HeatBloC® DN 25

Catalogue 01/2018

Systems, valves and fittings for the use
in hot water heating systems

Valid for the UK

EnEV

100% Quality · Qualität made in Germany · Quality made in Germany

5 Years · Handwerkergarantie · manufacturer´s warranty

PAW

All HeatBloC®s MC offer the following advantages:

Automatic, dynamic balancing of the distribution manifold
Security of supply, high comfort, avoids mutual influence at the distribution manifold, no flow rate variation due to the mixing valve position any more, necessary condition for a hydraulic balancing of the radiators

Replaces mechanical differential pressure controllers and hydraulic separators
High efficiency due to the low return temperature, energy-saving operation of the pumps, energy saving due to the pumps of approx. 50 % compared to mechanical differential pressure controllers in each line

Electronic controller
Electronic regulation of the differential pressure, temperature measurement and temperature regulation if necessary (HeatBloC MC43), display of the flow rate and the heat quantity with Grundfos pump

Preassembled group of fittings for heating circuits

High flexibility during assembly
The modules can be used in nearly any combination

Check valve in the return pipe
Avoids gravity circulation, can be opened, 200 mm wc, spring-loaded

Non-return valve in the mixing valve
Avoids unwanted circulation at the distribution manifold, can be opened, 50 mm wc, spring-loaded

Flow on the right = standard
The flow and return line can be easily changed on site (also for heating circuits with mixing valve)

All water-carrying parts are made of brass

EnEV-compliant functional insulation
Made of permanently elastic EPP, complete insulation of the valves and fittings with sealing lips, ventilation opening to cool the pump

PAW heating circulation pumps with high-efficiency technology
Fitted with 2 m cable, completely premounted, integrated in the insulation, pressure tested, with serial number, perfectly aligned system, dimensioning diagram, ErP READY

The pump can be entirely isolated
No draining necessary during servicing

Optional integration in a smart home environment

DN 25

MC41
direct / unmixed

up to 50 kW*

MC42
3-way mixing valve

up to 40 kW*

MC43
Controlled circuit with constant value, 3-way mixing valve with bypass 0-50%

up to 45.5 kW*

MC44
3-way mixing valve with bypass 0-50%

up to 45.5 kW*

MC45
3-temperature mixing valve

up to 32.5 kW*

MC46
Boiler charging set with 3-way mixing valve

up to 45.5 kW*

Modular distribution manifolds
2-fold, 3-fold, 4-fold, 5-fold, 6-fold

up to 80 kW* per boiler connection

MCom communication set

*Temperature difference = 20 K

Application range

- for boiler charging
- for modulating temperature heating systems

Recommended application range

- up to 50 kW
- 20 K up to 2150 l/h

Operating data

Maximum pressure	6 bars
Maximum operating temperature	110 °C
Kvs value	7.2

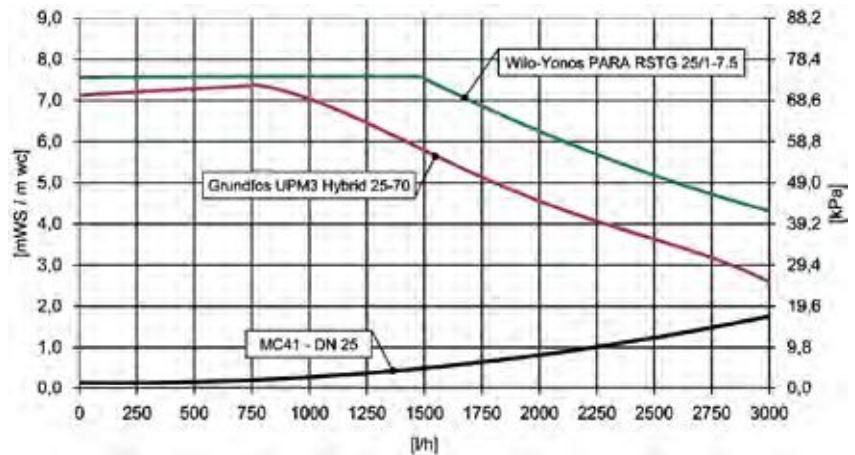## Technical data

Dimensions

Nominal diameter	DN 25 (1")
Connection generator	1½" external thread, flat sealing
Connection consumer	1" internal thread
(1) Height	500 mm
(2) Installation length	340 mm
(3) Centre distance	125 mm
(4) Width	250 mm

