

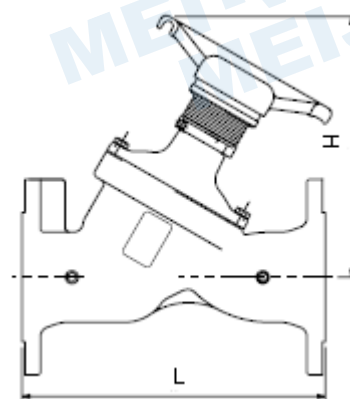
STATIC BALANCING VALVES

- Established H&V practice recommends that wherever possible within heating and chilled water systems, hydraulic losses should be minimal. Thus flow measurement and regulating valves serving such systems should function with pressure losses as low as efficient operation and high accuracy will permit.
- However, in certain circumstances where flow velocities are low as a result of system design, it is equally important that adequate differential pressures are available for accurate flow measurement. This requirement is achieved on the basis of a realistic compromise between the need for accuracy and low hydraulic loss.
- Flow measurement and regulating valves enable systems design engineers to specify standard production valves which will conform to the various system design options arising from current H&V technology, energy conservation considerations and standards legislation.



SPECIFICATION

- Valve conform to requirements of BS7350.
- Flanged to BS4504 PN16/25, JIS10/16K, ANSI Class 150.
- These are Y-pattern globe valves with a test point of flow measurement.
- Primarily used in injection or other circuits requiring a double regulating valve for system balancing.
- Accuracy of flow measurement is $\pm 5\%$ at the full open position of the valve.
- Some reduction in accuracy occurs at partial opening of the valve in accordance with BS 7350.



PRESSURE/TEMPERATURE RATINGS

Working pressure	16/25 bar
Testing Pressure	Shell: 24/37.5 bar, Seat: 17/26 Bar
Working temperature	-10°C to 120°C
Suitable Media	

MATERIALS

Part	Material	ASTM Spec.	BS Spec.
Body, Bonnet	Ductile Iron	A 536 65-45-12	BS EN - JL 1050
Stem	Stainless steel 410	ANSI 410	BS 970 410S21
Disc	EPDM coated DI	A 536 65-45-12	BS EN - JL 1050
Gland (65-150mm)	Brass	B 124 C37700	BS EN 12165 CW617N
Gland (200-350mm)	Ductile iron	A 536 65-45-12	BS EN - JL 1050
Gland Nut	Brass	B 124 C37700	BS EN 12165 CW617N
Test Valve	Brass	B 453 C35330	BS EN 12165 CW602N
Packing	Graphite	Non - asbestos	-
Seat ring	Bronze	B 62 C83600	BS EN 1982 CC491K
Hand wheel	Ductile iron	A 536 65-45-12	BS EN - JL 1050

DIMENSIONS, COEFFICIENTS, FLOW RATE

DIMENSIONS			
Size (mm)	L (mm)	H (mm)	Weight (kg)
65	290	260	15.5
80	310	329	19.5
100	350	340	28
125	400	424	37.5
150	480	454	50.5
200	550	517	123
250	622	573	192
300	698	617	251
350	787	705	300

COEFFICIENTS (PULL OPEN)			FLOW RATE (l/s)	
Size (mm)	Flow (Kv)	Head loss (K)	Min	Max
65	84	4.5	2.500	11.000
80	119	5.2	3.300	15.000
100	178	9.5	6.100	26.000
125	273	7.1	9.500	40.000
150	380	5.4	13.000	57.000
200	608	6.3	22.000	100.000
250	1292	5.5	34.000	157.000
300	1791	6.4	50.000	226.000
350	1980	6.5	-	-

► **Note:**

- % Valve opening: Products it is desirable that the valve will operate within the range indicated. Valve opening down to 30% and up to 100% are acceptable in practice.
- Installation: To achieve quoted levels of flow measurement accuracy the guidelines indicated must be regarded as minimum requirements. For valve the tolerance on flow measurement accuracy is $\pm 5\%$ fully open $\pm 10\%$ when 40% open.
- Design and specifications are subject to change without prior notice.