

Feature

DZR brass fixed orifice double regulating globe valve
 Venturi insert
 Positive shut-off with memory stop
 Design according to BS7350
 Tolerance on nominal Cvs $\pm 3\%$ (test according to BS7350)
 Multi-turn adjustment (four full turns minimum)
 Union ends (ASME B1.20.1 - NPSM) for tailpiece connections
 FNPT, MNPT, Solder, PEX (F1960) and Press tailpieces available

Meet BAA requirement

300WOG

Working conditions:

Water: from 15°F to 260°F
 below 32°F only for water with added antifreezing fluids
 over 212°F only for water with added anti-boiling fluids

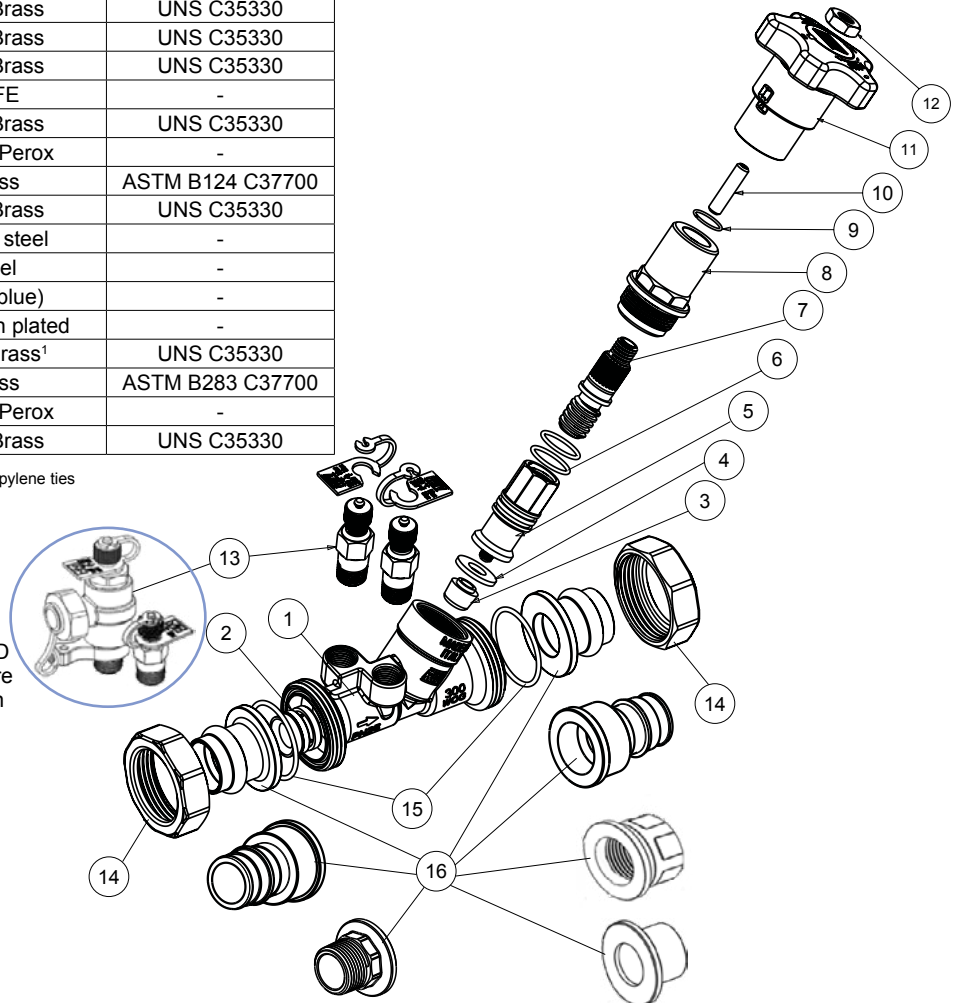


Material

	Part	Material	Specification
1	Body	DZR Brass	UNS C35330
2	Venturi insert	DZR Brass	UNS C35330
3	Balancing cone	DZR Brass	UNS C35330
4	Gasket disc	PTFE	-
5	Shutter	DZR Brass	UNS C35330
6	Stem O-ring	EPDM Perox	-
7	Stem	Brass	ASTM B124 C37700
8	Bonnet	DZR Brass	UNS C35330
9	Stop spring ring	Spring steel	-
10	Screw	Steel	-
11	Handwheel	ABS (blue)	-
12	Nut	Steel / Zn plated	-
13	Test point	DZR Brass ¹	UNS C35330
14	Union nut	Brass	ASTM B283 C37700
15	Union O-ring	EPDM Perox	-
16	Tailpiece ²	DZR Brass	UNS C35330

