



HeatBloC® MCom DN 25 - 50







Catalogue 04/2025

Automatic, dynamic balancing of distribution manifolds

Valid for the EU





HeatBloC® MCom - the heating circuit 4.0 Innovative system technology for modern heating

Whether it's about Smart Home in a single-family house or as Direct Digital Control (DDC) in a central building control system – the HeatBloC® MCom upgrades your heating system to level 4.0.

The **HeatBloC® MCom** combines high-quality and durable components of a PAW standard heating circuit with the latest sensor technology, actuator technology and control technology. As a result, numerous installation values (data points) are immediately provided and must not be additionally integrated. **System monitoring is thus as easy as never before!**

The heating circuits of the **HeatBloC® MCom** series can be connected to a multitude of **Smart Home centrals**. The connection is usually established via system-specific gateways. It is therefore compatible **with all common Smart Home systems**, but can also be established directly via **Modbus**.

With the optional communication set and the free PAW app, the HeatBloC® MCom can be easily:

- √ installed
- √ optimised
- ✓ documented



The advantages of the app at a glance:

Fully equipped heating circuit including sensor technology and actuator technology

✓ no subsequent installation of additional components (differential pressure controller), no hidden cost

Easy integration into Smart Home environments

- ✓ compatible with all common Smart Home systems
- ✓ compatible with Modbus

quick safe efficient









Quick commissioning of every heating line

- ✓ hydraulic balancing of distribution manifold happens automatically
- ✓ no time-consuming adjustment of regulating valve or overflow valve
- ✓ radiator balancing is possible with the free PAW app

BAFA-listed components

- ✓ quick processing of subsidy requests
- ✓ subsidizable heating circuits and communication sets

Measuring and visualising all system parameters

- optimisation of the energy distribution: minimisation of operating costs
 without any loss of comfort
- ✓ increase of the reliability

HeatBloC® MCom:

Easy commissioning and high living comfort included!

The **HeatBloC® MCom** guarantees **easy commissioning and high reliability** for high comfort demands. Time-consuming adjustments can be left out and additional visits of your craftsman are not required.

The HeatBloC® MCom automatically adapts to any operating condition. The heat is transferred to where it is needed. With our HeatBloC®s MC you can save **pump energy** compared to mechanical differential pressure controllers.



HeatBloC® MCom: Dynamic hydraulic balancing included!

Installation – adjustment – comfort: The plug & play solution!

Not only does the **HeatBloC® MCom** save you a lot of pump energy and money - combined with the **communication set** and the free **PAW Connect app,** it also makes **hydraulic balancing of your radiators possible** – hydraulic balancing certificate included:

- ✓ **System data**: heating loads, thermal output, heating circuits
- ✓ **Heating parameters**: flow temperature, flow rate, differential pressure
- ✓ **Documentation** (VdZ form for hydraulic balancing, compliant with KFW/BAFA)

With this easy hydraulic balancing, you and your craftsman are on the safe side and you will receive subsidies in no time!







HeatBloC® MCom: Important data included!



In contrast to other systems, the **HeatBloC® MCom** does not require any additional hardware installations. You will not have any hidden retrofitting cost for upgrades of your sensor technology or actuator technology.

The **HeatBloC® MCom** allows to display and adjust the following values in your

Smart Home system:

Temperature

- ✓ TFL-AC, TFL-NOM
- ✓ TRT-AC

Differential pressure

✓ ΔpAC , ΔpNOM

Flow rate

✓ FRAC

• Status messages / balance values

- ✓ Sensors: min./max. values, error messages
- ✓ Mixing valves: control (0-10 V), current rotation angle
- ✓ Pumps: control (PWM), calculated flow rate, error messages





HeatBloC® MCom: CO₂- and cost reduction included!

Thanks to the integration into Smart Home, the **HeatBloC® MCom** operates at the lowest flow temperature.

Space-time-user profiles of electronic thermostatic valves that used to be rigid can be combined with window contacts, motion detectors, weather reports and user profiles.

This way, Smart Homes equipped with a HeatBloC® MCom pay off considerably faster and have a substantially lower carbon footprint.







Product range HeatBloC® MC - DN 25 Heating circuits for the balancing of distribution manifolds













All HeatBloC®s MCom offer the following advantages:

Preassembled group of fittings for heating circuits

Automatic, dynamic balancing of distribution manifolds

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 heating circuits

Replaces mechanical differential pressure controllers and hydraulic separators

High efficiency thanks to the low return temperature, energy-saving operation of the pumps, energy saving thanks 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

High flexibility during assembly

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 durable elastic EPP, complete insulation of the valves and fittings with sealing lips, ventilation opening to cool the pump

PAW heating pumps with high-efficiency technology

fitted with 2 m cable, already installed, integrated in the insulation, pressure tested, serial number, perfectly designed system, pump characteristics, ErP READY

Pump can be isolated

so that it can be replaced without draining

Optional integration in a Smart Home environment

At the end of the chapter, you will find the complete mounting equipment for the modular system DN 25.



Product range HeatBloC® MC - DN 25 Heating circuits for the balancing of distribution manifolds - types



MC41 direct / unmixed

MC42 3-way mixing valve

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



up to 50 kW*



up to 40 kW*



up to 45.5 kW*

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

MC45
3-temperature mixing valve

MC46
Boiler charging set with 3-way mixing valve



up to 45.5 kW*



up to 32.5 kW*



up to 50 kW*

MCom communication set

Connection set for MCom controller (mandatory)



Award winner HeatBloC® MCom:



^{*}Temperature difference = 20 K

HeatBloC® MC41 DN 25 (1") direct / unmixed







Application range

- Boiler charging
- modulating temperature heating system

Operating data

Range of performance up to 50 kW

Temperature difference 20 K up to 2150 l/h

Kvs value 7.2

Max. operating pressure 6 bar

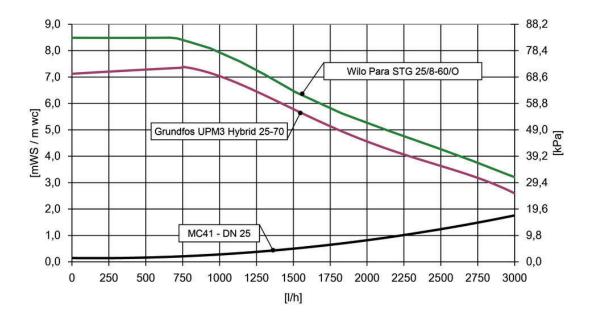
Operating temperature 110 °C

- differential pressure controlled, for the automatic, dynamic balancing of the distribution manifold
- for hydraulic balancing of the radiators, the HeatBloC® MC41 as well as the PAW Connect App are necessary
- the connection of 1-8 controllers to the power supply requires a connection set
- the integration in a Smart Home environment is possible with the MCom communication set (item no.: 1398731)

Technical data			
Equipment		Dimensions	
Controller MCom 3.4	24 Vdc, max. 200 mA	Nominal diameter	DN 25 (1")
	Interface: Modbus RTU (integration into building control and	Connection generator	$1\frac{1}{2}$ " ext. thread, flat sealing
	SmartHome systems)	Connection consumer	1" int. thread
Temperature sensors	1x Pt1000 in the flow and return	Height	500 mm
Differential pressure sensors	0-600 mbar	Installation length	340 mm
Thermometer	0 - 120 °C	Centre distance	125 mm
Check valves	1 x 200 mm wc	Width	250 mm
Materials			
Valves and fittings	Brass		
Gaskets	EPDM		
Insulation	EPP		







HeatBloC® MC41 DN 25 (1")		EEI*	with	Item no.
	ow rate signal			4536013GU7	
	Wilo Para STG 25/8/-60/O			•	4536013WS08
= with pump			*EEI = Energ	yy Efficiency	y Index

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







Application range

• Heating systems controlled by a mixing valve

Operating data

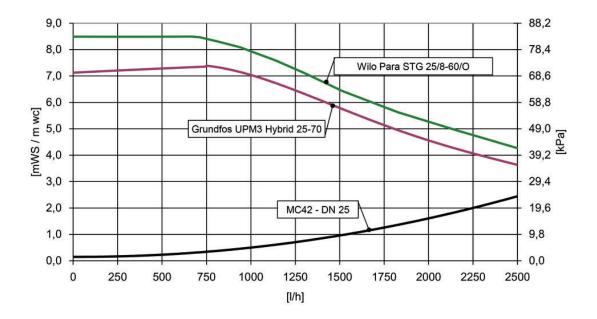
Range of performance	up to 40 kW
Temperature difference	20 K up to 1750 l/h
Kvs value	5.2
Max. operating pressure	6 bar
Operating temperature	110 °C

- differential pressure controlled, for the automatic, dynamic balancing of the distribution manifold
- for hydraulic balancing of the radiators, the HeatBloC® MC42 as well as the PAW Connect App are necessary
- the connection of 1-8 controllers to the power supply requires a connection set
- the integration in a Smart Home environment is possible with the MCom communication set (item no.: 1398731)

Technical data			
Equipment		Dimensions	
Controller MCom 3.4	24 Vdc, max. 200 mA	Nominal diameter	DN 25 (1")
	Interface: Modbus RTU (integration into building control and	Connection generator	11/2" ext. thread, flat sealing
	SmartHome systems)	Connection consumer	1" int. thread
Temperature sensors	1x Pt1000 in the flow and return	Height	500 mm
Differential pressure sensors	0-600 mbar	Installation length	340 mm
Thermometer	0 - 120 °C	Centre distance	125 mm
Check valves	1 x 200 mm wc	Width	250 mm
Actuator SR5	230 V - 50 Hz		
Materials			
Valves and fittings	Brass		
Gaskets	EPDM		
Insulation	EPP		







HeatBloC® MC42 DN 25 (1")	EEI*	with	Item no.
Grundfos UPM3 Hybrid 25-70, flow rate signal			4536053MGU7
Wilo Para STG 25/8/-60/O			4536053MWS08

= with pump

= without pump



HeatBloC® MC43 DN 25 (1")

Controlled circuit, const. value, 3-way mixing valve with bypass







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

Operating data

Range of performance up to 45 kW

Temperature difference 20 K up to 1940 l/h

Kvs value 6

Max. operating pressure 6 bar

Operating temperature 110 °C

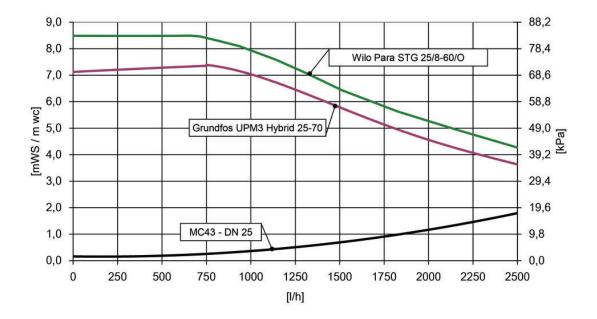
- differential pressure controlled, for the automatic, dynamic balancing of the distribution manifold
- for hydraulic balancing of the radiators, the HeatBloC® MC43 as well as the PAW Connect App are necessary
- the connection of 1-8 controllers to the power supply requires a connection set
- the integration in a Smart Home environment is possible with the MCom communication set (item no.: 1398731)

Technical data			
Equipment		Dimensions	
Controller MCom 3.4	24 Vdc, max. 200 mA	Nominal diameter	DN 25 (1")
	Interface: Modbus RTU (integration into building control and	Connection generator	1½" ext. thread, flat sealing
	SmartHome systems)	Connection consumer	1" int. thread
Temperature sensors	1x Pt1000 in the flow and return	Height	500 mm
Differential pressure sensors	0-600 mbar	Installation length	340 mm
Thermometer	0 - 120 °C	Centre distance	125 mm
Check valves	1 x 200 mm wc	Width	250 mm
Actuator SR10	24 V AC/DC		
Materials			
Valves and fittings	Brass		
Gaskets	EPDM		
Insulation	EPP		



HeatBloC® MC43 DN 25 (1") Controlled circuit, const. value, 3-way mixing valve with bypass





HeatBloC® MC43 DN 25 (1"		EEI*	with	Item no.
	Grundfos UPM3 Hybrid 25-70, flow rate signal			4536073MGU7
	Wilo Para STG 25/8/-60/O			4536073MWS08
A	<u> </u>			

= with pump

= without pump

=with actuator

HeatBloC® MC44 DN 25 (1") 3-way bypass mixing valve







Application range

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

Operating data

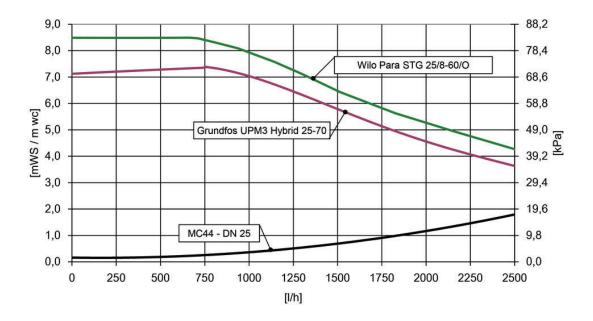
Range of performance up to 45 kW
Temperature difference 20 K up to 1940 l/h
Kvs value 6
Max. operating pressure 6 bar
Operating temperature 110 $^{\circ}$ C

- differential pressure controlled, for the automatic, dynamic balancing of the distribution manifold
- for hydraulic balancing of the radiators, the HeatBloC® MC44 as well as the PAW Connect App are necessary
- the connection of 1-8 controllers to the power supply requires a connection set
- the integration in a Smart Home environment is possible with the MCom communication set (item no.: 1398731)

Technical data			
Equipment		Dimensions	
Controller MCom 3.4	24 Vdc, max. 200 mA	Nominal diameter	DN 25 (1")
	Interface: Modbus RTU (integration into building control and	Connection generator	11/2" ext. thread, flat sealing
	SmartHome systems)	Connection consumer	1" int. thread
emperature sensors	1x Pt1000 in the flow and return	Height	500 mm
Differential pressure sensors	0-600 mbar	Installation length	340 mm
hermometer	0 - 120 °C	Centre distance	125 mm
Check valves	1 x 200 mm wc	Width	250 mm
Actuator SR5	230 V - 50 Hz		
Materials			
/alves and fittings	Brass		
Saskets	EPDM		
nsulation	EPP		







HeatBloC® MC44 DN 25 (1	")		EEI*	with	Item no.
	Grundfos UPM3 Hybrid 25-70,	flow rate signal			4536063MGU7
	Wilo Para STG 25/8/-60/O				4536063MWS08
= with pump	= without pump		*EEI = Enerc	gy Efficienc	y Index

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







Application range

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

Operating data

Range of performance up to 32 kW

Temperature difference 20 K up to 1400 l/h

Kvs value 4.7

Max. operating pressure 6 bar

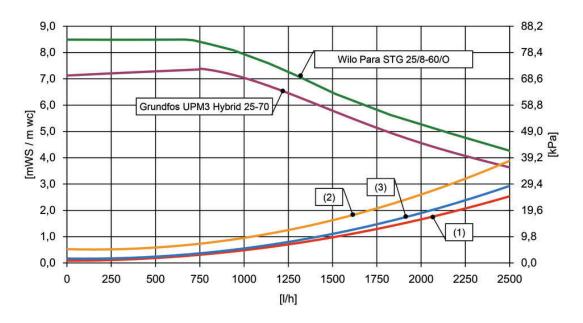
Operating temperature 110 °C

- differential pressure controlled, for the automatic, dynamic balancing of the distribution manifold
- for hydraulic balancing of the radiators, the HeatBloC® MC45 as well as the PAW Connect App are necessary
- the connection of 1-8 controllers to the power supply requires a connection set
- the integration in a Smart Home environment is possible with the MCom communication set (item no.: 1398731)

Technical data			
Equipment		Dimensions	
Controller MCom 3.4	24 Vdc, max. 200 mA	Nominal diameter	DN 25 (1")
	Interface: Modbus RTU (integration into building control and	Connection generator	1½" ext. thread, flat sealing
	SmartHome systems)	Connection consumer	1" int. thread
Temperature sensors	1x Pt1000 in the flow and return	Height	500 mm
Differential pressure sensors	0-600 mbar	Installation length	340 mm
Thermometer	0 - 120 °C	Centre distance	125 mm
Check valves	1 x 200 mm wc	Width	250 mm
Actuator SR5	230 V - 50 Hz		
Materials			
Valves and fittings	Brass		
Gaskets	EPDM		
Insulation	EPP		







- (1) 100% return, Kvs value = 5.1
- (2) 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.
Grundfos UPM3 Hybrid 25-70, flow rate signal			4536093MGU7
Wilo Para STG 25/8/-60/O			4536093MWS08

- = with pump
- = without pump
- =with actuator
- *EEI = Energy Efficiency Index

Product range HeatBloC® MC - DN 32 Heating circuits for the balancing of distribution manifolds





All HeatBloC®s MCom offer the following advantages:

Preassembled group of fittings for heating circuits

Automatic, dynamic balancing of distribution manifolds

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 heating circuits

Replaces mechanical differential pressure controllers and hydraulic separators

High efficiency thanks to the low return temperature, energy-saving operation of the pumps, energy saving thanks 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

High flexibility during assembly

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 durable elastic EPP, complete insulation of the valves and fittings with sealing lips, ventilation opening to cool the pump

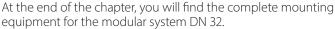
PAW heating pumps with high-efficiency technology

fitted with 2 m cable, already installed, integrated in the insulation, pressure tested, serial number, perfectly designed system, pump characteristics, ErP READY

Pump can be isolated

so that it can be replaced without draining

Optional integration in a Smart Home environment









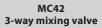




Product range HeatBloC® MC - DN 32 Heating circuits for the balancing of distribution manifolds - types



MC41 direct / unmixed



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



up to 65 kW*



up to 51 kW*



up to 64 kW*

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

MC46
Boiler charging set with 3-way mixing valve

MCom communication set (optional)



up to 64 kW*



up to 64 kW*



Connection set for MCom controller (mandatory)



Award winner HeatBloC® MCom:



*Temperature difference = 20 K

HeatBloC® MC41 DN 32 (11/4") direct / unmixed







Application range

- Boiler charging
- modulating temperature heating system

Operating data

Range of performance up to 65 kW

Temperature difference 20 K up to 2800 l/h

Kvs value 15.1

Max. operating pressure 6 bar

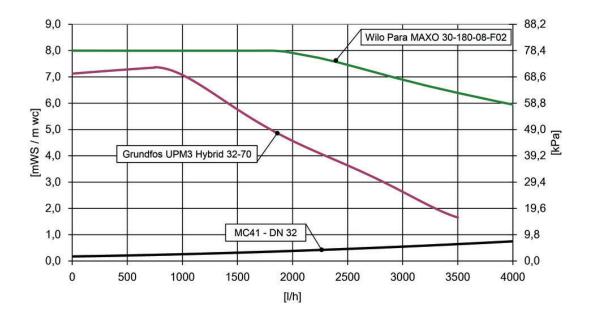
Operating temperature 110 °C

- differential pressure controlled, for the automatic, dynamic balancing of the distribution manifold
- for hydraulic balancing of the radiators, the HeatBloC® MC41 as well as the PAW Connect App are necessary
- the connection of 1-8 controllers to the power supply requires a connection set
- the integration in a Smart Home environment is possible with the MCom communication set (item no.: 1398731)

Technical data			
Equipment		Dimensions	
Controller MCom 3.4	24 Vdc, max. 200 mA	Nominal diameter	DN 32 (11/4")
	Interface: Modbus RTU (integration into building control and	Connection generator	2" ext. thread, flat sealing
	SmartHome systems)	Connection consumer	1¼" int. thread
Temperature sensors	1x Pt1000 in the flow and return	Height	557 mm
Differential pressure sensors	0-600 mbar	Installation length	400 mm
Thermometer	0 - 120 °C	Centre distance	125 mm
Check valves	1 x 200 mm wc	Width	250 mm
Materials			
Valves and fittings	Brass		
Gaskets	EPDM		
Insulation	EPP		







HeatBloC® MC41 DN 32 (11/4")			with	Item no.
	Grundfos UPM3 Hybrid 32-70, flow rate signal			4539013GU7
	Wilo Para MAXO 30-180-08-F02		٨	4539013WM08

= with pump

= without pump

HeatBloC® MC42 DN 32 (11/4") 3-way H-type mixing valve







Application range

• Heating systems controlled by a mixing valve

Operating data

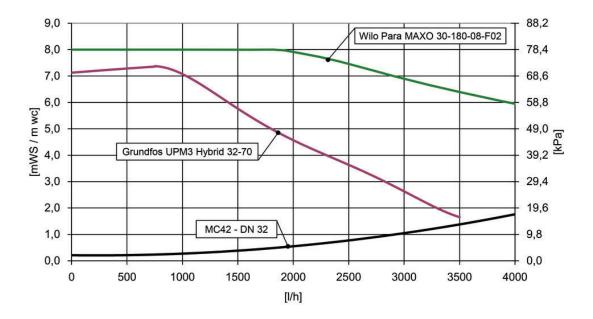
Range of performance	up to 51 kW
Temperature difference	20 K up to 2200 l/h
Kvs value	9.6
Max. operating pressure	6 bar
Operating temperature	110 °C

- differential pressure controlled, for the automatic, dynamic balancing of the distribution manifold
- for hydraulic balancing of the radiators, the HeatBloC® MC42 as well as the PAW Connect App are necessary
- the connection of 1-8 controllers to the power supply requires a connection set
- the integration in a Smart Home environment is possible with the MCom communication set (item no.: 1398731)

Technical data			
Equipment		Dimensions	
Controller MCom 3.4	,	Nominal diameter	DN 32 (1¼")
	Interface: Modbus RTU (integration into building control and	Connection generator	2" ext. thread, flat sealing
	SmartHome systems)	Connection consumer	1¼" int. thread
Temperature sensors	1x Pt1000 in the flow and return	Height	557 mm
Differential pressure sensors	0-600 mbar	Installation length	400 mm
Thermometer	0 - 120 °C	Centre distance	125 mm
Check valves	1 x 200 mm wc	Width	250 mm
Actuator SR5	230 V - 50 Hz		
Materials			
Valves and fittings	Brass		
Gaskets	EPDM		
Insulation	EPP		







HeatBloC® MC42 DN 32 (1	11/4")		EEI*	with	Item no.
	Grundfos UPM3 Hybrid 32-70, f	flow rate signal			4539053MGU7
	Wilo Para MAXO 30-180-08-F02	2			4539053MWM08
= with pump	= without pump		*EEI = Energ	y Efficiency	/ Index



HeatBloC® MC43 DN 32 (11/4")

Controlled circuit with constant temperature, electronically







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

Operating data

Range of performance up to 64 kW

Temperature difference 20 K up to 2760 l/h

Kvs value 10.1

Max. operating pressure 6 bar

Operating temperature 110 °C

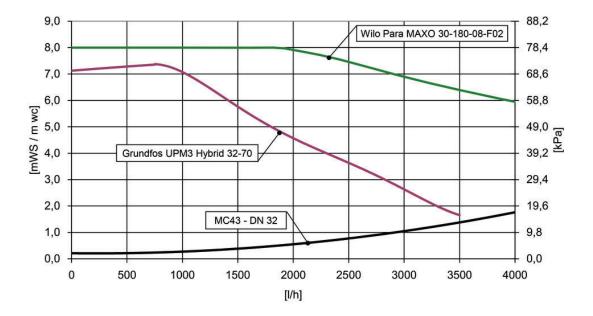
- differential pressure controlled, for the automatic, dynamic balancing of the distribution manifold
- for hydraulic balancing of the radiators, the HeatBloC® MC43 as well as the PAW Connect App are necessary
- the connection of 1-8 controllers to the power supply requires a connection set
- the integration in a Smart Home environment is possible with the MCom communication set (item no.: 1398731)

Technical data			
Equipment		Dimensions	
Controller MCom 3.4	24 Vdc, max. 200 mA	Nominal diameter	DN 32 (11/4")
	Interface: Modbus RTU (integration into building control and	Connection generator	2" ext. thread, flat sealing
	SmartHome systems)	Connection consumer	1¼" int. thread
Temperature sensors	1x Pt1000 in the flow and return	Height	557 mm
Differential pressure sensors	0-600 mbar	Installation length	400 mm
Thermometer	0 - 120 °C	Centre distance	125 mm
Check valves	1 x 200 mm wc	Width	250 mm
Actuator SR10	24 V AC/DC		
Materials			
Valves and fittings	Brass		
Gaskets	EPDM		
Insulation	EPP		



HeatBloC® MC43 DN 32 (1½") Controlled circuit with constant temperature, electronically





HeatBloC® MC43 DN 32 (1¼")			EEI*	with	Item no.
	Grundfos UPM3 Hybrid 32-70, f	low rate signal			4539073MGU7
	Wilo Para MAXO 30-180-08-F02				4539073MWM08
= with pump	= without pump	= with actuator	*EEI = Energ	y Efficiency	/ Index

HeatBloC® MC44 DN 32 (11/4") 3-way bypass mixing valve







Application range

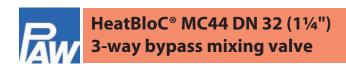
• for low-temperature heating systems controlled by a mixing valve

Operating data

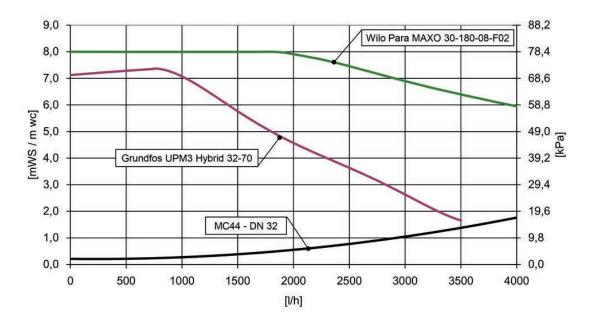
Range of performance	up to 64 kW
Temperature difference	20 K up to 2760 l/h
Kvs value	10.1
Max. operating pressure	6 bar
Operating temperature	110 °C

- differential pressure controlled, for the automatic, dynamic balancing of the distribution manifold
- for hydraulic balancing of the radiators, the HeatBloC® MC44 as well as the PAW Connect App are necessary
- the connection of 1-8 controllers to the power supply requires a connection set
- the integration in a Smart Home environment is possible with the MCom communication set (item no.: 1398731)

Technical data			
Equipment		Dimensions	
Controller MCom 3.4	24 Vdc, max. 200 mA	Nominal diameter	DN 32 (11/4")
	Interface: Modbus RTU (integration into building control and	Connection generator	2" ext. thread, flat sealing
	SmartHome systems)	Connection consumer	1¼" int. thread
Temperature sensors	1x Pt1000 in the flow and return	Height	557 mm
Differential pressure sensors	0-600 mbar	Installation length	400 mm
Thermometer	0 - 120 °C	Centre distance	125 mm
Check valves	1 x 200 mm wc	Width	250 mm
Actuator SR5	230 V - 50 Hz		
Materials			
Valves and fittings	Brass		
Gaskets	EPDM		
Insulation	EPP		







atBloC® MC44 DN 32 (11/4")		EEI*	with	Item no.
	Grundfos UPM3 Hybrid 32-70, flow rate signal			4539063MGU7
	Wilo Para MAXO 30-180-08-F02			4539063MWM08

= with pump

= without pump

=with actuator



Product range HeatBloC® MC - DN 40/50 Heating circuits for the balancing of distribution manifolds













All HeatBloC®s MCom offer the following advantages:

Preassembled group of fittings for heating circuits

Automatic, dynamic balancing of distribution manifolds

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 heating circuits

Replaces mechanical differential pressure controllers and hydraulic separators

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

Electronic controller

Electronic regulation of the differential pressure and temperature measurement

High flexibility during assembly

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

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 durable elastic EPP, complete insulation of the valves and fittings with sealing lips, ventilation opening to cool the pump

PAW heating pumps with high-efficiency technology

fitted with 2 m cable, already installed, integrated in the insulation, pressure tested, serial number, perfectly designed system, pump characteristics, ErP READY

Pump can be isolated

so that it can be replaced without draining

Optional integration in a Smart Home environment

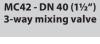
At the end of the chapter, you will find the complete mounting equipment for the modular system DN 40 / 50.



