN 1561 EN GJL250
7	LOWER SPRING DISC	DUCTILE IRON	ASTM A395
8	DIAPHRAGM	NEOPRENE RUBBER	
9	RING	NEOPRENE RUBBER	
10	CAP	DUCTILE IRON	ASTM A395
11	STEM	STAINLESS STEEL	ASTM A276 TYPE 410
12	BODY	DUCTILE IRON	ASTM A395
13	DISC	NEOPRENE RUBBER	
14	DISC HOLDER	DUCTILE IRON	ASTM A395
15	SPRING (CADMIUM PLATED)	CARBON STEEL	---------
16	BOTTOM COVER	DUCTILE IRON	ASTM A395
17	GASKET	C.N.A.F.	
18	BOTTOM COVER	DUCTILE IRON	ASTM A395
19	STUD & NUT	CARBON STEEL	BS 916
20	O-RING	NEOPRENE RUBBER	

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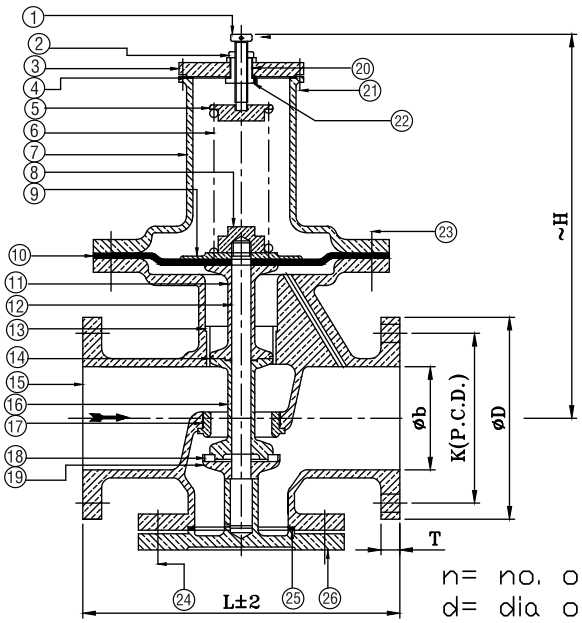

DIMENSIONAL DATA CLASS

SIZE (mm)	65	80	100	125
$L^{\pm 2}$	235	286	308	375
~H	426	505	648	762
Øb	63.5	80	101.6	125
ØD	184.2	203.2	228.6	279.5
T	14.3	16	19.1	22.2
K	146.1	165.1	190.5	235
n	8	8	8	8
d	17.5	17.5	17.5	22.2

MATERIAL SPECIFICATION

S.No.	NAME OF PART	MATERIAL	SPECIFICATION
1	ADJUSTING SCREW	STAINLESS STEEL	TYPE 410
2	LOCK NUT	DUCTILE IRON	ASTM A395
3	COVER	DUCTILE IRON	ASTM A395
4	GASKET	C.N.A.F.	
5	UPPER SPRING DISC	STAINLESS STEEL	TYPE 304
6	DIAPHRAGM SPRING (CADMIUM PLATED)	SPRING STEEL	BS 910 EN-44
7	SPRING CHAMBER	CAST IRON / DUCTILE IRON	BSEN 1561 EN GJL250 / ASTM A395
8	LOWER SPRING DISC	STAINLESS STEEL	TYPE 304
9	DIAPHRAGM DISC	DUCTILE IRON / STAINLESS STEEL	----------
10	DIAPHRAGM	NEOPRENE RUBBER	
11	DIAPHRAGM HOLDER	DUCTILE IRON	ASTM A395
12	STEM	STAINLESS STEEL	ASTM A276 TYPE 410
13	POSITION LINER	STAINLESS STEEL	TYPE 304
14	O-RING	NEOPRENE RUBBER	
15	BODY	DUCTILE IRON	ASTM A395
16	UPPER DISC HOLDER	DUCTILE IRON	ASTM A395
17	BODY SEAT RING	F.S.S.	ASTM A182 Gr. F304
18	DISC	NEOPRENE RUBBER	
19	DISC HOLDER	DUCTILE IRON	ASTM A395
20	BUSH	STAINLESS STEEL	TYPE 416
21	STUDS & NUTS	CARBON STEEL	-------
22	LOCKING SCREW	STEEL	--------
23	BOLTS & NUTS	CARBON STEEL	BS 916
24	BOLTS & NUTS	CARBON STEEL	BS 916
25	GASKET	C.N.A.F.	
26	BOTTEM COVER	DUCTILE IRON	ASTM A395