¹ Test points with EPDM Perox gaskets and polypropylene ties
² Any possible combination of tailpiece available

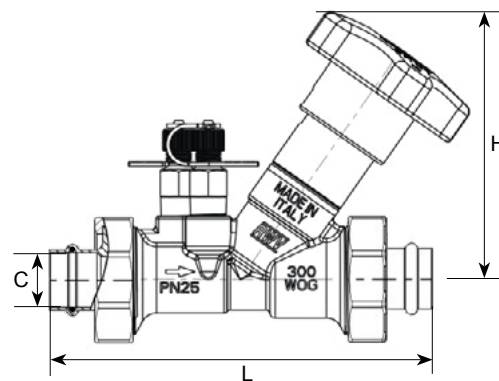
Optional:
 Fig. 95TP-SD
 High pressure
 TP with drain



Dimension, Weight

9517T-PP

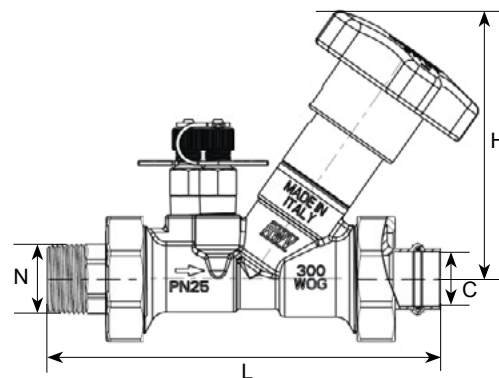
Size	C [in]	H [in]	L [in]	Weight [lb]	Flow range [GPM]
X-1/2"	0.64	4.06	5.80	1.65	0.12-0.36
U-1/2"	0.64	4.06	5.80	1.65	0.27-0.71
L-1/2"	0.64	4.06	5.80	1.65	0.49-1.17
1/2"	0.64	4.06	5.80	1.65	0.98-2.35 ¹
3/4"	0.89	4.06	6.00	1.95	2.19-5.15 ¹
1"	1.14	4.06	6.40	2.45	4.09-9.56 ¹



9517T-MP

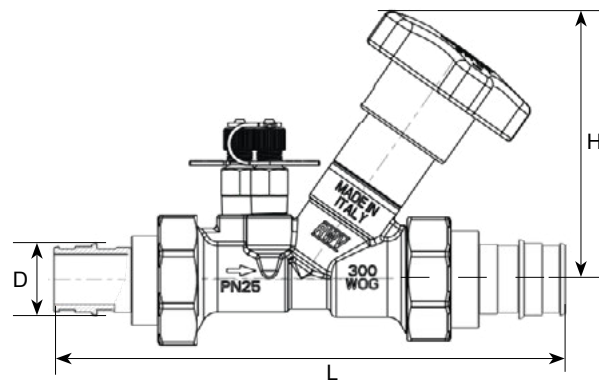
Size	N	C [in]	H [in]	L [in]	Weight [lb]	Flow range [GPM]
X-1/2"	1/2 - 14 NPT	0.64	4.06	5.84	1.66	0.12-0.36
U-1/2"	1/2 - 14 NPT	0.64	4.06	5.84	1.66	0.27-0.71
L-1/2"	1/2 - 14 NPT	0.64	4.06	5.84	1.66	0.49-1.17
1/2"	1/2 - 14 NPT	0.64	4.06	5.84	1.66	0.98-2.35 ¹
3/4"	3/4 - 14 NPT	0.89	4.06	6.00	1.98	2.19-5.15 ¹
1"	1 - 11.5 NPT	1.14	4.06	6.65	2.48	4.09-9.56 ¹

* Male tailpiece can be downsized. Call for availability.