Product range HeatBloC® MC - DN 40/50 Heating circuits for the balancing of distribution manifolds - types



MC41 - DN 40 (1½") direct / unmixed



MC41 - DN 50 (2") direct / unmixed







up to 150 kW*

up to 125 kW*

up to 250 kW*

MC42 - DN 50 (2") 3-way mixing valve

MCom communication set (optional)

Connection set for MCom controller (mandatory)







up to 230 kW*

Award winner HeatBloC® MCom:



^{*}Temperature difference = 20 K

HeatBloC® MC41 DN 40 (11/2") direct / unmixed







Application range

- Boiler charging
- modulating temperature heating system

Operating data

Operating temperature

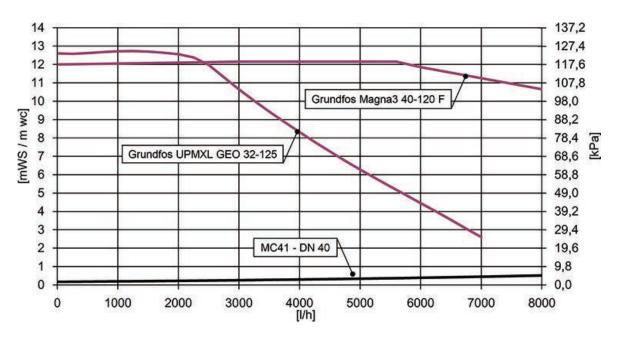
Range of performance up to 150 kW Temperature difference 20 K up to 6500 l/h Kvs value 28.3 Max. operating pressure 6 bar 110°C

- differential pressure controlled, for the automatic, dynamic balancing of the distribution manifold
- for hydraulic balancing of the radiators, the HeatBloC® MC41 as well as the PAW Connect App are necessary
- the connection of 1-8 controllers to the power supply requires a connection set
- the integration in a Smart Home environment is possible with the MCom communication set (item no.: 1398731)

Technical data			
Equipment		Dimensions	
Controller MCom 3.4	24 Vdc, max. 200 mA	Nominal diameter	DN 40 (11/2")
	Interface: Modbus RTU (integration into building control and	Connection generator	Flange DN 40 / PN 6
	SmartHome systems)	Connection consumer	1½" int. thread
Temperature sensors	1x Pt1000 in the flow and return	Height	790 mm
Differential pressure sensors	0-600 mbar	Installation length	560 mm
Thermometer	0 - 120 °C	Centre distance	160 mm
Check valves	1 x 250 mm wc	Width	320 mm
Materials			
Valves and fittings	Brass		
Gaskets	EPDM		
Insulation	EPP		







HeatBloC® MC41 DN 40 (11/2")	EEI*	with	Item no.
Grundfos MAGNA3 40-120 F	< 0.18		4541011GH12
Grundfos UPMXL GEO 32-125, flow estimation	< 0.23		4541011GX12

= with pump

= without pump

HeatBloC® MC42 DN 40 (1½") 3-way H-type mixing valve







Application range

• Heating systems controlled by a mixing valve

Operating data

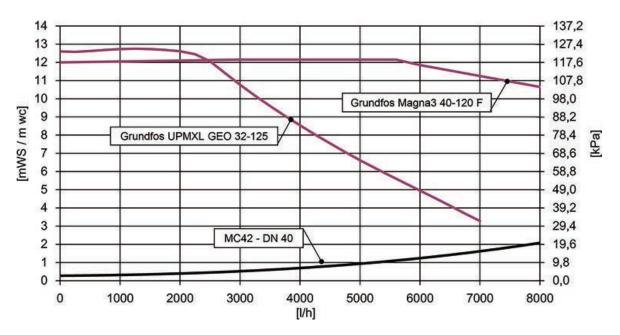
Range of performance	up to 125 kW
Temperature difference	20 K up to 5400 l/h
Kvs value	17.7
Max. operating pressure	6 bar
Operating temperature	110 °C

- differential pressure controlled, for the automatic, dynamic balancing of the distribution manifold
- for hydraulic balancing of the radiators, the HeatBloC® MC42 as well as the PAW Connect App are necessary
- the connection of 1-8 controllers to the power supply requires a connection set
- the integration in a Smart Home environment is possible with the MCom communication set (item no.: 1398731)

Technical data			
Equipment		Dimensions	
Controller MCom 3.4	24 Vdc, max. 200 mA Interface: Modbus RTU (integration into building control and SmartHome systems)	Nominal diameter	DN 40 (11/2")
		Connection generator	Flange DN 40 / PN 6
		Connection consumer	1½" int. thread
Temperature sensors	1x Pt1000 in the flow and return	Height	790 mm
Differential pressure sensors	0-600 mbar	Installation length	560 mm
Thermometer	0 - 120 °C	Centre distance	160 mm
Check valves	1 x 250 mm wc	Width	320 mm
Actuator SR10	230 V - 50 Hz		
Materials			
Valves and fittings	Brass		
Gaskets	EPDM		
Insulation	EPP		







HeatBloC® MC42 DN 40 (11/2")	EEI*	with	Item no.
Grundfos MAGNA3 40-120 F	< 0.18		4541051MGH12
Grundfos UPMXL GEO 32-125, flow estimation	< 0.23		4541051MGX12

= with pump

= without pump

HeatBloC[®] MC43 DN 40 (11/2")

Controlled circuit with constant value, 3-way mixing valve







Application range

- Radiant floor heating systems from 3.5 kW
- low-temperature heating systems

Operating data

Range of performance up to 125 kW Temperature difference 20 K up to 5400 l/h Kvs value 17.7 Max. operating pressure 6 bar 110°C Operating temperature

- differential pressure controlled, for the automatic, dynamic balancing of the distribution manifold
- for hydraulic balancing of the radiators, the HeatBloC® MC43 as well as the PAW Connect App are necessary
- the connection of 1-8 controllers to the power supply requires a connection set
- the integration in a Smart Home environment is possible with the MCom communication set (item no.: 1398731)

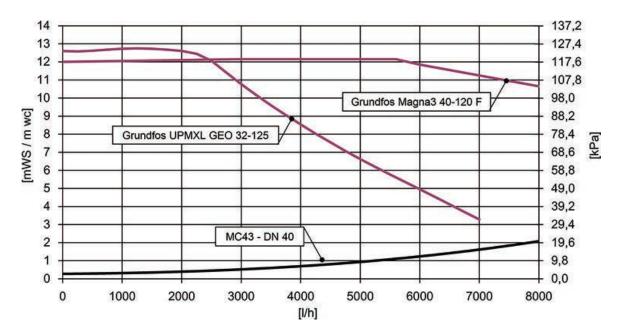
	Dimensions	
24 Vdc, max. 200 mA Interface: Modbus RTU (integration into building control and SmartHome systems)	Nominal diameter	DN 40 (1½")
	Connection generator	Flange DN 40 / PN 6
	Connection consumer	11/2" int. thread
1x Pt1000 in the flow and return	Height	790 mm
0-600 mbar	Installation length	560 mm
0 - 120 °C	Centre distance	160 mm
1 x 250 mm wc	Width	320 mm
24 V AC/DC		
Brass		
EPDM		
EPP		
	Interface: Modbus RTU (integration into building control and SmartHome systems) 1x Pt1000 in the flow and return 0-600 mbar 0 - 120 °C 1 x 250 mm wc 24 V AC/DC Brass EPDM	24 Vdc, max. 200 mA Interface: Modbus RTU (integration into building control and SmartHome systems) 1x Pt1000 in the flow and return 0-600 mbar Installation length 0 - 120 °C Centre distance 1 x 250 mm wc 24 V AC/DC Brass EPDM



HeatBloC® MC43 DN 40 (11/2")

Controlled circuit with constant value, 3-way mixing valve





HeatBloC® MC43 DN 40 (11/2")	EEI*	with	Item no.
Grundfos MAGNA3 40-120 F	< 0.18		4541071MGH12
Grundfos UPMXL GEO 32-125, flow estimation	< 0.23		4541071MGX12

= with pump

= without pump

HeatBloC® MC41 DN 50 (2") direct / unmixed







Application range

- Boiler charging
- modulating temperature heating system

Operating data

Range of performance up to 250 kW

Temperature difference 20 K up to 10800 l/h

Kvs value 31.2

Max. operating pressure 6 bar

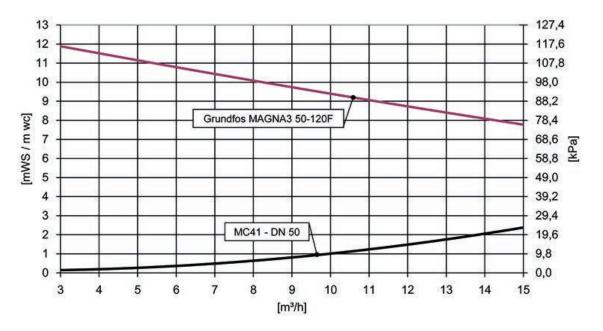
Operating temperature 110 °C

- differential pressure controlled, for the automatic, dynamic balancing of the distribution manifold
- for hydraulic balancing of the radiators, the HeatBloC® MC41 as well as the PAW Connect App are necessary
- the connection of 1-8 controllers to the power supply requires a connection set
- the integration in a Smart Home environment is possible with the MCom communication set (item no.: 1398731)

Technical data			
Equipment		Dimensions	
Controller MCom 3.4	24 Vdc, max. 200 mA Interface: Modbus RTU (integration into building control and SmartHome systems)	Nominal diameter	DN 50 (2")
		Connection generator	Flange DN 50 / PN 6
		Connection consumer	2" int. thread
Temperature sensors	1x Pt1000 in the flow and return	Height	850 mm
Differential pressure sensors	0-600 mbar	Installation length	630 mm
Thermometer	0 - 120 °C	Centre distance	180 mm
Check valves	1 x 250 mm wc	Width	320 mm
Materials			
Valves and fittings	Brass		
Gaskets	EPDM		
Insulation	EPP		







tBloC [®] MC41 DN 50 (2")

= with pump

= without pump

=with actuator

HeatBloC® MC42 DN 50 (2") 3-way H-type mixing valve







Application range

• Heating systems controlled by a mixing valve

Operating data

Range of performance up to 230 kW Temperature difference 20 K up to 9980 l/h Kvs value 25.7 Max. operating pressure 6 bar Operating temperature $110 \,^{\circ}\text{C}$

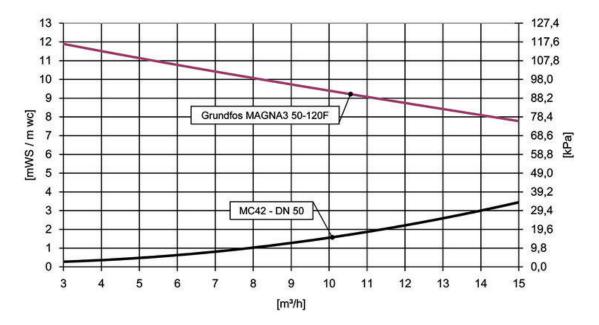
Functions

- differential pressure controlled, for the automatic, dynamic balancing of the distribution manifold
- for hydraulic balancing of the radiators, the HeatBloC® MC42 as well as the PAW Connect App are necessary
- the connection of 1-8 controllers to the power supply requires a connection set
- the integration in a Smart Home environment is possible with the MCom communication set (item no.: 1398731)

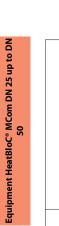
Technical data			
Equipment		Dimensions	
Controller MCom 3.4	24 Vdc, max. 200 mA	Nominal diameter	DN 50 (2")
	Interface: Modbus RTU (integration into building control and	Connection generator	Flange DN 50 / PN 6
	SmartHome systems)	Connection consumer	2" int. thread
Temperature sensors	1x Pt1000 in the flow and return	Height	850 mm
Differential pressure sensors	0-600 mbar	Installation length	630 mm
Thermometer	0 - 120 °C	Centre distance	180 mm
Check valves	1 x 250 mm wc	Width	360 mm
Actuator SR10	230 V - 50 Hz		
Materials			
Valves and fittings	Brass		
Gaskets	EPDM		
Insulation	EPP		







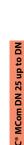
HeatBloC® MC42 DN 50 (2")		EEI*	with	Item no.
	Grundfos MAGNA3 50-120 F	< 0.18	٨	4551051MGH12
= with pump	= without pump	*EEI = Energ	gy Efficiency	/ Index



Equipment HeatBloC® MCom DN 25 up to DN 50



	Market distribution would be DN 25. 2 feld	24422
	Modular distribution manifold DN 25, 2-fold	34123
	Modular distribution manifold DN 25, 3-fold	34133
	Modular distribution manifold DN 25, 4-fold	34143
	Modular distribution manifold DN 25, 5-fold	34153
The state of the s	Modular distribution manifold DN 25, 6-fold	34163
	completely made of brass ; completely premounted entirely insulated with EPP half-shells	
	extremely low resistance, free passage d = 36 mm	
	up to 6 groups, premounted, extendable several boiler connections possible, for higher outputs	
	Modular distribution manifold DN 32, 2-fold	37123
	Modular distribution manifold DN 32, 3-fold	37133
	Modular distribution manifold DN 32, 4-fold	37143
	Modular distribution manifold DN 32, 5-fold	37153
	Modular distribution manifold DN 32, 6-fold	37163
	completely made of brass; completely premounted	
	entirely insulated with EPP half-shells extremely low resistance, free passage d = 50 mm	
	up to 6 groups, premounted, extendable	
	several boiler connections possible, for higher outputs	
	Modular distribution manifold DN 40, 2-fold	4112
	Modular distribution manifold DN 40, 3-fold	4113
	Modular distribution manifold DN 40, 4-fold	4114
	modular distribution manifold made of brass connecting flanges as slip-on flanges made of steel	
	seals and screws for boiler connection DN 50 included	
	completely premounted; entirely insulated with EPP shells	
	extremely low resistance, free passage d = 64 mm up to 4 groups, premounted, extendable	
	boiler connections DN 50	
	Modular distribution manifold DN 50, 2-fold	5112
	Modular distribution manifold DN 50, 3-fold	5113
	Modular distribution manifold DN 50, 4-fold	5114
	modular distribution manifold made of brass	
	connecting flanges as slip-on flanges made of steel	
	gaskets and screws for boiler connection DN 65 included	
	completely premounted; entirely insulated with EPP shells extremely low resistance, free passage d = 84 mm	
	up to 4 groups, premounted, extendable	
	boiler connections DN 65	
	Manifold DN 25 (1"), 2- / 3-fold	433413
	The distribution manifold V23 - DN 25 is a completely insulated brass manifold for hydronic	
4.44.4	heating. Depending on the size, two or three HeatBloC°s can be connected to the manifold. The HeatBloC°s DN 25 can be directly mounted onto or under the distribution manifolds V23 - DN 25	
	without any other accessories.	
	MCom communication set	1398731
	For WiFi communication with an Apple or Android terminal.	
- Contract	The communication module is the condition for for the automatic hydraulic balancing of the	
739	radiators via the PAW app. You can get the corresponding app in the App Store or Google Play Store by searching for "PAW MCom".	
T 1	With insulation and device for the installation on the modular distribution manifold	
	Communication module Raspberry Pi with Modbus cable	
	WLAN adapter 802.11n nano Wall power supply 5 V DC	
	Wall power supply 5 V DC	



Equipment HeatBloC® MCom DN 25 up to DN 50





	Connection set for MCom	1398700
	Mains cable (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 with up to 8 controllers, one connection set is necessary.	
	PowerLine Case	1398736
	for extending the reach of the WiFi radio network during the hydraulic balancing	
	Plug adapter	1398710
	RJ12 adapter, for connecting the MCom system as Modbus-RTU-Slave (GLT, Loxone) to external systems	
	KM2 Interface adapter	1309001
	Modbus-IP client for visualising the system parameters in the Modbus-IP network or for system integration into VBus.NET Optional accessory for SC5.14 - Optional accessory for FC4.13	
	Maintenance set DPS - DN 25 / DN 32 (1"/11/4")	N00257
	1x sealing cap 2x strainer	
-	Wall bracket for HeatBloC® DN 25 - DN 32	34722
	Consisting of: wall bracket (galvanised steel), mounting equipment DN 25 / DN 32: Possible wall distance: 155 mm	
- 8	Not required for installation with a PAW modular distribution manifold	
	Wall bracket for modular distribution manifold - DN 25 (1") - DN 32 (11/4")	34721
	Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm	
	Wall bracket set for module heating circuit - DN 25 (1")	3422SET
and the same of th	Components: 2 x 1½" nut, mounting plate, wall bracket possible wall distance: 155 mm	
* e	Wall bracket set for module heating circuit - DN 32	3722SET
Ell.	Components: 2 x 2" nut, mounting plate, wall bracket possible wall distance: 142.5-167.5 mm	
-	Wall bracket for HeatBloC® DN 40 (1½")	41641
	Components: Wall bracket, 2 gaskets, mounting equipment, distance of the pipe axis to the wall A = 270 mm	



Equipment HeatBloC® MCom DN 25 up to DN 50



	Wall bracket for HeatBloC*s - DN 50 (2") Components: Wall bracket (galvanised steel), 2 gaskets, mounting equipment, distance of the pipe axis to the wall A = 400 mm	41642
	Wall bracket set for modular distribution manifold - DN 40 (1½") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm	41651
11	Wall bracket set for modular distribution manifold - DN 50 (2") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm	41652
	Floor bracket set for modular distribution manifold - DN 40 / 50 (1½"/ 2") Components: 2 floor brackets (galvanized steel), 4 wall plugs, 4 screws, 2 screws for fixing the distribution manifold onto the floor brackets Height = adjustable 1,050 - 1,080 mm, for shortening simply cut off	41671
	Extension set HeatBloC® MCom - DN 25 / 32 Required extension set for operating MCom heating circuits DN 25/32 when used in building cooling and heating. With the extension set, the thermal separation of electronic components is achieved in order to avoid damage caused by condensate. The thermometers are replaced by condensate-proof thermometers.	4537023
	Extension set HeatBloC® MCom - DN 40 / 50 Required extension set for operating MCom heating circuits DN 40/50 when used in building cooling and heating. With the extension set, the thermal separation of electronic components is achieved in order to avoid damage caused by condensate. The thermometers are replaced by condensate-proof thermometers.	4546021

Your notes		





HeatBloC® Standard series DN 20-50







Catalogue 04/2025

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

Valid for the EU





Product range HeatBloC® Heating circuits DN 20













All HeatBloC®s offer the following advantages:

Preassembled group of fittings for heating circuits

High flexibility during assembly

modules can be used in nearly any combination

Ball valve with full port, gaskets of the spindle can be replaced during operation

Flat-sealing connections, 1" external thread

including 1" union nut for assembly on a PAW distribution manifold. With PAW mounting equipment, the HeatBloC® can be installed on wall brackets.

Large ball valve handles,

easy handling, visible closing position

EnEV-compliant functional insulation

made of durable elastic EPP, complete insulation of valves and fittings, ventilation opening to cool the pump.

The insulation for the distribution manifold is integrated in the heating circuit insulation.

Free access to the pump head

Check valve in the return pipe

can be opened, 200 mm wc, spring-loaded, and thus also suited for horizontal and overhead installation

Flow on the right = standard

The HeatBloC®s can be delivered with flow on the left against additional charge.

Flow and return line can be changed on site,

also for heating circuits with mixing valve

All water-carrying parts are made of brass

Full metal thermometer

can be pulled off, with immersion sleeve, integrated in the ball valve

PAW heating pumps with high-efficiency technology (ECM technology)

fitted with 2 m cable, already installed, integrated in the insulation, pressure tested, serial number, perfectly designed system, pump characteristics, EuP/ErP READY

pump can be isolated

so that it can be replaced without draining

At the end of the chapter, you will find the complete mounting equipment for the modular system DN 20.

Product range HeatBloC® Heating circuits DN 20 - types

K31 direct / unmixed K32 with 3-way mixing valve

K33 Controlled circuit with constant value, 3-way mixing valve with bypass 0-50%



up to 30 kW*



up to 21 kW*



up to 5 kW*

K34 3-way mixing valve with bypass 0-50% K36 Boiler charging set with thermal control valve



up to 21 kW*



up to 10 kW*

^{*}Temperature difference = 20 K

HeatBloC® K31 DN 20 (¾") direct / unmixed







Application range

• Boiler charging

Recommended application range

- up to 30 kW
- 20 K up to 1300 l/h

Operating data

 $\begin{array}{ll} \mbox{Max. operating pressure} & \mbox{6 bar} \\ \mbox{Max. operating temperature} & \mbox{110 °C} \\ \mbox{Kvs value} & \mbox{4.7} \end{array}$

Technical data		Differential pressure diagram
Dimensions		8.0
Nominal diameter	DN 20 (¾")	7,0 Wilo Para 15/6 SC Grundfos UPM3 Auto L 15-70 PP3
Connection generator	1" ext. thread, flat sealing	
Connection consumer	¾" int. thread	6,0
Height	385 mm	তু 5,0 Wilo Yonos PICO 15/1-6
nstallation length	255 mm	5,0 Wilo Yonos PICO 15/1-6 E 4,0 Grundfos Alpha2.1 15-60 8 3,0
Centre distance	90 mm	₩ <u>E</u> 3,0
Vidth	180 mm	
Materials		2,0 K31 - DN 20
alves and fittings	Brass	1,0
Saskets	EPDM	0,0
nsulation	EPP	0 200 400 600 800 1000 1200 1400 1600 1800 2000 [[/h]]

HeatBloC® K31 DN 20 (¾")		EEI*	with	Item no.
	Wilo Para SC 15/6-43	< 0.20		32013WP6
	Wilo Yonos PICO 15/1-6	< 0.20		32013WN06
	Grundfos ALPHA2.1 15-60	< 0.17		32013GH6
	Grundfos UPM3 Auto 15-70	< 0.20		32013GM6
	without pump - for pumps with 1" ext. thread x 130 mm		Θ	32013



= with pump

= without pump

 \bigcirc = with actuator

HeatBloC® K32 DN 20 (¾") 3-way H-type mixing valve







Application range

• Heating systems controlled by a mixing valve

Recommended application range

- up to 20 kW
- 20 K up to 905 l/h

Operating data

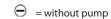
Max. operating pressure $6 \, \mathrm{bar}$ Max. operating temperature $110 \, ^{\circ}\mathrm{C}$ Kvs value $3.7 \, \mathrm{cm}$

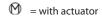
Technical data Differential pressure diagram **Dimensions** 8,0 78,4 Nominal diameter DN 20 (3/4") Wilo Para 15/6 SC Grundfos UPM3 Auto L 15-70 PP3 7,0 68,6 Connection generator 1" ext. thread, flat sealing Connection consumer 3/4" int. thread 6,0 58,8 Height 385 mm 5,0 4,0 3,0 Wilo Yonos PICO 15/1-6 49,0 255 mm Installation length 39,2 0 Grundfos Alpha2.1 15-60 Centre distance 90 mm 29,4 Width 180 mm **Materials** 2,0 19,6 K32 - DN 20 Valves and fittings Brass 1,0 9,8 Gaskets **EPDM** 0,0 0,0 Insulation EPP 800 2000 0 200 400 600 1000 1200 1400 1600 1800 **Equipment** [l/h] Actuator SR2 230 V - 50 Hz

HeatBloC® K32 DN 20 (¾")		EEI*	with	Item no.
	Wilo Para SC 15/6-43	< 0.20		32053MWP6
	Wilo Yonos PICO 15/1-6	< 0.20		32053MWN06
	Grundfos ALPHA2.1 15-60	< 0.17		32053MGH6
	Grundfos UPM3 Auto 15-70	< 0.20		32053MGM6
COMPA AUTO	without pump - for pumps with 1" ext. thread x 130 mm		$\Theta \!$	32053M
	Wilo Para SC 15/6-43	< 0.20		32053WP6
	Wilo Yonos PICO 15/1-6	< 0.20	(A)	32053WN06
	Grundfos ALPHA2.1 15-60	< 0.17	(A)	32053GH6
a (1) p	Grundfos UPM3 Auto 15-70	< 0.20	(A)	32053GM6
	without pump - for pumps with 1" ext. thread x 130 mm		Θ	32053









HeatBloC® K33 DN 20 (3/4") Constant-value mixing valve







Application range

• For low-temperature heating systems controlled by a mixing valve

Recommended application range

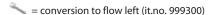
- up to 5 kW
- 20 K up to 430 l/h

Operating data

6 bar Max. operating pressure Max. operating temperature 110°C Kvs value 1.3 Adjustment range bypass 0 - 50 % Adjusting range contact thermostat 20-60 °C

Technical data				Different	ial pressur	e diagram		
Dimensions		8,0						
Nominal diameter	DN 20 (¾")	7,0		Wilo Para 15/6 SC		Grundfos UPI	M3 Auto L 15-70 I	PP3
Connection generator	1" ext. thread, flat sealing		-					
Connection consumer	3/4" int. thread	6,0	[Wile Ye	nos PICO 15/1-6	/		7	
leight	385 mm	তু 5,0	VVIIO TO	llos Fico Is/1-0]	Grun	dfos Alpha2.1 1	5-60	
nstallation length	255 mm	E 4,0	- a		107			- 10
entre distance	90 mm	5,0 ————————————————————————————————————						/
idth	180 mm					100		
laterials		2,0	Г	K33 - DN 20	1000			
alves and fittings	Brass	1,0					1	
askets	EPDM	0,0	+-					
sulation	EPP	0	100 2	300	400	500	600 700	
					[l/h]			