Materials

Valves and fittings	Brass
Gaskets	AFM34 / EPDM
Insulation	EPP, EnEV conform

Differential pressure diagram

HeatBloC® MC41 - DN 25 (1")		EEI*	with	Item no.	€ / piece
	Grundfos UPM3 Hybrid 25-70, flow rate display	< 0.20	♠	4536013GU7	-
	Wilo-Yonos PARA RSTG 25/1-7.5	< 0.21	♠	4536013WG8	-

Accessories

	Connection set for MCom controller (mandatory)	1398700	-

Wall power supply (24 V DC, RJ12, RS485) for the connection of the MCom controllers to the power supply.
Please note: For the function of a MC system, **one** connection set is necessary, regardless of the number of the heating circuits.

	MCom communication set (optional)	1398730	-

For WiFi communication with an Apple or Android terminal.
The communication module is the condition for the integration in a smart home environment.

HeatBloC® MC42 - DN 25 (1")
3-way mixing valve

EnEV

Application range
- for heating systems controlled by a mixing valve

Recommended application range
- up to 40 kW
- 20 K up to 1750 l/h

Operating data
Maximum pressure	6 bars
Maximum operating temperature	110 °C
Kvs value	5.2

Technical data
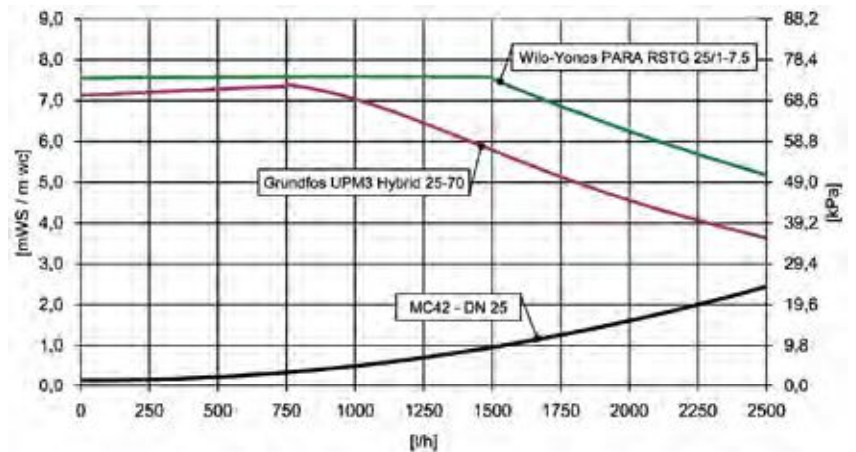
Dimensions
Nominal diameter	DN 25 (1")
Connection generator	1½" external thread, flat sealing
Connection consumer	1" internal thread
(1) Height	500 mm
(2) Installation length	340 mm
(3) Centre distance	125 mm
(4) Width	250 mm

Materials
Valves and fittings	Brass
Gaskets	AFM34 / EPDM
Insulation	EPP, EnEV conform

Differential pressure diagram

HeatBloC® MC42 - DN 25 (1")		EEI*	with	Item no.	€ / piece
	Grundfos UPM3 Hybrid 25-70, flow rate display	< 0.20	▲Ⓜ	**4536053MGU7**	-
	Wilo-Yonos PARA RSTG 25/1-7.5	< 0.21	▲Ⓜ	**4536053MWG8**	-

Accessories

	Connection set for MCom controller (mandatory)	**1398700**	-

Wall power supply (24 V DC, RJ12, RS485) for the connection of the MCom controllers to the power supply.
Please note: For the function of a MC system, **one** connection set is necessary, regardless of the number of the heating circuits.