9517T-EE

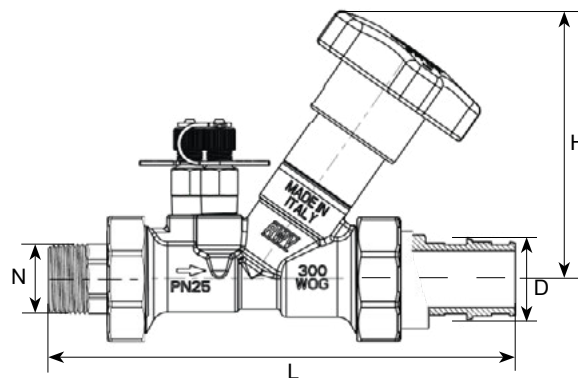
Size	D	H [in]	L [in]	Weight [lb]	Flow range [GPM]
X-1/2"	1/2" F1960	4.06	6.10	1.66	0.12-0.36
U-1/2"	1/2" F1960	4.06	6.10	1.66	0.27-0.71
L-1/2"	1/2" F1960	4.06	6.10	1.66	0.49-1.17
1/2"	1/2" F1960	4.06	6.10	1.66	0.98-2.35 ¹
3/4"	3/4" F1960	4.06	6.80	1.98	2.19-5.15 ¹
1"	1" F1960	4.06	7.70	2.64	4.09-9.56 ¹



9517T-ME

Size	D	N	H [in]	L [in]	Weight [lb]	Flow range [GPM]
X-1/2"	1/2" F1960	1/2 - 14 NPT	4.06	5.84	1.66	0.12-0.36
U-1/2"	1/2" F1960	1/2 - 14 NPT	4.06	5.84	1.66	0.27-0.71
L-1/2"	1/2" F1960	1/2 - 14 NPT	4.06	5.84	1.66	0.49-1.17
1/2"	1/2" F1960	1/2 - 14 NPT	4.06	5.84	1.66	0.98-2.35 ¹
3/4"	3/4" F1960	3/4 - 14 NPT	4.06	6.00	1.98	2.19-5.15 ¹
1"	1" F1960	1 - 11.5 NPT	4.06	6.65	2.48	4.09-9.56 ¹

* Male tailpiece can be downsized. Call for availability.



¹ Suggested flow range applicability (BS7350)

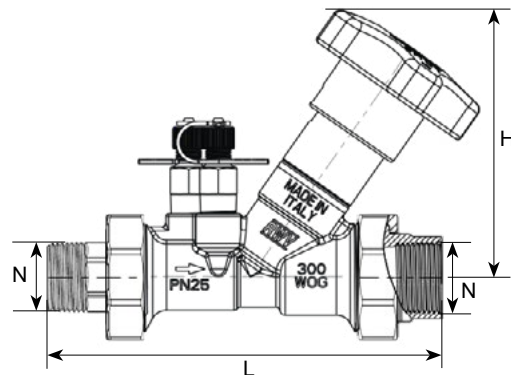
² Tolerance field

If using a measuring manometer different from those proposed by RWV please verify that sensibility of the measuring device is compatible with indicated minimum flow (see flow measurement paragraph)

9517T-MF

Size	N	H [in]	L [in]	Weight [lb]	Flow range [GPM]
X-1/2"	1/2 - 14 NPT	4.06	5.53	1.68	0.12-0.36
U-1/2"	1/2 - 14 NPT	4.06	5.53	1.68	0.27-0.71
L-1/2"	1/2 - 14 NPT	4.06	5.53	1.68	0.49-1.17
1/2"	1/2 - 14 NPT	4.06	5.53	1.68	0.98-2.35 ¹
3/4"	3/4 - 14 NPT	4.06	5.75	2.03	2.19-5.15 ¹
1"	1 - 11.5 NPT	4.06	6.44	2.56	4.09-9.56 ¹

