

Fixed Orifice Double Regulating Valve (FODRV) D931/D933/D934 PN25

WRAS
APPROVED
PRODUCT

CRANE®

FLUID SYSTEMS

Threaded BSEN10226 formerly BS21 (ISO 7) for Single Unit Systems Conforms to BS7350*



Specification

Y-pattern globe valves having characterised throttling disk tending towards equal percentage performance. Integral square edged entrance orifice plate and P84 insertion test points fitted. Double regulating feature allows valve opening to be set with an Allen key. Operation of the valve is by means of the Microset hand wheel.

WRAS Approved.

End Connection

Sizes 1 to 2 BS EN 10266 (ISO 7) parallel

Sizes 1/2 & 3/4 DN15 & DN20 BS 2779 (ISO 228) parallel.

Adaptor kits for use with copper tube also available.

Also available threaded ANSI B1.20.1

Order code D931AT/D933AT/D934AT.

Application

This single unit-commissioning valve D931 is designed for installation in circuits where combined functions of regulation and flow measurement are required. Accuracy of flow measurement is $\pm 5\%$ across all hand wheel settings.

D933 size 1/2" low flow FODRV combines the functions of regulation and flow measurement in a unit of high authority making it particularly suitable for low flow applications in the range of 0.03 to 0.07 l/s.

D934 size 1/2" ultra low flow FODRV combines the functions of regulation and flow measurement in a unit of high authority making it particularly suitable for ultra low flow applications in the range of 0.016 to 0.04 l/s.

Pressure/Temperature Ratings

Threaded

| | | | |
|----------------|------------|------|------|
| Temperature °C | -10 to 100 | 110 | 120 |
| Pressure (Bar) | 25 | 23.4 | 21.8 |

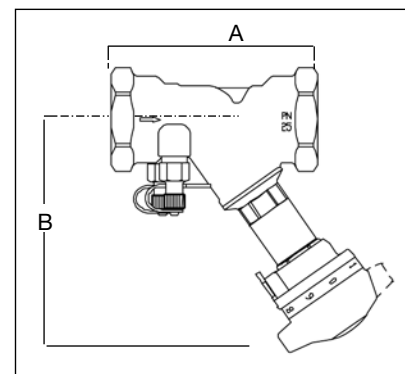
Note: In line with BS EN 1254/2 the maximum pressure must not exceed 16 bar when using compression adaptors.

Compression

| | | | |
|----------------|--------|----|-----|
| Temperature °C | 2 - 30 | 65 | 120 |
| Pressure (Bar) | 16 | 10 | 5 |

Intermediate pressure ratings shall be determined by interpolation.

Maximum temperature 120°C



Dimensions, Coefficients and Weights

| Fig. No. | Nom. Size | Dimensions (mm) | Fully Open | | KVs | Weight Kg |
|----------|------------|-----------------|------------|-------------|------|-----------|
| | | | Flow Kv | Head loss K | | |
| D931 | 1/2 DN15 | A 87 B 105 | 1.87 | 30.27 | 2.2 | 0.61 |
| | 3/4 DN20 | 96 106 | 3.14 | 34.55 | 4.7 | 0.65 |
| | 1 DN25 | 100 127 | 5.59 | 27.85 | 8.6 | 0.95 |
| | 1 1/4 DN32 | 114 128 | 10.80 | 22.60 | 16.6 | 1.13 |
| | 1 1/2 DN40 | 125 143 | 18.10 | 14.76 | 24.5 | 1.52 |
| | 2 DN50 | 146 144 | 29.10 | 14.62 | 46.1 | 1.98 |
| D933 | 1/2 DN15 | 87 105 | 1.06 | 94.20 | 1.1 | 0.61 |
| D934 | 1/2 DN15 | 87 105 | 0.57 | 325.8 | 0.58 | 0.61 |

*Except pressure rating exceeds BS

Materials

| Part | Material | Specification | Part | Material | Specification |
|--------|------------------|--------------------|----------------|------------------|------------------|
| Body | Bronze | BSEN1982 CC491K | 'O' Ring Seal | EPDM Rubber | |
| Bonnet | DZR copper alloy | BSEN12165 CW602N | Orifice Insert | DZR copper alloy | BSEN12164 CW602N |
| Stem | DZR copper alloy | BSEN12164 CW602N | P84 test valve | DZR copper alloy | BSEN12164 CW602N |
| Disc | DZR copper alloy | BSEN12164/5 CW602N | Hand Wheel | Plastic | |