

GDRV-101

**FIXED ORIFICE
DOUBLE REGULATING VALVE**



PRODUCT DATA SHEET

FIXED ORIFICE DOUBLE REGULATING VALVE

Model : GDRV-101

15mm (1/2") ~ 50mm (2")



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.
- Bronze body of PN25 pressure rating.
- Comply to BS 7350.

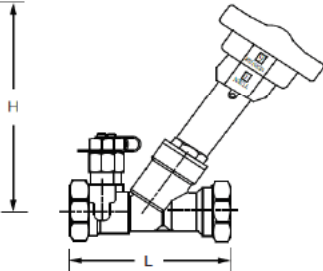
SPECIFICATION

- Type : Fixed orifice
- Size range : 15mm ~ 50mm
- Max. working pressure : 25bar
- Testing pressure : 37.5bar (Shell)
: 27.5bar (Seat)
- Working temperature : -10°C to 120°C
- Connection : BS 21 (ISO 7)
: ANSI B1.20.1
- Standard : Comply to BS 7350

MATERIALS

Part	Material	ASTM	EN
Body	Bronze	B62 B83600	EN1982 CC491K
Bonnet	DZR Brass	B453 C35330	EN12164 CW602N
Stem	DZR Brass	B453 C35330	EN12164 CW602N
Disc (15mm ~ 20mm)	DZR Brass	B453 C35330	EN12164 CW602N
Disc (25mm ~ 50mm)	DZR Brass + PTFE	B453 C35330	EN12164 CW602N
Orifice Insert	DZR Brass	B453 C35330	EN12164 CW602N
Measuring Nipples	DZR Brass	B453 C35330	EN12164 CW602N
O-Ring	EPDM	-	-
Handwheel	ABS	-	-

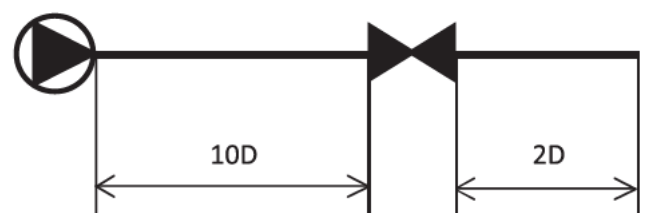
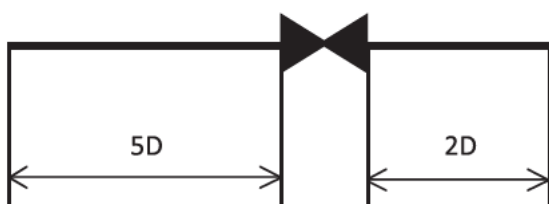
DIMENSIONS & COEFFICIENTS

	Size (mm)	L (mm)	H (mm)	Weight (kg)	Kvs
	15	90	109	0.6	2.1
20	98	110	0.6	4.4	
25	105	125	0.8	9.1	
32	120	128	1.1	17.5	
40	130	145	1.4	26.3	
50	150	148	2.0	49.3	

Note: Kvs at fully open position.

