

DDRV-B
DDRV-B25

FIXED ORIFICE
DOUBLE REGULATING VALVE



PRODUCT DATA SHEET

FIXED ORIFICE DOUBLE REGULATING VALVE

**Model : DDRV-B
DDRV-B25**

65mm (2½") ~ 300mm (12")



APPLICATION

Tozen Double Regulating Valves are installed and used in centralised heating and cooling systems to obtain design flow rates of each terminal units and balancing the circuits in the building.

FUNCTION

- Balancing
- Measuring
- Pre-setting
- Isolating

FEATURES

- Y-pattern globe design.
- Integral fixed orifice plate to form a fixed orifice flow measurement unit with regulation and isolation function.
- Accuracy of +/-5% at full open position of the valve.
- Equipped with 2 measuring nipples for differential pressure measurement.
- Microset handwheel adjustment with easily readable settings.
- Multi-turn adjustment range for maximum flow control.
- Double regulating feature allows valve opening to be set with allen key.
- Long neck for thermal insulation.
- Ductile iron body of PN16 & PN 25 pressure rating.
- Comply to BS 7350.

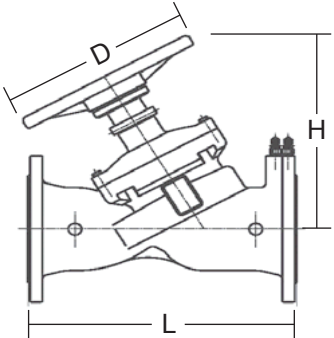
SPECIFICATION

- Type : Fixed orifice
- Size range : 65mm ~ 300mm
- Max. working pressure : 16bar (DDRV-B)
: 25bar (DDRV-B25)
- Testing pressure (Shell) : 24bar (DDRV-B)
: 37.5bar (DDRV-B25)
- Testing pressure (Seat) : 17.6bar (DDRV-B)
: 27.5bar (DDRV-B25)
- Working temperature : -10°C to 120°C
- Connection : EN1092-2 PN16/25
(Other flange standard available upon request)
- Standard : Comply to BS 7350

MATERIALS

Part	Material	ASTM	EN
Body	Ductile Iron	A536 65-45-12	EN-JS 1050
Bonnet	Ductile Iron	A536 65-45-12	EN-JS 1050
Stem	Stainless Steel 410	S41000	BS970 410S21
Disc	EPDM Coated Ductile Iron	A536 65-45-12	EN-JS 1050
Gland (65 - 150mm)	DZR Brass	B453 C35330	EN 12164 CW602N
Gland (200 - 300mm)	Ductile Iron	A536 65-45-12	EN-JS 1050
Gland Nut	DZR Brass	B453 C35330	EN 12164 CW602N
Measuring Nipples	DZR Brass	B453 C35330	EN 12164 CW602N
Handwheel	Ductile Iron	A536 65-45-12	EN-JS 1050
Orifice Insert	DZR Brass	B453 C35330	EN 12164 CW602N
Packing	EPDM	-	-

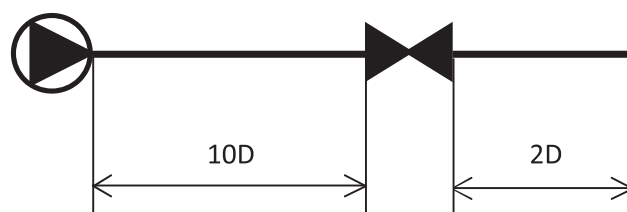
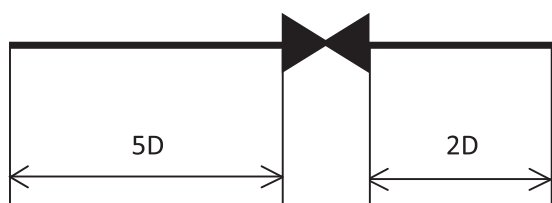
DIMENSIONS & COEFFICIENTS

	Size (mm)	L (mm)	H (mm)	D (mm)	Weight (kg)	Kvs
	65	290	265	200	17	98.40
	80	310	270	200	20	131.24
	100	350	310	240	29	189.33
	125	400	340	290	40	354.73
	150	480	340	290	52	472.39
	200	600	537	350	113	735.55
	250	730	570	420	185	1153.21
	300	850	690	420	248	1712.62

Note: Kvs at fully open position.

