MIXING VALVE SERIES 4F

4F, DN 32-150, cast iron, PN 6. Flange.



OPERATION

The ESBE series F is a valve made of cast iron for use in heating and cooling installations.

The mixing proportions are adjusted manually with a handle or, in automatically controlled systems, by means of an actuator. Suitable actuators are ESBE series ARC300, ARD100, ARD200 or series 90. The valve can alco be equipped with ESBE controllers series CRA120.

Valve series 4F is available in dimensions DN 32-150 with flanged connections.

The scale is graded on both sides and can be turned, allowing a choice of mounting positions. Operation angle = 90°.

SERVICE AND MAINTENANCE

All major parts are replaceable. The shaft seal consist two o-rings, one of which can be replaced without the need for draining down the system or dismantling the valve. However, before doing so, the system must be depressurized.

INSTALLATION EXAMPLES

All the examples of installations can be reversed. The valve position plate is graded on both sides and should at the installation be fitted in the correct position as shown in the instruction for installation.



VALVE 4F DESIGNED FOR

Heating

Comfort cooling

■ Series CRA120 ≤DN100

SUITABLE ACTUATORS AND CONTROLLERS

- Series 90 ≤DN100
- Series ARC300
- Series ARD100 ≤DN80
- Series ARD200

TECHNICAL DATA	
Pressure class:	PN 6
Media temperature:	max. 110°C, min10°C
Differential pressure drop:	DN 20-50,max. 50 kPa
·	DN 65-150,max. 30 kPa
Leakrate in % of flow:	max. 1.5%
Rangeability Kv/Kv ^{min} :	100
	Flange according to EN 1092-2
Material	
Valve body:	Cast iron EN-JL 1030
Slide:	brass CW 614N and stainless steel
	brass CW 602N
_	cast iron
O-rings:	EPDM
DED 2014 /69 /ELL entire	4.2

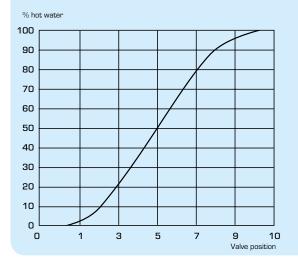
PED 2014/68/EU, article 4.3

REQUIRED ACTUATOR TORQUE

The figures below are intended only as a recommendation for ordinary installations. In some applications the valve may require even more actuator torque.

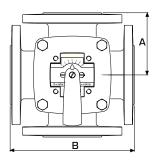
Valve size up to	DN 50 _	actuator torque 5 Nm
	DN 80 _	10 Nm
	DN 100	15 Nm
	DN 150	20 Nm

VALVE CHARACTERISTICS

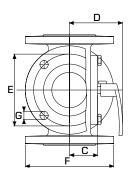


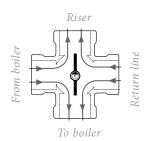


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The flat-sided spindle top (as well as the indicator of the knob) points towards the sleeve position.

SERIES 4F

Art. No.	Reference	DN	Kvs*	А	В	С	D	Е	F	G	Weight [kg]
1110 17 00	4F 32	32	28	80	160	40	82	90	120	4x15	7.0
1110 18 00	4F 40	40	44	88	175	40	82	100	130	4x15	8.2
1110 19 00	4F 50	50	60	98	195	50	92	110	140	4x15	11.0
1110 20 00	4F 65	65	90	100	200	50	92	130	160	4x15	12.2
1110 21 00	4F 80	80	150	120	240	65	108	150	190	4x18	20.0
1110 22 00	4F 100	100	225	132	265	81	124	170	210	4x18	25.0
1110 23 00	4F 125	125	280	150	300	81	124	200	240	8x18	35.0
1110 24 00	4F 150	150	400	175	350	89	131	225	265	8x18	45.0

^{*} Kvs-value in m³/h at a pressure drop of 1 bar. Flow chart, see product catalogue.

