

**Suitable for actuation**  
**With profiled disc to give equal percentage flow control**

**Specification**

Y-pattern globe valve.  
Integral square edged entrance orifice plates and P84 insertion test points fitted.  
Double regulating feature allows valve opening to be manually set.  
Operation of the valve is by means of motorised actuator.  
MotoBalance should be fitted with a suitable actuator. These include thermal actuators for on/off control specified 'normally open or normally closed' with either 24V or 230V supply.  
Alternatively use with a fully modulating control actuator that requires a 24V supply and a control signal 0-10V.

**End Connection**

Sizes 1/2" and 3/4" DN15 & DN20 BS EN ISO 28 parallel.  
All sizes also available threaded  
ANSI B1.20.1

**Application**

The MotoBalance valve is designed for installation in circuits where combined functions of actuated regulation and flow measurement are required. Accuracy of flow measurement is ± 5% across all drive settings.

- D981P** - The 1/2" MotoBalance has a flow range of 0.061 to 0.132 l/s.  
The 3/4" MotoBalance has a flow range of 0.131 to 0.289 l/s.
- D983P** - 1/2" low flow MotoBalance is particularly suitable for low flow applications in the range of 0.03 to 0.07 l/s.
- D984P** - 1/2" ultra low flow MotoBalance is particularly suitable for ultra low flow applications in the range of 0.016 to 0.04 l/s.

**Materials**

Part	Material	Specification
Body	Bronze	BSEN1982 CC491K
Bonnet	DZR copper alloy	BSEN12165 CW602N
Stem	DZR copper alloy	BSEN12165 CW602N
Disc	EPDM rubber	
O' Ring Seal	EPDM rubber	BS4518 0056-024
Orifice Insert	DZR copper alloy	BSEN12165 CW602N
P84 Test Point	DZR copper alloy	BSEN12165 CW602N



**Pressure/Temperature Ratings**

The maximum static pressure is 16 bar, the maximum differential pressure is 1.2 bar.  
Maximum working temperature: 120°C  
Minimum working temperature: -10°C

**Threaded**

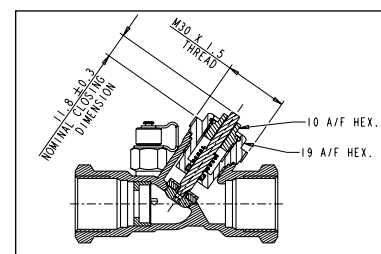
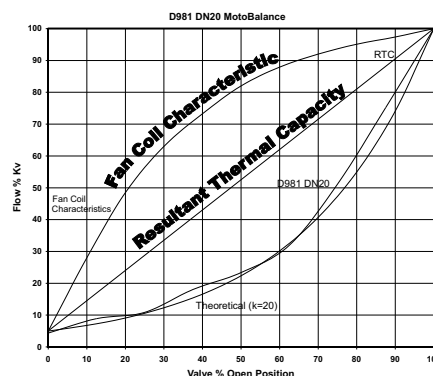
Temperature °C	-10 to 100	110	120
Pressure (bar)	16.0	14.8	13.5

**Compression**

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

Intermediate pressure ratings shall be determined by interpolation

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



**Dimensions, Coefficients and Weights**

Fig. No.	Nom. Size	Dimensions (mm)			Fully Open			
		A	B	C	Flow Kv	Head loss K	KVs	Weight Kg
D981P	1/2" DN15	87	50	46	1.245	30.27	2.2	0.41
	3/4" DN20	96	51	51	2.300	34.55	4.7	0.45
D983P	1/2" DN15	87	50	46	0.667	90.42	1.1	0.41
D984P	1/2" DN15	87	50	46	0.587	325.80	0.58	0.41

