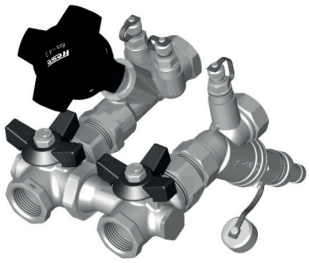
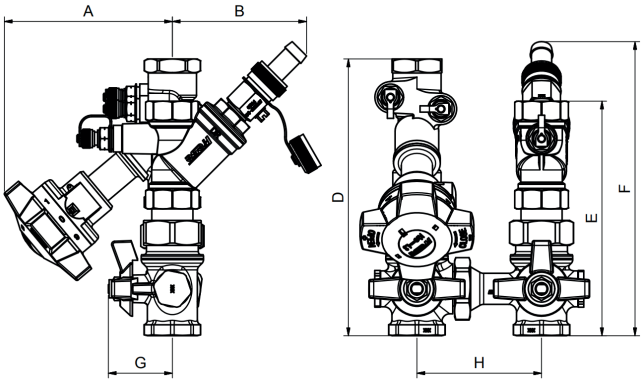
EasyLink80 FODRV
H Block complete with FODRV

Features
- Fitted with FODRV
- For heating and cooling applications at 80mm centres
- Material DZR Brass CW602N
- Integrated union joints for easy valve alignment
- Tee handle isolation valves for flow, return and bypass
- Drains on the return
- Built in PT ports for flow measurement
- PT plug on the flow side for measuring the DP across the terminal unit
- Kv value printed clearly on the handwheel for identification during commissioning
- Double regulating feature enables the valve opening to be set at the desired set point using a 3mm allen key

Technical data
Max pressure: 25 Bar
Maximum Differential pressure: 800kPa (8 Bar)
Working temp: 0°C to +120°C
Material: DZR Brass (CW602N) unless otherwise stated
Filter/Strainer Mesh: Stainless Steel. 32 (0.5mm)





DN	DN15	DN20	DN25
A	112	108	125
B	74	86	92
D	167	177	183
E	136	150	165
F	176	188	204
G*		41*	
H		80/130/170	

*Only Std. Handle possible

V1. Dimensions in mm

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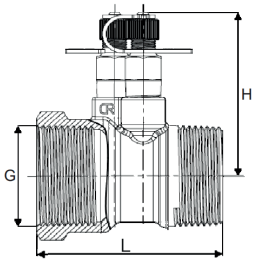
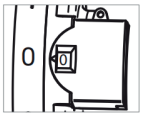
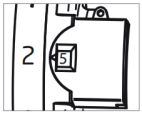
Metering Station

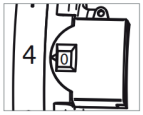


DN	DN15	DN20	DN25
L (mm)	60	62	68
H (mm)	57	60	64
G	1/2"	3/4"	1"

Setting the valve

Valve closed 

Valve set at 2.5 

Valve fully open 

Verification of the flow

In general, the flow rate in a system can be verified in two ways:

1. Direct flow rate verification in a circuit
2. Measurement of the differential pressure across the balancing valve or metering station.

1. Direct flow rate verification
For example, this can be carried out by ultrasonic equipment. On the basis of the measured velocity of the flow and the pipe dimension, the software will compute the flow rate. The use of ultrasonic verification requires free access to the pipes as the sensors are fitted directly to the pipe.

2. Measurement of the differential pressure
In the case of balancing valves, such as the Albion FODRV, the differential pressure across the balancing valve or metering station is measured to verify the flow.

Use the flow graph on page 3 to determine the flow or use the data tables on page 4 to determine the Kv of the valve at the specific pre-setting. The formula below can be used to determine the flow from the measured ΔP.

The following applies to all flow control valves:
$Q = Kv * \sqrt{\Delta p}$

Q = Flow (m3/h)
Kv = Orifice area
Δp = Differential pressure (Bar)

The Albion FODRV verifies the flow by measuring the differential pressure across the fixed orifice plate. The flow can be calculated using the formula above.

Flow calculation with other units	
$Q = Kv \cdot 100 \cdot \sqrt{\Delta p}$	Q = l/h Δp = kPa
$Q = \frac{Kv}{36} \cdot \sqrt{\Delta p}$	Q = l/s Δp = kPa