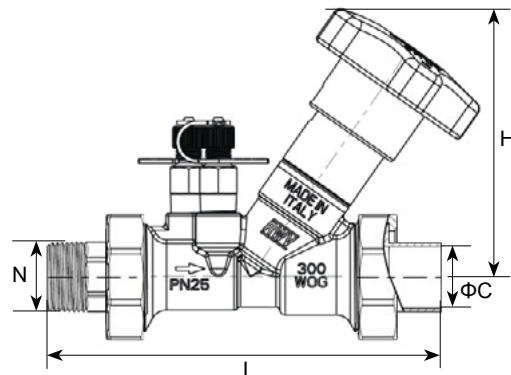
* Male tailpiece can be downsized. Call for availability.



9517T-MS

Size	N	ΦC ² [in]	H [in]	L [in]	Weight [lb]	Flow range [GPM]
X-1/2"	1/2 - 14 NPT	0.627-0.631	4.06	5.53	1.68	0.12-0.36
U-1/2"	1/2 - 14 NPT	0.627-0.631	4.06	5.34	1.63	0.27-0.71
L-1/2"	1/2 - 14 NPT	0.627-0.631	4.06	5.34	1.63	0.49-1.17
1/2"	1/2 - 14 NPT	0.627-0.631	4.06	5.34	1.63	0.98-2.35 ¹
3/4"	3/4 - 14 NPT	0.877-0.881	4.06	5.78	1.94	2.19-5.15 ¹
1"	1 - 11.5 NPT	1.128-1.131	4.06	6.66	2.49	4.09-9.56 ¹

* Male tailpiece can be downsized. Call for availability.

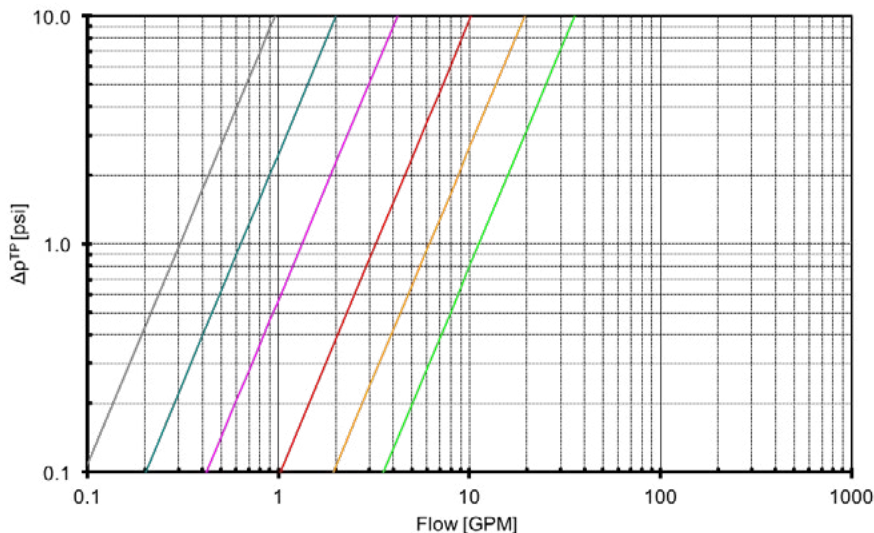


¹ Suggested flow range applicability (BS7350)

² Tolerance field

If using a measuring manometer different from those proposed by RWV please verify that sensibility of the measuring device is compatible with indicated minimum flow (see flow measurement paragraph)

Flow Measurement



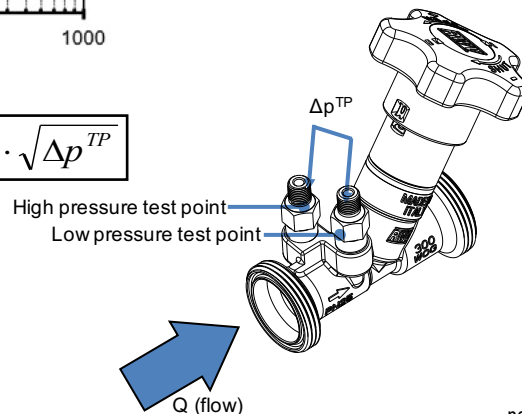
- X-1/2", Cvs venturi 0.304
- U-1/2", Cvs venturi 0.64
- L-1/2", Cvs venturi 1.33
- 1/2", Cvs venturi 3.24
- 3/4", Cvs venturi 6.16
- 1", Cvs venturi 11.24

