9510 Series

DZR Double Regulating Valve

Description

DZR brass double regulating valve
Threaded F/F (ISO 228/1 for DN15 and DN20, ISO7/1 RP above)
Design according BS7350

PN25 (Max 25bar up to 100°C, max 20bar at 130°C)

Water: -10°C to +130°C
below 0°C only for water with added antifreezingfluids over 100°C only for water with addedanti-boiling fluids

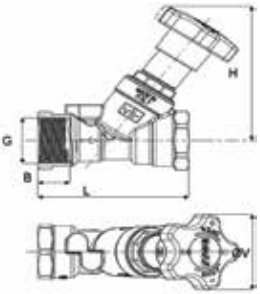
Materials of Construction

N.	Part	Material	Norm
1	Body	DZR Brass	EN12165 CW602N
2	Balancing cone	DZR Brass	EN12164 CW602N
3	Gasket disc	PTFE	–
4	Disc[1]	DZR Brass	EN12164 CW602N
5	Disc O-ring[1]	EPDM Perox	–
6	Disc stem	DZR Brass	EN12164 CW602N
7	Stem O-ring	EPDM Perox	–
8	Union[1]	DZR Brass	EN12165 CW602N
9	Stem	Brass	EN12164 CW617N
10	Bonnet	DZR Brass	EN12164 CW602N
11	Stop spring ring	Spring steel	–
12	Screw	Steel	–
13	Handwheel	ABS (blue)	–
14	Nut	Zinc plated steel	EN10025 Fe42

[1]Only on DN32, DN40 and DN50

Dimensions and Flow Data

DN	G[1]	H mm	L mm	B mm	ØV mm	Wgt kg	Flow range l/s	Product Codes
015_{LF}	½"	103.0	87.8	17.5	70	0.532	0.017-0.074	37000107
015	½"	103.0	87.8	17.5	70	0.527	0.062-0.148[2]	37000118
020	¾"	103.0	95.9	19.0	70	0.576	0.138-0.325[2]	37000129
025	1"	103.0	100.0	22.5	70	0.700	0.258-0.603[2]	37000140
032	1¼"	123.3	117.5	24.8	70	1.154	0.540-1.250[2]	37000151
040	1½"	125.4	127.0	24.8	70	1.446	0.810-1.880[2]	37000162
050	2"	135.6	145.3	29.2	70	2.027	1.520-3.510[2]	37000173

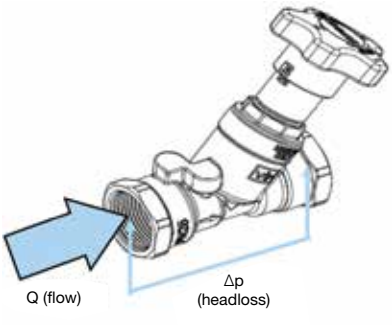


[1]ISO 228/1 for DN15 and DN20, ISO7/1 Rp above

[2]Suggested flow range applicability (BS7350).