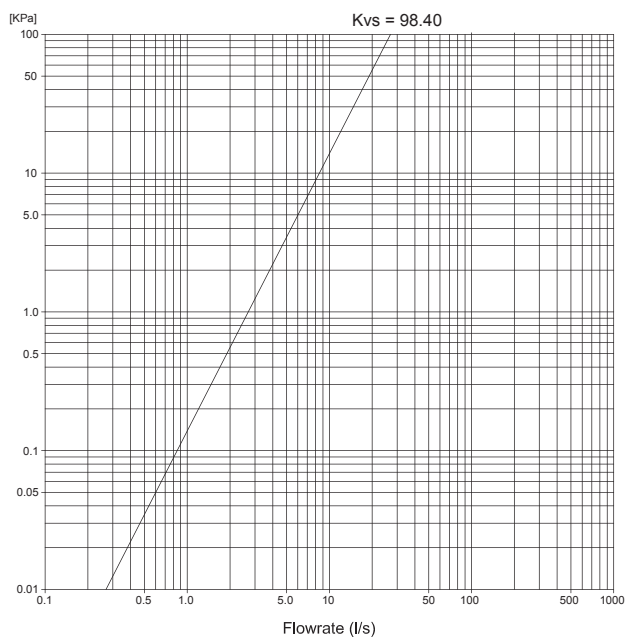
Installation

- The Double Regulating Valve shall be installed with the arrow marking on the valve body in accord to the same flow direction in the pipe. It may be installed at any angle.
- The gasket must be assembled between the flanges when the valve is installed. It can ensure that the valve is concentric with the pipe and the exact measurement data can be read.
- Avoid welding with pipe while it is connected. Tighten flanges bolts alternately, diagonally and repeatedly with the same force.
- Up and down stream from the valve is required to avoid turbulence which will affect the accuracy.