HeatBloC® K33 DN 20 (¾")		EEI*	with	Item no.
in .	Wilo Para SC 15/6-43	< 0.20		32073WP6
	Wilo Yonos PICO 15/1-6	< 0.20		32073WN06
	Grundfos ALPHA2.1 15-60	< 0.17		32073GH6
	Grundfos UPM3 Auto 15-70	< 0.20		32073GM6
	without pump - for pumps with 1" ext. thread x 130 mm		Θ	32073
101				



= with pump

= without pump

HeatBloC® K34 DN 20 (¾") 3-way bypass mixing valve







Application range

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

Recommended application range

- up to 20 kW
- 20 K up to 905 l/h

Operating data

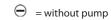
Max. operating pressure6 barMax. operating temperature110 °CKvs value3.7Adjustment range bypass0 - 50 %

Technical data Differential pressure diagram **Dimensions** 8,0 Nominal diameter DN 20 (3/4") 78,4 Wilo Para 15/6 SC Grundfos UPM3 Auto L 15-70 PP3 Connection generator 1" ext. thread, flat sealing 7,0 68,6 Connection consumer 3/4" int. thread 6,0 58,8 Height 385 mm Wilo Yonos PICO 15/1-6 5,0 4,0 3,0 49,0 255 mm Installation length 39,2 😇 Grundfos Alpha2.1 15-60 Centre distance 90 mm Width 180 mm 29,4 **Materials** 2,0 19,6 Valves and fittings Brass K34 - DN 20 1,0 9,8 Gaskets **EPDM** Insulation EPP 0,0 0,0 200 400 600 800 1000 1200 1400 1600 1800 2000 **Equipment** [l/h] Actuator SR2 230 V - 50 Hz

HeatBloC® K34 DN 20 (¾")		EEI*	with	Item no.
	Wilo Para SC 15/6-43	< 0.20		32063MWP6
	Wilo Yonos PICO 15/1-6	< 0.20		32063MWN06
	Grundfos ALPHA2.1 15-60	< 0.17		32063MGH6
	Grundfos UPM3 Auto 15-70	< 0.20		32063MGM6
WHI AUTO	without pump - for pumps with 1" ext. thread x 130 mm		$\Theta \otimes$	32063M
O	Wilo Para SC 15/6-43	< 0.20		32063WP6
	Wilo Yonos PICO 15/1-6	< 0.20		32063WN06
	Grundfos ALPHA2.1 15-60	< 0.17		32063GH6
	Grundfos UPM3 Auto 15-70	< 0.20		32063GM6
	without pump - for pumps with 1" ext. thread x 130 mm		Θ	32063







 \bigcirc = with actuator

Rw

HeatBloC® K36 DN 20 (3/4")

Boiler charging set with thermal control valve







Application range

 Return flow temperature maintenance for solid fuel boilers, wood firing and stove heating systems

Recommended application range

- up to 10 kW
- 10 K up to 860 l/h

Operating data

Max. operating pressure $$6$\,\mathrm{bar}$$ Max. operating temperature $$110\,^\circ\mathrm{C}$$ Kvs value \$2.5

Technical data		Differential pressure diagram
Dimensions		8,0
Nominal diameter	DN 20 (¾")	7,0 Wilo-Para 15/6 SC Grundfos UPM3 Auto L 15-70 PP3 68,6
Connection generator	¾" int. thread	
Connection consumer	¾" int. thread	6,0
Height	385 mm	তু 5,0 Wilo Yonos PICO 15/1-6
Installation length	347 mm	5.0 Wilo Yonos PICO 15/1-6 49.0 E 4.0 Grundfos Alpha2.1 15-60 39.2 39.2
Centre distance	90 mm	∑ E 3,0 29,4
Width	180 mm	2 3,0
Materials		2,0 K36 - DN 20
Valves and fittings	Brass	1,0
Gaskets	EPDM	0,0
Insulation	EPP	0 200 400 600 800 1000 1200 1400 [[/h]

HeatBloC® K36 DN	N 20 (¾")		EEI*	with	Item no.
	Wilo Para SC 15/6-43	Opening temperature: 45 °C	< 0.20		320353WP6
DARBAR	Wilo Yonos PICO 15/1-6	Opening temperature: 45 °C	< 0.20		320353WN06
	Grundfos ALPHA2.1 15-60	Opening temperature: 45 °C	< 0.17		320353GH6
OTUA EMPEU	Grundfos UPM3 Auto 15-70	Opening temperature: 45 °C	< 0.20		320353GM6
× ,	without pump - for pumps with 1" ext. thread x 130 mm	Opening temperature: 45 °C		Θ	320353
	Wilo Para SC 15/6-43	Opening temperature: 60 °C	< 0.20		320373WP6
	Wilo Yonos PICO 15/1-6	Opening temperature: 60 °C	< 0.20		320373WN06
	Grundfos ALPHA2.1 15-60	Opening temperature: 60 °C	< 0.17		320373GH6
- 45 -	Grundfos UPM3 Auto 15-70	Opening temperature: 60 °C	< 0.20		320373GM6
	without pump - for pumps with 1" ext. thread x 130 mm	Opening temperature: 60 °C		Θ	320373



= with pump

= without pump

 \bigcirc = with actuator





	Union nut DN 20 (¾")	2055
	Brass, to screw insertion pieces for soldering below distribution manifolds DN 20 (¾")	
	Sealing for nut - DN 20 (¾")	2057
	asbestos-free, outside diameter: 30 mm, inside diameter: 21 mm, height: 2 mm	
	Conversion kit DN 20 (3/4") from flow on the left to flow on the right	31071
	Conversion kit DN 20 (¾") from flow on the right to flow on the left	31072
,,,00	The conversion kit for changing the flow line is mandatory for mixing valves K33 with bypass at the front.	
	Modular distribution manifold DN 20, 2-fold	3112
	Modular distribution manifold DN 20, 3-fold	3113
	Modular distribution manifold DN 20, 4-fold	3114
	Modular distribution manifold DN 20, 5-fold	3115
	Modular distribution manifold DN 20, 6-fold completely made of brass; completely premounted flow and return chamber 95 % thermally separated manifolds are delivered with insulation caps, the insulation for the manifold is integrated into the insulation of the HeatBloC°s extremely low resistance, free passage d = 25 mm up to 6 groups, premounted, extendable several boiler connections possible, for higher outputs	3116
	Wall bracket for HeatBloC® DN 20 (¾") Components: 2 wall bracket sets, mounting equipment Possible wall distance: 70-100 mm, distance: 15 mm For 5-fold modular distribution manifolds, we recommend to use two wall bracket sets.	3121
	Wall bracket set for module heating circuit - DN 20 Components: mounting plate, wall bracket, 2 x 1" nut, possible centre distance: 55-115 mm distance: 15 mm	3122SET
0 2	Coupling piece for overhead installation - DN 20 (¾")	31241
8 8	Coupling piece for installation of a HeatBloC® below a distribution manifold with flat sealing.	
	Please note: When you use wall brackets, an additional mounting plate is necessary for installing a 2-fold distribution manifold MV2.	
	Mounting plate DN 20 (¾")	3125
	Components: mounting plate, 2 gaskets, 2 x 1" nut, 2 x reducing nipple 1" ext. thread x ¾" ext.thread for installation with flat sealings under a modular distribution manifold and for attaching wall brackets	





	Overflow set DN 20 (¾")	31301
	For hydronic heating installations with standard circulation pumps and thermostatic or zone valves. The PAW differential pressure overflow valve reduces noises due to circulation and keeps the pump pressure constant, even when the flow in the radiators is reduced (particularly when thermostatic valves are used). The valve controls the flow rate in proportion to the thermostatic or zone valves. The return temperature is increased as soon as the valve opens. For weather compensated control we recommend to mount the sensor to the flow line directly	
	behind the circulation pump. The higher return temperature guarantees that the boiler does not corrode.	
88	Connection set DN 20 (¾") Consisting of 2 adapter pieces with 1" nut and ¾" internal thread for connecting pipes with ¾" external thread under modular distribution manifolds DN 20 (¾")	3131
	Piping group DN 20 Piping group for hydraulic separator, consisting of 2 pipe sections, union nuts and seals, for connection of a vertically mounted hydraulic separator below a PAW distribution manifold. Flat-sealing connection, completely insulated, outlet on the left or on the right.	3142KS1
	Extension set for low-loss header - DN 20 (¾") for a subsequent conversion into a distribution manifold with integrated hydraulic separator (low-loss header). Range of application up to 950 l/h, max. up to a 3-fold distribution manifold MV3. Consisting of two distance rings for a resistance-free connection of flow and return chamber, incl. screws and o-rings.	3143
	Fitting for for heat flowmeter - DN 20 (3/4") - for HeatBloC*s DN 20 - for heat flowmeters with the dimensions 3/4" external thread x 110 mm - to be mounted above the insulation Scope of delivery: - Thermo ball valve - Screw-in fittings - Union nuts - Adapter pipe - Flange fitting - T-piece with counter nut and immersion sleeve - Seals	3145
A K	Flush and drain set DN 20 (¾") 2 x counter-T-pieces ¾" with fill and drain valve, each equipped with an extension piece, permits to flush and drain individual HeatBloC®s.	3161
fi	Set extension pieces DN 20 - DN 25 Set of adaptor pieces for the overhead installation of HeatBloC*s DN 25 below distribution manifolds DN 20, centre distance changed from 90 mm to 125 mm, connections 1" nut x 1" flange (for nut 1½"), flat sealing.	34352
	for distribution manifolds DN 20, with self-sealing counter T-piece ¾" x ½", outlet ¾" with cap for expansion tank, pressure relief valve ½" x ¾", 3 bar, up to 50 kW, pressure gauge 0-4 bar	5257





Cutting-ring compression fitting DN 20 (¾"), d = 15 mm	561215
Cutting-ring compression fitting DN 20 (¾"), d = 18 mm	561218
Cutting-ring compression fitting DN 20 (¾"), d = 22 mm	561222
³ / ₄ " external thread, self-sealing with o-ring, with support sleeve, suitable for soft copper pipes. For temperatures up to 150 °C.	
Immersion sleeve ½" ext. thread x T = 30 mm	566001
Immersion sleeve ¼" ext. thread x T = 60 mm	566002
Immersion sleeve ½" ext. thread x T = 60 mm	5660021
Immersion sleeve ½" ext. thread x T = 100 mm	566003
Immersion sleeve ½" ext. thread x T = 150 mm	566004
For all immersion sleeves: for the installation of the temperature sensors (d = 6 mm) in the storage tank, in the collector and the hydraulic separator.	
Attention: suitable for ball valves until 2016!	
PAW actuator SR2	705013
Easy assembly and disassembly thanks to the smart PAW snap-in mechanism, with 1.5 m cable and mounting set for halting assembly on the PAW mixing valve, for weather-compensated control, due to the removable scale it is suited for flow on the right or left side, change-over switch for manual / automatic operation	
Electrical connection: 230 V - 50 Hz	
Input power: 1 W	
Torque: min. 2 Nm Setting time for 90°: 105 s	
Connection set for diaphragm expansion tank - DN 20 (¾")	7509
for assembly to distribution manifolds DN 20, with tank connector ¾", wall bracket and mounting equipment	
armoured hose with bend ¾" x 700 mm,	
maximum tank diameter = 440 mm	
Contact thermostat 20-60 °C	N00083
Contact thermostat for limiting the flow temperature, adjustable from 20 - 60 °C	
	Cutting-ring compression fitting DN 20 (%"), d = 18 mm Cutting-ring compression fitting DN 20 (%"), d = 22 mm %" external thread, self-sealing with o-ring, with support sleeve, suitable for soft copper pipes. For temperatures up to 150 °C. Immersion sleeve ½" ext. thread x T = 30 mm Immersion sleeve ½" ext. thread x T = 60 mm Immersion sleeve ½" ext. thread x T = 60 mm Immersion sleeve ½" ext. thread x T = 100 mm Immersion sleeve ½" ext. thread x T = 150 mm For all immersion sleeves; for the installation of the temperature sensors (d = 6 mm) in the storage tank, in the collector and the hydraulic separator. Attention: suitable for ball valves until 2016! PAW actuator SR2 Easy assembly and disassembly thanks to the smart PAW snap-in mechanism, with 1.5 m cable and mounting set for halting assembly on the PAW mixing valve, for weather-compensated control, due to the removable scale it is suited for flow on the right or left side, change-over switch for manual / automatic operation Electrical connection: 230 V - 50 Hz Input power: 1 W Torque: min. 2 Nm Setting time for 90°: 105 s Connection set for diaphragm expansion tank - DN 20 (%") for assembly to distribution manifolds DN 20, with tank connector ¾", wall bracket and mounting equipment, armoured hose with bend ¾" x 700 mm, maximum tank diameter = 440 mm

Product range HeatBloC® Heating circuits DN 25





All HeatBloC®s offer the following advantages:

Preassembled group of fittings for heating circuits

High flexibility during assembly

modules can be used in nearly any combination

Ball valve with full port, gaskets of the spindle can be replaced during operation

Flat-sealing connections, 11/2" external thread

including 1½" union nut for assembly on a PAW distribution manifold. With PAW mounting equipment, the HeatBloC® can be installed on wall brackets.

Large ball valve handles,

easy handling, visible closing position

EnEV-compliant functional insulation

made of durable elastic EPP, complete insulation of the valves and fittings with sealing lips, ventilation opening to cool the pump.

Free access to the pump head

Check valve in the return pipe

can be opened, 200 mm wc, spring-loaded, and thus also suited for horizontal and overhead installation

Flow on the right = standard

The HeatBloC®s can be delivered with flow on the left against additional charge.

Flow and return line can be changed on site

also for heating circuits with mixing valve

All water-carrying parts are made of brass

Full metal thermometer

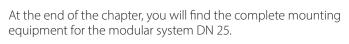
can be pulled off, with immersion sleeve, integrated in the ball valve

PAW heating pumps with high-efficiency technology (ECM technology)

fitted with 2 m cable, already installed, integrated in the insulation, pressure tested, serial number, perfectly designed system, pump characteristics, EuP/ErP READY

pump can be isolated

so that it can be replaced without draining













K31 direct / unmixed

K32 with 3-way mixing valve

K33
Controlled circuit with constant value, 3-way
mixing valve with bypass 0-50%



up to 50 kW*



up to 40 kW*



up to 10 kW*

K33R Controlled circuit with constant value, electronic, 3-way mixing valve with bypass 0-50%

K34
3-way mixing valve with bypass 0-50%

K35
3-temperature mixing valve



up to 22.5 kW* (radiant panel heating, $\Delta T = 10$ K) up to 45 kW* (return flow temperature maintenance, $\Delta T = 20$ K)



up to 45.5 kW*



up to 32.5 kW*

K36E direct / unmixed K38 with 4-way mixing valve K34R, weather compensated controller 3-way mixing valve with bypass 0-50 %



up to 40 kW*



up to 33 kW*



up to 45.5 kW*

*Temperature difference = 20 K

HeatBloC® K31 DN 25 (1") direct / unmixed







Application range

• Boiler charging

Recommended application range

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

Operating data

 $\begin{array}{ll} \mbox{Max. operating pressure} & \mbox{6 bar} \\ \mbox{Max. operating temperature} & \mbox{110 °C} \\ \mbox{Kvs value} & \mbox{7.2} \end{array}$

Technical data	Differential pressure diagram	
Dimensions		11,0
Nominal diameter	DN 25 (1")	10.0
Connection generator	1½" ext. thread, flat sealing	9,0 Grundfos UPML 25-105 Auto Wilo Para 25/8 SC 88
Connection consumer	1" int. thread	8,0 Grundfos UPM3 Auto L 25-70 PP3
leight	383 mm	₽ 7,0
nstallation length	340 mm	© 7,0 E 6,0 Wilo Para 25/6 SC Wilo Yonos PICO 25/1-6
Centre distance	125 mm	E 6,0 Wilo Para 25/6 SC 45
Vidth	250 mm	E 4,0 Wilo Yonos PICO 25/1-6
Naterials		3,0 Grundfos Alpha2.1 25-60
alves and fittings	Brass	2,0 K31 - DN 25
askets	EPDM	1,0
nsulation	EPP	0,0

HeatBloC [®] K31 DN 25 (1")		EEI*	with	Item no.
	Grundfos ALPHA2.1 25-60	< 0.17		36013GH6
	Grundfos UPM3 Auto 15-70	< 0.20		36013GM6
	Grundfos UPML 25-105 AUTO	< 0.23		36013GL9
	Wilo Para SC 25/8-60/O	< 0.20		36013WP8
	Wilo Para SC 25/6-43	< 0.20		36013WP6
	Wilo Yonos PICO 25/1-6	< 0.20		36013WN06
	without pump - for pumps with 1½" ext. thread x 180 mm		Θ	36013



= with pump

 \bigcirc = without pump

HeatBloC® K32 DN 25 (1") 3-way H-type mixing valve







Application range

• Heating systems controlled by a mixing valve

Recommended application range

- up to 40 kW
- 20 K up to 1750 l/h

Operating data

Max. operating pressure $6 \, \mathrm{bar}$ Max. operating temperature $110 \, ^{\circ}\mathrm{C}$ Kvs value $5.7 \, \mathrm{cm}$

Technical data Differential pressure diagram **Dimensions** 11,0 107,8 Nominal diameter DN 25 (1") 10,0 98,0 Connection generator 11/2" ext. thread, flat sealing Grundfos UPML 25-105 Auto Wilo Para 25/8 SC 88,2 9,0 Connection consumer 1" int. thread 8,0 Grundfos UPM3 Auto L 25-70 PP3 78,4 Height 383 mm 7,0 E 6,0 68,6 Installation length 340 mm 58,8 E84 49,0 ¥ Centre distance 125 mm SME 4,0 Wilo Para 25/6 SC Width 250 mm 39,2 Grundfos Alpha2.1 25-60 **Materials** 3,0 29,4 Wilo Yonos PICO 25/1-6 Valves and fittings Brass 2,0 19,6 K32 - DN 25 1,0 9,8 Gaskets **EPDM** 0,0 0,0 Insulation EPP 0 250 500 750 1000 1250 1500 1750 2000 2250 2500 **Equipment** [l/h] Actuator SR5 230 V - 50 Hz

HeatBloC® K32 DN 25 (1")		EEI*	with	Item no.
	Wilo Para SC 25/6-43	< 0.20		36053MWP6
	Wilo Para SC 25/8-60/O	< 0.20		36053MWP8
	Wilo Yonos PICO 25/1-6	< 0.20		36053MWN06
	Grundfos ALPHA2.1 25-60	< 0.17		36053MGH6
	Grundfos UPM3 Auto 15-70	< 0.20		36053MGM6
	Grundfos UPML 25-105 AUTO	< 0.23		36053MGL9
	without pump - for pumps with 1½" ext. thread x 180 mm		Θ	36053M
	Wilo Para SC 25/6-43	< 0.20	(A)	36053WP6
	Wilo Para SC 25/8-60/O	< 0.20		36053WP8
	Wilo Yonos PICO 25/1-6	< 0.20		36053WN06
	Grundfos ALPHA2.1 25-60	< 0.17	(A)	36053GH6
	Grundfos UPM3 Auto 25-70	< 0.20	(A)	36053GM6
	Grundfos UPML 25-105 AUTO	< 0.23		36053GL9
	without pump - for pumps with 1½" ext. thread x 180 mm		Θ	36053









HeatBloC® K33 DN 25 (1")

Controlled circuit with constant value, 3-way mixing valve







Application range

Radiant floor heating systems from 3.5 kW / low-temperature heating

Recommended application range

- up to 10 kW
- 10 K up to 860 l/h

Operating data

6 bar Max. operating pressure Max. operating temperature 110°C Kvs value Adjustment range bypass 0 - 50 % Adjusting range contact thermostat 20-60 °C

Technical data		Differential pressure diagram
Dimensions		11,0
Nominal diameter	DN 25 (1")	10.0
Connection generator	1½" ext. thread, flat sealing	9,0 Grundfos UPML 25-105 Auto Wilo Para 25/8 SC 88,2
Connection consumer	1" int. thread	8,0 Grundfos UPM3 Auto L 25-70 PP3 78,4
Height	383 mm	
Installation length	340 mm	7,0 E 6,0 Wilo Para 25/6 SC 4,0 Wilo Yonos PICO 25/1-6 Wilo Yonos PICO 25/1-6
Centre distance	125 mm	§ 5,0 Wilo Para 25/6 SC 49,0
Width	250 mm	
Materials		3,0 Grundfos Alpha2.1 25-60 29,4
Valves and fittings	Brass	2,0 K33 - DN 25
Gaskets	EPDM	1,0
Insulation	EPP	0,0 0 200 400 600 800 1000 1200 1400 1600
		[/h]

HeatBloC® K33 DN 25 (1")		EEI*	with	Item no.
in a	Wilo Para SC 25/6-43	< 0.20		36073WP6
w w	Wilo Para SC 25/8-60/O	< 0.20		36073WP8
	Wilo Yonos PICO 25/1-6	< 0.20		36073WN06
	Grundfos ALPHA2.1 25-60	< 0.17		36073GH6
	Grundfos UPM3 Auto 25-70	< 0.20		36073GM6
	Grundfos UPML 25-105 AUTO	< 0.23		36073GL9
8	without pump - for pumps with 11/2" ext. thread x 180 mm		\odot	36073



= conversion to flow left (it.no. 999300)



= without pump

HeatBloC® K33R DN 25 (1")

Controlled circuit with constant temperature, electronically







Application range

• for thermally controlled radiant heating systems, for low-temperature heating systems, as a return flow temperature maintenance for solid fuel boilers, wood firing and stove heating systems

Recommended application range

- up to 22,5 / 45 kW
- 20 K up to 1940 l/h

Operating data

Max. operating pressure 6 bar Max. operating temperature 110°C Kvs value Adjustment range bypass 0 - 50 %

Technical data		Differential pressure diagram
Dimensions		
Nominal diameter	DN 25 (1")	11,0
Connection generator	11/2" ext. thread, flat sealing	10,0 Grundfos UPML 25-105 Auto 98,
Connection consumer	1" int. thread	9,0 Wilo Para 25/8 SC 88,
Height	383 mm	8,0 Grundfos UPM3 Auto L 25-70 PP3 78,
Installation length	340 mm	7,0 E 6,0 Wilo Para 25/6 SC 49,0 Wilo Yong PICO 25/1.6
Centre distance	125 mm	€ 6,0
Width	250 mm	© 5,0 Wilo Para 25/6 SC 49,
Materials		Wild 10103 F100 23/1-0
Valves and fittings	Brass	3,0 Grundfos Alpha2.1 25-60 29,
Gaskets	EPDM	2,0 1,0 1,0 1,0 1,0
Insulation	EPP	0,0
Equipment		0 250 500 750 1000 1250 1500 1750 2000 2250 2500
Controller	Constant temp. controller PKR6	[l/h]

HeatBloC® K33R DN 25 (1")		EEI*	with	Item no.
lin.	Wilo Para SC 25/6-43	< 0.20	(A)	360463WP6
	Wilo Para SC 25/8-60/O	< 0.20		360463WP8
	Wilo Yonos PICO 25/1-6	< 0.20		360463WN06
	Grundfos ALPHA2.1 25-60	< 0.17	(A)	360463GH6
	Grundfos UPM3 Auto 25-70	< 0.20	(A)	360463GM6
	Grundfos UPML 25-105 AUTO	< 0.23	(A)	360463GL9
1-0-	without pump - for pumps with 1½" ext. thread x 180 mm		Θ	360463

= conversion to flow left (it.no. 999300)



= without pump



HeatBloC® K34 DN 25 (1") 3-way bypass mixing valve







Application range

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

Recommended application range

- up to 45 kW
- 20 K up to 1940 l/h

Operating data

Max. operating pressure6 barMax. operating temperature110 °CKvs value6Adjustment range bypass0 - 50 %

Technical data Differential pressure diagram **Dimensions** 11,0 107,8 DN 25 (1") Nominal diameter 98,0 10,0 Grundfos UPML 25-105 Auto Connection generator 11/2" ext. thread, flat sealing Wilo Para 25/8 SC 9,0 88,2 Connection consumer 1" int. thread 78,4 8,0 Grundfos UPM3 Auto L 25-70 PP3 Height 383 mm 7,0 E 6,0 68,6 Installation length 340 mm 58,8 E SME 4,0 Centre distance 125 mm Wilo Para 25/6 SC Width 250 mm 39,2 Wilo Yonos PICO 25/1-6 Materials 3,0 29,4 Grundfos Alpha2.1 25-60 2,0 19,6 Valves and fittings Brass K34 - DN 25 1,0 9,8 Gaskets **EPDM** 0,0 0,0 Insulation **EPP** 0 250 500 750 1000 1250 1500 1750 2000 2250 2500 **Equipment** [l/h] Actuator SR5 230 V - 50 Hz

HeatBloC® K34 DN 25 (1")		EEI*	with	Item no.
	Wilo Para SC 25/6-43	< 0.20		36063MWP6
	Wilo Para SC 25/8-60/O	< 0.20		36063MWP8
	Wilo Yonos PICO 25/1-6	< 0.20		36063MWN06
	Grundfos ALPHA2.1 25-60	< 0.17		36063MGH6
	Grundfos UPM3 Auto 25-70	< 0.20		36063MGM6
	Grundfos UPML 25-105 AUTO	< 0.23		36063MGL9
	without pump - for pumps with 1½" ext. thread x 180 mm		Θ	36063M
	Wilo Para SC 25/6-43	< 0.20		36063WP6
	Wilo Para SC 25/8-60/O	< 0.20		36063WP8
	Wilo Yonos PICO 25/1-6	< 0.20		36063WN06
	Grundfos ALPHA2.1 25-60	< 0.17		36063GH6
	Grundfos UPM3 Auto 25-70	< 0.20		36063GM6
	Grundfos UPML 25-105 AUTO	< 0.23		36063GL9
	without pump - for pumps with 1½" ext. thread x 180 mm		Θ	36063

HeatBloC® K34R DN 25 (1") weather-compensated







Application range

• for retrofitting of weather-compensated low-temperature heating systems controlled by a mixing valve

Recommended application range

- up to 45 kW
- 20 K up to 1940 l/h

Operating data

Max. operating pressure6 barMax. operating temperature110 °CKvs value6Adjustment range bypass0 - 50 %

Technical data Differential pressure diagram **Dimensions** Nominal diameter DN 25 (1") 11,0 107,8 Connection generator 11/2" ext. thread, flat sealing 10,0 98,0 Grundfos UPML 25-105 Auto Wilo Para 25/8 SC Connection consumer 1" int. thread 9,0 88,2 8,0 Grundfos UPM3 Auto L 25-70 PP3 78,4 Height 383 mm 7,0 E 6,0 68,6 Installation length 340 mm 58,8 E 49,0 Centre distance 125 mm / SME] 4,0 Wilo Para 25/6 SC Width 250 mm Wilo Yonos PICO 25/1-6 39,2 Materials 3,0 29,4 Grundfos Alpha2.1 25-60 Valves and fittings Brass 2.0 19.6 K34R - DN 25 **EPDM** Gaskets 1,0 9,8 **EPP** Insulation 0,0 0,0 1750 250 500 750 1000 1250 1500 2000 2250 2500 **Equipment** [l/h] Controller Weather-comp. controller PWR6

