

**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.

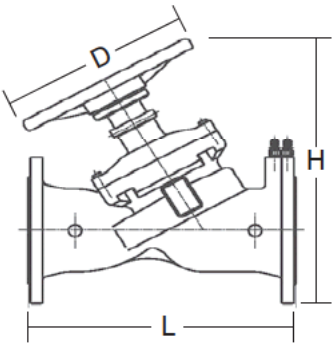
### SPECIFICATION

- 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-JL 1050
Bonnet	Ductile Iron	A536 65-45-12	EN-JL 1050
Stem	Stainless Steel 410	S41000	BS970 410S21
Disc	EPDM Coated DI	A536 65-45-12	EN-JL 1050
Gland (65 - 150mm)	DZR Brass	B456 C35330	EN 12165 CW602N
Gland (200 - 300mm)	Ductile Iron	A536 65-45-12	EN-JL 1050
Gland Nut	DZR Brass	B453 C35330	EN 12165 CW602N
Measuring Nipples	DZR Brass	B453 C35330	EN 12165 CW602N
Handwheel	Ductile Iron	A536 65-45-12	EN-JL 1050
Orifice Insert	DZR Brass	B453 C35330	EN 12165 CW602N
Packing	Graphite	Non-asbestos	Non-asbestos

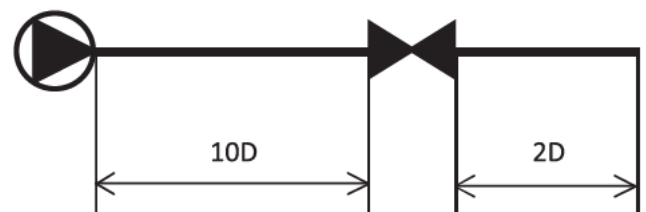
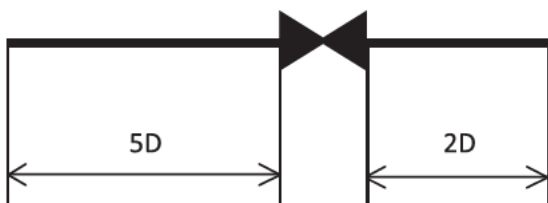
## DIMENSIONS & COEFFICIENTS

	Size (mm)	L (mm)	H (mm)	D (mm)	Weight (kg)	Kvs
		65	290	265	205	17
	80	310	270	205	20	116
	100	350	310	250	29	213
	125	400	340	300	40	333
	150	480	350	300	52	476
	200	600	537	375	113	768
	250	730	591	435	185	1153
	300	850	690	450	248	1743

Note: Kvs at fully open position.

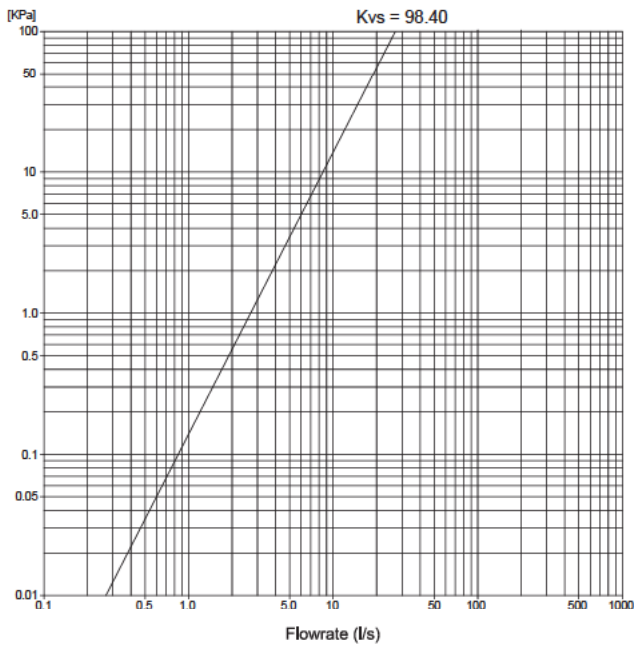
### Installation

- 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.