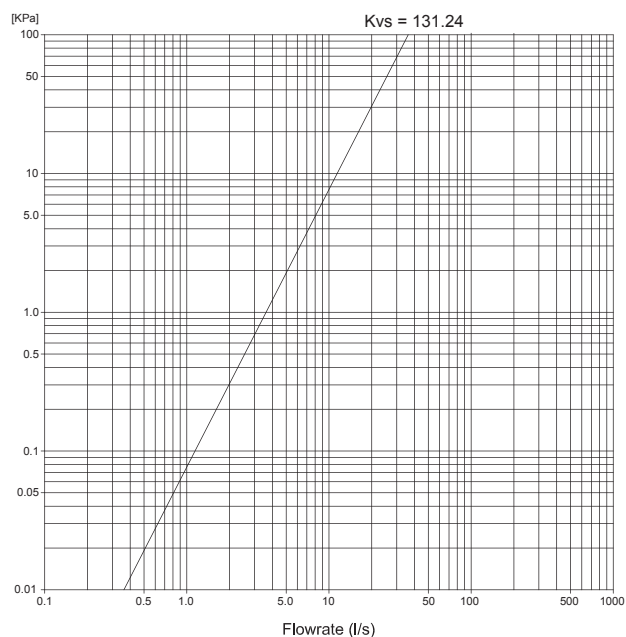


FLOW MEASUREMENT GRAPHS

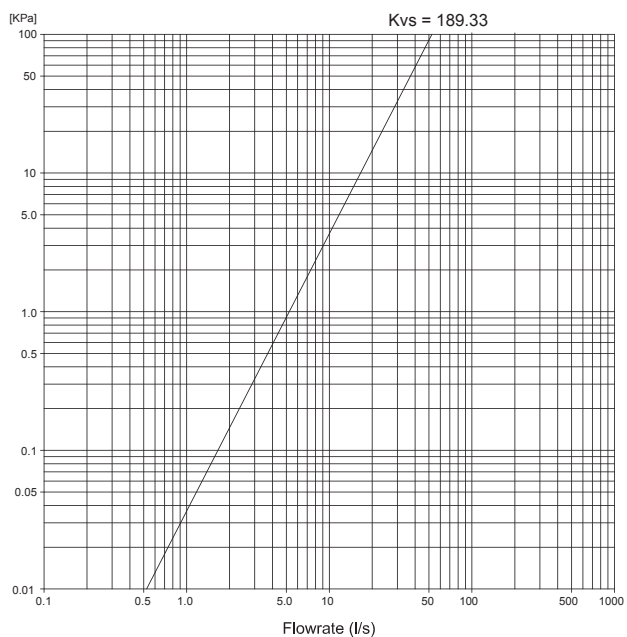
DDRV-B / DDRV-B25
Diameter : 65mm



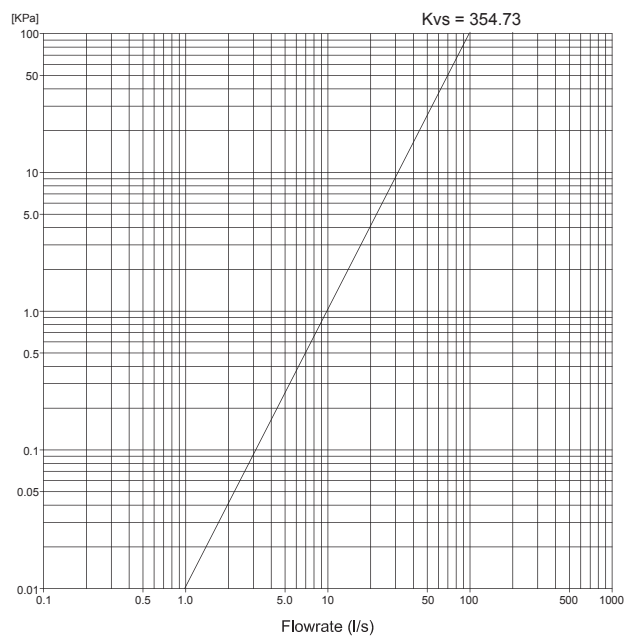
DDRV-B / DDRV-B25
Diameter : 80mm



DDRV-B / DDRV-B25
Diameter : 100mm

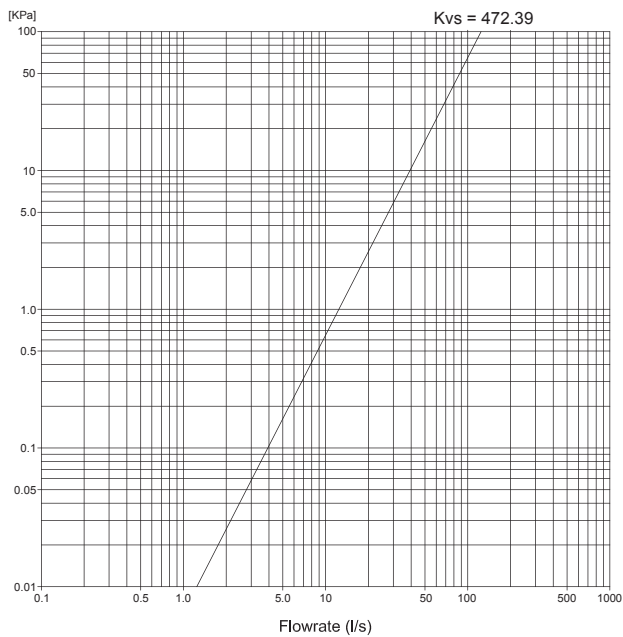


DDRV-B / DDRV-B25
Diameter : 125mm

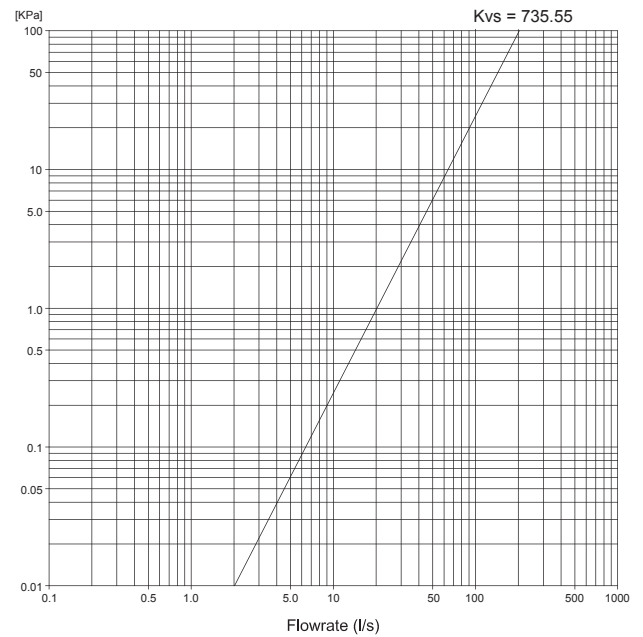


FLOW MEASUREMENT GRAPHS

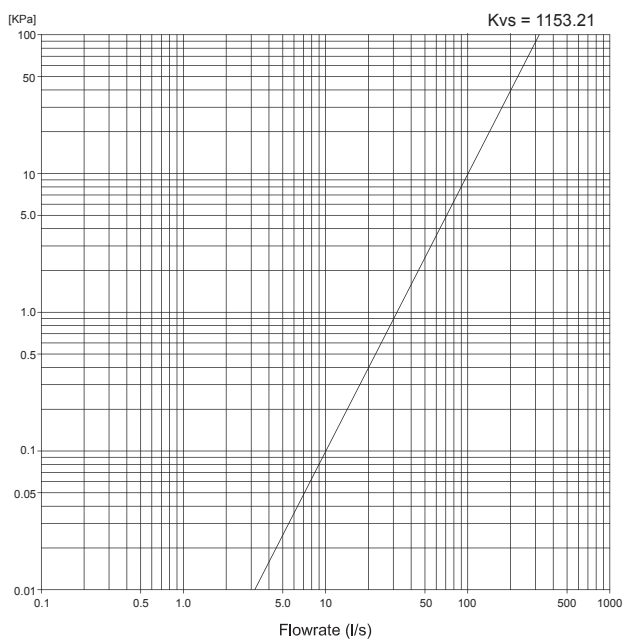
DDRV-B / DDRV-B25
Diameter : 150mm



DDRV-B / DDRV-B25
Diameter : 200mm



DDRV-B / DDRV-B25
Diameter : 250mm



DDRV-B / DDRV-B25
Diameter : 300mm

