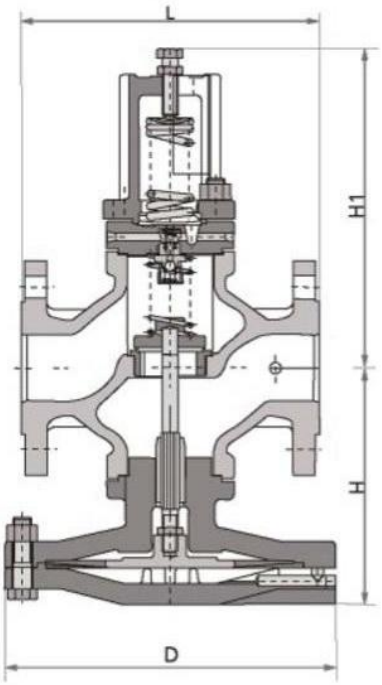
Pressure Reducing Valve
WCB Body, Flanged End PN 40



Structural features and uses

This the set pressure reducing value is native corporation refers to the super great iris pressure reducing value of well-developed produce of external but the new forerunner's that the research and development was succeeded style, and that native produce is living act a lot of modifications on the ordinary pressure reducing value base. The iris adoptd the new stuff, and the work area was widend enormously, hence that the fine alternation of valve upper reaches pressure either downsteam burden wholly be able to be without delay exact feed backing the primary valve iris, to regulate the primary valve degree of turning on, real downsteam steading of pressure. This produce another projecting distinguishing features is : May fix and exchange much guideing valves in the identical valve part of the body, is living the voltage regulation the at the same time, realization temperature.

Dimensions **(mm)**

DN	15	20	25	32	40	50	65	80	100	125	150
Kv	2.8	5.5	8.1	12.0	17.0	28.0	45.5	60.1	93.3	146	186

Materials

Part	Material
Valve Cover Caps	WCB
Seat Valve Disc	2Cr13
Valve Fragment	2Cr13
Valve Staff	2Cr13
Patch	316
Conditioning Spring	660Si2Mn
Primary Valve Spring	50CrVA

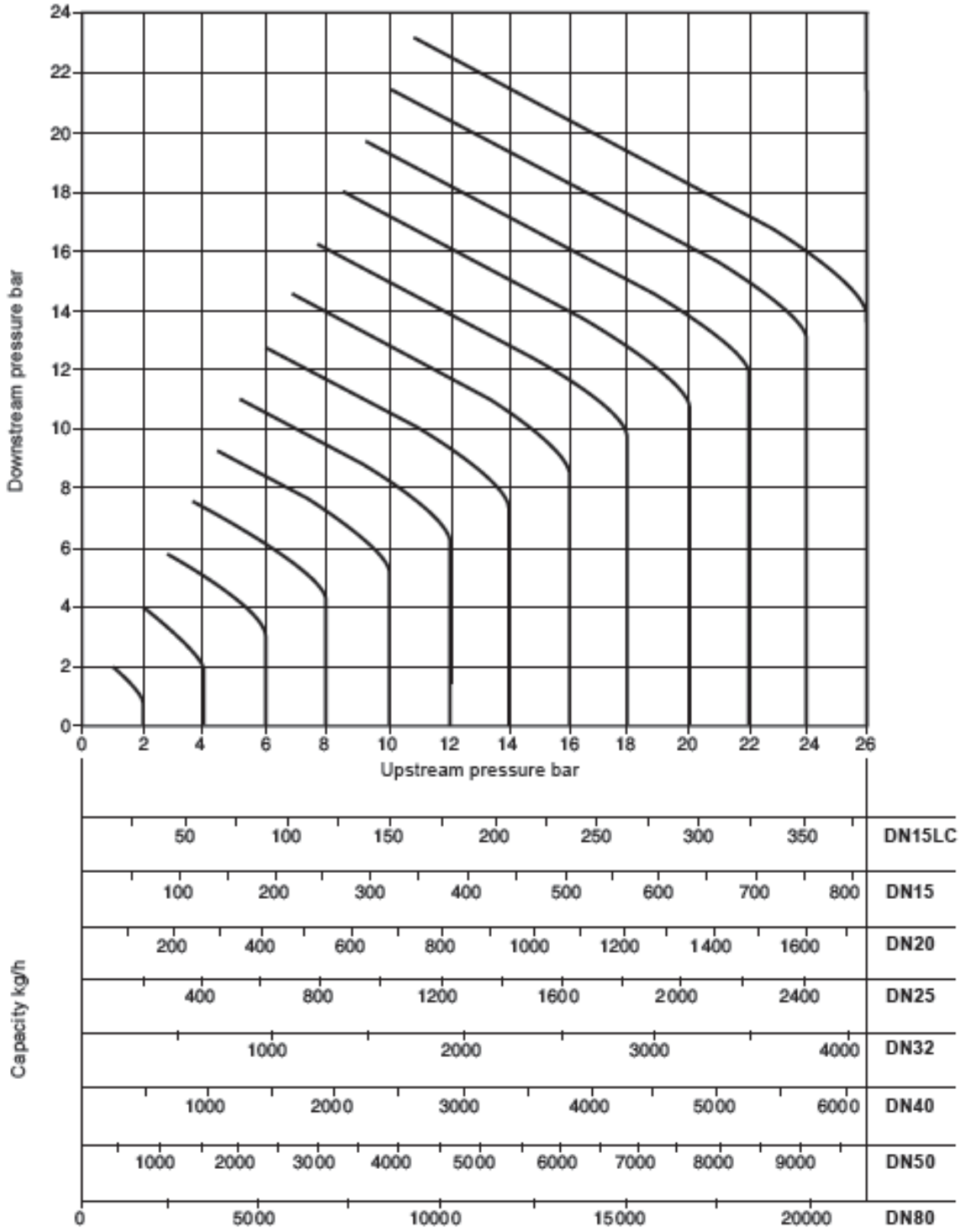
Specifications

TMA (Max. Allowable Temperature) : 350°C
PMO (Max. Operating Pressure) : 25barg
TMO (Max. Operating Temperature) : 285°C
Barg : 1.2 ~ 17

Dimensions **(mm)**

Size	L	H1	H	D
15	147	221	133	185
20	154	224	136	185
25	160	235	145	207
32	180	236	156	207
40	200	238	176	255
50	230	246	183	255
65	250	295	200	320
80	310	323	230	350
100	350	340	263	380
125	400	359	306	455
150	450	375	330	500

Steam capacities chart



Note

The capacities quoted above are based on valves fitted with an external pressure sensing pipe. Reliance on the internal balance pipe will mean that capacities may be reduced. In the case of low downstream pressure this reduction could be up to 30% of the valve capacity.

How to use the chart

Saturated steam

A valve is required to pass 600 kg/h reducing from 6 bar to 4 bar. Find the point at which the curved 6 bar upstream pressure line crosses the horizontal 4 bar downstream pressure line. A perpendicular dropped from this point gives the capacities of all DP sizes under these conditions. A DN32 valve, is the smallest size which will carry the required load.

Superheated steam

Because of the higher specific volume of superheated steam a correction factor must be applied to the figure obtained from the chart above. For 55 °C of superheat the factor is 0.95 and for 100 °C of superheat the factor is 0.9.
Using the example given for saturated steam, the DN32 valve would pass 740 x 0.95 = 703 kg/h if the steam had 55 °C of superheat. It is still big enough to pass the required load of 600 kg/h.