HeatBloC® K34R DN 25 (1")	HeatBloC® K34R DN 25 (1")		with	Item no.
	Wilo Para SC 25/6-43	< 0.20		360663MWP6
	Wilo Para SC 25/8-60/O	< 0.20		360663MWP8
	Wilo Yonos PICO 25/1-6	< 0.20		360663MWN06
	Grundfos ALPHA2.1 25-60	< 0.17		360663MGH6
	Grundfos UPM3 Auto 25-70	< 0.20		360663MGM6
	Grundfos UPML 25-105 AUTO	< 0.23		360663MGL9
	without pump - for pumps with 1½" ext. thread x 180 mm		$\Theta \!$	360663M



= without pump

 \bigcirc = with actuator

HeatBloC® K35 DN 25 (1") 3-temperatures mixing valve







Application range

• Heating installations with buffer tank and solar heating support

Recommended application range

- up to 32 kW
- 20 K up to 1400 l/h

Operating data

Max. operating pressure 6 bar 110°C Max. operating temperature Kvs value 4.1

Technical data Differential pressure diagram **Dimensions** 11,0 107,8 DN 25 (1") Nominal diameter 98,0 10,0 Grundfos UPML 25-105 Auto Connection generator 11/2" ext. thread, flat sealing 9,0 88,2 Wilo Para 25/8 SC Connection consumer 1" int. thread 8,0 78,4 Grundfos UPM3 Auto L 25-70 PP3 Height 383 mm 7,0 6,0 5,0 4,0 68,6 Installation length 340 mm 58,8 E 49,0 Centre distance 125 mm Wilo Para 25/6 SC Width 250 mm Wilo Yonos PICO 25/1-6 39,2 Materials Grundfos Alpha2.1 25-60 3,0 29,4 Valves and fittings Brass 2,0 19,6 1,0 9,8 Gaskets **EPDM** 0,0 0,0 Insulation **EPP** 250 500 750 1000 1250 1500 1750 2000 **Equipment** [l/h] Actuator SR5 230 V - 50 Hz

(1) 100% return, Kvs value = 5.1

(2) low temperature flow, Kvs value = 4.1

(3) 100% high temperature flow, Kvs value = 4.7

HeatBloC® K35 DN 25 (1")		EEI*	with	Item no.
	Wilo Para SC 25/6-43	< 0.20		36093MWP6
	Wilo Para SC 25/8-60/O	< 0.20		36093MWP8
	Wilo Yonos PICO 25/1-6	< 0.20		36093MWN06
	Grundfos ALPHA2.1 25-60	< 0.17		36093MGH6
	Grundfos UPM3 Auto 25-70	< 0.20		36093MGM6
	Grundfos UPML 25-105 AUTO	< 0.23		36093MGL9
	without pump - for pumps with 11/2" ext. thread x 180 mm		Θ	36093M
	Wilo Para SC 25/6-43	< 0.20		36093WP6
	Wilo Para SC 25/8-60/O	< 0.20		36093WP8
	Wilo Yonos PICO 25/1-6	< 0.20		36093WN06
	Grundfos ALPHA2.1 25-60	< 0.17		36093GH6
	Grundfos UPM3 Auto 25-70	< 0.20		36093GM6
	Grundfos UPML 25-105 AUTO	< 0.23		36093GL9
	without pump - for pumps with 11/2" ext. thread x 180 mm		Θ	36093

= conversion to flow left (it.no. 999300)



= without pump



HeatBloC® K36E DN 25 (1")

Boiler charging set, with integrated overflow valve







Application range

Return flow temperature maintenance for solid fuel boilers, wood firing and stove heating systems

Recommended application range

- up to 40 kW
- 20 K up to 1725 l/h

Operating data

6 bar Max. operating pressure Max. operating temperature 110 °C Kvs value 5.9

Technical data		Differential pressure diagram
Dimensions		11,0
Nominal diameter	DN 25 (1")	10.0
Connection generator	1" int. thread	9,0 Grundfos UPML 25-105 Auto Wilo Para 25/8 SC 88
Connection consumer	11/2" int. thread	8,0 Grundfos UPM3 Auto L 25-70 PP3 78
Height	383 mm	তু 7,0
nstallation length	408 mm	7,0 E 6,0 Wilo Para 25/6 SC 4,0 Wilo Yonos PICO 25/1-6
Centre distance	125 mm	§ 5,0 Wilo Para 25/6 SC 45
Width	250 mm	E 4,0 Wilo Yonos PICO 25/1-6 38
Materials		3,0 Grundfos Alpha2.1 25-60
Valves and fittings	Brass	2,0 K36E - DN 25
Gaskets	EPDM	1,0
nsulation	EPP	0,0
		[/h]

HeatBloC® K36E DN	25 (1")		EEI*	with	Item no.
	Wilo Para SC 25/6-43	Opening temperature: 45 °C	< 0.20		360343WP6
	Wilo Para SC 25/8-60/O	Opening temperature: 45 °C	< 0.20		360343WP8
	Wilo Yonos PICO 25/1-6	Opening temperature: 45 °C	< 0.20		360343WN06
	Grundfos ALPHA2.1 25-60	Opening temperature: 45 °C	< 0.17		360343GH6
	Grundfos UPM3 Auto 25-70	Opening temperature: 45 °C	< 0.20		360343GM6
	Grundfos UPML 25-105 AUTO	Opening temperature: 45 °C	< 0.23	(A)	360343GL9
	without pump - for pumps with 1½" ext. thread x 180 mm	Opening temperature: 45 °C		Θ	360343
	Wilo Para SC 25/6-43	Opening temperature: 60 °C	< 0.20		360373WP6
	Wilo Para SC 25/8-60/O	Opening temperature: 60 °C	< 0.20	(A)	360373WP8
	Wilo Yonos PICO 25/1-6	Opening temperature: 60 °C	< 0.20		360373WN06
	Grundfos ALPHA2.1 25-60	Opening temperature: 60 °C	< 0.17		360373GH6
	Grundfos UPM3 Auto 25-70	Opening temperature: 60 °C	< 0.20		360373GM6
	Grundfos UPML 25-105 AUTO	Opening temperature: 60 °C	< 0.23		360373GL9
	without pump - for pumps with 1½" ext. thread x 180 mm	Opening temperature: 60 °C		Θ	360373



 \bigcirc = without pump

 \bigcirc = with actuator





	Fitting for heat flowmeter - DN 25 for unmixed HeatBloC°s - for unmixed HeatBloC°s DN 25 - for heat flowmeters with the dimensions ¾" x 110 mm and 1" x 130 mm Scope of delivery: - Pump ball valve with check valve, can be opened (200 mm wc) - Screw-in fittings - Union nuts - Adapter pipe - Flange fitting - Reducers for immersion sensor (¼" ext. thread, self-sealing x M10 x 1 int. thread and ¼" ext. thread, self-sealing x M12 x 1.5 ext. thread) - Seals Fitting for heat flowmeter - DN 25 für mixed HeatBloC°s - for HeatBloC°s DN 25 with 3-way or 4-wax mixing valve	34453
	- for heat flowmeters with the dimensions ¾" x 110 mm and 1" x 130 mm Scope of delivery: - Screw-in fittings - Union nuts - Adapter pipe - Reducers for immersion sensor (¼" ext. thread, self-sealing x M10 x 1 int. thread and ¼" ext. thread, self-sealing x M12 x 1.5 ext. thread) - Non-return valve for mixing valve return - Seals HeatBloC® K21 DN 25 with fitting for heat meter	36113
	HeatBloC® K31 DN 25 with fitting for heat meter unmixed HeatBloC® K31 DN 25 (1"), but with preassembled fitting for heat flowmeter, without pump	36113
	HeatBloC® K32 DN 25 with fitting for heat meter mixed HeatBloC® K32 DN 25 (1"), but with preassembled fitting for heat flowmeter, without pump	36153
	HeatBloC® K34 DN 25 with fitting for heat meter HeatBloC® K34 DN 25 (1") with 3-way mixing valve and bypass, but with preassembled fitting for heat flowmeter	36163
	Flush and drain set DN 25 (1")	3461
	2 x counter-T-pieces 1" ext. thread x 1" int. thread with fill and drain valve, each equipped with an extension piece, permits to flush and drain individual HeatBloC*s.	
•	Please note: Flush and drain set is not compatible with the HeatBloC® MC system!	





Modular distribution manifold DN 25, 3-fold Modular distribution manifold DN 25, 4-fold 34143 Modular distribution manifold DN 25, 6-fold 34163 Modular distribution manifold DN 25, 6-fold 34163 Modular distribution manifold DN 25, 6-fold 34163 34163 34163 34163 34163 34163 Alticolor manifold DN 25, 6-fold 34163 Alticolor manifold DN 25, 6-fold 34163 Alticolor manifold DN 25, 6-fold 34163 Manifold DN 25 (1*), 2-fold The distribution manifold, for higher outputs Manifold DN 25 (1*), 2-fold The distribution manifold, for higher outputs Manifold DN 25 (1*), 2-fold The distribution manifold DN 23- DN 25 is a completely insulated brass manifold for hydronic heating. Depending on the size, two or three HeatBloC*s can be connected to the manifold. The HeatBloC*s DN 25 can be directly mounted onto or under the distribution manifolds V23 - DN 25 without any other accessories. Adapter pipe DN 25 (1*) 2 x 19° external thread, flat-sealing, length 180 mm, when an external circulation pump is used to bridge the pump connection. Reducer set DN 25 - DN 20 for installation of HeatBloC*s DN 20 on modular distribution manifolds DN 25, adapter set 19° external thread, flat-sealing with nut on %" PAW flange, reduction of the centre distance from 12° mm to 90 mm, distance pipe 1° theman threads 4° external thread, flat-sealing, brass, with sealing. The required union nuts 1" internal thread are part of the scope of delivery of the HeatBloC*s. Set extension pieces DN 25 - DN 32 for the assembly of HeatBloC*s DN 32 on distribution manifolds DN 25, seef of distance rings for union nut 2" internal thread on 1" PAW flange, made of brass, with special sealing, flat-sealing Coupling piece for installation of a HeatBloC* below a distribution manifold with flat sealing, 2-fold distribution manifold MV2. Mounting plate DN 25 (1") 3425 Components mounting plate 2 assets; 2 x 10s* put 2 x possion of coupling E1*x 10s* ext thread		Modular distribution manifold DN 25, 2-fold	34123
Modular distribution manifold DN 25, 5-fold Modular distribution manifold DN 25, 6-fold 34163 3417 3418		Modular distribution manifold DN 25, 3-fold	34133
Modular distribution manifold DN 25, 6-fold completely made of brass; completely premounted entirely insulated with EPP half-shells extremely low resistance, free passage d = 36 mm up to 6 groups, premounted, extendable several boiler connections possible, for higher outputs Manifold DN 25 (1"), 2- / 3-fold The distribution manifold V23 - DN 25 is a completely insulated brass manifold for hydronic heating, Depending on the size, two or three HeatBloC*s can be connected to the manifold. The HeatBloC*s DN 25 can be directly mounted onto or under the distribution manifolds V23 - DN 25 without any other accessories. Adapter pipe DN 25 (1") 2 x 1½" external thread, flat-sealing, length 180 mm, when an external circulation pump is used to bridge the pump connection. Reducer set DN 25 - DN 20 for installation of HeatBloC*s DN 20 on modular distribution manifolds DN 25, adapter set 1½" external thread, flat-sealing with nut on ½" PAW flange, reduction of the centre distance from 125 mm to 90 mm, distance pipe 1" internal thread x 1" external thread, flat sealing, brass, with sealing. The required union nuts 1" internal thread are part of the scope of delivery of the HeatBloC*s. Set extension pieces DN 25 - DN 32 on distribution manifolds DN 25, and a sample of brass, with special sealing, flat-sealing with nut on ½" PAW flange, made of brass, with special sealing, flat-sealing Coupling piece for overhead installation - DN 25 (1") Coupling piece for installation of a HeatBloC* below a distribution manifold with flat sealing, Please note: When you use wall brackets, an additional mounting plate is necessary for installing a 2-fold distribution manifold MV2. Mounting plate DN 25 (1") 3425		Modular distribution manifold DN 25, 4-fold	34143
completely made of brass: completely premounted entirely insulated with EPP half-shells extremely low resistance, free passage d = 36 mm up to 6 groups, premounted, extendable several boiler connections possible, for higher outputs Manifold DN 25 (1"), 2-/3-fold The distribution manifold V23 - DN 25 is a completely insulated brass manifold for hydronic heating, Depending on the size, two or three HeatBloC*s can be connected to the manifold. The HeatBloC*s DN 25 can be directly mounted onto or under the distribution manifolds V23 - DN 25 without any other accessories. Adapter pipe DN 25 (1") 2 x 1½" external thread, flat-sealing, length 180 mm, when an external circulation pump is used to bridge the pump connection. Reducer set DN 25 - DN 20 on modular distribution manifolds DN 25, adapter set 1½" external thread, flat-sealing with nut on ½" PAW flange, reduction of the centre distance from 125 mm to 90 mm, distance pipe 1" internal thread x1" external thread, flat sealing, brass, with sealing. The required union nuts 1" internal thread are part of the scope of delivery of the HeatBloC*s. Set extension pieces DN 25 - DN 32 on distribution manifolds DN 25, set of distance rings for union nut 2" internal thread on 1" PAW flange, made of brass, with special sealing, flat-sealing and provide the provided of brass, with special sealing, flat-sealing and provided brass and distribution manifold with flat sealing. Coupling piece for overhead installation - DN 25 (1") Mounting plate DN 25 (1") Mounting plate DN 25 (1")		Modular distribution manifold DN 25, 5-fold	34153
extremely low resistance, free passage d = 36 mm up to 6 groups, premounted, extendable several boiler connections possible, for higher outputs Manifold DN 25 (1"), 2-/3-fold The distribution manifold V23 - DN 25 is a completely insulated brass manifold for hydronic heating, Depending on the size, two or three HeatBloC*s can be connected to the manifold. The HeatBloC*s DN 25 can be directly mounted onto or under the distribution manifolds V23 - DN 25 without any other accessories. Adapter pipe DN 25 (1") 2 x 1½° external thread, flat-sealing, length 180 mm, when an external circulation pump is used to bridge the pump connection. Reducer set DN 25 - DN 20 for installation of HeatBloC*s DN 20 on modular distribution manifolds DN 25, adapter set 1½° external thread, flat-sealing with nut on ½° PAW flange, reduction of the centre distance from 125 mm to 90 mm, distance pipe 1" internal thread x 1" external thread, flat sealing, brass, with sealing. The required union nuts 1" internal thread are part of the scope of delivery of the HeatBloC*s. Set extension pieces DN 25 - DN 32 for the assembly of HeatBloC*s DN 32 on distribution manifolds DN 25, set of distance rings for union nut 2" internal thread on 1" PAW flange, made of brass, with special sealing, flat-sealing and of brass, with special sealing, flat-sealing Please note: When you use wall brackets, an additional mounting plate is necessary for installing a 2-fold distribution manifold MV2. Mounting plate DN 25 (1") Mounting plate DN 25 (1") 3425		completely made of brass; completely premounted	34163
The distribution manifold V23 - DN 25 is a completely insulated brass manifold for hydronic heating. Depending on the size, two or three HeatBloC*s can be connected to the manifold. The HeatBloC*s DN 25 can be directly mounted onto or under the distribution manifolds V23 - DN 25 without any other accessories. Adapter pipe DN 25 (1") 2 x 1½* external thread, flat-sealing, length 180 mm, when an external circulation pump is used to bridge the pump connection. Reducer set DN 25 - DN 20 for installation of HeatBloC*s DN 20 on modular distribution manifolds DN 25, adapter set 1½* external thread, flat-sealing with nut on ¾* PAW flange, reduction of the centre distance from 125 mm to 90 mm, distance pipe 1* internal thread x 1* external thread, flat sealing, brass, with sealing. The required union nuts 1* internal thread are part of the scope of delivery of the HeatBloC*s. Set extension pieces DN 25 - DN 32 on distribution manifolds DN 25, set of distance rings for union nut 2* internal thread on 1* PAW flange, made of brass, with special sealing, flat-sealing Coupling piece for overhead installation - DN 25 (1") Coupling piece for installation of a HeatBloC* below a distribution manifold with flat sealing. Please note: When you use wall brackets, an additional mounting plate is necessary for installing a 2-fold distribution manifold MV2. Mounting plate DN 25 (1") 3425		extremely low resistance, free passage $d=36\mathrm{mm}$ up to 6 groups, premounted, extendable	
heating. Depending on the size, two or three HeatBloC*s can be connected to the manifold. The HeatBloC*s DN 25 can be directly mounted onto or under the distribution manifolds V23 - DN 25 without any other accessories. Adapter pipe DN 25 (1") 2 x 1½" external thread, flat-sealing, length 180 mm, when an external circulation pump is used to bridge the pump connection. Reducer set DN 25 - DN 20 for installation of HeatBloC*s DN 20 on modular distribution manifolds DN 25, adapter set 1½" external thread, flat-sealing with nut on ½" PAW flange, reduction of the centre distance from 125 mm to 90 mm, distance pipe 1" internal thread x 1" external thread, flat sealing, brass, with sealing. The required union nuts 1" internal thread are part of the scope of delivery of the HeatBloC*s. Set extension pieces DN 25 - DN 32 on distribution manifolds DN 25, set of distance rings for union nut 2" internal thread on 1" PAW flange, made of brass, with special sealing, flat-sealing Coupling piece for overhead installation - DN 25 (1") Coupling piece for overhead installation - DN 25 (1") Coupling piece for installation of a HeatBloC* but a distribution manifold with flat sealing. Please note: When you use wall brackets, an additional mounting plate is necessary for installing a 2-fold distribution manifold MV2. Mounting plate DN 25 (1") 3425		Manifold DN 25 (1"), 2- / 3-fold	433413
Reducer set DN 25 - DN 20 for installation of HeatBloC*s DN 20 on modular distribution manifolds DN 25, adapter set 1½" external thread, flat-sealing with nut on ¾" PAW flange, reduction of the centre distance from 125 mm to 90 mm, distance pipe 1" internal thread x 1" external thread, flat sealing, brass, with sealing. The required union nuts 1" internal thread are part of the scope of delivery of the HeatBloC*s. Set extension pieces DN 25 - DN 32 for the assembly of HeatBloC*s DN 32 on distribution manifolds DN 25, set of distance rings for union nut 2" internal thread on 1" PAW flange, made of brass, with special sealing, flat-sealing Coupling piece for overhead installation - DN 25 (1") Coupling piece for installation of a HeatBloC* below a distribution manifold with flat sealing. Please note: When you use wall brackets, an additional mounting plate is necessary for installing a 2-fold distribution manifold MV2. Mounting plate DN 25 (1") 3425		heating. Depending on the size, two or three HeatBloC®s can be connected to the manifold. The HeatBloC®s DN 25 can be directly mounted onto or under the distribution manifolds V23 - DN 25	
Reducer set DN 25 - DN 20 for installation of HeatBloC*s DN 20 on modular distribution manifolds DN 25, adapter set 1½" external thread, flat-sealing with nut on ¾" PAW flange, reduction of the centre distance from 125 mm to 90 mm, distance pipe 1" internal thread x 1" external thread, flat sealing, brass, with sealing. The required union nuts 1" internal thread are part of the scope of delivery of the HeatBloC*s. Set extension pieces DN 25 - DN 32 for the assembly of HeatBloC*s DN 32 on distribution manifolds DN 25, set of distance rings for union nut 2" internal thread on 1" PAW flange, made of brass, with special sealing, flat-sealing Coupling piece for overhead installation - DN 25 (1") Coupling piece for installation of a HeatBloC* below a distribution manifold with flat sealing, Please note: When you use wall brackets, an additional mounting plate is necessary for installing a 2-fold distribution manifold MV2. Mounting plate DN 25 (1") 34351		Adapter pipe DN 25 (1")	3447
for installation of HeatBloC*s DN 20 on modular distribution manifolds DN 25, adapter set 1½" external thread, flat-sealing with nut on ¾" PAW flange, reduction of the centre distance from 125 mm to 90 mm, distance pipe 1" internal thread x 1" external thread, flat sealing, brass, with sealing. The required union nuts 1" internal thread are part of the scope of delivery of the HeatBloC*s. Set extension pieces DN 25 - DN 32 for the assembly of HeatBloC*s DN 32 on distribution manifolds DN 25, set of distance rings for union nut 2" internal thread on 1" PAW flange, made of brass, with special sealing, flat-sealing Coupling piece for overhead installation - DN 25 (1") Coupling piece for installation of a HeatBloC* below a distribution manifold with flat sealing. Please note: When you use wall brackets, an additional mounting plate is necessary for installing a 2-fold distribution manifold MV2. Mounting plate DN 25 (1") 3425			
adapter set 1½" external thread, flat-sealing with nut on ¾" PAW flange, reduction of the centre distance from 125 mm to 90 mm, distance pipe 1" internal thread x 1" external thread, flat sealing, brass, with sealing. The required union nuts 1" internal thread are part of the scope of delivery of the HeatBloC*s. Set extension pieces DN 25 - DN 32 for the assembly of HeatBloC*s DN 32 on distribution manifolds DN 25, set of distance rings for union nut 2" internal thread on 1" PAW flange, made of brass, with special sealing, flat-sealing Coupling piece for overhead installation - DN 25 (1") Coupling piece for installation of a HeatBloC* below a distribution manifold with flat sealing. Please note: When you use wall brackets, an additional mounting plate is necessary for installing a 2-fold distribution manifold MV2. Mounting plate DN 25 (1") 3425		Reducer set DN 25 - DN 20	34351
Set extension pieces DN 25 - DN 32 for the assembly of HeatBloC*s DN 32 on distribution manifolds DN 25, set of distance rings for union nut 2" internal thread on 1" PAW flange, made of brass, with special sealing, flat-sealing Coupling piece for overhead installation - DN 25 (1") Coupling piece for installation of a HeatBloC* below a distribution manifold with flat sealing. Please note: When you use wall brackets, an additional mounting plate is necessary for installing a 2-fold distribution manifold MV2. Mounting plate DN 25 (1") 3425	JĮ	adapter set $1\frac{1}{2}$ " external thread, flat-sealing with nut on $\frac{3}{4}$ " PAW flange, reduction of the centre distance from 125 mm to 90 mm, distance pipe 1" internal thread x 1" external thread, flat sealing, brass, with sealing.	
Coupling piece for overhead installation - DN 25 (1") Coupling piece for installation of a HeatBloC® below a distribution manifold with flat sealing. Please note: When you use wall brackets, an additional mounting plate is necessary for installing a 2-fold distribution manifold MV2. Mounting plate DN 25 (1") 34241 3425	0		3436
Coupling piece for installation of a HeatBloC® below a distribution manifold with flat sealing. Please note: When you use wall brackets, an additional mounting plate is necessary for installing a 2-fold distribution manifold MV2. Mounting plate DN 25 (1") 3425		set of distance rings for union nut 2" internal thread on 1" PAW flange,	
Please note: When you use wall brackets, an additional mounting plate is necessary for installing a 2-fold distribution manifold MV2. Mounting plate DN 25 (1") 3425		Coupling piece for overhead installation - DN 25 (1")	34241
	HH	Coupling piece for installation of a HeatBloC® below a distribution manifold with flat sealing. Please note: When you use wall brackets, an additional mounting plate is necessary for installing a	
Components: mounting plate 2 gaskets 2 x 1½" nut 2 x housing of coupling F 1" x 1½" ext. thread		Mounting plate DN 25 (1")	3425
for installation with flat sealings under a modular distribution manifold and for attaching wall brackets			
Wall bracket for HeatBloC® - DN 25 (1") / DN 32 (1¼") 34723	"0	Wall bracket for HeatBloC® - DN 25 (1") / DN 32 (11/4")	34723
Galvanised mounting bracket for wall assembly of HeatBloC*s. Mount HeatBloC*s on mounting bracket for an easy assembly.	0		
Wall bracket for HeatBloC® DN 25 - DN 32 34722		Wall bracket for HeatBloC® DN 25 - DN 32	34722
Consisting of: wall bracket (galvanised steel), mounting equipment DN 25 / DN 32: Possible wall distance: 155 mm		DN 25 / DN 32: Possible wall distance: 155 mm	
Not required for installation with a PAW modular distribution manifold	- 3	Not required for installation with a PAW modular distribution manifold	





	Wall bracket for modular distribution manifold - DN 25 (1") - DN 32 (1¼") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm	34721
Ada Transition of the Control of the	Wall bracket set for module heating circuit - DN 25 (1") Components: 2 x 1½" nut, mounting plate, wall bracket possible wall distance: 155 mm	3422SET
	Immersion sleeve ½" ext. thread x T = 30 mm	566001
	Immersion sleeve ¼" ext. thread x T = 60 mm	566002
	Immersion sleeve ½" ext. thread x T = 60 mm	5660021
	Immersion sleeve ½" ext. thread x T = 100 mm	566003
	Immersion sleeve ½" ext. thread x T = 150 mm	566004
←	For all immersion sleeves: for the installation of the temperature sensors ($d = 6$ mm) in the storage tank, in the collector and the hydraulic separator.	
	Attention: suitable for ball valves until 2016!	
	Union nut DN 25 (1")	2155
	Brass, to screw insertion pieces for soldering below distribution manifolds DN 25 (1")	
	Sealing for nut - DN 25 (1")	2157
	as bestos-free, outside diameter: 44 mm, inside diameter: 32 mm, height: 2 mm	
	Cutting-ring compression fitting DN 25 (1"), d = 15 mm	562915
	Cutting-ring compression fitting DN 25 (1"), d = 18 mm	562918
	Cutting-ring compression fitting DN 25 (1"), d = 22 mm	562922
	1" external thread, self-sealing with o-ring, with support sleeve, suitable for soft copper pipes. For temperatures up to 150 °C.	
	Connection set - DN 25 (1")	3431
	Consisting of 2 insertion pieces for connection of pipes with 1" external thread below HeatBloC®s or for the use of cutting-ring compression fittings.	
	Connection set DN 25 (1")	3432
	2 brass screw-in fittings $1\frac{1}{2}$ " external thread x 1" internal thread, for connection of pipes with 1" external thread	
	Non-return valve for the mixing valve return - DN 25 (1")	340112
	To be inserted into the PAW mixing valve. Prevents unwanted circulation for example when various mixing valves are connected to one distribution manifold. The shutoff valve can be simply inserted into the mixing valve. Not for HeatBloC® K38 DN 25.	





