## ROTARY MOTORIZED VALVES

# MIXING VALVE SERIES HG

ESBE mixing valves Series HG are designed for installations where space is limited. - 3HG/4HG, DN25, cast iron, PN10. Union connections.





**3HG** External thread/Union connections

External thread/Union connections

## OPERATION

ESBE mixing valve series HG have connections in an H configuration. The upward connections are for radiator circuits and the downward connections are for boiler connection.

The HG series have union connections. The integrated bypass has an adjustable flow with a maximum 50% total capacity of the valve.

The valves can be equipped with ESBE actuators series ARA600 and series 90. The valves may also be equipped with ESBE controllers series CRx200.

### SERVICE AND MAINTENANCE

All major parts are replaceable. The shaft seal consist of 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.

#### **VALVE HG DESIGNED FOR**



## SUITABLE ACTUATORS AND CONTROLLERS

- Series ARA600Series 90
- Series CRK210
  Series CRD220
- Series CRC210
- Series CRB210, CRB220
- Series CRA210

TECHNICAL DATA	
Pressure class:	PN 10
Temperature:	max. 110°C
· · · · · · · · · · · · · · · · · · ·	min. –10°C
Differential pressure drop:	max. 50 kPa
Torque:	5 Nm
Leakrate in % of flow:	max. 1%
Connections: External thre	ad, ISO 228/1
Media: Heating water (in accordance	with VDI2035)
Water / Glycol mixtu	ires, max. 50%
Water / Ethanol mixtu	ires, max. 28%
Material	
Body: Cast iro	n EN-JL 1030
Slide/Spindle: Br	ass CW 614N
Bushing:	Plastic
Cover plate:	Zinc
O-rings:	EPDM

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



ROTARY MOTORIZED VALVES

# MIXING VALVE SERIES HG





### **SERIES 3HG, EXTERNAL THREAD**

				Conne	ection					Weight	
Art. No.	Reference	DN	Kvs*	E	F	А	В	С	D	[kg]	Note
11351200	3HG25-125	25	10	G 1½"	PF 11⁄₂"	125	110	38	76	2,2	1), 2)

### **SERIES 4HG, EXTERNAL THREAD**

				Connection						Weight		
Art. No.	Reference	DN	Kvs*	E	F	А	В	С	D	[kg]	Note	
11350100	4HG25-90	25	8	G 1½"	PF 11/2"	90	110	38	76	1,5	1]	
11350200	4HG25-125	41005 405	05	6,3	0.11/"	DE 41/ "	105	110		70	1,8	1]
11351100		20	10	G 1 1/2	PF 172	120	110	38	70	2,2	1), 2)	
11351100 *Kuguglug in m <sup>3</sup>		n of 1 hon F	IU low short of							2,2	1,21	

\*Kvs-value in m<sup>3</sup>/h at a pressure drop of 1 bar. Flow chart, see product catalogue. Note 1) Male thread for union connections 2) With By-pass





# MIXING VALVE SERIES HG

### DIMENSIONING

#### HEATING SYSTEMS (RADIATOR OR UNDERFLOOR HEATING SYSTEMS)

Start with the heat demand in kW (e.g. 25 kW) and move vertically to the chosen  $\Delta t$  (e.g. 15°C).

Move horizontally to the shaded field (pressure drop of 3-15 kPa) and select the smaller Kvs-value (e.g. 6,3). A mixing valve with suitable Kvs-value will be found in respective product description.

#### **OTHER APPLICATIONS**

Make sure maximum  $\Delta P$  is not exceeded.