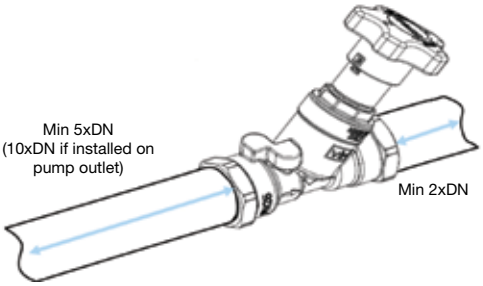
Headloss Calculation

Handwheel position	Kv (m3/h @ 1bar)						
	015_{LF}	**015**	**020**	**025**	**032**	**040**	**050**
0.5	0.143	0.296	0.437	1.41	2.48	2.69	4.99
0.7	0.154	0.355	0.512	1.66	2.90	3.07	5.97
1.0	0.216	0.443	0.615	2.04	3.44	3.58	7.44
1.3	0.279	0.531	0.722	2.40	3.92	4.16	9.28
1.5	0.318	0.587	0.805	2.68	4.23	4.57	10.86
1.7	0.365	0.644	0.887	3.02	4.57	5.27	12.55
2.0	0.435	0.723	1.02	3.66	5.40	7.03	15.33
2.3	0.509	0.801	1.14	4.35	6.79	9.81	18.39
2.5	0.559	0.860	1.25	4.70	8.08	11.71	20.21
2.7	0.607	0.953	1.48	4.93	9.32	13.74	21.84
3.0	0.679	1.25	2.02	5.34	10.92	16.55	23.98
3.3	0.741	1.64	2.70	5.75	11.90	18.14	25.92
3.5	0.783	1.93	3.16	5.99	12.31	18.80	27.14
3.7	0.832	2.14	3.57	6.20	12.67	19.10	28.40
4.0	0.906	2.30	3.93	6.50	13.18	19.75	29.67
4.4	0.951	2.36	4.09	6.74	–	–	–

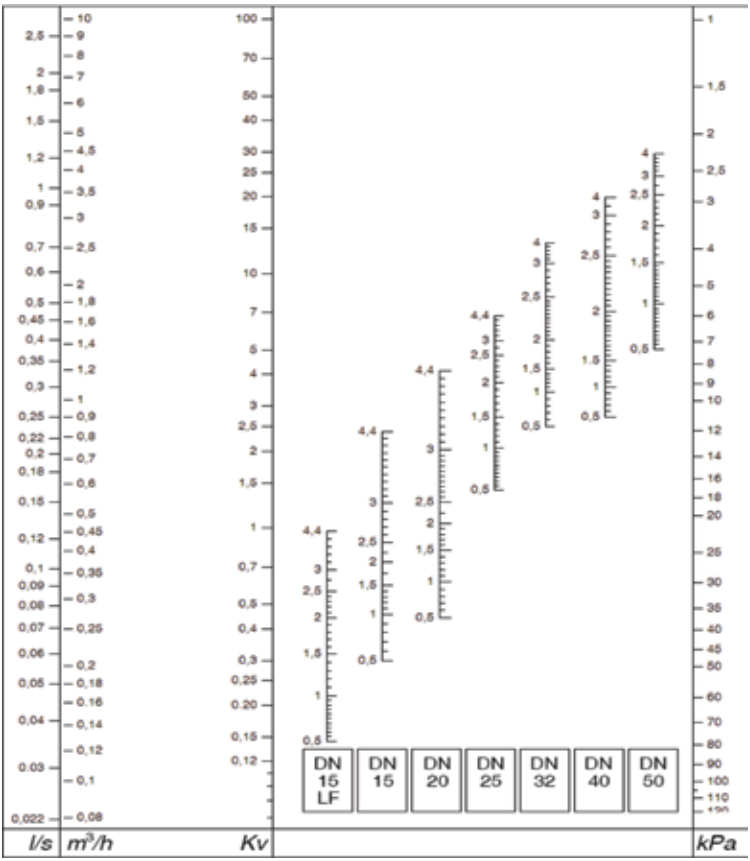


Installation

To obtain the best performances valve must be installed on a pipe with its same nominal size preceded and followed by straight pipe lengths as per figure indications.

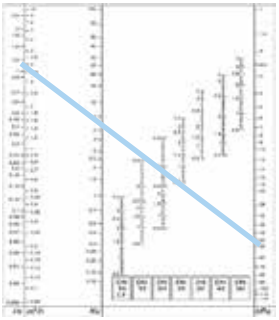


Presetting of 9510 Series



By using diagram above is possible to esteem the presetting position of the valve with given design flowrate and headloss:

1) draw a straight line joining design flowrate and design headloss;
2) determine design Kv value as intersection of drawn line and Kv axis;
3) draw a straight horizontal line from intersection previously identified and the specific valve DN Axis;
4) intersection determines handwheel position to use for presetting.



In the example for a design flowrate of 2,5m3/h and design Δp 35kPa handwheel position of 1,5 is determined for a DN32 valve