	Piping for two HeatBloC®s K35	36092KS2
	Pipe set DN 25 to connect the connections on the backside, for the assembly of two HeatBloC*s K35 on one distribution manifold.	
	Extension pipe set for three HeatBloC®s K35	36092KS3
	For installation of three K35 HeatBloC®s the extension pipe set DN 25 is additionally required to extend 36092KS2.	
	Piping for a single HeatBloC® K35	36092KS4
	Pipe set DN 25 to connect a mixing valve to a HeatBloC® K35	
îi	Piping group for hydraulic separator - DN 25 (1")	3442KS1
	Piping group for hydraulic separator, consisting of 2 pipe sections, union nuts and seals, for connection of a vertically mounted hydraulic separator below a PAW distribution manifold. Flat-sealing connection, completely insulated, outlet on the left or on the right.	
	Extension set for low-loss header - DN 25 (1")	34431
	for a subsequent conversion into a distribution manifold with integrated hydraulic separator (low-loss header). Range of application up to 1600 l/h, max. up to a 3-fold distribution manifold MV3. Consisting of two distance rings for a resistance-free connection of flow and return chamber, incl. screws and o-rings.	
	Contact thermostat 20-60 °C	N00083
	Contact thermostat for limiting the flow temperature, adjustable from 20 - 60 $^{\circ}\text{C}$	
	Safety set for distribution manifold - DN 25 (1") up to 50 kW	52543
	For the installation on modular distribution manifolds DN 25 (as of 2017), with a connection of $3/4$ " int. thread (sealed with plug) for the installation of the connection set for the expansion tank (item no. 7507), pressure relief valve $1/2$ " x $3/4$ ", 3 bar, up to 50 kW, pressure gauge 0-4 bar	
	For the installation on modular distribution manifolds DN 25 (as of 2017), with a connection of 3/4" int. thread (sealed with plug) for the installation of the connection set for the expansion tank (item no. 7507),	52543





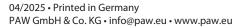
	Safety set distribution manifold - DN 25 (1") up to 50 kW, counter elbow For the installation on modular distribution manifolds DN 25, with self-sealing counter elbow ¾" x ½", outlet ¾" for expansion tank with cap pressure relief valve ½" x ¾", 3 bar, up to 50 kW, pressure gauge 0-4 bar	5254
	Connection set for diaphragm expansion tank DN 20 for assembly to safety group DN 25, with self-sealing double nipple $\frac{3}{4}$ " and mounting equipment, tank connector $\frac{3}{4}$ ", armoured hose with bend $\frac{3}{4}$ " x 700 mm, double nipple $\frac{3}{4}$ ", maximum tank diameter = 440 mm	7507
	Limit switch The limit switch is a micro switch. For the assembly in the actuators SR5 and SR10-24/3P.	705101
4	Temperature sensor Pt1000-B Temperature sensor for the integration into the flow and return ball valve of products of the HeatBloC® range DN 25 and DN 32. • The temperature sensor Pt1000 with plug connection measures the temperature directly in the fluid. • ¼" external thread • including matching connection cable (2.9 m) with wire end ferrules	131934
	PAW constant temperature controller PKR6 Easy assembly and disassembly thanks to the smart PAW snap-in mechanism, with 2 m cable and Schuko plug, incl. mounting set for snap-in assembly on the PAW mixing valve and PT1000 screw-in sensor G¼" for the flow ball valve, change-over switch for manual / automatic operation. Controller settings for direction of rotation, operation mode and nominal temperature can be adjusted at the display Power supply: 230 V - 50 Hz Power consumption: 3 W Torque: min. 6 Nm Setting time 90°: 120 s	703601
	Weather compensated controller PWR6 Same type as the PAW constant temperature controller PKR6 (art.no. 703601), but for the use of a weather-compensated heating circuit. The package includes the outdoor sensor, the flow sensor as well as the source sensor. This ensures that the mixing valve or the heating circuit can be operated in an autarkic manner and without boiler control. In addition, it is possible to set the room temperature centrally in the flat via a room based remote control (art.no. 1359501).	723681
© 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Room remote control RCD 2.0 Room remote control RCD 2.0 for weather compensated controller PWR6	1359501



Setting time for 90°: 140 s



PAW actuator SR5	705001
Change-over switch for manual / automatic operation, easy assembly and disassembly thanks t	0
the smart PAW snap-in mechanism,	
with 1.5 m cable and mounting set for halting assembly on the PAW mixing valve, for weather-	
compensated control,	
thanks to the removable scale, it is suited for flow on the right or left side	
Electrical connection: 230 V / 50 Hz	
Input power: 2.5 W	
Torque: 5 Nm	
Setting time for 90°: 140 s	
PAW actuator SR10	705002
Thanks to the removable scale, it is suited for flow on the right or left side, easy assembly and	
disassembly thanks to the smart PAW snap-in mechanism, with 1.5 m cable and mounting set for	or
halting assembly on the PAW mixing valve, for weather-compensated control, change-over swi	tch
for manual / automatic operation	
Electrical connection: 230 V / 50 Hz	
Input power: 3.5 W	
Torque: 10 Nm	
Setting time for 90°: 140 s	
PAW actuator SR10 24/3P	7054
Like PAW actuator type SR10 (item no. 705002), but with:	
electrical connection/supply voltage: 24 VAC for control systems with 3-level-control	
PAW actuator SR10 24/ST	70541
Like PAW actuator SR10 (item no. 705002), but with: electrical connection/supply voltage: 24	
VAC/DC control voltage direct: 0(2)10 VDC for continuous control systems with 010 V output	ıt
The be control voltage affect of 2, to voe for containable control systems with 0 to v outpe	
Electrical connection: 230 V / 50 Hz	
Input power: 1.5 W	
Torque: 10 Nm	
Catting time for 00% 140 a	



Product range HeatBloC® Heating circuits DN 32





All HeatBloC®s offer the following advantages:

Preassembled group of fittings for heating circuits

High flexibility during assembly

modules can be used in nearly any combination

Ball valve with full port, gaskets of the spindle can be replaced during operation

Flat-sealing connections, 2" external thread

including 2" union nut for assembly on a PAW distribution manifold. With PAW mounting equipment, the HeatBloC® can be installed on wall brackets.

Large ball valve handles,

easy handling, visible closing position

EnEV-compliant functional insulation

made of durable elastic EPP, complete insulation of the valves and fittings with sealing lips, ventilation opening to cool the pump.

Free access to the pump head

Check valve in the return pipe

can be opened, 200 mm wc, spring-loaded, and thus also suited for horizontal and overhead installation

Flow on the right = standard

The HeatBloC®s can be delivered with flow on the left against additional charge.

Flow and return line can be changed on site

also for heating circuits with mixing valve

All water-carrying parts are made of brass

Full metal thermometer

can be pulled off, with immersion sleeve, integrated in the ball valve

PAW heating pumps with high-efficiency technology (ECM technology)

fitted with 2 m cable, already installed, integrated in the insulation, pressure tested, serial number, perfectly designed system, pump characteristics, EuP/ErP READY

Pump can be isolated

so that it can be replaced without draining

At the end of the chapter, you will find the complete mounting equipment for the modular system DN 32.













K31 direct / unmixed

K32 with 3-way mixing valve

K33R
Controlled circuit with constant value,
electronic, 3-way mixing valve with bypass
0-50%



up to 65 kW*



up to 51 kW*



up to 32 kW*
(radiant panel heating, $\Delta T = 10 \text{ K}$)
up to 64 kW* (return flow temperature maintenance, $\Delta T = 20 \text{ K}$)

K34
3-way mixing valve with bypass 0-50%

K36E Boiler charging set, with integrated overflow valve

K38 with 4-way mixing valve



up to 64 kW*



up to 60 kW*



up to 52 kW*

K34R, weather compensated controller, 3-way mixing valve with bypass 0-50 %



up to 64 kW*

*Temperature difference = 20 K

HeatBloC® K31 DN 32 (11/4") direct / unmixed







Application range

• Boiler charging

Recommended application range

- up to 65 kW
- 20 K up to 2800 l/h

Operating data

 $\begin{array}{ll} \mbox{Max. operating pressure} & \mbox{6 bar} \\ \mbox{Max. operating temperature} & \mbox{110 °C} \\ \mbox{Kvs value} & \mbox{15.1} \end{array}$

Technical data		Differential pressure diagram
Dimensions		12,0
Nominal diameter	DN 32 (11/4")	11,0 Wilo-Yonos MAXO plus 30/0.5-10
Connection generator	2" ext. thread, flat sealing	10,0
Connection consumer	1¼" int. thread	9,0
Height	441 mm	8,0 Grundfos UPML 32-105 Auto
nstallation length	400 mm	E 6,0 Wilo Para 30/6 SC
Centre distance	125 mm	6,0 Wilo Para 30/6 SC Grundfos UPM3 Auto L 32-70 PP3
Vidth	250 mm	4,0 Grundfos Alpha2.1 32-60
/laterials		3,0 Wilo Yonos PICO 30/1-6
alves and fittings	Brass	2,0 Wile Yones PICO 30/1-6 /
iaskets	EPDM	0,0
nsulation	EPP	0 500 1000 1500 2000 2500 3000 3500 4000 450

HeatBloC® K31 DN 32 (1¼")		EEI*	with	ltem no.
	Wilo Para SC 30/6-43	< 0.20	(A)	39013WP6
	Wilo Yonos MAXO plus 30/0.5-10	< 0.20		39013WY10
— — —	Wilo Yonos PICO 30/1-6	< 0.20		39013WN06
The state of the s	Grundfos ALPHA2.1 32-60	< 0.17		39013GH6
	Grundfos UPM3 Auto 32-70	< 0.20		39013GM6
The state of the s	Grundfos UPML 32-105 AUTO	< 0.23		39013GL9
	without pump - for pumps with 2" ext. thread x 180 mm		Θ	39013



= without pump

 \bigcirc = with actuator

HeatBloC® K32 DN 32 (11/4") 3-way H-type mixing valve







Application range

• Heating systems controlled by a mixing valve

Recommended application range

- up to 51 kW
- 20 K up to 2200 l/h

Operating data

Max. operating pressure $6 \, \mathrm{bar}$ Max. operating temperature $110 \, ^{\circ}\mathrm{C}$ Kvs value $9.6 \, \mathrm{cm}$

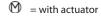
Technical data Differential pressure diagram **Dimensions** 12,0 117,6 Nominal diameter DN 32 (11/4") Wilo-Yonos MAXO plus 30/0.5-10 11,0 107,8 Connection generator 2" ext. thread, flat sealing 10,0 98,0 Connection consumer 11/4" int. thread 9,0 88,2 Height 441 mm 78,4 8,0 Grundfos UPML 32-105 Auto [mWS/ m wc] 7,0 68,6 400 mm Installation length 58,8 (8) Wilo Para 30/6 SC 6,0 Centre distance 125 mm 5,0 49,0 Grundfos UPM3 Auto L 32-70 PP3 Width 250 mm 4,0 39,2 Grundfos Alpha2.1 32-60 **Materials** 3,0 29,4 Wilo Yonos PICO 30/1-6 Valves and fittings Brass 2,0 19,6 K32 - DN 32 Gaskets **EPDM** 1,0 9,8 0,0 0,0 Insulation EPP 0 500 1000 1500 2000 2500 3000 3500 4000 4500 **Equipment** [l/h] Actuator SR5 230 V - 50 Hz

leatBloC® K32 DN 32 (1¼")		EEI*	with	Item no.
	Wilo Para SC 30/6-43	< 0.20		39053MWP6
	Wilo Yonos MAXO plus 30/0.5-10	< 0.20		39053MWY10
	Wilo Yonos PICO 30/1-6	< 0.20		39053MWN06
***	Grundfos ALPHA2.1 32-60	< 0.17		39053MGH6
	Grundfos UPM3 Auto 32-70	< 0.20		39053MGM6
1-1-1-1	Grundfos UPML 32-105 AUTO	< 0.23		39053MGL9
	without pump - for pumps with 2" ext. thread x 180 mm		Θ	39053M
	Wilo Para SC 30/6-43	< 0.20	(A)	39053WP6
	Wilo Yonos MAXO plus 30/0.5-10	< 0.20	(A)	39053WY10
	Wilo Yonos PICO 30/1-6	< 0.20	(A)	39053WN06
	Grundfos ALPHA2.1 32-60	< 0.17	(A)	39053GH6
	Grundfos UPM3 Auto 32-70	< 0.20	(A)	39053GM6
	Grundfos UPML 32-105 AUTO	< 0.23	(A)	39053GL9
	without pump - for pumps with 2" ext. thread x 180 mm		Θ	39053









HeatBloC® K33R DN 32 (11/4")

Controlled circuit with constant temperature, electronically







Application range

for thermally controlled radiant heating systems, for low-temperature heating systems, as a return flow temperature maintenance for solid fuel boilers, wood firing and stove heating systems

Recommended application range

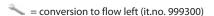
- up to 15 kW
- 20 K up to 2760 l/h

Operating data

6 bar Max. operating pressure Max. operating temperature 110°C Kvs value 10.1 Adjustment range bypass 0 - 50 %

Technical data Differential pressure diagram **Dimensions** Nominal diameter **DN 32** 117,6 12,0 Wilo-Yonos MAXO plus 30/0.5-10 107,8 Connection generator 2" ext. thread, flat sealing 11.0 98,0 10,0 Connection consumer 11/4" int. thread 88,2 9,0 Height 441 mm 78,4 8,0 Grundfos UPML 32-105 Auto [5,0 7,0 6,0 5,0 Installation length 400 mm 68,6 58,8 👨 Centre distance 125 mm Wilo Para 30/6 SC Width 49,0 250 mm Grundfos UPM3 Auto L 32-70 PP3 4,0 39,2 Materials Grundfos Alpha2.1 32-60 3,0 29,4 Valves and fittings Brass Wilo Yonos PICO 30/1-6 2,0 19,6 Gaskets **EPDM** K33R - DN 32 1,0 9,8 Insulation 0,0 0,0 1000 1500 2000 2500 3000 3500 4000 4500 500 **Equipment** [l/h] Controller Constant temp. controller PKR6

HeatBloC® K33R DN 32 (11/4")		EEI*	with	Item no.
	Wilo Para SC 30/6-43	< 0.20		390463WP6
¥	Wilo Yonos MAXO plus 30/0.5-10	< 0.20		390463WY10
	Wilo Yonos PICO 30/1-6	< 0.20		390463WN06
	Grundfos ALPHA2.1 32-60	< 0.17		390463GH6
The second second	Grundfos UPM3 Auto 32-70	< 0.20		390463GM6
	Grundfos UPML 32-105 AUTO	< 0.23		390463GL9
	without pump - for pumps with 2" ext. thread x 180 mm		Θ	390463









HeatBloC® K34 DN 32 (11/4") 3-way bypass mixing valve







Application range

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

Recommended application range

- up to
- 20 K up to 2760 l/h

Operating data

Max. operating pressure6 barMax. operating temperature110 °CKvs value10.1Adjustment range bypass0 - 50 %

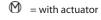
Technical data Differential pressure diagram **Dimensions** 12,0 117,6 Nominal diameter DN 32 (11/4") Wilo-Yonos MAXO plus 30/0.5-10 11,0 107,8 Connection generator 2" ext. thread, flat sealing 10,0 98,0 Connection consumer 11/4" int. thread 88,2 9,0 Height 441 mm 8,0 78,4 Grundfos UPML 32-105 Auto mWS/ m wc] 7,0 68,6 400 mm Installation length 58,8 2 Wilo Para 30/6 SC 6,0 Centre distance 125 mm 5,0 49,0 Grundfos UPM3 Auto L 32-70 PP3 Width 250 mm 4,0 39,2 Grundfos Alpha2.1 32-60 **Materials** 29,4 3,0 Wilo Yonos PICO 30/1-6 Valves and fittings Brass 19,6 2,0 K34 - DN 32 1,0 9,8 Gaskets **EPDM** 0,0 0,0 Insulation EPP 500 1000 1500 2000 2500 3000 3500 4000 4500 **Equipment** [l/h] Actuator SR5 230 V - 50 Hz

HeatBloC® K34 DN 32 (1¼")		EEI*	with	Item no.
	Wilo Para SC 30/6-43	< 0.20		39063MWP6
	Wilo Yonos PICO 30/1-6	< 0.20		39063MWN06
	Wilo Yonos MAXO plus 30/0.5-10	< 0.20		39063MWY10
	Grundfos ALPHA2.1 32-60	< 0.17		39063MGH6
	Grundfos UPM3 Auto 32-70	< 0.20		39063MGM6
	Grundfos UPML 32-105 AUTO	< 0.23		39063MGL9
	without pump - for pumps with 2" ext. thread x 180 mm		Θ	39063M
	Wilo Para SC 30/6-43	< 0.20	(A)	39063WP6
	Wilo Yonos MAXO plus 30/0.5-10	< 0.20	(A)	39063WY10
V CONTRACTOR	Wilo Yonos PICO 30/1-6		(A)	39063WN06
all and the	Grundfos ALPHA2.1 32-60	< 0.17	(A)	39063GH6
	Grundfos UPM3 Auto 32-70	< 0.20	(A)	39063GM6
	Grundfos UPML 32-105 AUTO	< 0.23	(A)	39063GL9
	without pump - for pumps with 2" ext. thread x 180 mm		Θ	39063









HeatBloC® K34R DN 32 (11/4") weather-compensated







Application range

for retrofitting of weather-compensated low-temperature heating systems controlled by a mixing valve

Recommended application range

- up to 64 kW
- 20 K up to 2760 l/h

Operating data

Max. operating pressure 6 bar Max. operating temperature 110 °C Kvs value 10.1 Adjustment range bypass 0 - 50 %

Technical data Differential pressure diagram **Dimensions** Nominal diameter DN 32 (11/4") 12,0 Wilo-Yonos MAXO plus 30/0.5-10 2" ext. thread, flat sealing 11,0 107,8 Connection generator 10,0 98,0 11/4" int. thread Connection consumer 88,2 9,0 Height 441 mm 78,4 8,0 Grundfos UPML 32-105 Auto Installation length 400 mm 7,0 68,6 58,8 2 Centre distance 125 mm Wilo Para 30/6 SC 6,0 Width 250 mm 5,0 49,0 Grundfos UPM3 Auto L 32-70 PP3 4,0 39,2 Materials Grundfos Alpha2.1 32-60 3.0 29,4 Valves and fittings Brass Wilo Yonos PICO 30/1-6 2.0 19,6 Gaskets **EPDM** K34R - DN 32 1,0 9.8 Insulation **EPP** 0,0 0,0 0 500 1000 1500 2000 2500 3000 3500 4000 4500 **Equipment** [l/h] Controller Weather-comp. controller

HeatBloC® K34R DN 32 (11/4") EEI* with Item no. Wilo Para 30/6-43 390663MWP6 < 0.20 Wilo Yonos MAXO plus 30/0.5-10 < 0.20 390663MWY10 Wilo Yonos PICO 30/1-6 < 0.20 MA 390663MWN06 **Grundfos ALPHA2.1 32-60** 390663MGH6 < 0.17 **Grundfos UPM3 Auto 32-70** < 0.20 390663MGM6 AM **Grundfos UPML 32-105 AUTO** 390663MGL9 < 0.23 without pump - for pumps with 2" ext. thread x 180 mm 390663M Θ

🥄 = conversion to flow left (it.no. 999300)

PWR6



= with pump



Rw

HeatBloC® K36E DN 32 (11/4")

Boiler charging set, with integrated overflow valve







Application range

 Return flow temperature maintenance for solid fuel boilers, wood firing and stove heating systems

Recommended application range

- up to 60 kW
- 20 K up to 2600 l/h

Operating data

 $\begin{array}{ll} \text{Max. operating pressure} & 6 \, \text{bar} \\ \text{Max. operating temperature} & 110 \, ^{\circ}\text{C} \\ \text{Kvs value} & 9.7 \end{array}$

Fechnical data	Differential pressure diagram	
Dimensions		12,0
Nominal diameter	DN 32 (11/4")	11,0 Wilo-Yonos MAXO plus 30/0.5-10
Connection generator	11/4" int. thread	10,0
Connection consumer	2" int. thread	9,0
Height	441 mm	8,0
nstallation length	465 mm	6,0 Wilo Para 30/6 SC
Centre distance	125 mm	7,0 Grundfos UPML 32-105 Auto Wilo Para 30/6 SC Wilo Para 30/6 SC Grundfos UPM3 Auto L 32-70 PP3
Width	250 mm	4,0 Grundfos Alpha2.1 32-60 Grundfos Alpha2.1 32-60
Materials		3,0 Wilo Yonos PICO 30/1-6
/alves and fittings	Brass	2,0 Wilo Yonos PICO 30/1-6 // 1,0 K36E - DN 32
Gaskets	EPDM	0,0
nsulation	EPP	0 500 1000 1500 2000 2500 3000 3500 4000 45

HeatBloC® K36E D	DN 32 (1¼")		EEI*	with	Item no.
	Wilo Para SC 30/6-43	Opening temperature: 45 °C	< 0.20	(A)	390343WP6
	Wilo Yonos PICO 25/1-6	Opening temperature: 45 °C	< 0.20	(A)	390343WN06
	Wilo Yonos MAXO plus 30/0.5-10	Opening temperature: 45 °C	< 0.20		390343WY10
	Grundfos ALPHA2.1 32-60	Opening temperature: 45 °C	< 0.17	(A)	390343GH6
	Grundfos UPM3 Auto 32-70	Opening temperature: 45 °C	< 0.20	(A)	390343GM6
	Grundfos UPML 32-105 AUTO	Opening temperature: 45 °C	< 0.23	(A)	390343GL9
	without pump - for pumps with 2" ext. thread x 180 mm	Opening temperature: 45 °C		Θ	390343
	Wilo Para SC 30/6-43	Opening temperature: 60 °C	< 0.20	(A)	390373WP6
	Wilo Yonos PICO 30/1-6	Opening temperature: 60 °C	< 0.20	(A)	390373WN06
	Wilo Yonos MAXO plus 30/0.5-10	Opening temperature: 60 °C	< 0.20	(A)	390373WY10
	Grundfos ALPHA2.1 32-60	Opening temperature: 60 °C	< 0.17		390373GH6
	Grundfos UPM3 Auto 32-70	Opening temperature: 60 °C	< 0.20	(A)	390373GM6
	Grundfos UPML 32-105 AUTO	Opening temperature: 60 °C	< 0.23	(A)	390373GL9
	without pump - for pumps with 2" ext. thread x 180 mm	Opening temperature: 60 °C		Θ	390373



= with pump

= without pump

 \bigcirc = with actuator





_	Fitting for heat flowmeter - DN 32 for unmixed HeatBloC°s	37453
T_	- for unmixed HeatBloC®s DN 32 - for heat flowmeters with the dimensions 1" x 130 mm	
	Scope of delivery: - Pump ball valve with check valve, can be opened (200 mm wc) - Screw-in fittings, flat sealing - Union nut - Adapter pipe - Reducers for immersion sensor (¼" ext. thread, self-sealing x M10 x 1" int. thread and ¼" ext. thread, self-sealing x M12 x 1.5" ext. thread)	
0	- Seals	
_	Fitting for heat flowmeter - DN 32 for mixed HeatBloC®s	37463
T -	- for HeatBloC*s DN 32 with 3-way or 4-wax mixing valve - for heat flowmeters with the dimensions 1" ext. thread x 130 mm	
	Scope of delivery: - Screw-in fittings flat sealing - Adapter pipe - Reducers for immersion sensor (¼" ext. thread, self-sealing x M10 x 1" int. thread and ¼" ext. thread, self-sealing x M12 x 1.5" ext. thread) - Non-return valve for mixing valve return - Seals	
	Immersion sleeve ½" ext. thread x T = 30 mm	566001
	Immersion sleeve 1/4" ext. thread x T = 60 mm	566002
	Immersion sleeve ½" ext. thread x T = 60 mm	5660021
	Immersion sleeve ½" ext. thread x T = 100 mm	566003
T	Immersion sleeve ½" ext. thread x T = 150 mm For all immersion sleeves: for the installation of the temperature sensors (d = 6 mm) in the storage tank, in the collector and the hydraulic separator. Attention: suitable for ball valves until 2016!	566004
	Adapter pipe DN 32 (11/4")	3747
	Brass, 2 x 2" external thread, flat-sealing, length 180 mm, when an external circulation pump is used to bridge the pump connection.	
	Flush and drain set DN 32 (1/4")	3761
	2 x counter-T-pieces 1¼" with fill and drain valve, each equipped with an extension piece, permits to flush and drain individual HeatBloC*s.	
	Please note: The flush and drain set is not compatible with the HeatBloC® MC system!	
	Union nut DN 32 (1¼")	2156
	Brass, to screw insertion pieces for soldering below distribution manifolds DN 32 (11/4")	
	Sealing for nut - DN 32 (11/4")	2158
	asbestos-free, outside diameter: 50 mm, inside diameter: 38 mm, height: 2 mm	





22	Connection set DN 32 (1¼")	3731
	Consisting of 2 insertion pieces for connection of pipes w/ 1¼" external thread below HeatBloC®s	
	Connection set DN 32 (1¼")	3732
	Connection set for DN 32 (1¼"), consists of 2 screw-in fittings with 2" external thread and 1¼" internal thread for the connection of pipes 1¼" external thread.	
	Non-return valve DN 32 (1¼")	37011
	To be inserted into the PAW mixing valve. Prevents unwanted circulation for example when various mixing valves are connected to one distribution manifold. The shutoff valve can be simply inserted into the mixing valve.	
_ =	Coupling piece for overhead installation - DN 32 (11/4")	3724
	Coupling piece for installation of a HeatBloC® below a distribution manifold with flat sealing. Please note: When you use wall brackets, an additional mounting plate is necessary for installing a 2-fold distribution manifold MV2.	
	Mounting plate DN 32 (1¼")	3725
	Components: mounting plate, 2 gaskets, 2 x 2" nut for installation with flat sealings under a modular distribution manifold and for attaching wall brackets	
0	Wall bracket for HeatBloC® - DN 25 (1") / DN 32 (11/4")	34723
Co Co	Galvanised mounting bracket for wall assembly of HeatBloC®s. Mount HeatBloC®s on mounting bracket for an easy assembly.	
	Wall bracket for HeatBloC® DN 25 - DN 32	34722
	Consisting of: wall bracket (galvanised steel), mounting equipment DN 25 / DN 32: Possible wall distance: 155 mm	
- 3	Not required for installation with a PAW modular distribution manifold	
	Wall bracket for modular distribution manifold - DN 25 (1") - DN 32 (11/4")	34721
	Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm	
	Wall bracket set for module heating circuit - DN 32	3722SET
No.	Components: 2 x 2" nut, mounting plate, wall bracket possible wall distance: 142.5-167.5 mm	
	Reducer set DN 32 - DN 25	37351
	for the installalation of DN 25 HeatBloC*s on DN 32 distribution manifolds, adapter set 2" external thread, flat-sealing with nut on 1½" internal thread, flat-sealing, made of brass, with gaskets, 2 types	
0 0	Reducer set DN 32 - DN 25	3735
	for installation of modular heating circuits DN 20 on modular distribution manifolds DN 25, adapter set 1½" external thread, flat-sealing with nut on ¾" PAW flange, reduction of the centre distance from 125 mm to 90 mm, distance pipe 1" internal thread x 1" external thread, flat sealing, brass, with sealing. The required union nuts 1" internal thread are dismounted from the heating circuit.	
	<u> </u>	