Q = flow rate in GPM

Δp = differential pressure signal generated through pressure test points

Cv = flow coefficient

$$Q = C_{vs}^{venturi} \cdot \sqrt{\Delta p^{TP}}$$

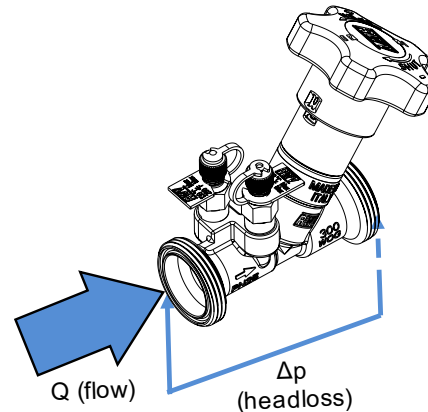


Headloss

Handwheel position	Cv (GPM/psi ^{0.5})					
	X-1/2"	U-1/2"	L-1/2"	1/2"	3/4"	1"
0.5	0.061	0.177	0.160	0.474	0.47	1.70
0.7	0.072	0.206	0.186	0.474	0.54	2.00
1.0	0.124	0.283	0.287	0.613	0.67	2.42
1.3	0.169	0.331	0.394	0.717	0.81	2.82
1.5	0.193	0.355	0.440	0.809	0.90	3.12
1.7	0.217	0.387	0.501	0.902	0.99	3.48
2.0	0.250	0.445	0.586	0.99	1.12	4.13
2.3	0.267	0.511	0.67	1.10	1.25	4.83
2.5	0.274	0.517	0.70	1.18	1.39	5.28
2.7	0.280	0.527	0.74	1.32	1.62	5.63
3.0	0.291	0.563	0.83	1.60	2.24	6.09
3.3	0.294	0.578	0.86	1.88	2.94	6.49
3.5	0.299	0.594	0.89	2.03	3.39	6.64
3.7	0.302	0.595	0.92	2.12	3.75	6.80
4.0	0.303	0.603	0.95	2.19	4.06	7.10
4.4	0.305	0.605	0.98	2.22	4.24	7.21

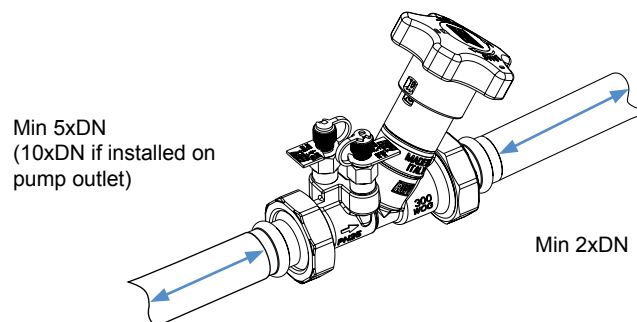
Formula linking flow Q (in GPM) and theoretical valve headloss Δp (in psi). Cv depends on handwheel position as indicated on table.