	MCom communication set (optional)	**1398730**	-

For WiFi communication with an Apple or Android terminal.
The communication module is the condition for the integration in a smart home environment.

HeatBloC® MC43 - DN 25 (1")
Controlled circuit with constant value, 3-way mixing valve with bypass 0-50%

EnEV

Application range
- For low-temperature heating systems controlled by a mixing valve
- Constant value control circuit or indication of the nominal temperature via smart home environment

Recommended application range
- up to 45.5 kW
- 20 K up to 1940 l/h

Operating data
Maximum pressure	6 bars
Maximum operating temperature	110 °C
Kvs value	6.0
Adjustment range of the bypass	0 - 50 %

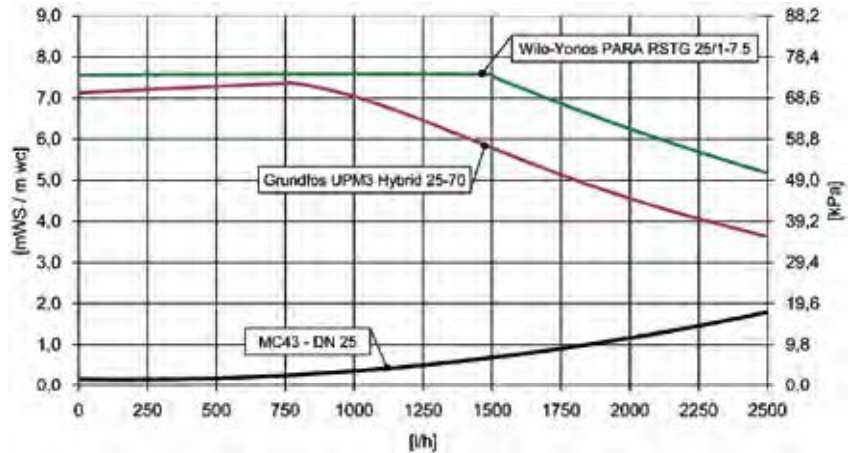## Technical data

Dimensions
Nominal diameter	DN 25 (1")
Connection generator	1½" external thread, flat sealing
Connection consumer	1" internal thread
(1) Height	500 mm
(2) Installation length	340 mm
(3) Centre distance	125 mm
(4) Width	250 mm

Materials
Valves and fittings	Brass
Gaskets	AFM34 / EPDM
Insulation	EPP, EnEV conform

Differential pressure diagram

HeatBloC® MC43 - DN 25 (1")		EEI*	with	Item no.	€ / piece
	Grundfos UPM3 Hybrid 25-70, flow rate display	< 0.20	▲Ⓜ	**4536073MGU7**	-
	Wilo-Yonos PARA RSTG 25/1-7.5	< 0.21	▲Ⓜ	**4536073MWG8**	-

Accessories

Connection set for MCom controller (mandatory)	**1398700**	**-**

Wall power supply (24 V DC, RJ12, RS485) for the connection of the MCom controllers to the power supply.
Please note: For the function of a MC system, **one** connection set is necessary, regardless of the number of the heating circuits.

MCom communication set (optional)	**1398730**	**-**

For WiFi communication with an Apple or Android terminal.
The communication module is the condition for the integration in a smart home environment.

Application range

- for low-temperature heating systems controlled by a mixing valve

Recommended application range

- up to 45.5 kW
- 20 K up to 1940 l/h

Operating data

Maximum pressure	6 bars
Maximum operating temperature	110 °C
Kvs value	6.0
Adjustment range of the bypass	0 - 50 %