	Piping group for hydraulic separator - DN 32 (11/4") Piping group for hydraulic separator, consisting of 2 pipe sections, union nuts and seals, for connection of a vertically mounted hydraulic separator below a PAW distribution manifold. Flat-sealing connection, completely insulated, outlet on the left or on the right.	34742KS1
	Extension set for low-loss header - DN 32 (11/4") for a subsequent conversion into a distribution manifold with integrated hydraulic separator (low-loss header). Range of application up to 2600 l/h, max. up to a 3-fold distribution manifold MV3. Consisting of two distance rings for a resistance-free connection of flow and return chamber, incl. screws and o-rings.	37431
	Modular distribution manifold DN 32, 2-fold	37123
	Modular distribution manifold DN 32, 3-fold	37133
	Modular distribution manifold DN 32, 4-fold	37143
_	Modular distribution manifold DN 32, 5-fold	37153
	Modular distribution manifold DN 32, 6-fold	37163
	completely made of brass; completely premounted entirely insulated with EPP half-shells extremely low resistance, free passage d = 50 mm up to 6 groups, premounted, extendable several boiler connections possible, for higher outputs	
	Contact thermostat 20-60 °C Contact thermostat for limiting the flow temperature, adjustable from 20 - 60 °C	N00083
	Safety set for distribution manifold - DN 32 (11/4") up to 100 kW For the installation on modular distribution manifolds DN 32 (as of 2017), with a connection of 1" int. thread (sealed with plug) for the installation of the connection set for the expansion tank (item no. 7508), pressure relief valve 3/4" x 1", 3 bar, up to 100 kW, pressure gauge 0-4 bar	52553
	Connection set DN 25 for diaphragm expansion tank for assembly to a safety group DN 32, with self-sealing double nipple 1", cap valve 1", armoured hose with bend 1" x 700 mm.	7508
	Temperature sensor Pt1000-B Temperature sensor for the integration into the flow and return ball valve of products of the HeatBloC® range DN 25 and DN 32. • The temperature sensor Pt1000 with plug connection measures the temperature directly in the fluid. • ¼" external thread • including matching connection cable (2.9 m) with wire end ferrules	131934





	PAW constant temperature controller PKR6	703601
	Easy assembly and disassembly thanks to the smart PAW snap-in mechanism, with 2 m cable and Schuko plug, incl. mounting set for snap-in assembly on the PAW mixing valve and PT1000 screw-in sensor G¼" for the flow ball valve, change-over switch for manual / automatic operation. Controller settings for direction of rotation, operation mode and nominal temperature can be adjusted at the display Power supply: 230 V - 50 Hz	
	Power consumption: 3 W Torque: min. 6 Nm Setting time 90°: 120 s	
	Weather compensated controller PWR6	723681
	Same type as the PAW constant temperature controller PKR6 (art.no. 703601), but for the use of a weather-compensated heating circuit. The package includes the outdoor sensor, the flow sensor as well as the source sensor. This ensures that the mixing valve or the heating circuit can be operated in an autarkic manner and without boiler control. In addition, it is possible to set the room temperature centrally in the flat via a room based remote control (art.no. 1359501).	
9	Room remote control RCD 2.0	1359501
	Room remote control RCD 2.0 for weather compensated controller PWR6	
	PAW actuator SR5	705001
	Change-over switch for manual / automatic operation, easy assembly and disassembly thanks to the smart PAW snap-in mechanism, with 1.5 m cable and mounting set for halting assembly on the PAW mixing valve, for weather-compensated control, thanks to the removable scale, it is suited for flow on the right or left side	
	Electrical connection: 230 V / 50 Hz Input power: 2.5 W Torque: 5 Nm Setting time for 90°: 140 s	
	PAW actuator SR10	705002
	Thanks to the removable scale, it is suited for flow on the right or left side, easy assembly and disassembly thanks to the smart PAW snap-in mechanism, with 1.5 m cable and mounting set for halting assembly on the PAW mixing valve, for weather-compensated control, change-over switch for manual / automatic operation	
Demonstrage Services	Electrical connection: 230 V / 50 Hz Input power: 3.5 W Torque: 10 Nm Setting time for 90°: 140 s	
	PAW actuator SR10 24/3P	7054
	Like PAW actuator type SR10 (item no. 705002), but with: electrical connection/supply voltage: 24 VAC for control systems with 3-level-control	
	PAW actuator SR10 24/ST	70541
	Like PAW actuator SR10 (item no. 705002), but with: electrical connection/supply voltage: 24 VAC/DC control voltage direct: 0(2)10 VDC for continuous control systems with 010 V output	
	Electrical connection: 230 V / 50 Hz Input power: 1.5 W Torque: 10 Nm	
	Setting time for 90°: 140 s	

Product range HeatBloC® Heating circuits DN 40/50





All HeatBloC®s offer the following advantages:

Preassembled group of fittings for heating circuits

High flexibility during assembly

modules can be used in nearly any combination

Ball valve with full port, gaskets of the spindle can be replaced during operation

Connections

Flange connection DN 40/PN6 resp. DN 50/PN6 as slip-on flange and 11/2" / 2" internal thread

incl. gaskets and screws, for installation on PAW modular distribution manifolds

With PAW mounting equipment the heating circuit can be installed on wall brackets

Hand lever at the ball valve

easy handling from the front, even when the insulation is closed, visible closing position

EnEV-compliant functional insulation

made of durable elastic EPP, complete insulation of valves and fittings, ventilation opening to cool the pump.

Free access to the pump head

Check valve in the return pipe

can be opened, 200 mm wc, spring-loaded, and thus also suited for horizontal and overhead installation

Flow on the right = standard

The HeatBloC®s can be delivered with flow on the left against additional charge.

Flow and return line can be changed on site

also for heating circuits with mixing valve

Fill and drain valve

for flushing, filling and draining, integrated in the ball valve

Full metal thermometer

can be pulled off, with immersion sleeve, integrated in the ball valve

PAW heating pumps with high-efficiency technology (ECM technology)

fitted with cable, already installed, integrated in the insulation, pressure tested, serial number, perfectly designed system, pump characteristics, EuP/ErP READY

Pump can be isolated

so that it can be replaced without draining

At the end of the chapter, you will find the complete mounting equipment for the modular system DN 40 / 50.





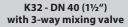








K31 - DN 40 (1½") direct / unmixed





up to 150 kW*



up to 125 kW*

K31 - DN 50 (2") direct / unmixed

K32 - DN 50 (2") with 3-way mixing valve



up to 250 kW*



up to 230 kW*

*Temperature difference = 20 K

HeatBloC® K31 DN 40 (1½") direct / unmixed







Application range

• Boiler charging

Recommended application range

- up to 150 kW
- 20 K up to 6500 l/h

Operating data

 $\begin{array}{ll} \text{Max. operating pressure} & 6 \, \text{bar} \\ \text{Max. operating temperature} & 110 \, ^{\circ}\text{C} \\ \text{Kvs value} & 28.3 \end{array}$

Technical data		Differential pressure diagram
Dimensions		14
Nominal diameter	DN 40 (1½")	13 - Grundfos Magna1 40-120 F / Wilo-Yonos MAXO plus 40/0.5-12 Grundfos Magna3 40-120 F
Connection generator	Flange DN 40 / PN 6	12
Connection consumer	1½" int. thread	10
leight	610 mm	9
nstallation length	560 mm	© 8 E 7 Wilo-Yonos MAXO plus 40/0.5-8 Wilo-Yonos MAXO plus 30/0.5-10
entre distance	160 mm	g 6
Vidth	320 mm	Wilo-Yonos MAXO plus 30/0.5-10
Materials		3 Grundfos Magna1 32-100
alves and fittings	Brass	2
Gaskets	EPDM	1 K31 - DN 40
nsulation	EPP	0 1000 2000 3000 4000 5000 6000 7000 8 [l/h]

HeatBloC® K31 DN 40 (1½")		EEI*	with	Item no.
	Wilo Yonos MAXO plus 40/0.5-8	< 0.20		41211WY8
	Wilo Yonos MAXO plus 30/0.5-10	< 0.20	(A)	41211WY10
	Wilo Yonos MAXO plus 40/0.5-12	< 0.20		41211WY12
	Grundfos MAGNA1 32-100	< 0.21		41211GL10
	Grundfos MAGNA1 40-120 F	< 0.21		41211GL12
	Grundfos MAGNA3 40-120 F	< 0.18		41211GH12
	without pump - for pumps with flange DN 40/PN6 x 250 mm Optionally available: Adapter pipe 30 mm, pump installation length 220 mm (item no. 12397)		Θ	41211

▲

= with pump

= without pump

 \bigcirc = with actuator

HeatBloC® K32 DN 40 (1½") 3-way H-type mixing valve







Application range

• Heating systems controlled by a mixing valve

Recommended application range

- up to 125 kW
- 20 K up to 5400 l/h

Operating data

Max. operating pressure 6 bar Max. operating temperature $110 \,^{\circ}\text{C}$ Kvs value $17.7 \,^{\circ}$

Technical data Differential pressure diagram **Dimensions** 137,2 14 DN 40 (1½") Nominal diameter Grundfos Magna1 40-120 F Grundfos Magna3 40-120 F Wilo Yonos MAXO plus 40/0.5-12 13 127,4 Flange DN 40 / PN 6 Connection generator 12 117,6 11 107,8 Connection consumer 1½" int. thread 10 98,0 Height 610 mm 9 Wilo Yonos MAXO plus 30/0.5-10 88,2 [mWS / m wc] 8 Installation length 560 mm 78,4 68,6 Centre distance 160 mm 6 58,8 Wilo Yonos MAXO plus 40/0.5-8 Width 320 mm 5 49,0 39,2 **Materials** 29,4 Grundfos Magna1 32-100 Valves and fittings Brass 2 19,6 K32 - DN 40 Gaskets **EPDM** 9,8 0,0 Insulation EPP 1000 2000 5000 7000 8000 0 3000 4000 6000 **Equipment** [l/h] Actuator SR10 230 V - 50 Hz

leatBloC® K32 DN 40 (1½")		EEI*	with	Item no.
	Wilo Yonos MAXO plus 40/0.5-8	< 0.20		41221MWY8
	Wilo Yonos MAXO plus 30/0.5-10	< 0.20		41221MWY10
GRUEN CERTAIN	Wilo Yonos MAXO plus 40/0.5-12	< 0.20		41221MWY12
	Grundfos MAGNA1 32-100	< 0.21		41221MGL10
	Grundfos MAGNA1 40-120 F	< 0.21		41221MGL12
S S S S S S S S S S S S S S S S S S S	Grundfos MAGNA3 40-120 F	< 0.18		41221MGH12
Toll	without pump - for pumps with flange DN 40/PN6 x 250 mm Optionally available: Adapter pipe 30 mm, pump installation length 220 mm (item no. 12397)			41221M





= without pump



HeatBloC® K31 DN 50 (2") direct / unmixed







Application range

• Boiler charging

Recommended application range

- up to 250 kW
- 20 K up to 10800 l/h

Operating data

 $\begin{array}{ll} \text{Max. operating pressure} & 6 \, \text{bar} \\ \text{Max. operating temperature} & 110 \, ^{\circ}\text{C} \\ \text{Kvs value} & 31.2 \end{array}$

Technical data		Differential pressure diagram
Dimensions		13
Nominal diameter	DN 50 (2")	12 Wilo-Yonos MAXO plus 50/0.5-12
Connection generator	Flange DN 50 / PN 6	11
Connection consumer	2" int. thread	10 9
Height	660 mm	
Installation length	630 mm	Wilo-Yonos MAXO plus 50/0.5-9 E 7 Grundfos MAGNA1 50-120F
Centre distance	180 mm	8 Wilo-Yonos MAXO plus 50/0.5-9 Grundfos MAGNA1 50-120F Grundfos MAGNA3 F Grundfos MAG
Width	360 mm	<u>E</u> 5
Materials		3
Valves and fittings	Brass	2 K31 - DN 50
Gaskets	EPDM	
Insulation	EPP	3 4 5 6 7 8 9 10 11 12 13 14
		[m³/h]

HeatBloC® K31 DN 50 (2")		EEI*	with	Item no.
مادهاد	Wilo Yonos MAXO plus 50/0.5-12	< 0.23		51211WM12
	Wilo Yonos MAXO plus 50/0.5-9	< 0.20		51211WY9
	Grundfos MAGNA1 50-120 F	< 0.21		51211GL12
	Grundfos MAGNA3 50-120 F	< 0.18		51211GH12
	without pump - for pumps with flange DN 50/PN6 x 280 mm Optionally available: Adapter pipe 30 mm, pump installation length 250 mm (item no. 12395), 2x adapter pipe 20 mm, pump installation length 240 mm (item no. 12396)		Θ	51211



= with pump

 \bigcirc = without pump

(

 \bigcirc = with actuator

HeatBloC® K32 DN 50 (2") 3-way H-type mixing valve







Application range

• Heating systems controlled by a mixing valve

Recommended application range

- up to 230 kW
- 20 K up to 9980 l/h

Operating data

Max. operating pressure 6 bar Max. operating temperature 110°C Kvs value 25.7

Technical data Differential pressure diagram **Dimensions** 13 127,4 Nominal diameter DN 50 (2") Wilo-Yonos MAXO plus 50/0.5-12 12 117,6 Flange DN 50 / PN 6 Connection generator 11 107,8 Connection consumer 2" int. thread 10 98,0 9 88,2 Height 660 mm [mWS / m wc] 8 78,4 Wilo-Yonos MAXO plus 50/0.5-9 Installation length 630 mm 7 68,6 68,6 E 4 58,85 Grundfos MAGNA1 50-120F Grundfos MAGNA3 50-120F Centre distance 180 mm 6 5 49,0 Width 360 mm 4 39,2 **Materials** 29,4 3 K32 - DN 50 Valves and fittings Brass 19,6 2 Gaskets **EPDM** 9,8 0 0,0 Insulation EPP 3 10 11 12 13 14 15 **Equipment** [m³/h] Actuator SR10 230 V - 50 Hz

HeatBloC® K32 DN 50 (2")		EEI* with		Item no.	
GHA GENE	Wilo Yonos MAXO plus 50/0.5-12	< 0.23		51221MWM12	
	Wilo Yonos MAXO plus 50/0.5-9	< 0.20		51221MWY9	
	Grundfos MAGNA1 50-120 F	< 0.21		51221MGL12	
	Grundfos MAGNA3 50-120 F	< 0.18		51221MGH12	
Z Contractor X	without pump - for pumps with flange DN 50/PN6 x 280 mm Optionally available: Adapter pipe 30 mm, pump installation length 250 mm (item no. 12395), 2x adapter pipe 20 mm, pump installation length 240 mm (item no. 12396)			51221M	













	Modular distribution manifold DN 40, 2-fold	4112
	Modular distribution manifold DN 40, 3-fold	4113
	Modular distribution manifold DN 40, 4-fold	4114
	modular distribution manifold made of brass connecting flanges as slip-on flanges made of steel seals and screws for boiler connection DN 50 included completely premounted; entirely insulated with EPP shells extremely low resistance, free passage d = 64 mm up to 4 groups, premounted, extendable boiler connections DN 50	
	Modular distribution manifold DN 50, 2-fold	5112
	Modular distribution manifold DN 50, 3-fold	5113
	Modular distribution manifold DN 50, 4-fold	5114
	modular distribution manifold made of brass connecting flanges as slip-on flanges made of steel gaskets and screws for boiler connection DN 65 included completely premounted; entirely insulated with EPP shells extremely low resistance, free passage d = 84 mm up to 4 groups, premounted, extendable boiler connections DN 65	
	Floor bracket set for modular distribution manifold - DN 40 / 50 (1½"/ 2")	41671
	Components: 2 floor brackets (galvanized steel), 4 wall plugs, 4 screws, 2 screws for fixing the distribution manifold onto the floor brackets Height = adjustable 1,050 - 1,080 mm, for shortening simply cut off	
	Wall bracket set for modular distribution manifold - DN 40 (1½")	41651
	Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm	
-n -sc 19	Wall bracket set for modular distribution manifold - DN 50 (2")	41652
11	Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm	
-	Wall bracket for HeatBloC® DN 40 (1½")	41641
	Components: Wall bracket, 2 gaskets, mounting equipment, distance of the pipe axis to the wall A = 270 mm	
100	Wall bracket for HeatBloC®s - DN 50 (2")	41642
	Components: Wall bracket (galvanised steel), 2 gaskets, mounting equipment, distance of the pipe axis to the wall A = 400 mm	
		1





	Extension module DN 40 (1½"), for the standard and MC series	4111
	Extension module DN 50 (2"), for the standard and MC series	5111
	Commission woods of hyper	
	ompletely made of brass ompletely preassembled with a completely preassemble with	
Extension module DN 50 (2"), for the standard and MC series Completely made of briass Completely preassembled Flow and return chamber 95 % thermally separated Blind flange DN 40 (11%") / PN 6 Blind flange SN (2") / PN 8 PN 6, as per DIN 2527, with 1 gasket, 4 screws and 4 nuts Screwed flange DN 40 (11%") / PN 6 on 11%" int. thread 41612 Screwed flange DN 50 (2") / PN 6 on 2" int. thread 41613 Screwed flange DN 65 (2") / PN 6 on 2" int. thread 51612 PN 6, ac. to DIN 2565, seel, black Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 50 (2") / PN 6 FN 6, ac. to DIN 2651, seel, black Set reducer flanges DN 40 - DN 32 (11%" - 11%") Reducer flanges pn 40 - PN 6, other side flange for 2" union nut. flat sealing. Reduction of the centre distance from 180 mm to 125 mm, intallation height = 35 mm. *For the installation of a DN 32 pump 2x nut and seals are required additionally (2x N00121). Set reducer flanges DN 50 - 32 (2" - 11%") Set reducer flanges DN 50 - 32 (2" - 11%") Set reducer flanges DN 50 - 34 (2" -		
	Extension module DN 50 (2"), for the standard and MC series Completely made of brass Completely made of brass Completely preassembled Flow and return chamber 95 % thermally separated Blind flange DN 40 (1%") PN 6 Blind flange DN 40 (1%") PN 6 PN 6, as per DIN 2527, with 1 gasket, 4 screws and 4 nuts Screwed flange DN 50 (2") / PN 6 on 1%" int. thread Screwed flange DN 50 (2") / PN 6 on 2%" int. thread Screwed flange DN 50 (2") / PN 6 on 2%" int. thread PN 6, acc. to DIN 2565, steel, black Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 50 (2") / PN 6 PN 6, acc. to DIN 2561, steel, black Set reducer flanges DN 40 - DN 32 (11%" - 11%") Reducer flanges DN 40 - DN 32 (11%" - 11%") Reducer flanges made of brass for the assembly of a pump DN 32" in HeatBloC"s DN 40 or for connection of a single HeatBloC" DN 32 on a distribution manifold DN 40. One side flange DN 40 - PN 6, other side flange for 2" union nut, flat sealing. Reduction of the centre distance from 160 mm to 125 mm, installation height = 35 mm. "For the installation of a DN 32 pump 2x nut and seals are required additionally (2x N00121). Set reducer flanges DN 50 - 32 (2" - 11%") 2 reducing flanges made of steel, zinced/brass for connecting a DN 32 HeatBloC" on a DN 50 modular distribution manifold. One side DN 50 flange with PN 6, other side flange DN 32 - 114". Reduction of the centre distance from 180 mm to 125 mm, with seals and screws for connection to DN 50. Installation height - 48 mm Set reducer flanges DN 50 - 40 (2" - 115") 2 reducing flanges made of zinced steel for connecting a DN 40 HeatBloC" on a DN 50 modular distribution manifold. One side DN 50 flange (PN 6), other side flange (PN 6). Reduction of the centre distance from 180 mm to 160 mm, with seals and screws, installation height = 13 mm Use only with slip on flanges! Extension set for low-loss header - DN 40 (11/") Extension set for low-loss header - DN 40 (11/") Extension set for low-loss header - DN 40 (11/") Exte	41611
	Blind flange 50 (2") / PN 6	51611
	PN 6, as per DIN 2527, with 1 gasket, 4 screws and 4 nuts	
	Screwed flange DN 40 (1½") / PN 6 on 1½" int. thread	41612
	Screwed flange DN 50 (2") / PN 6 on 2" int. thread	41613
	Screwed flange DN 65 (2½") / PN 6 on 2½" int. thread	51612
	Screwed flange DN 40 (1½") / PN 6 on 1½" int. thread Screwed flange DN 50 (2") / PN 6 on 2" int. thread Screwed flange DN 65 (2½") / PN 6 on 2" int. thread 51612 PN 6, acc. to DIN 2565, steel, black Weld neck flange DN 40 (1½") / PN 6 Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 50 (2") / PN 6 FN 6, acc. to DIN 2631, steel, black Set reducer flanges DN 40 - DN 32 (1½" - 1½") Reducer flanges made of brass for the assembly of a pump DN 32" in HeatBloC"s DN 40 or for connection of a single HeatBloC" DN 32 on a distribution manifold DN 40. One side flange DN 40 - PN 6, other side flange for 2" union nut, flat sealing. Reduction of the centre distance from 160 mm to 125 mm, installation height = 35 mm. "For the installation of a DN 32 pump 2x nut and seals are required additionally (2x N00121). Set reducer flanges made of steel, zinced/brass for connecting a DN 32 HeatBloC" on a DN 50 modular distribution manifold. One side DN 50 flange with PN 6, other side flange DN 32 - 1½". Reduction of the centre distance from 180 mm to 125 mm, with seals and screws for connection to DN 50. Installation height = 48 mm Set reducer flanges DN 50 - 40 (2" - 1½") 2 reducing flanges made of zinced steel for connecting a DN 40 HeatBloC" on a DN 50 modular distribution manifold. For the assembly of a DN 40 pump, installation length 250 mm, in a DN 50 HeatBloC". One side DN 50 flange (PN 6), other side PN 40 flange (PN 6). Reduction of the centre distance from 180 mm to 160 mm, with seals and screws, installation	
		41614
-		41615
	Weld neck flange DN 65 (2½") / PN 6	51613
Set reducer flanges DN 40 - DN 32 (1½" - 1¼") Reducer flanges made of brass for the assembly of a pump DN 32* in HeatBloC connection of a single HeatBloC® DN 32 on a distribution manifold DN 40. One side flange DN 40 - PN 6, other side flange for 2" union nut, flat sealing.	PN 6, acc. to DIN 2631, steel, black	
	Set reducer flanges DN 40 - DN 32 (1½" - 1¼")	41610
	Completely preassembled Flow and return chamber 95 % thermally separated Blind flange DN 40 (1½") / PN 6 Blind flange S0 (2") / PN 6 PN 6, as per DIN 2527, with 1 gasket, 4 screws and 4 nuts Screwed flange DN 40 (1½") / PN 6 on 1½" int. thread Screwed flange DN 40 (1½") / PN 6 on 1½" int. thread Screwed flange DN 40 (1½") / PN 6 on 2½" int. thread PN 6, acc. to DIN 2563, steel, black Weld neck flange DN 40 (1½") / PN 6 Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 50 (2") / PN 6 PN 6, acc. to DIN 2563, steel, black Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 50 (2") / PN 6 PN 6, acc. to DIN 2531, steel, black Set reducer flanges DN 40 (1½") / PN 6 Weld neck flange DN 50 (2") / PN 6 PN 6, acc. to DIN 2531, steel, black Set reducer flanges DN 40 - DN 32 (1½" - 1½") Reduction of a single HeatBidC on DN 32 on a stiribution manifold DN 40 One side flange DN 40 - DN 30 (1½" - 1½") Reduction of the centre distance from 160 mm to 125 mm, installation height = 35 mm. "For the installation of a DN 32 pump 2x nut and seals are required additionally (2x N00121). Set reducer flanges DN 50 - 32 (2" - 1½") 2 reducing flanges made of steel, insect/brass for connection gn DN 32 HeatBioC* on a DN 50 modular distribution manifold. One side DN 50 flange with PN 6, other side flange DN 32 - 1½", Reduction of the centre distance from 180 mm to 125 mm, with seals and screws for connection to DN 50. Installation height = 48 mm Set reducer flanges DN 50 - 40 (2" - 1½") 2 reducing flanges made of steel, sinced steel for connecting a DN 40 HeatBioC* on a DN 50 modular distribution manifold. One side DN 50 flange (W) 6), other side flange (PN 5). Reduction of the centre distance from 180 mm to 125 mm, with seals and screws for connection to DN 50. Installation height = 48 mm Set reducer flanges DN 50 - 40 (2" - 1½") 2 reducing flanges made of sinced steel for connection of flow and return chamber, incl. screws and o-rings. For the installation into a distribution manifold with integrate	
	*For the installation of a DN 32 pump 2x nut and seals are required additionally (2x N00121).	
	Set reducer flanges DN 50 - 32 (2" - 1¼")	5162
THE THE PARTY OF T	modular distribution manifold. One side DN 50 flange with PN 6, other side flange DN 32 - 1¼". Reduction of the centre distance from 180 mm to 125 mm, with seals and screws for connection to	
	Set reducer flanges DN 50 - 40 (2" - 1½")	51610
THE PARTY	distribution manifold. For the assembly of a DN 40 pump, installation length 250 mm, in a DN 50 HeatBloC°. One side DN 50 flange (PN 6), other side DN 40 flange (PN 6). Reduction of the centre distance from 180 mm to 160 mm, with seals and screws, installation height = 13 mm	
	Extension set for low-loss header - DN 40 (1½")	4143
00 0000	Extension set for low-loss header DN 50 (2")	5143
	Consisting of: 1 distance ring for a resistance-free connection of flow and return chamber, incl.	
	PAW actuator SR10	705002
	disassembly thanks to the smart PAW snap-in mechanism, with 1.5 m cable and mounting set for halting assembly on the PAW mixing valve, for weather-compensated control, change-over switch	
Depontage purification of the contract of the	Input power: 3.5 W	





Adapter pipe DN 40 (1½") for flange pumps DN 40 DN 40 x 30 mm Installation length from 220 to 250 mm	12397
Adapter pipe DN 50 (2") for flange pumps DN 50 DN 50 x 30 mm Installation length from 250 to 280 mm	12395
Adaptor pieces DN 50 (2") for flange pumps DN 50 DN 50 x 20 mm Installation length from 240 to 280 mm	12396

