

# CIRCULATION UNIT

## FIXED TEMPERATURE, SERIES GFF100

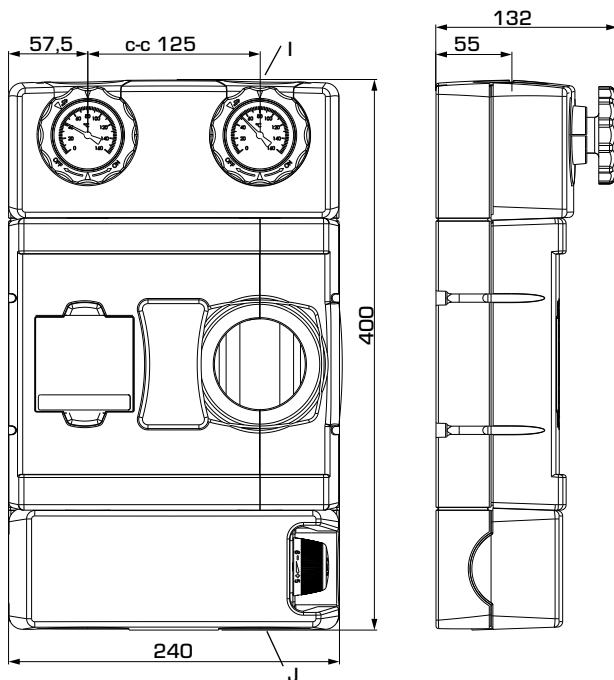


GFF111

### PRODUCT DESCRIPTION

The ESBE series GFF100 is a circulation mixing unit which is intended for heating circulations where the constant temperature control are required. Equipped with two shut-off valves with thermometers, check valve and high class insulation shell. The GFF100 is delivered with the 3-way thermostatic valve, which provides constant temperature regulation of the heating system and adjustable temperature setting. The ESBE Circulation Unit GFF100 is ready to work with 180mm pumps. The smart adjustable insulation shell makes it sure that any kind of pump will be insulated in a right way.

### PRODUCT ASSORTMENT



Installation dimensions for Circulation unit Series GFF100

### SERIES GFF100

Art. No.	Reference	DN	Temperature range	Connections		Weight [kg]	Note
				I	J		
61220100	GFF111	25	20-55 °C	G 1"	G 1½"	3,8	

### KEY BENEFITS

- Constant temperature control thanks to the thermostatic valve
- Adjustable flow temperature settings
- 180mm pump ready – be free to use favorite pump manufacturer
- High class, adjustable insulation shell

### SERVICE AND MAINTENANCE

The circulation unit does not require any specific maintenance under normal conditions.

### RELATED ACCESSORIES

See separate data sheet for further detailed information.

#### ESBE Manifold

Manifold for 1, 2, or 3 circulation units. With integrated separator function.

Art. No.		
66001100	_____	GMA411- for 1 unit
66001600	_____	GMA521 - for 2 units
66001700	_____	GMA531 - for 3 units


Manifold for 2, 3, 4 or 5 circulation units. Without integrated separator function.

Art. No.		
66001200	_____	GMA421- for 2 units
66001300	_____	GMA431 - for 3 units
66001400	_____	GMA441 - for 4 units
66001500	_____	GMA451 - for 5 units

# CIRCULATION UNIT

## FIXED TEMPERATURE, SERIES GFF100

### TECHNICAL DATA

 Visit [esbe.eu](http://esbe.eu) for further detailed information.


#### The Circulation unit, in general:

Pressure class: \_\_\_\_\_ PN 6  
 Media temperature: \_\_\_\_\_ max. +95°C  
 \_\_\_\_\_ min. 0°C  
 Ambient temperature: \_\_\_\_\_ max. °C / min. °C  
 (depends on the electronic equipment)  
 Working pressure: \_\_\_\_\_ 0,6 MPa (6 bar)  
 Connections, \_\_\_\_\_ Internal thread (G), ISO 228/1  
 \_\_\_\_\_ External thread (G), ISO 228/1  
 Insulation: \_\_\_\_\_ EPP  $\lambda$  0,036 W/mK  
 Media: \_\_\_\_\_ Heating water (in accordance with VDI2035)  
 \_\_\_\_\_ Water / Glycol mixtures, max. 50%.  
 (above 20% admixture, the pump data must be checked)

#### Material, in contact with water:

Components of: \_\_\_\_\_ Brass, steel  
 Sealing material of: \_\_\_\_\_ PTFE, Aramid fibre, EPDM

#### Conformities and certificates:

 PED 2014/68/EU, article 4.3



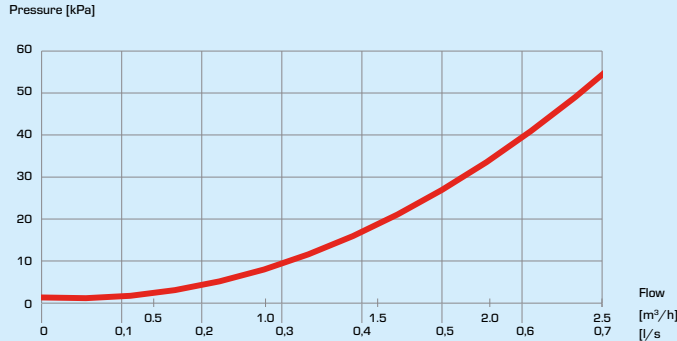
 EnEV 2014

#### The integrated thermostatic mixing valve:

Max. differential pressure drop: \_\_\_\_\_ 100kPa (1bar)  
 Temperature range: \_\_\_\_\_ 20-55°C  
 Temperature stability: \_\_\_\_\_  $\pm 3^\circ\text{C}^*$

\* Valid at unchanged hot/cold water pressure, minimum flow rate 9 l/min.  
 Minimum temperature difference between hot water inlet and mixed water outlet 10°C.

### CHARACTERISTICS



### INSTALLATION EXAMPLE

