

DIVERTING VALVES

MOTORIZED BALL VALVE SERIES MBA130

The ESBE series MBA130 consist of motorized 3-way ball valves available in DN 20-25, PN32 with external thread or combination of internal and external thread connection.



OPERATION

The ESBE series MBA130 is a range of 3-way diverting motorized ball valves with actuator for use in heating and cooling system. The valve is air bubble tight according to EN12266-1

The actuator is controlled by 2-point signal and is recommended for on/off function, available for 230V AC, 50 Hz power supply. Actuator is supplied with 0.85 meter connection cable attached, auxiliary switch and an anti condensation resistor to prevent condensation on the

electronic circuit board.

Actuator is assembled on the ball valve with a metallic spigot that allows to assembly/disassembly the actuator in a secure, simple and rapid way. The ball valve and actuator has an operating range of 90°.

TECHNICAL DATA

Valve:

Pressure class: _____ PN 32
Media temperature: _____ max. +90°C
_____, min. 0°C
Torque (at nominal pressure): _____ < 4 Nm
Leakrate - EN12266-1: internal leakage rate B, Air bubble tight
EN12266-1: external leakage rate A, Air bubble tight
Working pressure: _____ 3.2 MPa (32 bar)
Connections: _____ Internal thread, ISO 228/1
_____, External thread, ISO 228/1
Media: _____ Heating water (in accordance with VDI2035)
_____, Water / Glycol mixtures, max. 50%.
(above 20% admixture, the pump data must be checked)

Material

Valve body: _____ Brass CW 617N, Nickel plated
Body end: _____ Brass CW 617N, Nickel plated
Seat: _____ PTFE
O-ring: _____ FPM
Ball: _____ Brass CW 617N, Chrome plated
Washer: _____ PTFE
Shaft: _____ Brass CW 614N, Chrome plated
O-ring, shaft: _____ HNBR
Gasket: _____ Heat resistance fibre
Union: _____ Brass CW 617N, Nickel plated
Nut: _____ Brass CW 617N, Nickel plated

Actuator:

Ambient temperature: _____ max. +50°C
_____, min. 0°C
Enclosure rating: _____ IP44
Protection class: _____ II
Power supply: _____ 230 ± 10% VAC, 50 Hz
Control signal: _____ 2-point SPST
Power consumption - motor operation: _____ 3.5 W
- anti condensation resistor: _____ up to 5 W
Rating auxiliary switch: _____ 6(1) A 230 V AC
Running time 90°: _____ 40 seconds
Torque: _____ 10 Nm



LVD 2014/35/EU
EMC 2014/30/EU
RoHS3 2015/863/EU

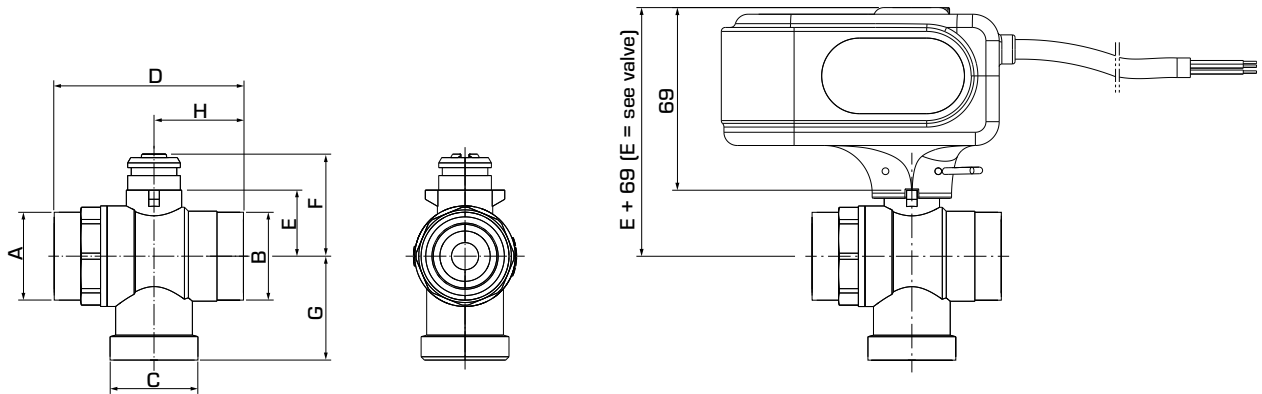
UK SI 2016 No. 1101
CA SI 2016 No. 1091
SI 2012 No. 3032

PED 2014/68/EU, article 4.3 / SI 2016 No. 1105 (UK)