Your notes		





Modular distribution manifolds / hydraulic separators

Catalogue 04/2025

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

Valid for the EU







Distribution manifold DN 20 (3/4")





EPP

Application range

- modular design
- for outputs up to 50 kW (for each boiler connection) at a temperature difference of 20 K

with thermal separation of flow and return chamber

Operating data

 $\begin{tabular}{ll} Max. operating pressure & 6 bar \\ Max. operating temperature & 110 \, ^{\circ} C \\ \end{tabular}$

Technical data		Differential pressure diagram
Dimensions		
Nominal diameter	DN 20 (¾")	
Height	80 mm	1,4
Height insulation	85 mm	1,2
Centre distance	90 mm	
Connection generator	3/4" int. thread x 1" ext.	1,0 MV4 9,8
	thread, flat-sealing (bottom),	
	2 x for boiler connection, others plugged	© 0,8
Connection consumer	34" PAW flange for nut 1" (top)	E 0,4 3,9
Lateral connection	34" int. thread, sealed with plug, for safety group and diaphragm expansion tank	0,2
Materials		0,0
Valves and fittings	Brass	0 500 1000 1500 2000 2500 [l/h]
Gaskets	EPDM / AFM34	

Distribution manifold DN 20	Execution	Kvs value	Width	Connections for HeatBloC®s	Item no.
	2-fold	7.1	440 mm	3	3112
	3-fold	7.8	620 mm	5	3113
	4-fold	8	800 mm	7	3114
	5-fold	8.2	980 mm	9	3115
	6-fold	8.2	1 160 mm	11	3116

Insulation







Application range

 for outputs up to 80 kW (for each boiler connection) at a temperature difference of 20 K

Operating data

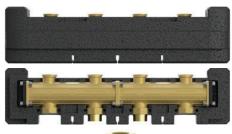
Max. operating pressure $$6$\,\mathrm{bar}$$ Max. operating temperature $$110\,^\circ\mathrm{C}$$

echnical data			Differential pre	ssure diagram		
imensions						
lominal diameter	DN 25 (1")	4000				
eight	104 mm	1000				9
eight insulation	85 mm	900			/	/ 8
entre distance	125 mm	800				7
onnection generator	1½" external thread, flat- sealing / 1" internal thread	700 및 600				6 5
onnection consumer	1" flange for 1½" nut, flat- sealing	500 SME 400	V	23 - 2-fach		4
laterials		300			V23 - 3-fach	2
alves and fittings	Brass	200		//		2
askets	EPDM/NBR	100				- 1
sulation	EPP	0				0

Manifold DN 25	Execution	Kvs value	Width	Connections for HeatBloC®s	Item no.
	2- / 3-fold	13.3	490 mm	3	433413







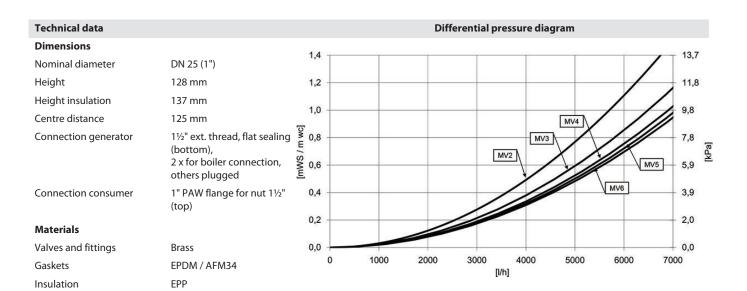


Application range

- modular design
- for outputs up to 80 kW (for each boiler connection) at a temperature difference of 20 K

Operating data

Max. operating pressure $$6\,{\rm bar}$$ Max. operating temperature $$110\,{\rm ^\circ C}$$



Distribution manifold DN 25	Execution	Kvs value	Width	Connections for HeatBloC®s	Item no.
	2-fold	16	625 mm	3	34123
	3-fold	18	875 mm	5	34133
The same of the same of	4-fold	18.5	1 125 mm	7	34143
	5-fold	19	1 375 mm	9	34153
	6-fold	19	1 625 mm	11	34163









Application range

- modular design
- for outputs up to 150 kW (for each boiler connection) at a temperature difference of 20 K

Operating data

Max. operating pressure $$6$\,\mathrm{bar}$$ Max. operating temperature $$110\,^\circ\mathrm{C}$$

Technical data			D	ifferential pressure	e diagram		
Dimensions		1,4	-	-	2		13,7
Nominal diameter	DN 32 (11/4")						
Height	156 mm	1,2					11,8
Height insulation	156 mm	1,0					9,8
Centre distance	125 mm	1,0			MV4		3,0
Connection generator	2" ext. thread, flat sealing (bottom), 2 x for boiler connection, others plugged	9,0 м м м м м м м м м м м м м м м м м м м		MV2	MV3	MV5	- 7,8 - 5,9
Connection consumer	1¼" PAW flange for nut 2" (top)	0,4					3,9
Materials		0,2					2,0
Valves and fittings	Brass	0,0					0,0
Gaskets	EPDM / AFM34	2000	4000	6000 8	3000 10	0000 12	000
Insulation	EPP			[l/h]			

Distribution manifold DN 32	Execution	Kvs value	Width	Connections for HeatBloC®s	Item no.
	2-fold	34	625 mm	3	37123
	3-fold	37	875 mm	5	37133
	4-fold	38	1 125 mm	7	37143
	5-fold	38	1 375 mm	9	37153
	6-fold	38	1 625 mm	11	37163



Distribution manifold DN 40 (11/2")







Application range

- modular design
- for outputs up to 250 kW (for each boiler connection) at a temperature difference of 20 K

Operating data

 $\begin{tabular}{ll} Max. operating pressure & 6 bar \\ Max. operating temperature & 110 \, ^{\circ} C \\ \end{tabular}$

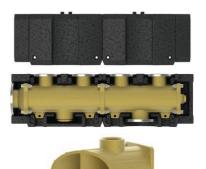
Technical data		Differential pressure diagram
Dimensions		44
Nominal diameter	DN 40 (1½")	1,4
Height	179 mm	1,2
Height insulation	190 mm	
Centre distance	160 mm	1,0
Connection generator	Flange DN 50 / PN 6, flow at the side, return to the bottom, others sealed with 2" plug	0,8 MV2 7,8 E Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q
Connection consumer	Flange DN 40 / PN 6 (on top)	0,4 MV4 3,9
Materials		0,2
Valves and fittings	Brass	0,0
Gaskets	EPDM / AFM34	4000 6000 8000 10000 12000 14000 16000 18000 [/h]
Insulation	EPP	[611]

Distribution manifold DN 40	Execution	Kvs value	Width	Connections for HeatBloC®s	Item no.
et all the later to the	2-fold	53.9	740 mm	2	4112
3.2 2.4.2.2.2.	3-fold	59.6	1 060 mm	3	4113
	4-fold	62.9	1 380 mm	4	4114



Distribution manifold DN 50 (2")





Application range

- modular design
- for outputs up to 400 kW (for each boiler connection) at a temperature difference of 20 K

Operating data

Max. operating pressure 6 bar Max. operating temperature 110°C

Technical data						Dif	ferent	ial pres	sure di	agram				
Dimensions														
Nominal diameter	DN 50 (2")													
Height	225 mm	1,6												
Height insulation	220 mm	188		6										4.
Centre distance	180 mm	1,4												
Connection generator	Flange DN 65 / PN 6, flow at the side, return to the bottom, others sealed with 2" plug	1,2 — 1,0 — 0,8 —				MV3	- DN 50	MV	4 - DN 50					9 7
Connection consumer	Flange DN 50 / PN 6 (on top)	0,6								M	/2 - DN	50		_ ; _ ;
Lateral connection	11/4" int. thread, sealed with plug, for safety group and expansion tank	0,2	+			1		+				+		1
Materials		5	6	7	8	9	10	11	12 13	14	15	16	17	18
Valves and fittings	Brass							[m³/h	J					
Gaskets	EPDM / AFM34													
Insulation	EPP													

Distribution manifold DN 50	Execution	Kvs value	Width	Connections for HeatBloC®s	Item no.
	2-fold	70.4	840 mm	2	5112
	3-fold	74.7	1 200 mm	3	5113
	4-fold	85.6	1 560 mm	4	5114





	MCom communication set	1398731
25	For WiFi communication with an Apple or Android terminal. The communication module is the condition for for the automatic hydraulic balancing of the radiators via the PAW app. You can get the corresponding app in the App Store or Google Play Store by searching for "PAW MCom".	
• '	With insulation and device for the installation on the modular distribution manifold Communication module Raspberry Pi with Modbus cable WLAN adapter 802.11n nano Wall power supply 5 V DC	
	Connection set for diaphragm expansion tank - DN 20 (3/4")	7509
	for assembly to distribution manifolds DN 20, with tank connector ¾", wall bracket and mounting equipment, armoured hose with bend ¾" x 700 mm, maximum tank diameter = 440 mm	
	Union nut DN 20 (¾")	2055
	Brass, to screw insertion pieces for soldering below distribution manifolds DN 20 (¾")	
	Sealing for nut - DN 20 (¾")	2057
	asbestos-free, outside diameter: 30 mm, inside diameter: 21 mm, height: 2 mm	
	Wall bracket for HeatBloC® DN 20 (¾")	3121
	Components: 2 wall bracket sets, mounting equipment Possible wall distance: 70-100 mm, distance: 15 mm For 5-fold modular distribution manifolds, we recommend to use two wall bracket sets.	
	Wall bracket for HeatBloC® DN 40 (11/2")	41641
	Components: Wall bracket, 2 gaskets, mounting equipment, distance of the pipe axis to the wall A = 270 mm	
0 0	Coupling piece for overhead installation - DN 20 (¾")	31241
8 8	Coupling piece for installation of a HeatBloC® below a distribution manifold with flat sealing.	
	Please note: When you use wall brackets, an additional mounting plate is necessary for installing a 2-fold distribution manifold MV2.	
	Connection set DN 20 (¾")	3131
7 7	Consisting of 2 adapter pieces with 1" nut and ¾" internal thread for connecting pipes with ¾" external thread under modular distribution manifolds DN 20 (¾")	
	Set extension pieces DN 20 - DN 25	34352
fi	Set of adaptor pieces for the overhead installation of HeatBloC®s DN 25 below distribution manifolds DN 20, centre distance changed from 90 mm to 125 mm, connections 1" nut x 1" flange (for nut 1½"), flat sealing.	
	1	1





0	Set extension pieces DN 25 - DN 32	3436
	for the account to a fill and Dia Con DN 22 are distribution, required to DN 25	
0	for the assembly of HeatBloC®s DN 32 on distribution manifolds DN 25, set of distance rings for union nut 2" internal thread on 1" PAW flange,	
-	made of brass, with special sealing, flat-sealing	
	Coupling piece for overhead installation - DN 25 (1")	34241
H H	Coupling piece for installation of a HeatBloC® below a distribution manifold with flat sealing.	
100	Please note: When you use wall brackets, an additional mounting plate is necessary for installing a	
	2-fold distribution manifold MV2.	
	Mounting plate DN 20 (¾")	3125
	Components: mounting plate, 2 gaskets, 2 x 1" nut, 2 x reducing nipple 1" ext. thread x	
	3/4" ext.thread	
	for installation with flat sealings under a modular distribution manifold and for attaching wall	
	brackets	
	Mounting plate DN 25 (1")	3425
	Components: mounting plate, 2 gaskets, 2 x 1½" nut, 2 x housing of coupling F 1" x 1½" ext. thread	
	for installation with flat sealings under a modular distribution manifold and for attaching wall	
	brackets	
	Mounting plate DN 32 (1¼")	3725
	Components: mounting plate, 2 gaskets, 2 x 2" nut	
	for installation with flat sealings under a modular distribution manifold and for attaching wall	
	brackets	
	Extension module DN 20	3111
	Completely made of brass	
	Completely preassembled	
	Flow and return chamber 95 % thermally separated	
	Extension module DN 25 for modular distribution manifold until 12/2016	3411
	Extension module DN 25 for modular distribution manifold as of 01/2017	34113
THE RESIDENCE OF THE PERSON	Number of connections for HeatBloC®s = 1	
	Width: 251 mm	
	Completely made of brass Completely preassembled	
	Flow and return chamber 95 % thermally separated	
	For the extension of already existing modular distribution manifolds DN 25.	
	The installation may only be made by qualified experts!	
	Extension module DN 32 for modular distribution manifold until 12/2016	3711
	Extension module DN 32 for modular distribution manifold as of 01/2017	37113
	Number of connections for HeatBloC®s = 1	
SECTION AND DESIGNATION AND DE	Width: 251 mm	
STATE OF	Completely made of brass Completely preassembled	
	Flow and return chamber 95 % thermally separated	
	For the extension of already existing modular distribution manifolds DN 32.	
	The installation may only be made by qualified experts!	
THE RESIDENCE AND	Extension module DN 40 (1½"), for the standard and MC series	4111
	Extension module DN 50 (2"), for the standard and MC series	5111
	Completely made of brass	
	Completely preassembled	
	Flow and return chamber 95 % thermally separated	





Extension set for low-loss header - DN 25 (1") for a subsequent conversion into a distribution manifold with integrated hydraulic separator (low-loss header, lange of application up to 1600 l/h, max. up to a 3-fold distribution manifold MV3. Consisting of two distance rings for a resistance-free connection of flow and return chamber, incl. screws and o-rings. Extension set for low-loss header - DN 32 (11/4") for a subsequent conversion into a distribution manifold with integrated hydraulic separator (low-loss header). Range of application up to 2600 l/h, max. up to a 3-fold distribution manifold MV3. Consisting of two distance rings for a resistance-free connection of flow and return chamber, incl. screws and o-rings. Extension set for low-loss header DN 50 (2") for conversion into a distribution manifold with integrated hydraulic separator (low-loss header). Consisting of: 1 distance ring for a resistance-free connection of flow and return chamber, incl. screws and o-rings. Blind flange DN 40 (11/4") / PN 6 Blind flange DN 40 (11/4") / PN 6 PN 6, as per DIN 2527, with 1 gasket, 4 screws and 4 nuts Screwed flange DN 40 (11/4") / PN 6 on 11/4" int. thread Screwed flange DN 50 (2") / PN 6 on 2" int. thread YN 6, acc. to DIN 2565, steel, black Weld neck flange DN 50 (2") / PN 6 on 2" int. thread Weld neck flange DN 50 (2") / PN 6 PN 6, acc. to DIN 2561, steel, black Weld neck flange DN 50 (2") / PN 6 PN 6, acc. to DIN 2561, steel, black Wall bracket set for modular distribution manifold - DN 40 (11/2") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm		
for a subsequent conversion into a distribution manifold with integrated hydraulic separator (low-loss header), Range of application up to 2600 l/h, max. up to a 3-fold distribution manifold MV3. Consisting of two distance rings for a resistance-free connection of flow and return chamber, incl. screws and o-rings. Extension set for low-loss header - DN 40 (1½") Extension set for low-loss header DN 50 (2") for conversion into a distribution manifold with integrated hydraulic separator (low-loss header). Consisting of: 1 distance ring for a resistance-free connection of flow and return chamber, incl. screws and o-rings. Blind flange DN 40 (1½") / PN 6 Blind flange DN 40 (1½") / PN 6 PN 6, as per DIN 2527, with 1 gasket, 4 screws and 4 nuts Screwed flange DN 50 (2") / PN 6 on 1½" int. thread Screwed flange DN 50 (2") / PN 6 on 2½" int. thread Screwed flange DN 65 (2½-") / PN 6 on 2½" int. thread PN 6, acc. to DIN 2565, steel, black Weld neck flange DN 40 (1½") / PN 6 Weld neck flange DN 50 (2") / PN 6 Weld neck f	9	V-
for a subsequent conversion into a distribution manifold with integrated hydraulic separator (low-loss header), Range of application up to 2600 l/h, max. up to a 3-fold distribution manifold MV3. Consisting of two distance rings for a resistance-free connection of flow and return chamber, incl. screws and o-rings. Extension set for low-loss header - DN 40 (1½") Extension set for low-loss header DN 50 (2") for conversion into a distribution manifold with integrated hydraulic separator (low-loss header). Consisting of: 1 distance ring for a resistance-free connection of flow and return chamber, incl. screws and o-rings. Blind flange DN 40 (1½") / PN 6 Blind flange DN 40 (1½") / PN 6 PN 6, as per DIN 2527, with 1 gasket, 4 screws and 4 nuts Screwed flange DN 50 (2") / PN 6 on 1½" int. thread Screwed flange DN 50 (2") / PN 6 on 2½" int. thread Screwed flange DN 65 (2½-") / PN 6 on 2½" int. thread PN 6, acc. to DIN 2565, steel, black Weld neck flange DN 40 (1½") / PN 6 Weld neck flange DN 50 (2") / PN 6 Weld neck f		37431
Extension set for low-loss header DN 50 (2") for conversion into a distribution manifold with integrated hydraulic separator (low-loss header). Consisting of: 1 distance ring for a resistance-free connection of flow and return chamber, incl. screws and o-rings. Blind flange DN 40 (1½") / PN 6 Blind flange SO (2") / PN 6 PN 6, as per DIN 2527, with 1 gasket, 4 screws and 4 nuts Screwed flange DN 40 (1½") / PN 6 on 1½" int. thread Screwed flange DN 50 (2") / PN 6 on 2½" int. thread Screwed flange DN 65 (2½") / PN 6 on 2½" int. thread Screwed flange DN 65 (2½") / PN 6 on 2½" int. thread PN 6, acc. to DIN 2565, steel, black Weld neck flange DN 40 (1½") / PN 6 Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 65 (2½") / PN 6 Weld		V-
for conversion into a distribution manifold with integrated hydraulic separator (low-loss header). Consisting of: 1 distance ring for a resistance-free connection of flow and return chamber, incl. screws and o-rings. Blind flange DN 40 (1½") / PN 6 Blind flange SO (2") / PN 6 PN 6, as per DIN 2527, with 1 gasket, 4 screws and 4 nuts Screwed flange DN 40 (1½") / PN 6 on 1½" int. thread Screwed flange DN 50 (2") / PN 6 on 2" int. thread Screwed flange DN 50 (2") / PN 6 on 2½" int. thread Screwed flange DN 65 (2½") / PN 6 on 2½" int. thread PN 6, acc. to DIN 2565, steel, black Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 50 (2") / PN 6 PN 6, acc. to DIN 2631, steel, black Wall bracket set for modular distribution manifold - DN 40 (1½") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm Wall bracket set for modular distribution manifold - DN 50 (2") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets		4143
Consisting of: 1 distance ring for a resistance-free connection of flow and return chamber, incl. screws and o-rings. Blind flange DN 40 (1½") / PN 6 Blind flange 50 (2") / PN 6 PN 6, as per DIN 2527, with 1 gasket, 4 screws and 4 nuts Screwed flange DN 40 (1½") / PN 6 on 1½" int. thread Screwed flange DN 50 (2") / PN 6 on 2" int. thread Screwed flange DN 65 (2½") / PN 6 on 2½" int. thread PN 6, acc. to DIN 2565, steel, black Weld neck flange DN 40 (1½") / PN 6 Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 65 (2½") / PN 6 Weld neck flange DN 65 (2½") / PN 6 Weld neck flange DN 65 (2½") / PN 6 Weld neck flange DN 65 (2½") / PN 6 Weld neck flange DN 65 (2½") / PN 6 Weld neck flange DN 65 (2½") / PN 6 Weld neck flange DN 65 (2½") / PN 6 Weld neck flange DN 65 (2½") / PN 6 Weld neck flange DN 65 (2½") / PN 6 Weld neck flange DN 65 (2½") / PN 6 Weld neck flange DN 65 (2½") / PN 6 Weld neck flange DN 65 (2½") / PN 6 Well bracket set for modular distribution manifold - DN 40 (1½") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm Well bracket set for modular distribution manifold - DN 50 (2") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets	8 8 D D D D	5143
Blind flange 50 (2") / PN 6 PN 6, as per DIN 2527, with 1 gasket, 4 screws and 4 nuts Screwed flange DN 40 (1½") / PN 6 on 1½" int. thread 41612 Screwed flange DN 50 (2") / PN 6 on 2" int. thread 51612 PN 6, acc. to DIN 2565, steel, black Weld neck flange DN 40 (1½") / PN 6 Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 65 (2½") / PN 6 Weld neck flange DN 65 (2½") / PN 6 This well neck flange DN 65 (
Screwed flange DN 40 (1½") / PN 6 on 1½" int. thread Screwed flange DN 50 (2") / PN 6 on 2" int. thread Screwed flange DN 65 (2½") / PN 6 on 2½" int. thread Screwed flange DN 65 (2½") / PN 6 on 2½" int. thread PN 6, acc. to DIN 2565, steel, black Weld neck flange DN 40 (1½") / PN 6 Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 65 (2½") / PN 6 Weld neck flange DN 65 (2½") / PN 6 FN 6, acc. to DIN 2631, steel, black Wall bracket set for modular distribution manifold - DN 40 (1½") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm Wall bracket set for modular distribution manifold - DN 50 (2") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets		41611
Screwed flange DN 40 (1½") / PN 6 on 1½" int. thread Screwed flange DN 50 (2") / PN 6 on 2" int. thread Screwed flange DN 65 (2½") / PN 6 on 2½" int. thread PN 6, acc. to DIN 2565, steel, black Weld neck flange DN 40 (1½") / PN 6 Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 65 (2½") / PN 6 Weld neck flange DN 65 (2½") / PN 6 FN 6, acc. to DIN 2631, steel, black Wall bracket set for modular distribution manifold - DN 40 (1½") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm Wall bracket set for modular distribution manifold - DN 50 (2") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets		51611
Screwed flange DN 50 (2") / PN 6 on 2" int. thread Screwed flange DN 65 (2½") / PN 6 on 2½" int. thread PN 6, acc. to DIN 2565, steel, black Weld neck flange DN 40 (1½") / PN 6 Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 65 (2½") / PN 6 PN 6, acc. to DIN 2631, steel, black Wall bracket set for modular distribution manifold - DN 40 (1½") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm Wall bracket set for modular distribution manifold - DN 50 (2") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets	•	
Screwed flange DN 65 (2½") / PN 6 on 2½" int. thread PN 6, acc. to DIN 2565, steel, black Weld neck flange DN 40 (1½") / PN 6 Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 65 (2½") / PN 6 Weld neck flange DN 65 (2½") / PN 6 PN 6, acc. to DIN 2631, steel, black Wall bracket set for modular distribution manifold - DN 40 (1½") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm Wall bracket set for modular distribution manifold - DN 50 (2") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets		41612
PN 6, acc. to DIN 2565, steel, black Weld neck flange DN 40 (1½") / PN 6 Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 65 (2½") / PN 6 PN 6, acc. to DIN 2631, steel, black Wall bracket set for modular distribution manifold - DN 40 (1½") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm Wall bracket set for modular distribution manifold - DN 50 (2") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets		41613
Weld neck flange DN 40 (1½") / PN 6 Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 65 (2½") / PN 6 PN 6, acc. to DIN 2631, steel, black Wall bracket set for modular distribution manifold - DN 40 (1½") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm Wall bracket set for modular distribution manifold - DN 50 (2") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets		51612
Weld neck flange DN 50 (2") / PN 6 Weld neck flange DN 65 (2½") / PN 6 PN 6, acc. to DIN 2631, steel, black Wall bracket set for modular distribution manifold - DN 40 (1½") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm Wall bracket set for modular distribution manifold - DN 50 (2") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets		
Weld neck flange DN 65 (2½") / PN 6 PN 6, acc. to DIN 2631, steel, black Wall bracket set for modular distribution manifold - DN 40 (1½") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm Wall bracket set for modular distribution manifold - DN 50 (2") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets		41614
PN 6, acc. to DIN 2631, steel, black Wall bracket set for modular distribution manifold - DN 40 (1½") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm Wall bracket set for modular distribution manifold - DN 50 (2") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets		41615
Wall bracket set for modular distribution manifold - DN 40 (1½") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm Wall bracket set for modular distribution manifold - DN 50 (2") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets		51613
Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm Wall bracket set for modular distribution manifold - DN 50 (2") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets		
Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets		41651
distribution manifold onto the floor brackets	-n -sic 19	41652
NO		
Floor bracket set for modular distribution manifold - DN 40 / 50 (1½"/ 2") 41671	P P	41671
Components: 2 floor brackets (galvanized steel), 4 wall plugs, 4 screws, 2 screws for fixing the distribution manifold onto the floor brackets Height = adjustable 1,050 - 1,080 mm, for shortening simply cut off		





JĮ	Reducer set DN 25 - DN 20 for installation of HeatBloC°s DN 20 on modular distribution manifolds DN 25, adapter set 1½" external thread, flat-sealing with nut on ¾" PAW flange, reduction of the centre distance from 125 mm to 90 mm, distance pipe 1" internal thread x 1" external thread, flat sealing, brass, with sealing. The required union nuts 1" internal thread are part of the scope of delivery of the HeatBloC°s.	34351
	Wall bracket for modular distribution manifold - DN 25 (1") - DN 32 (11/4") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm	34721
	Safety set DN 20 (¾"), up to 50 kW for distribution manifolds DN 20, with self-sealing counter T-piece ¾" x ½", outlet ¾" with cap for expansion tank, pressure relief valve ½" x ¾", 3 bar, up to 50 kW, pressure gauge 0-4 bar	5257
	Safety set for distribution manifold - DN 25 (1") up to 50 kW For the installation on modular distribution manifolds DN 25 (as of 2017), with a connection of ¾" int. thread (sealed with plug) for the installation of the connection set for the expansion tank (item no. 7507), pressure relief valve ½" x ¾", 3 bar, up to 50 kW, pressure gauge 0-4 bar	52543
	Safety set for distribution manifold - DN 32 (11/4") up to 100 kW For the installation on modular distribution manifolds DN 32 (as of 2017), with a connection of 1" int. thread (sealed with plug) for the installation of the connection set for the expansion tank (item no. 7508), pressure relief valve 3/4" x 1", 3 bar, up to 100 kW, pressure gauge 0-4 bar	52553
	Coupling piece for overhead installation - DN 32 (11/4") Coupling piece for installation of a HeatBloC® below a distribution manifold with flat sealing. Please note: When you use wall brackets, an additional mounting plate is necessary for installing a 2-fold distribution manifold MV2.	3724
	Adapter pipe DN 40 (1½") for flange pumps DN 40 DN 40 x 30 mm Installation length from 220 to 250 mm	12397
	Adapter pipe DN 50 (2") for flange pumps DN 50 DN 50 x 30 mm Installation length from 250 to 280 mm	12395

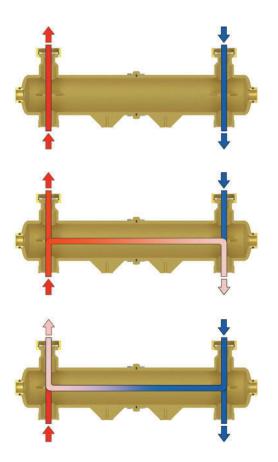




Adaptor pieces DN 50 (2") for flange pumps DN 50 DN 50 x 20 mm Installation length from 240 to 280 mm	12396
for installation of modular heating circuits DN 20 on modular distribution manifolds DN 25, adapter set 1½" external thread, flat-sealing with nut on ¾" PAW flange, reduction of the centre distance from 125 mm to 90 mm, distance pipe 1" internal thread x 1" external thread, flat sealing, brass, with sealing. The required union nuts 1" internal thread are dismounted from the heating circuit.	3735
Reducer set DN 32 - DN 25 for the installalation of DN 25 HeatBloC*s on DN 32 distribution manifolds, adapter set 2" external thread, flat-sealing with nut on 1½" internal thread, flat-sealing, made of brass, with gaskets, 2 types	37351
Set reducer flanges DN 40 - DN 32 (1½" - 1¼") Reducer flanges made of brass for the assembly of a pump DN 32* in HeatBloC*s DN 40 or for connection of a single HeatBloC* DN 32 on a distribution manifold DN 40. One side flange DN 40 - PN 6, other side flange for 2" union nut, flat sealing. Reduction of the centre distance from 160 mm to 125 mm, installation height = 35 mm. *For the installation of a DN 32 pump 2x nut and seals are required additionally (2x N00121).	41610
Set reducer flanges DN 50 - 32 (2" - 11/4") 2 reducing flanges made of steel, zinced/brass for connecting a DN 32 HeatBloC® on a DN 50 modular distribution manifold. One side DN 50 flange with PN 6, other side flange DN 32 - 11/4". Reduction of the centre distance from 180 mm to 125 mm, with seals and screws for connection to DN 50. Installation height = 48 mm	5162
Set reducer flanges DN 50 - 40 (2" - 1½") 2 reducing flanges made of zinced steel for connecting a DN 40 HeatBloC® on a DN 50 modular distribution manifold. For the assembly of a DN 40 pump, installation length 250 mm, in a DN 50 HeatBloC®. One side DN 50 flange (PN 6), other side DN 40 flange (PN 6). Reduction of the centre distance from 180 mm to 160 mm, with seals and screws, installation height = 13 mm Use only with slip-on flanges!	51610



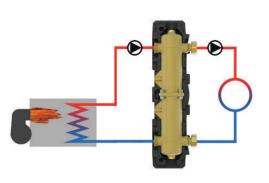




Description

Hydraulic separators are used when there are simultaneously one or more heat generator circuits/primary circuits with an own pump and one or more consumer/secondary circuits with a distribution pump in an installation. The hydraulic separator causes a hydraulic separation of the connected circuits. It is thus possible to make the connected primary and secondary circuits work independently in terms of the hydraulics. The flow in one circuit does not cause a flow in the other circuit when the pressure drop in the hydraulic separator is insignificant.