DN 25

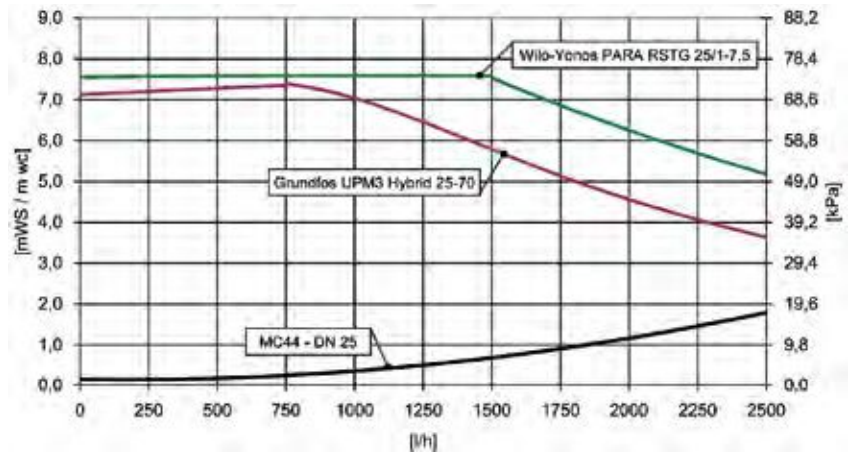## Technical data

Dimensions

Nominal diameter	DN 25 (1")
Connection generator	1½" external thread, flat sealing
Connection consumer	1" internal thread
(1) Height	500 mm
(2) Installation length	340 mm
(3) Centre distance	125 mm
(4) Width	250 mm

Materials

Valves and fittings	Brass
Gaskets	AFM34 / EPDM
Insulation	EPP, EnEV conform

Differential pressure diagram

HeatBloC® MC44 - DN 25 (1")		EEI*	with	Item no.	€ / piece
	Grundfos UPM3 Hybrid 25-70, flow rate display	< 0.20	▲Ⓜ	4536063MGU7	-
	Wilo-Yonos PARA RSTG 25/1-7.5	< 0.21	▲Ⓜ	4536063MWG8	-

Accessories

Connection set for MCom controller (mandatory)	1398700	-

Wall power supply (24 V DC, RJ12, RS485) for the connection of the MCom controllers to the power supply.
Please note: For the function of a MC system, **one** connection set is necessary, regardless of the number of the heating circuits.

MCom communication set (optional)	1398730	-

For WiFi communication with an Apple or Android terminal.
The communication module is the condition for the integration in a smart home environment.

HeatBloC® MC45 - DN 25 (1")
3-temperature mixing valve

Application range

- Heating installations with buffer tank and solar heating support
- Control of radiant floor and panel heating systems

Recommended application range

- up to 32.5 kW
- 20 K up to 1400 l/h

Operating data

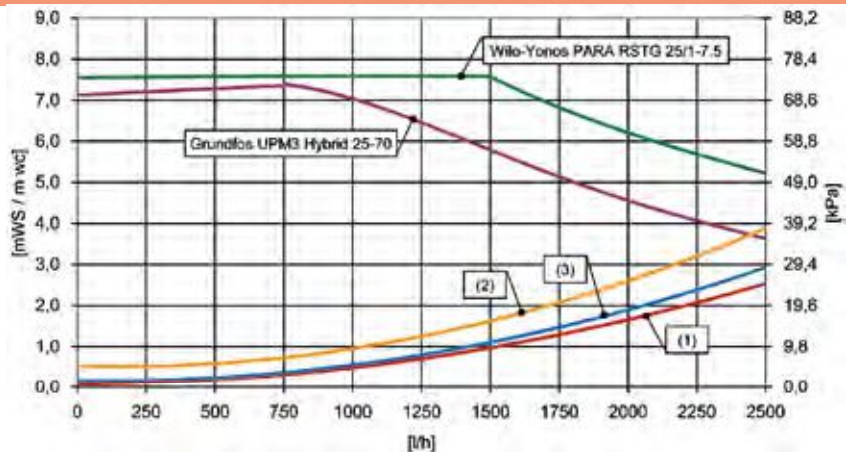|	
Maximum pressure	6 bars
Maximum operating temperature	110 °C

Technical data

Dimensions

Nominal diameter	DN 25 (1")
Connection generator	1½" external thread, flat sealing
Connection consumer	1" internal thread
(1) Height	500 mm
(2) Installation length	340 mm
(3) Centre distance	125 mm
(4) Width	250 mm