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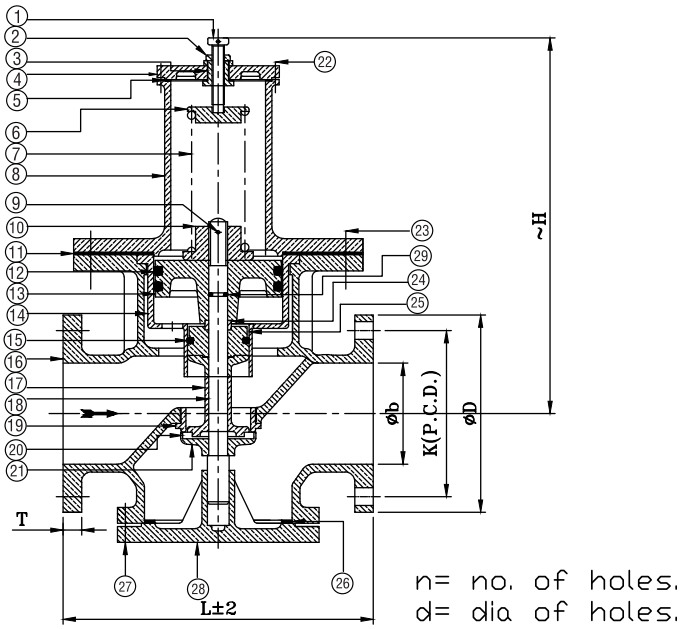

DIMENSIONAL DATA

SIZE (mm)	150
$L^{\pm 2}$	404
~H	630
Øb	150
ØD	305
T	25.5
K	260.4
n	12
d	22.2

MATERIAL SPECIFICATION

P.No.	NAME OF PART	MATERIAL	SPECIFICATION
1	ADJUSTING SCREW	STAINLESS STEEL	TYPE 410
2	LOCK NUT	DUCTILE IRON	ASTM A395
3	BUSH	STAINLESS STEEL	TYPE 416
4	COVER	DUCTILE IRON	ASTM A395
5	GASKET	C.N.A.F.	
6	UPPER SPRING DISC	STAINLESS STEEL	TYPE 304
7	SPRING (CADMIUM PLATED)	SPRING STEEL	BS 910 EN-44
8	SPRING CHAMBER	CAST IRON / DUCTILE IRON	BSEN 1561 EN GJL250 / ASTM A395
9	PIN	STAINLESS STEEL	TYPE 410
10	LOWER SPRING DISC	STAINLESS STEEL	TYPE 304
11	GASKET	C.N.A.F.	
12	O-RING	NEOPRENE RUBBER	
13	PISTON	DUCTILE IRON	ASTM A395
14	LINER	STAINLESS STEEL	TYPE 304
15	O-RING	NEOPRENE RUBBER	
16	BODY	DUCTILE IRON	ASTM A395
17	DISC RETAINER	DUCTILE IRON	ASTM A395
18	STEM	STAINLESS STEEL	ASTM A276 TYPE 410
19	BODY SEAT RING	F.S.S.	ASTM A182 Gr. F304
20	DISC	NEOPRENE RUBBER	
21	DISC HOLDER	DUCTILE IRON	ASTM A395
22	BOLTS & NUTS	CARBON STEEL	BS 916
23	BOLTS & NUTS	CARBON STEEL	BS 916
24	SPACER	DUCTILE IRON / STAINLESS STEEL	ASTM A395 / TYPE 304
25	GUIDE	DUCTILE IRON / STAINLESS STEEL	ASTM A395 / TYPE 304
26	GASKET	C.N.A.F.	
27	BOLTS & NUTS	CARBON STEEL	BS 916
28	BOTTEM COVER	DUCTILE IRON	ASTM A395
29	O-RING	NEOPRENE RUBBER	

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