V1. Dimensions in mm

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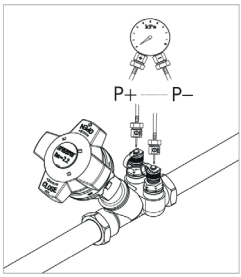
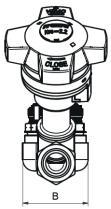
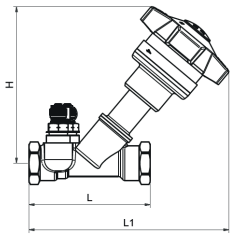
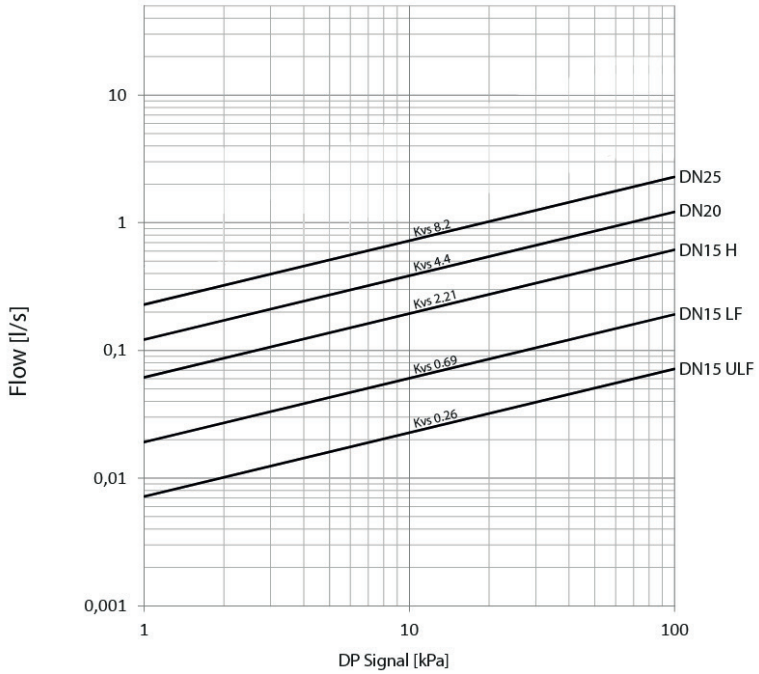
Measurement of the differential pressure across the fixed orifice of the valve







DN	DN15 ULF	DN15 LF	DN15	DN20	DN25
L	87	87	87	96	100
L1	143	143	143	142	153
H	112	112	112	108	125
B	47	47	47	53	57
Kvs (For flow verification)	0.26	0.69	2.21	4.4	8.2
Kv (Total valve)	0.26	0.69	1.99	3.17	5.21
Kg	0.49	0.49	0.49	0.58	0.84



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Pre-set	DN15 ULF	DN15 LF	DN15	DN20	DN25
	Kv	Kv	Kv	Kv	Kv
0	0	0	0	0	0
0.1	0.03	0.08	0.07	0.04	0.24
0.2	0.06	0.16	0.15	0.08	0.48
0.3	0.09	0.23	0.22	0.12	0.72
0.4	0.12	0.31	0.30	0.16	0.96
0.5	0.15	0.39	0.37	0.20	1.20
0.6	0.15	0.43	0.45	0.28	1.38
0.7	0.16	0.46	0.53	0.36	1.56
0.8	0.17	0.50	0.60	0.43	1.73
0.9	0.17	0.53	0.68	0.51	1.91
1.0	0.18	0.57	0.75	0.59	2.09
1.1	0.18	0.58	0.81	0.66	2.21
1.2	0.19	0.60	0.87	0.74	2.32
1.3	0.19	0.61	0.93	0.82	2.44
1.4	0.20	0.62	0.99	0.89	2.56
1.5	0.20	0.63	1.04	0.97	2.67
1.6	0.21	0.64	1.07	1.03	2.75
1.7	0.21	0.64	1.10	1.08	2.82
1.8	0.21	0.65	1.13	1.14	2.90
1.9	0.22	0.65	1.16	1.19	2.98
2.0	0.22	0.66	1.19	1.25	3.05
2.1	0.22	0.66	1.23	1.30	3.18
2.2	0.23	0.67	1.28	1.36	3.31
2.3	0.23	0.67	1.32	1.42	3.45
2.4	0.23	0.67	1.37	1.48	3.58
2.5	0.24	0.68	1.41	1.54	3.71
2.6	0.24	0.68	1.47	1.65	3.84
2.7	0.24	0.68	1.53	1.76	3.98
2.8	0.24	0.68	1.60	1.87	4.11
2.9	0.25	0.68	1.66	1.97	4.25
3.0	0.25	0.69	1.72	2.08	4.38
3.1	0.25	0.69	1.76	2.21	4.49
3.2	0.25	0.69	1.80	2.34	4.61
3.3	0.25	0.69	1.84	2.46	4.72
3.4	0.25	0.69	1.88	2.59	4.83
3.5	0.25	0.69	1.92	2.72	4.94
3.6	0.26	0.69	1.94	2.81	5.00
3.7	0.26	0.69	1.95	2.90	5.05
3.8	0.26	0.69	1.96	2.99	5.10
3.9	0.26	0.69	1.97	3.08	5.16
4.0	0.26	0.69	1.99	3.17	5.21

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