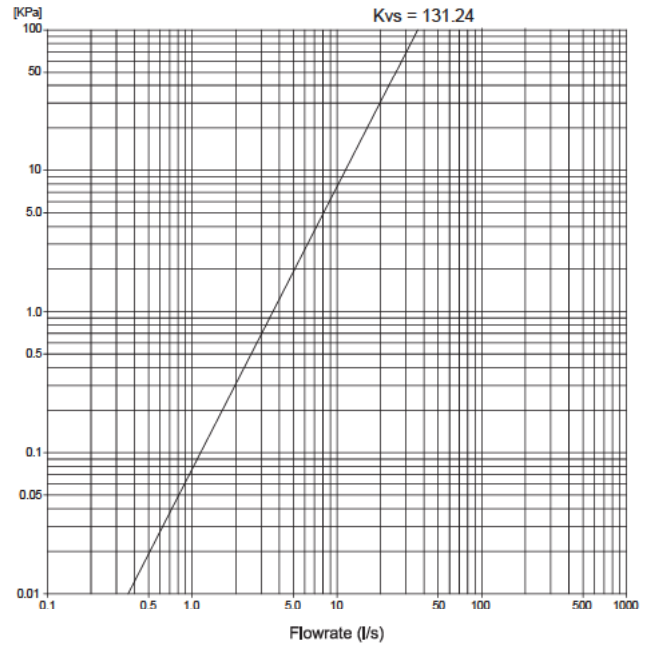


## FLOW MEASUREMENT GRAPHS

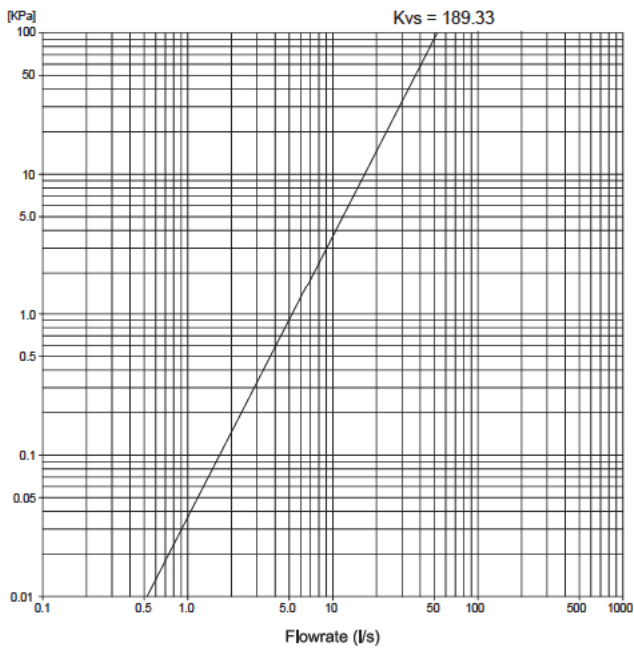
DDRV-B / DDRV-B25  
Diameter : 65mm



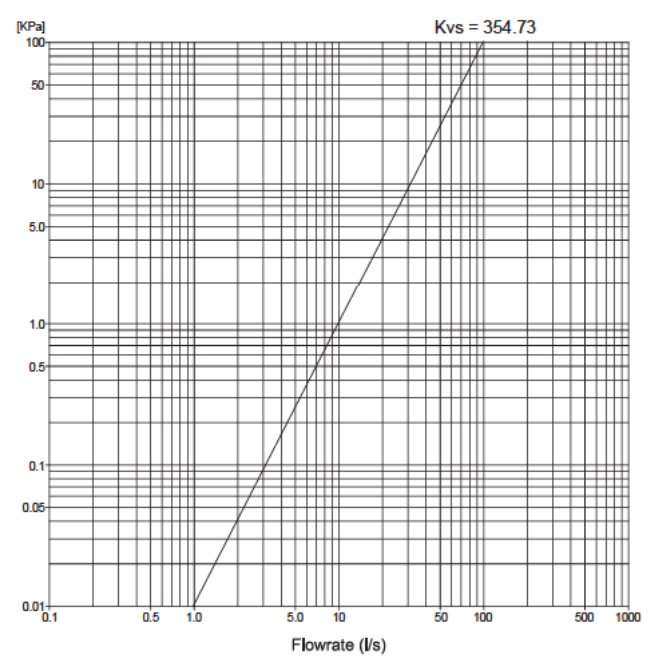
DDRV-B / DDRV-B25  
Diameter : 80mm



DDRV-B / DDRV-B25  
Diameter : 100mm

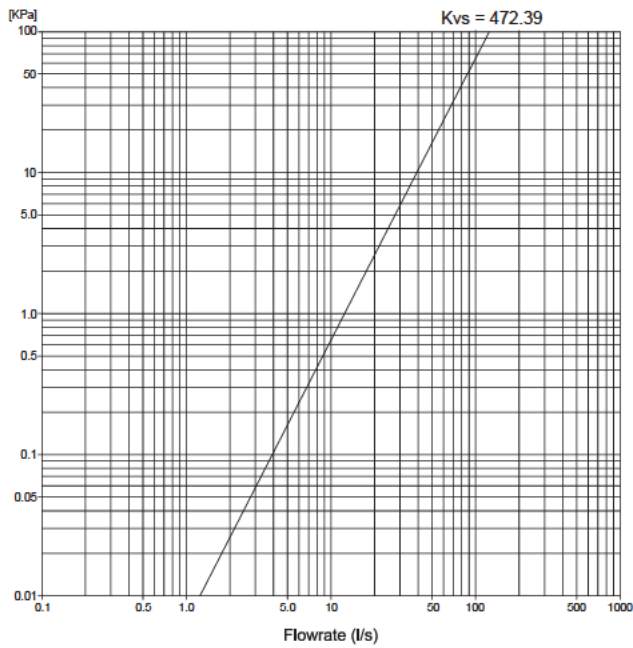