WIRING

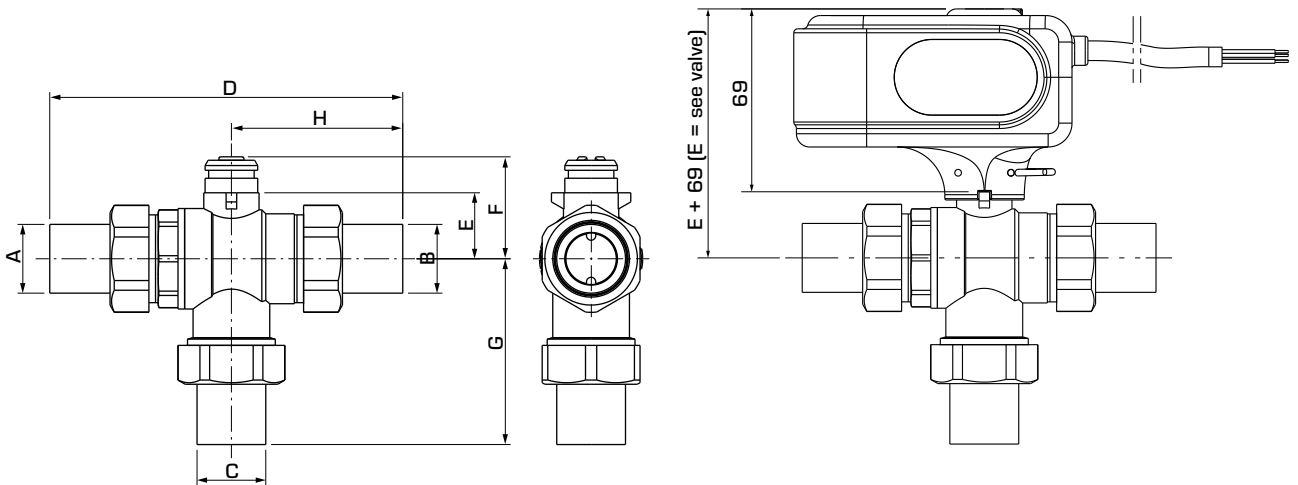
Please see the Installation instruction

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SERIES MBA132, EXTERNAL THREAD

Art. No.	Reference	DN	Kvs *	Connection			D	E	F	G	H	Weight [kg]	Note
				A	B	C							
43102500	MBA132	20	9.6	G 1"	G 1"	G 1"	72	25	39	39	34	0.76	
43102600		25	11.3	G 1¼"	G 1¼"	G 1¼"	82	29	43	42	40	0.99	

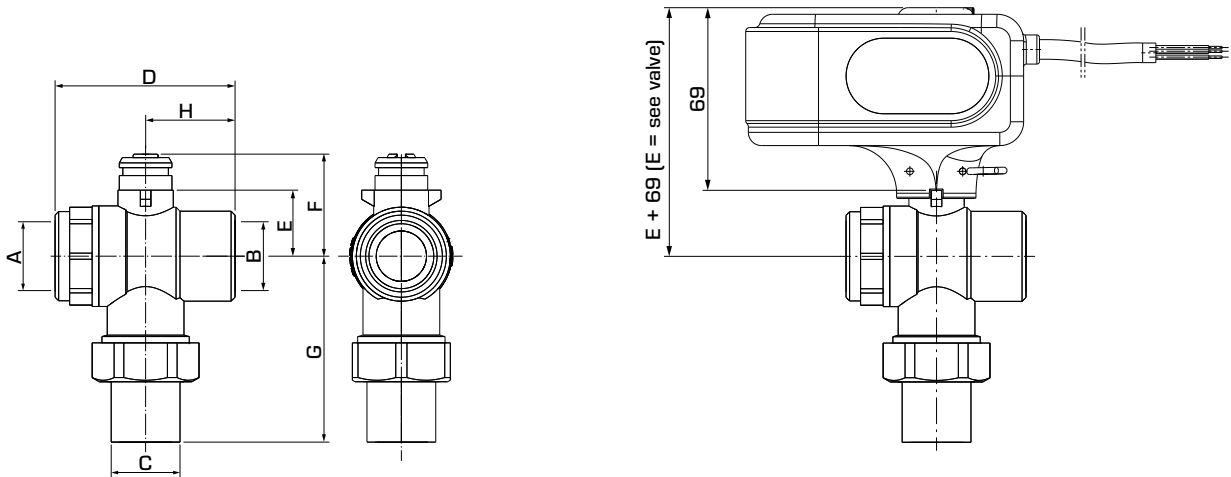


SERIES MBA132, EXTERNAL THREAD WITH ADAPTERS

Art. No.	Reference	DN	Kvs *	Connection			D	E	F	G	H	Weight [kg]	Note
				A	B	C							
43102700	MBA132	20	9.6	G ¾"	G ¾"	G ¾"	134	25	38.5	70	65	1.07	
43102800		25	11.3	G 1"	G 1"	G 1"	149	29	42.5	75.5	73	1.46	

* Kvs-value in m³/h at a pressure drop of 1 bar.

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SERIES MBA135, INTERNAL, INTERNAL AND EXTERNAL THREAD

Art. No.	Reference	DN	Kvs *	Connection			D	E	F	G	H	Weight [kg]	Note
				A	B	C							
43102100	MBA135	20	9.6	G 3/4"	G 3/4"	G 3/4"	68	25	39	70	34	0.87	1)
43102200		25	11.3	G 1"	G 1"	G 1"	81	29	43	76	41	1.14	1)

* Kvs-value in m³/h at a pressure drop of 1 bar

Note 1) Connection A, B = Internal thread, Connection C = External thread

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DIMENSIONING

HEATING APPLICATION IN GENERAL, EXAMPLE RADIATOR OR UNDERFLOOR HEATING SYSTEMS

Start with the heat demand in kW (e.g. 25 kW) and move vertically to the chosen Δt (e.g. 10°C).

Move horizontally to the pressure drop lines and select Kvs-value (e.g. 9,6). A valve with suitable Kvs-value will be found in respective product description.

OTHER APPLICATIONS

Make sure maximum ΔP is not exceeded 2 bar to avoid noises.