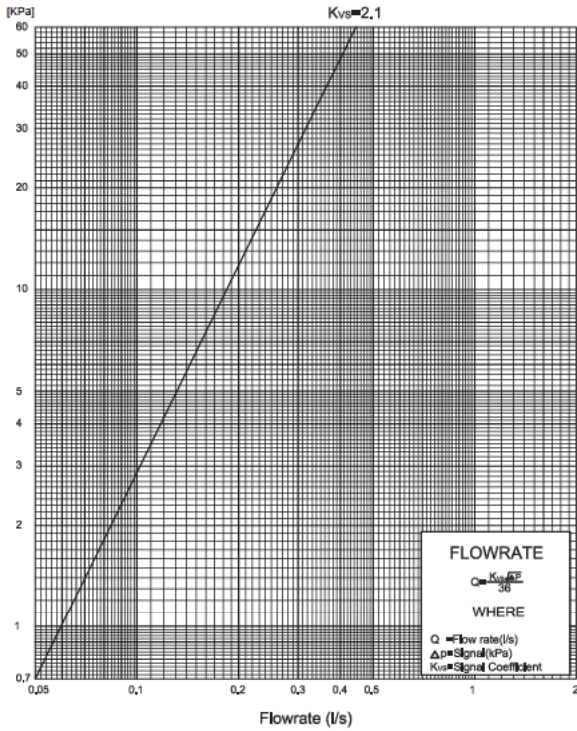
Installation

- 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.
- Use adequate seal material to protect the thread on pipe side from leaking or rusting. For connection, use proper tool (spanner, etc) to screw correctly in accordance to thread standard. Do not connect by using wrench on valve side.
- Up and down stream from the valve is required to avoid turbulence which will affect the accuracy.