DDRV-B / DDRV-B25  
Diameter : 125mm

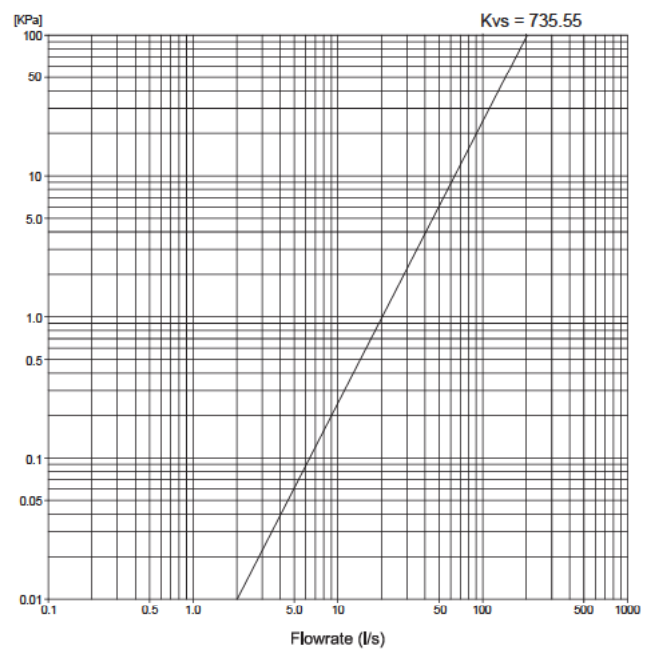


## FLOW MEASUREMENT GRAPHS

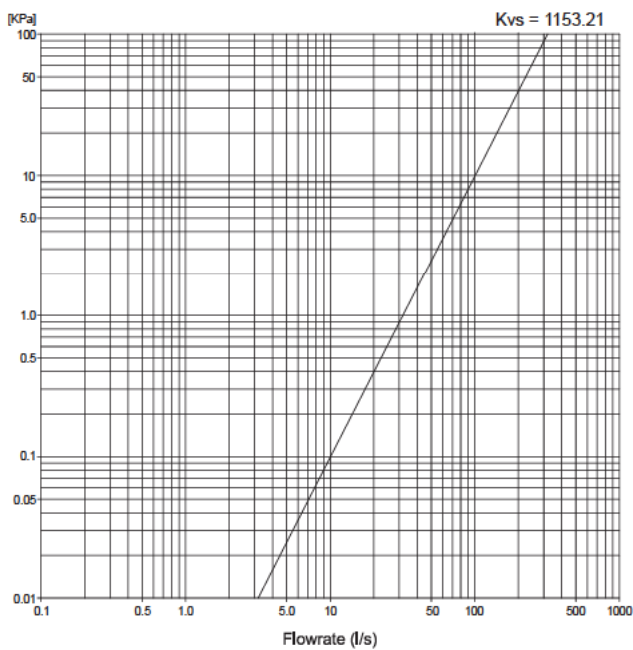
DDRV-B / DDRV-B25  
Diameter : 150mm



DDRV-B / DDRV-B25  
Diameter : 200mm



DDRV-B / DDRV-B25  
Diameter : 250mm



DDRV-B / DDRV-B25  
Diameter : 300mm

