



ICV MANUAL BALANCING VALVES PN16, DN65-150

908/00

Epoxy coated, ductile iron, flanged

003

Manual balancing valves deliver accurate hydraulic performance in an impressive range of applications, offer a reliable, simple and cost effective way to measure and balance all flow rates. The valve is ideal for use mainly on the secondary side in heating and cooling systems.

Product Description:

Manual Balancing Valve for water and water with glycol from -10°C to 110 °C
Design according to BS 7350:1990 (except PN25 inductile iron)

Standards:

- Face to face according to EN 558 Table 2 Basic Series 1
- Standard flange drilling to EN1092 (ISO 7005-2), PN 16

Test/Approvals:

- Test according to EN 12266-1 and EN 12266-2

Features:

- Flange connection
- Measuring ports for measuring differential pressure
- Handwheel with turn counter for easy reading and adjustment
- Equal percentage control of flow
- Soft seat offers tight shut-off
- Locking device/max opening device integrated in stem
- Feet on flanges for easier transport
- External surface fusion bonded epoxy coated (Grey RAL7011)
- Change of seal house O-ring during use possible at fully open valve position (back seating)

Accessories:

Allen key for locking device (one key is included)

2" P/T port

4" P/T port

P/T with drain

Options:

Balancing tool



Selecting and setting diagram (example shown)

Wanted:

Presetting for DN80 at a desired flow rate of 25 m³/h and a pressure drop of 20 kPa.

Solution:

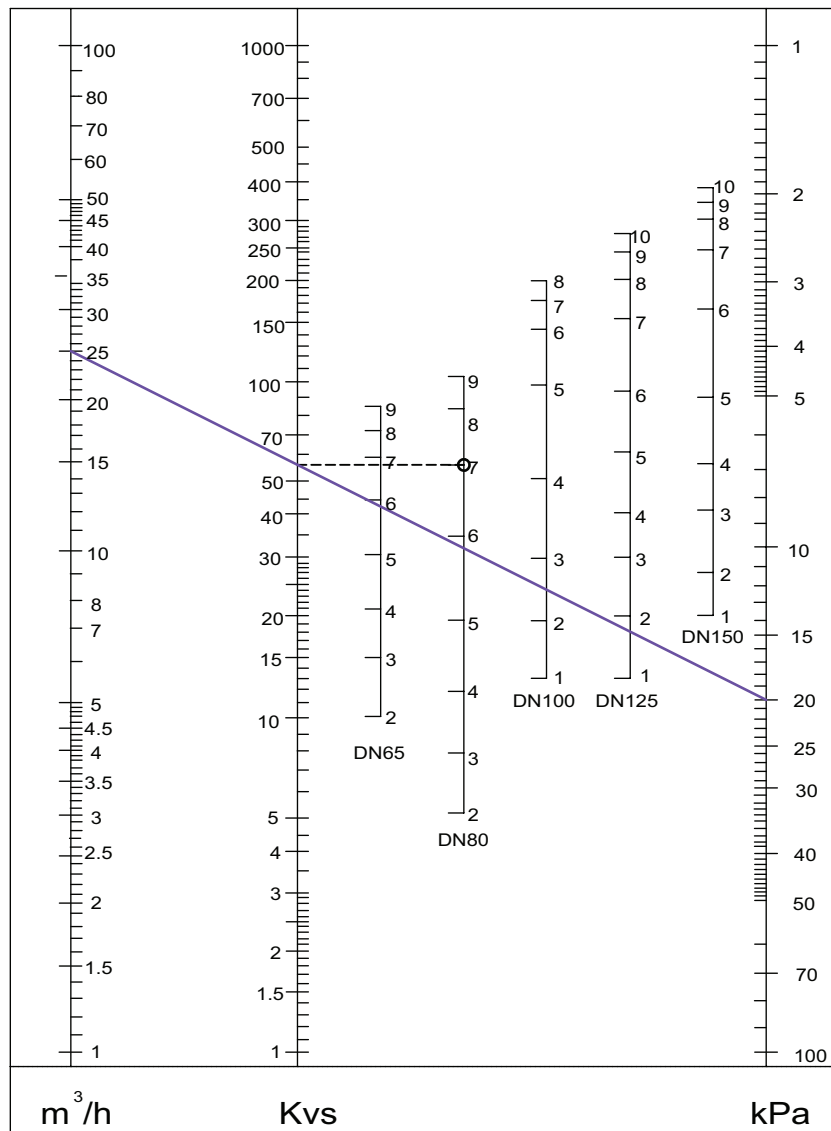
Draw a straight line joining 25 m³/h and 20 kPa. This gives Kv=56