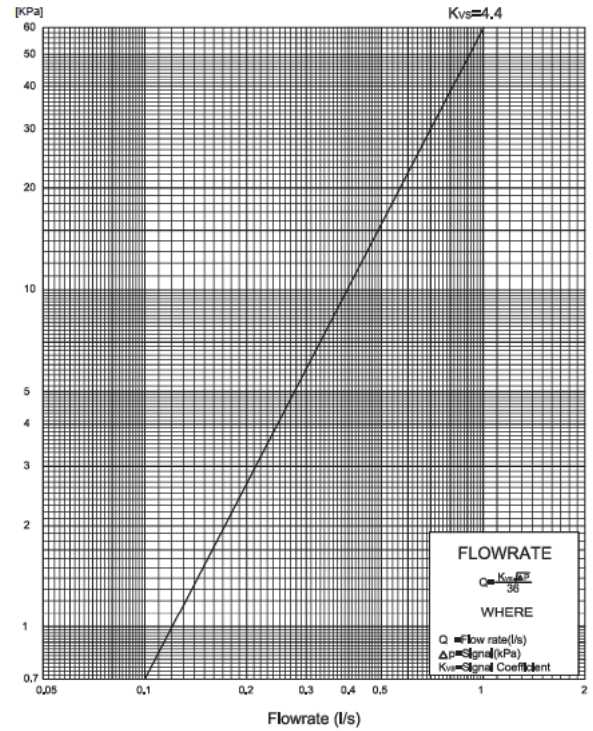


FLOW MEASUREMENT GRAPHS

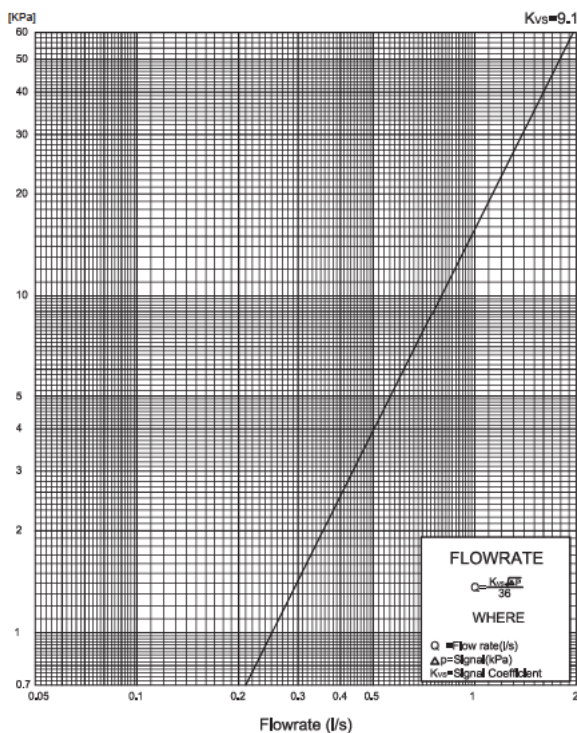
GDRV-101
Diameter : 15mm



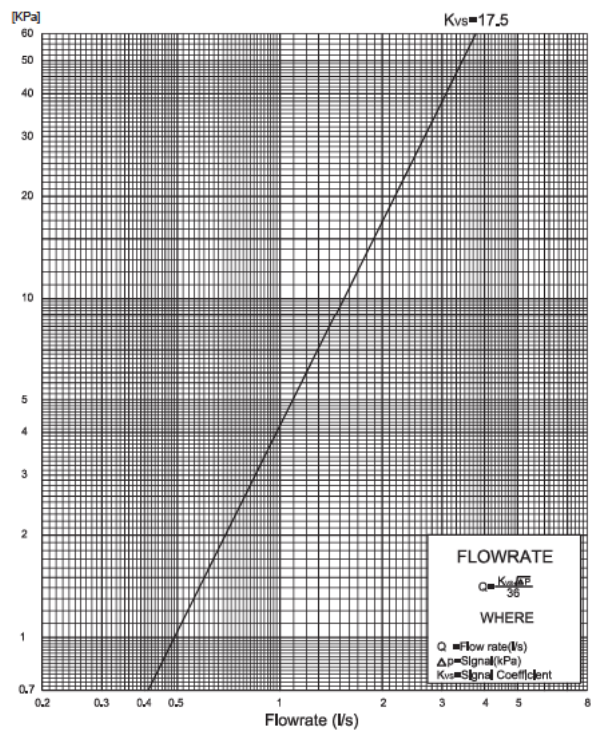
GDRV-101
Diameter : 20mm



GDRV-101
Diameter : 25mm

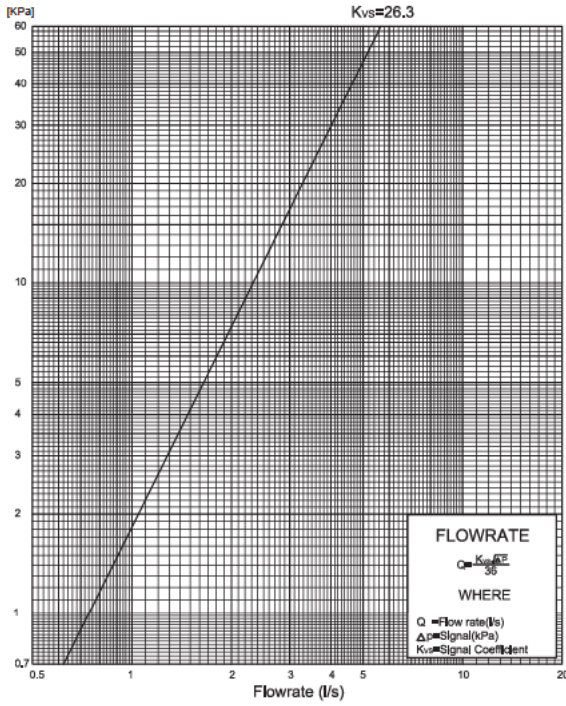


GDRV-101
Diameter : 32mm

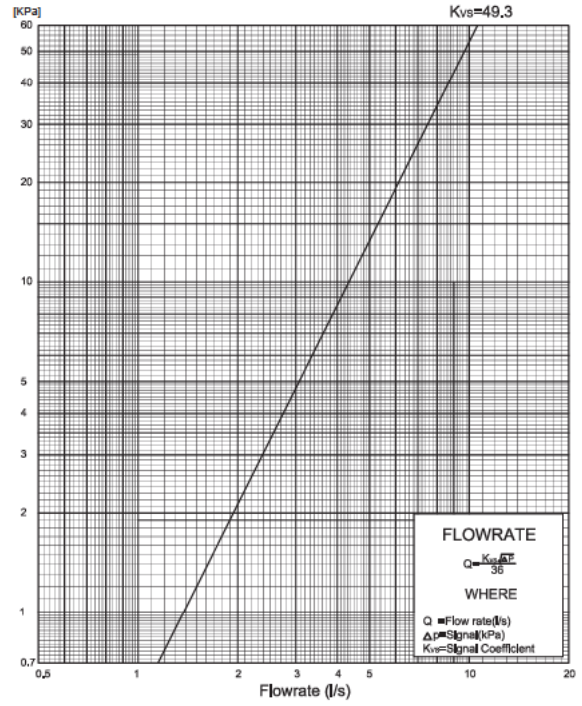


FLOW MEASUREMENT GRAPHS

GDRV-101
Diameter : 40mm



GDRV-101
Diameter : 50mm





Design and specification are subject to change without prior notice.

V0711

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