

482

Stainless Steel Pressure Reducing Valve For Water, Air & Neutral Gases Direct Acting Flanged PN16 or PN40



The 482 is an extremely sturdy pressure reducing valve which is suitable for water up to 95°C, compressed air, neutral gas, neutral and non-sticking liquids. Used in domestic water supply systems as well as commercial and industrial plants, this is a versatile valve suitable for many duties.

The 482 has an integral filter which prevents debris from entering the valve which may affect its performance.

The valve has 1/4" BSP pressure gauge ports on both sides so that the pressure can be accurately monitored and adjusted.

Approvals, Features & Benefits

- WRAS (EPDM up to 85°C only)
- ACS & DVGW (EPDM up to 80°C only)
- Direct acting
- Quiet operation
- Economical & efficient
- Pressure gauge port
- Can be installed in any position

Pressure & Temperature

Max upstream pressure:-

- 482-SP : 16 or 40 bar
- 482-HP : 16 or 40 bar (DN15-DN50 only)
- 482-LP : 16 or 25 bar (DN15-DN50 only)

Downstream pressure range:-

- 482-SP : 1 to 8 bar
- 482-HP : 5 to 15 bar (DN15-DN50 only)
- 482-LP : 0.5 to 2 bar (DN15-DN50 only)

Temperature range:-

- EPDM (Standard) : -10°C to 120°C*
- FKM : -10°C to 120°C*
- * 95°C for outlet pressures over 8 bar

DN	15	20	25	32	40	50	65	80	100
Flange	PN40	PN40	PN40	PN40	PN40	PN40	PN40	PN40	PN16
L	130	150	160	180	200	230	290	310	350
h	46	50	55	68	73	80	89	96	112
H	102	130	130	130	165	165	235	235	320 (340)
H1 (LP Version)**	128	150	150	150	185	185	-	-	-
H2	124	161	161	161	198	198	-	-	-
H3 (LP Version)	150	181	181	181	218	218	-	-	-
D	95	105	115	140	150	165	185	200	220
K (PCD)	65	75	85	100	110	125	145	160	180
nxd (Flange Bolts)	4 x M12	4 x M12	4 x M12	4 x M16	4 x M16	4 x M16	8 x M16	8 x M16	8 x M16
G1 (Inlet Gauge Port BSP)	1/4	1/4	1/4	1/4	1/4	1/4	1/4***	1/4***	1/4***
Strainer Mesh (mm)	0.60	0.60	0.60	0.60	0.75	0.75	0.75	0.75	0.75
Flow K_{vs} (m³/h)¹	3	5.8	6.7	7.6	12.5	15	25	26	80
Weight Kg**	3	4	5	6	9	11	19	21	37 (40)

** Figures in brackets for HP version *** Supplied with inlet & outlet port

¹ The K_{vs} value was determined according to DIN EN 60534-2-3. Instructions on how to determine size and capacity are to be found on following page.

MATERIALS	
Inlet Body	Stainless Steel (CF8M)
Outlet Body	Stainless Steel (CF8M)
Internal Parts	Stainless Steel (CF8M & 316L)
Spring	Steel (Anti-rust protection)
Strainer	Stainless Steel (316L)
Seals	EPDM (Standard) • FKM

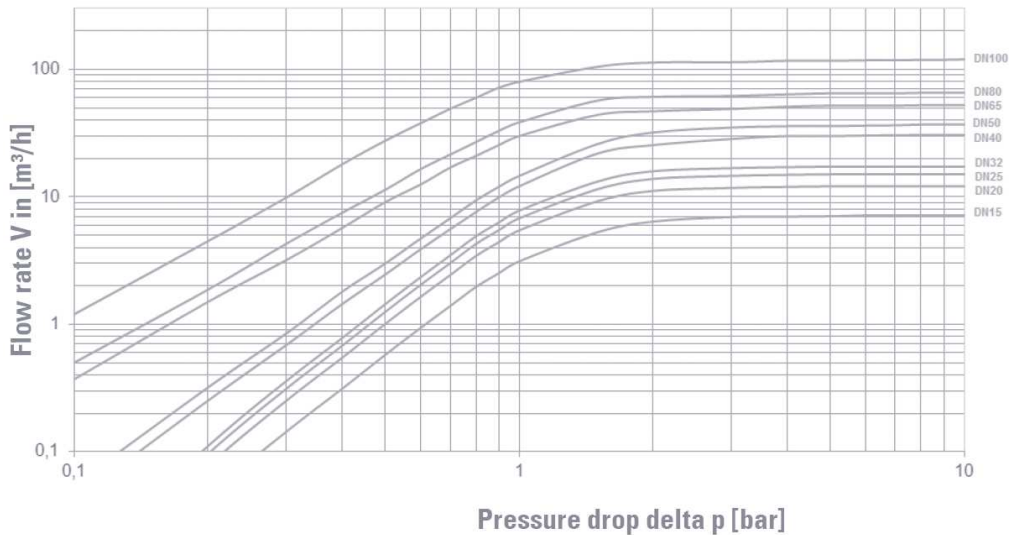
OPTIONS	
Hand Wheel	For tool free adjustment
Type Approval	DNV-GL • Lloyds • ABS • BV • RMRS • RINA
FKM Seals	-10°C to 120°C (not WRAS approved)
Complete Valve Insert Replacement	Can be exchanged without removing the valve
Pressure Gauges	63mm dial 1/4" BSP connection - various pressure ranges

482

Capacity Charts/Sizing

Dimensioning by pressure loss on the outlet pressure side

Flow chart water



Dimensioning by flow velocity

For liquids:

With help of the chart you can determine the nominal diameter (DN) for a given flow volume V (m³/h). According to DVGW-guidelines (DIN 1988) a flow velocity of 2 m/s in domestic water supply systems should not be exceeded.

For compressed air and other gaseous media:

The usual flow velocity for compressed air is 10 - 20 m/s. For gaseous media the flow volume V should always be shown in actual cubic meters/hour. If the flow volume is given in standard cubic meters, these should be converted into actual cubic meters before using the diagram.

$$V \text{ (m}^3\text{/h)} = \frac{V_{\text{Norm}} \text{ (Nm}^3\text{/h)}}{p_{\text{absolut}} \text{ (bar)}} = \frac{V_{\text{Norm}}}{p_{\text{u}} + 1}$$

Actual cubic meters are based on the prevailing pressure of the medium on the outlet side of the pressure reducer.