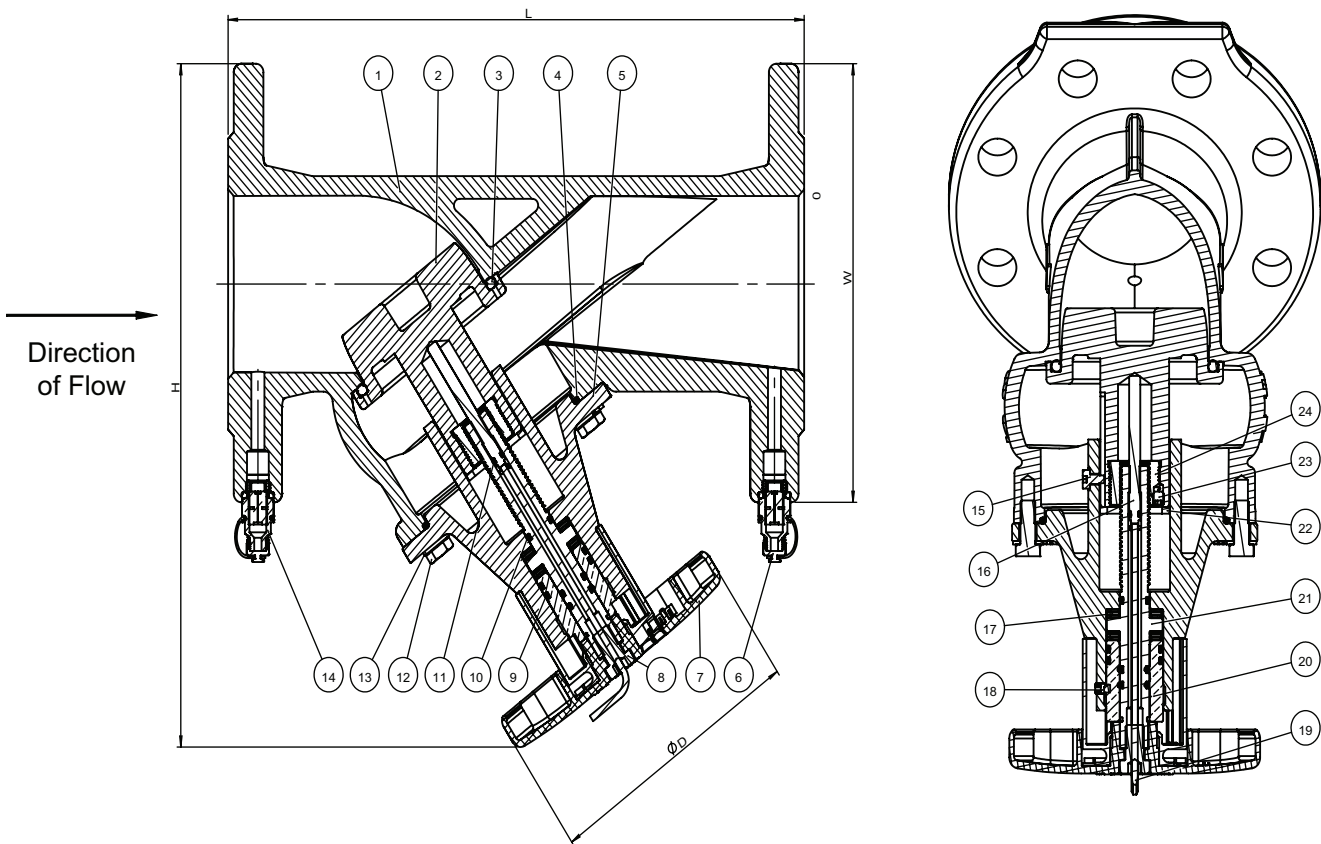
Now draw a horizontal line from Kv=56

This intersects the bar for DN80 at the desired presetting of 7.0 turns.

Remark:

DN65 at a presetting of 7.1 turns and DN100 at a presetting of 4.2 turns would also be suitable.





Component List:

1. Body	Ductile iron, GJS-500-7	2. Plug	DI GJS-500-7 Corrosion protected
3. O-ring	NBR rubber	4. O-ring	NBR rubber
5. Bonnet	Ductile iron, GJS-500-7	6. Measuring port (Blue)	Brass
7. Handwheel	PA6.6 / Aluminum alloy (DN 150)	8. Handwheel screw	Stainless steel Grade A2
9. O-ring	NBR rubber	10. O-ring	NBR rubber
11. O-ring	NBR rubber	12. Bolt	Grade 8.8 Zinc
13. Washer	Grade 8.8 Zinc	14. Measuring port (Red)	Brass
15. Grub screw	Steel ST.45H	16. Locking device	Stainless steel 1.4021
17. Axial bearing	Steel ST.12	18. Set screw	Stainless steel Grade A4
19. Speical allen key	Steel	20. Seal house	Brass,HPb 59-1
21. Stem	Stainless steel 1.4021	22. Gasket	NBR rubber
23. Plug screw	Stainless steel Grade A4	24. Stem nut	Brass, HPb 59-1

Components may be substituted with equivalent or higher class materials without prior notification.

Reference Nos. and Dimensions:

AVK ref. nos	DN mm	Flange drilling	L mm	D mm	H mm	W mm	Kvs* m³/h	Theoretical weight kg
908-0065-00-136	65	16	290	135	303	185	83	13
908-0080-00-136	80	16	310	135	310	200	101	15
908-0100-00-136	100	16	350	250	350	235	200	22
908-0125-00-136	125	16	400	250	435	270	275	30
908-0150-00-136	150	16	480	250	467	300	385	42

* Fully open position m³/h @ 1 bar differential pressure

Turns	Kv [m3/h]				
	DN65	DN80	DN100	DN125	DN150
0.0	0	0	0	0	0
0.5	2	1	5	5	8
1.0	6	3	13	13	20
1.5	8	4	15	16	23
2.0	10	5	19	20	27
2.5	12	6	23	24	33
3.0	15	8	30	30	41
3.5	18	10	40	34	47
4.0	22	12	54	41	57
4.5	25	15	71	49	70
5.0	31	19	96	61	90
5.5	36	25	116	74	119
6.0	45	33	145	93	163
6.5	52	45	160	123	204
7.0	59	56	174	153	245
7.5	66	69	187	177	276
8.0	72	81	200	201	307
8.5	78	91		221	327
9.0	83	101		240	346
9.5				258	366
10.0				275	385

Accuracy:

± 5% at full open valve

± 10% (according to BS 7350:1990) in normal operating range (outside shaded area)