482

Stainless Steel
Pressure Reducing Valve
For Water, Air & Neutral Gases
Direct Acting

Flanged PN16 or PN40

WRAS APPROVED PRODUCT

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 ¼" 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 (DN100 16 bar only)
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
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)	¼	¼	¼	¼	¼	¼	¼***	¼***	¼***
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

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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 ¼" BSP connection - various pressure ranges

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Capacity Charts/Sizing

Dimensioning by pressure loss on the outlet pressure side

Flow chart water
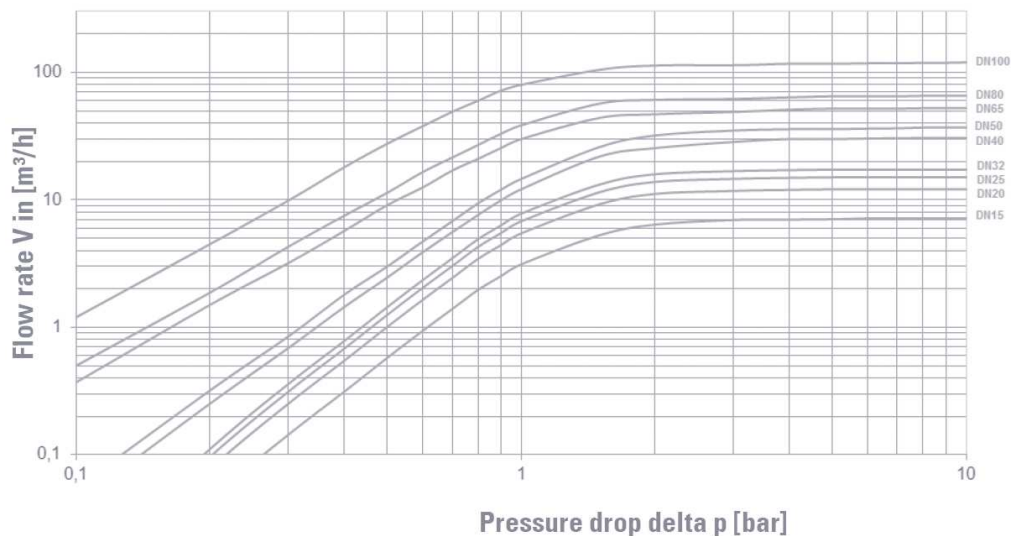
Dimensioning by flow velocity

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.

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

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