Materials

Valves and fittings	Brass
Gaskets	AFM34 / EPDM
Insulation	EPP, EnEV conform

Differential pressure diagram

Wilo-Yonos PARA RSTG 25/1-7.5

Grundfos UPM3 Hybrid 25-70

(1) 100% return, Kvs value = 5.1
(2) 100% low-temperature flow, Kvs value = 4.1
(3) 100% high-temperature flow, Kvs value = 4.7

HeatBloC® MC45 - DN 25 (1")	EEI*	with	Item no.	€ / piece
Grundfos UPM3 Hybrid 25-70, flow rate display	< 0.20	⏶Ⓜ	**4536093MGU7**	-
Wilo-Yonos PARA RSTG 25/1-7.5	< 0.21	⏶Ⓜ	**4536093MWG8**	-

Accessories

Connection set for MCom controller (mandatory)	**1398700**	-

Wall power supply (24 V DC, RJ12, RS485) for the connection of the MCom controllers to the power supply.
Please note: For the function of a MC system, **one** connection set is necessary, regardless of the number of the heating circuits.

MCom communication set (optional)	**1398730**	-

For WiFi communication with an Apple or Android terminal.
The communication module is the condition for the integration in a smart home environment.

HeatBloC® MC46 - DN 25 (1")
Boiler charging set with 3-way mixing valve

EnEV

Application range

- Return flow temperature maintenance for solid fuel boilers, wood firing and stove heating systems
- for a constant flow rate in the heat generator

Recommended application range

- up to 45.5 kW
- 20 K up to 1940 l/h

Operating data

Maximum pressure	6 bars
Maximum operating temperature	110 °C
Kvs value	6.0

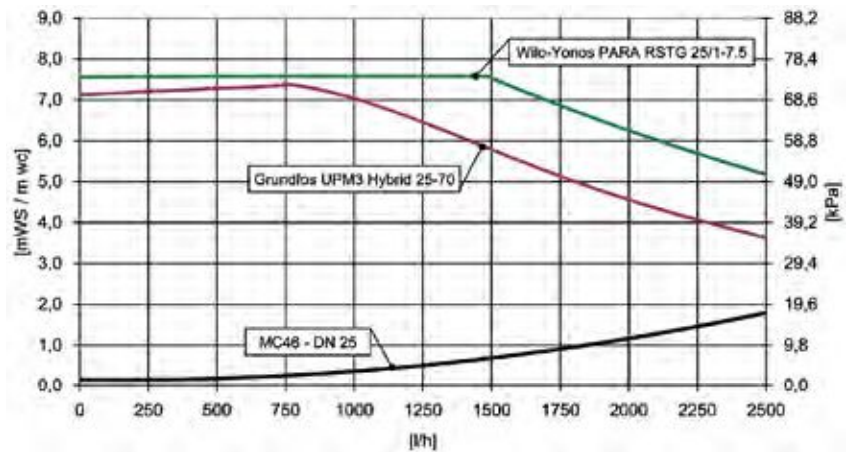## Technical data

Dimensions

Nominal diameter	DN 25 (1")
Connection generator	1½" external thread, flat sealing
Connection consumer	1" internal thread
(1) Height	500 mm
(2) Installation length	340 mm
(3) Centre distance	125 mm
(4) Width	250 mm

Materials

Valves and fittings	Brass
Gaskets	AFM34 / EPDM
Insulation	EPP, EnEV conform

Differential pressure diagram

Wilo-Yonos PARA RSTG 25/1-7.5
Grundfos UPM3 Hybrid 25-70
MC46 - DN 25

HeatBloC® MC46 - DN 25 (1")	EEI*	with	Item no.	€ / piece
Grundfos UPM3 Hybrid 25-70, flow rate display	< 0.20	▲M	45360333GU7	-
Wilo-Yonos PARA RSTG 25/1-7.5	< 0.21	▲M	45360333WG8	-
with connection set for MCom controller				

Accessories

MCom communication set (optional)	1398730	-
For WiFi communication with an Apple or Android terminal. The communication module is the condition for the integration in a smart home environment.		