$$\Delta p = \left(\frac{Q}{C_v} \right)^2$$

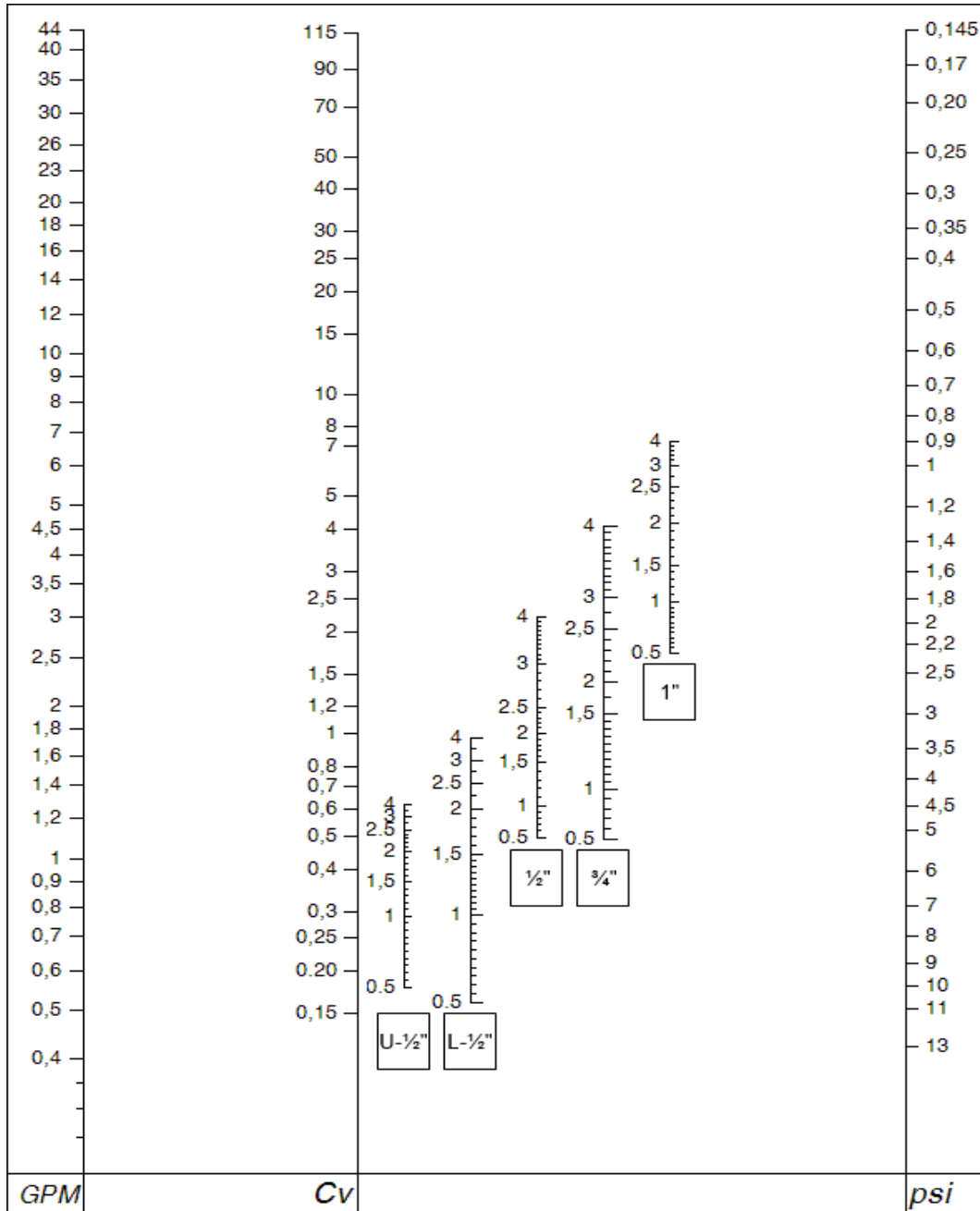


Installation

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.

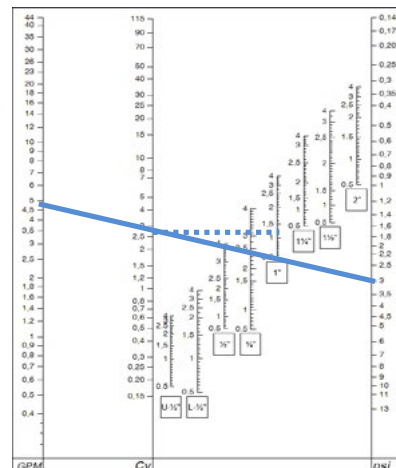


Presetting



Using the diagram above, it is possible to determine the presetting position of the valve with the given design flowrate and headloss:

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



In the example for a design flowrate of 5GPM and design Δp 3psi handwheel position of 1.35 is determined for a 1" valve