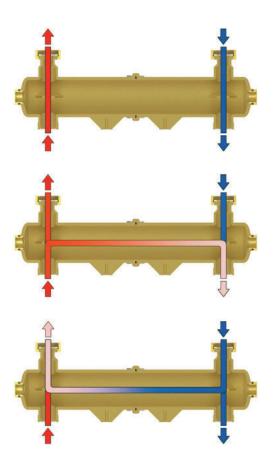
When a hydraulic separator is used, each circuit (the primary and the secondary one) must be equipped with a pump. Thus, a heat generation circuit/primary circuit can be provided with constant throughput and a consumer circuit/ secondary circuit can be provided with variable flow. These are the typical functioning conditions for modern heating and air conditioning systems. The figures on the adjoining side show three possible conditions of hydraulic stability.



Hydraulic separator DN 20 (¾")		Item no.
	Flow rate: 2200 l/h	31421
	Completely made of brass, completely insulated with EPP insulation, for the installation under a modular distribution manifold DN 20 or separately (vertically or horizontally) to the wall.	
	Connections: 34 " PAW flange for nut 1" nut (top), 34 " internal thread x 1" external thread flat-sealing (bottom), 2 x for boiler connection, others closed with plug, $2 \times \frac{1}{2}$ " internal thread for immersion sleeve and fill and drain valve width = 435 mm, installation height = 120 mm, centre distance = 270 mm	
	Flow rate: 950 I/h Completely made of brass, with separate flow and return line, for the installation under an individual HeatBloC® DN 20. The EPP insulation is integrated into the HeatBloC®. Can also be installed under a modular distribution manifold DN 20 (with mounting plate item no. 3125) or separately (in the pipe). When installing separately two additional union nuts item no. 2055 are necessary and the insulation must be produced on site.	3142
	Connections: 3/4" PAW flange for nut 1" nut (top), 3/4" internal thread x 1" external thread flat-sealing (bottom), 2 x 3/4" internal thread, closed with plug (on the side), width = 260 mm, installation height = 80 mm, centre distance = 90 mm	



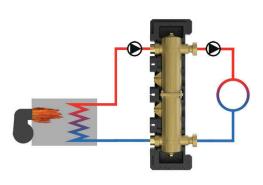




Description

Hydraulic separators are used when there are simultaneously one or more heat generator circuits/primary circuits with an own pump and one or more consumer/secondary circuits with a distribution pump in an installation. The hydraulic separator causes a hydraulic separation of the connected circuits. It is thus possible to make the connected primary and secondary circuits work independently in terms of the hydraulics. The flow in one circuit does not cause a flow in the other circuit when the pressure drop in the hydraulic separator is insignificant.

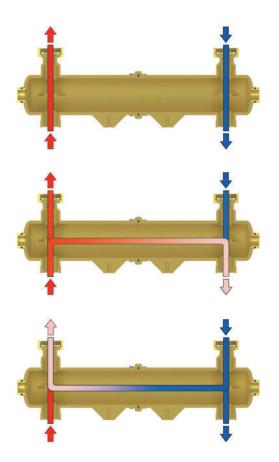
When a hydraulic separator is used, each circuit (the primary and the secondary one) must be equipped with a pump. Thus, a heat generation circuit/primary circuit can be provided with constant throughput and a consumer circuit/ secondary circuit can be provided with variable flow. These are the typical functioning conditions for modern heating and air conditioning systems. The figures on the adjoining side show three possible conditions of hydraulic stability.



Hydraulic separator DN 25 (1")		ltem no.
	Flow rate: 3500 l/h Completely made of brass, completely insulated with EPP insulation, for the installation under a modular distribution manifold DN 25 or separately (vertically or horizontally) to the wall. Connections: 1" PAW flange for 1½" nut (top), 1½" external thread / 1" internal thread, flat-sealing with fitting, 2 x ½" internal thread for immersion sleeve and fill and drain valve, width = 625 mm, installation height = 180 mm centre distance = 375 mm	344213
	Flow rate: 1600 /h Completely made of brass, with separate flow and return line, for the installation under an individual HeatBloC® DN 25. With EPP insulation. Can also be installed under a modular distribution manifold DN 25 (with mounting plate item no. 3425) or separately (in the pipe). In case of separate installation you need two connection sets item no. 2151. Connections: 1" PAW flange for 1½" nut (top), 1½" external thread, flat-sealing with fitting, width = 375 mm installation height = 128 mm centre distance = 125 mm	344203



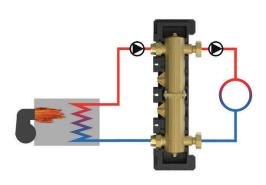




Description

Hydraulic separators are used when there are simultaneously one or more heat generator circuits/primary circuits with an own pump and one or more consumer/secondary circuits with a distribution pump in an installation. The hydraulic separator causes a hydraulic separation of the connected circuits. It is thus possible to make the connected primary and secondary circuits work independently in terms of the hydraulics. The flow in one circuit does not cause a flow in the other circuit when the pressure drop in the hydraulic separator is insignificant.

When a hydraulic separator is used, each circuit (the primary and the secondary one) must be equipped with a pump. Thus, a heat generation circuit/primary circuit can be provided with constant throughput and a consumer circuit/ secondary circuit can be provided with variable flow. These are the typical functioning conditions for modern heating and air conditioning systems. The figures on the adjoining side show three possible conditions of hydraulic stability.



Hydraulic separator DN 32 (11/4")		Item no.
	Flow rate: 4800 l/h	374213
	Completely made of brass, completely insulated with EPP insulation, for the installation under a modular distribution manifold DN 32 or separately (vertically or horizontally) to the wall.	
	Connections: 1¼" PAW flange for 2" nut (top), 1¼" internal thread / 2" external thread, flat-sealing (bottom) with fitting, 2 x ½" internal thread for immersion sleeve and fill and drain valve, width = 600 mm installation height = 200 mm centre distance = 375 mm	
	Flow rate: 2600 I/h Completely made of brass, with separate flow and return line, for the installation under an individual HeatBloC® DN 32. With EPP insulation. Can also be installed under a modular distribution manifold DN 32 (with mounting plate item no. 3725) or separately (in the pipe). In case of separate installation you need two connection sets item no. 2152.	374203
	Connections: 11/4" PAW flange for 2" nut (top), 2" external thread, flat-sealing with fitting, width = 330 mm installation height = 125 mm centre distance = 125 mm	



Mounting equipment hydraulic separators DN 20-32



T	Immersion sleeve ¼" ext. thread x T = 60 mm	566002
-61-61-	Wall bracket for HeatBloC® DN 20 (¾")	3121
4 9	Components: 2 wall bracket sets, mounting equipment Possible wall distance: 70-100 mm, distance: 15 mm For 5-fold modular distribution manifolds, we recommend to use two wall bracket sets.	
	Wall bracket for modular distribution manifold - DN 25 (1") - DN 32 (11/4") Components: 2 floor brackets (galvanized steel), 8 wall plugs, 8 screws, 2 screws for fixing the distribution manifold onto the floor brackets Distance of the pipe axis to the wall: A = 400 mm	34721
	Mounting plate DN 20 (¾") Components: mounting plate, 2 gaskets, 2 x 1" nut, 2 x reducing nipple 1" ext. thread x	3125
	¾" ext.thread for installation with flat sealings under a modular distribution manifold and for attaching wall brackets	
	Mounting plate DN 25 (1") Components: mounting plate, 2 gaskets, 2 x 1½" nut, 2 x housing of coupling F 1" x 1½" ext. thread for installation with flat sealings under a modular distribution manifold and for attaching wall brackets	3425
	Mounting plate DN 32 (11/4") Components: mounting plate, 2 gaskets, 2 x 2" nut for installation with flat sealings under a modular distribution manifold and for attaching wall brackets	3725
	Fill and drain valve - DN 15 (½") solid design, with hose connector and cap, completely made of brass, ½" with self-sealing counter nut	2260
	Union nut DN 20 (¾") Brass, to screw insertion pieces for soldering below distribution manifolds DN 20 (¾")	2055
	Union nut DN 25 (1") Brass, to screw insertion pieces for soldering below distribution manifolds DN 25 (1")	2155
	Union nut DN 32 (1¼")	2156
	Brass, to screw insertion pieces for soldering below distribution manifolds DN 32 (11/4")	2057
	Sealing for nut - DN 20 (¾")	2057
	asbestos-free, outside diameter: 30 mm, inside diameter: 21 mm, height: 2 mm Sealing for nut - DN 25 (1")	2157
	asbestos-free, outside diameter: 44 mm, inside diameter: 32 mm, height: 2 mm	
	Sealing for nut - DN 32 (11/4")	2158
	asbestos-free, outside diameter: 50 mm, inside diameter: 38 mm, height: 2 mm	
	Low-loss header DN 20, 2-fold Number of connections for HeatBloC*s = 3 Width = 440 mm	31422



Mounting equipment hydraulic separators DN 20-32

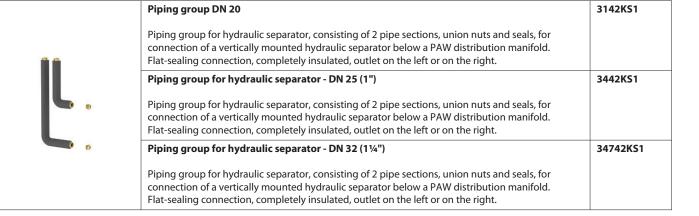


	Low-loss header DN 20, 3-fold	31423
	Number of connections for HeatBloC®s = 5 Width = 620 mm	
	Low-loss header DN 25, 2-fold	344223
	Number of connections for HeatBloC®s = 3 Width = 580 mm	
	Low-loss header DN 25, 3-fold	344233
4444	Number of connections for HeatBloC®s = 5 Width = 830 mm	
Control to a local beautiful	Low-loss header DN 32, 2-fold	374223
	Number of connections for HeatBloC®s = 3 Width = 600 mm	
	Low-loss header DN 32, 3-fold	374233
	Number of connections for HeatBloC®s = 5 Width = 850 mm	
	for boilers with integrated pump	
	By means of the conversion kit (item no. 3143 / 34431 / 37431), the modular distribution manifolds get a bypass which connects the flow and return line without causing any resistance (low-loss header). It must be considered that the pump of the boiler circuit must deliver a higher flow rate than the consumer pumps need in total. Otherwise, unwanted circulations occur on the right or left end of the low-loss header. In that case a hydraulic separator must be installed below a distribution manifold.	
	For all low-loss headers, please note: When you plan the system you must already check whether a low-loss header can be used. In combination with central heating boilers, hydraulic separators must be installed below / upstream of a distribution manifold as the boiler delivers a flow rate with a high temperature difference (leads to unwanted circulation in low-loss headers).	
	Extension set for low-loss header - DN 20 (¾")	3143
	for a subsequent conversion into a distribution manifold with integrated hydraulic separator (low-loss header). Range of application up to 950 l/h, max. up to a 3-fold distribution manifold MV3. Consisting of two distance rings for a resistance-free connection of flow and return chamber, incl. screws and o-rings.	
	Extension set for low-loss header - DN 25 (1")	34431
	for a subsequent conversion into a distribution manifold with integrated hydraulic separator (low-loss header). Range of application up to 1600 l/h, max. up to a 3-fold distribution manifold MV3. Consisting of two distance rings for a resistance-free connection of flow and return chamber, incl. screws and o-rings.	
	Extension set for low-loss header - DN 32 (11/4")	37431
	for a subsequent conversion into a distribution manifold with integrated hydraulic separator (low-loss header). Range of application up to 2600 l/h, max. up to a 3-fold distribution manifold MV3. Consisting of two distance rings for a resistance-free connection of flow and return chamber, incl. screws and o-rings.	



Mounting equipment hydraulic separators DN 20-32





Your notes		









CoolBloC DN 25 / DN 32







Catalogue 04/2025

Systems, valves and fittings for modern heating and cooling

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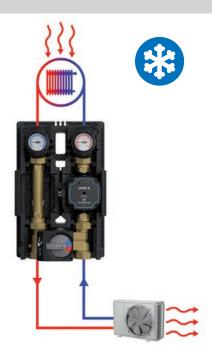




Product range CoolBloC Combined heating and cooling circuits



All CoolBloCs offer the following advantages:



Pump group for heating and cooling

Condensation-resistant valves and fittings:

high-quality components to avoid oxidation

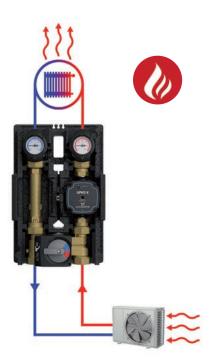
Special pumps with additional insulating element

for the use in special ambient conditions, such as dewing or condensate formation

Thermal separation of the actuator and the mixing valve to avoid condensate formation

Sealing lips protected by the utility model in the insulation to reduce condensate formation

CoolBloCs are ideally suitable for the use in combination with heat pumps.



Cooling - application during the summer:



- A heat sink (e.g. a heat pump) provides cooled fluid.
- The cooling circuit transports the cooled fluid to the interior spaces.
- There, a heat transfer takes place and the fluid is heated.
- The heated fluid is cooled down again in the heat sink.





- A heat source (e.g. a heat pump) provides heated fluid.
- The cooling circuit transports the heated fluid to the interior spaces.
- There, a heat transfer takes place and the fluid is cooled down.
- The cooled fluid is heated again in the heat source.







Product range CoolBloC Combined heating and cooling circuits - types



C31 - DN 25 (1") direct / unmixed

C34 - DN 25 (1") 3-way mixing valve with bypass 0-50%



up to 46.5 kW*



up to 43 kW*

C31 - DN 32 (11/4") direct / unmixed C34 - DN 32 (1¼") 3-way mixing valve with bypass 0-50%



up to 50 kW*



up to 48 kW*

*Temperature difference = 20 K

CoolBloC C31 DN 25 (1") direct / unmixed







Application range

• For boiler charging / for modulating temperature heating system

Recommended application range

- up to 46 kW
- 20 K up to 2000 l/h

Operating data

Max. operating pressure6 barMax. operating temperature95 °CKvs value7.2

Technical data	Differential pressure diagram		
Dimensions		9,0	78,5
Nominal diameter	DN 25 (1")		
Connection generator	11/2" ext. thread, flat sealing		68,6
Connection consumer	1" int. thread		58,8
Height	383 mm		49,0
Installation length	342 mm		39,2
Centre distance	125 mm	4,0 Grundios UPMSK Hybrid 15-70 Cit.	29,4
Width	250 mm		19,6
Materials		2,0	
Valves and fittings	Brass	1,0 C31 - DN 25	9,8
Gaskets	EPDM		0,0
Insulation	EPP	0 250 500 750 1000 1250 1500 1750 2000 2250 2500 2750 3000 [[//h]]	Ĭ.

CoolBloC C31 DN 25 (1")		EEI*	with	Item no.
	Grundfos UPM3K Hybrid 15-70 CIL	< 0.20	(A)	4236013GK7
	Wilo Para SC 25/8-60/O	< 0.20	٨	4236013WP8



= with pump

= without pump

CoolBloC C34 DN 25 (1") 3-way bypass mixing valve







Application range

• for heating and cooling systems controlled by a mixing valve

Recommended application range

- up to 43 kW
- 20 K up to 1850 l/h

Operating data

Max. operating pressure6 barMax. operating temperature95 °CKvs value6Adjustment range bypass0 - 50 %

Technical data Differential pressure diagram **Dimensions** Nominal diameter DN 25 (1") 9,0 78,5 Connection generator 11/2" ext. thread, flat sealing 8,0 68,6 Connection consumer 1" int. thread Wilo Para SC 25/8-60/O 7,0 58,8 Height 383 mm 6,0 49,0 Installation length 342 mm [mWS/mwc] 5,0 Grundfos UPM3K Hybrid 15-70 CIL Centre distance 125 mm 39,2 (8) 4,0 Width 250 mm 29,4 3,0 **Materials** 19,6 2,0 Valves and fittings Brass C34 - DN 25 9,8 1,0 Gaskets **EPDM** 0,0 0,0 Insulation EPP 0 500 750 1750 2000 2250 2500 2750 3000 250 **Equipment** Actuator SR5 230 V - 50 Hz

CoolBloC C34 DN 25 (1")		EEI*	with	Item no.
	Grundfos UPM3K Hybrid 15-70 CIL	< 0.20		4236063MGK7
	Wilo Para SC 25/8-60/O	< 0.20		4236063MWP8

=

= with pump

= without pump

CoolBloC C31 DN 32 (11/4") direct / unmixed







Application range

• For boiler charging / for modulating temperature heating system

Recommended application range

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

Operating data

Max. operating pressure6 barMax. operating temperature95 °CKvs value15.1

Technical data	Differential pressure diagram		
Dimensions		11,0	
Nominal diameter	DN 32 (11/4")	10,0	
Connection generator	11/4" int. thread	9,0 Grundfos UPML 32-105 Auto 8	
Connection consumer	2" ext. thread, flat sealing		
leight	441 mm	₹ 7,0 6 F	
nstallation length	400 mm	£ 6,0 Wilo Para MAXO 30-180-08-F02 5,0	
Centre distance	125 mm	E 6,0 Wilo Para MAXO 30-180-08-F02 5,0 Grundfos UPM3K Hybrid 15-70 CIL 3	
Vidth	250 mm	3,0	
Naterials		2,0 C31 - DN 32	
alves and fittings	Brass	1,0	
iaskets	EPDM	0,0 0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000	
nsulation	EPP	[l/h]	

CoolBloC C31 DN 32 (11/4")		EEI*	with	Item no.
	Grundfos UPM3K Hybrid 15-70 CIL	< 0.20		4239013GK7
	Grundfos UPML 32-105 AUTO	< 0.23		4239013GL9
	Wilo Para MAXO 30/1-8	< 0.20	٨	4239013WM08



= with pump

= without pump







Application range

• for heating and cooling systems controlled by a mixing valve

Recommended application range

- up to 48 kW
- 20 K up to 2070 l/h

Operating data

Max. operating pressure6 barMax. operating temperature95 °CKvs value10.1Adjustment range bypass0 - 50 %

Technical data Differential pressure diagram **Dimensions** 11,0 Nominal diameter DN 32 (11/4") 10,0 98,1 Connection generator 11/4" int. thread Grundfos UPML 32-105 Auto 9,0 88,3 Connection consumer 2" ext. thread, flat sealing 78,5 8,0 Height 441 mm 7,0 6,0 5,0 4,0 68,6 Installation length 400 mm 58,8 Ed 49,0 ¥ Wilo Para MAXO 30-180-08-F02 Centre distance 125 mm Width 250 mm Grundfos UPM3K Hybrid 15-70 CIL 4,0 39,2 **Materials** 3,0 29,4 Valves and fittings Brass 2,0 19,6 C34 - DN 32 Gaskets **EPDM** 1,0 9,8 Insulation EPP 0,0 -0.0 500 4500 5000 1000 1500 2000 2500 3000 3500 4000 **Equipment** Actuator SR5 230 V - 50 Hz

CoolBloC C34 DN 32 (11/4")		EEI*	with	Item no.
	Grundfos UPM3K Hybrid 15-70 CIL	< 0.20		4239063MGK7
	Grundfos UPML 32-105 AUTO	< 0.23		4239063MGL9
	Wilo Para MAXO 30/1-8	< 0.20		4239063MWM08





Equipment for CoolBloC



	Wall-mounting set for stair bolts Components: 2 x clip spring, 2 x acoustic decoupling	Z3445
	Connection set - DN 25 (1") Consisting of 2 insertion pieces for connection of pipes with 1" external thread below HeatBloC*s or for the use of cutting-ring compression fittings.	3431
T	Connection set DN 32 (11/4") Consisting of 2 insertion pieces for connection of pipes w/ 11/4" external thread below HeatBloC*s	3731
	Connection set DN 32 (1¼") Connection set for DN 32 (1¼"), consists of 2 screw-in fittings with 2" external thread and 1¼" internal thread for the connection of pipes 1¼" external thread.	3732

Your notes		





Distribution system Thermax









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

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Distribution system Thermax DN 20 K31 direct / K32 mixed







Application range

• for wall-mounted boilers

Recommended application range

- K31: up to 23 kW, 20 K up to 1000 l/h
- K32: up to 19 kW, 20 K up to 820 l/h

Operating data

Max. operating pressure	6 bar
Max. operating temperature	110°C
Kvs value unmixed	4,7
Kvs value mixed	3,7
Kvs value Thermax distribution manifold	7,8

Technical data Differential pressure diagram Dimensions 8,0 78,4 DN 20 (¾") Nominal diameter Wilo Para 15/6 SC Grundfos UPM3 Auto L 15-70 PP3 7,0 68,6 Connection generator 1" ext.thread / 3/4" int.thread Connection consumer 34" int. thread 6,0 58,8 Height 400 mm Wilo Yonos PICO 15/1-6 5,0 4,0 3,0 49,0 Installation length 335 mm 39,2 (8 Grundfos Alpha2.1 15-60 Centre distance 90 mm 29,4 Width 408 mm Materials 2,0 19,6 K32 - DN 20 Valves and fittings Brass 1,0 K31 - DN 20 9,8 EPDM / AFM34 Gaskets 0,0 0,0 Insulation EPP / ABS 200 400 800 1800 2000 0 600 1000 1400 1600 **Equipment** [l/h] Actuator SR2 230 V AC

Distribution system Thermax DN 20		EEI*	with	Item no.
	K31-K32, 2x Wilo Yonos PICO 15/1-6	< 0.20		323621WN06
	K31-K32, 2x Wilo Para SC 15/6-43	< 0.20		323621WP6
	K31-K32, 2x Grundfos ALPHA2.1 15-60	< 0.17		323621GH6
	K31-K32, 2x Grundfos UPM3 Auto 15-70	< 0.20		323621GM6
K31-K32, 2x Wilo Yonos PICO 15/1-6 < 0.20	323622WP6			
	K32-K32, 2x Wilo Yonos PICO 15/1-6	< 0.20		323622WN06
K31-K32, 2x Wilo Yonos PICO 15/1-6 < 0.20	323622GH6			
	K31-K32, 2x Wilo Yonos PICO 15/1-6 < 0.20 K31-K32, 2x Wilo Para SC 15/6-43 < 0.20 K31-K32, 2x Grundfos ALPHA2.1 15-60 < 0.17 K31-K32, 2x Grundfos UPM3 Auto 15-70 < 0.20 K32-K32, 2x Wilo Para SC 15/6-43 < 0.20 K32-K32, 2x Wilo Yonos PICO 15/1-6 < 0.20 K32-K32, 2x Grundfos ALPHA2.1 15-60 < 0.17		323622GM6	



= with pump

= without pump



=with actuator

Description of function Thermax DN 20 (3/4")







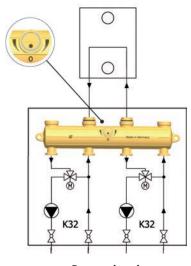
Installation beside the boiler:

Thermax is directly mounted to the wall without distance pieces

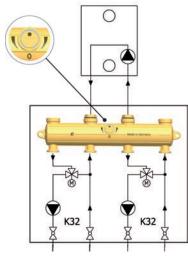
Installation below the boiler:

The pipes are installed between the Thermax (with distance pieces) and the wall

The Thermax system has been designed for applications with two different temperature levels. An application example: It can be connected to a consumer with a high flow temperature (such as a radiator) and a consumer with a low flow temperature (such as a radiant floor heating). The Thermax distribution manifold is equipped with an integrated, adjustable bypass. This bypass can be closed (distribution manifold is pressure tight - for applications with boilers without internal pump) or it can be opened (in this case a low-loss bypass is activated in the Thermax distribution manifold - for applications with an internal pump).

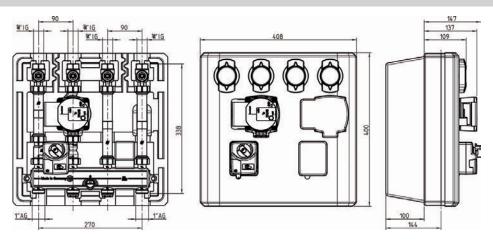


Bypass closed

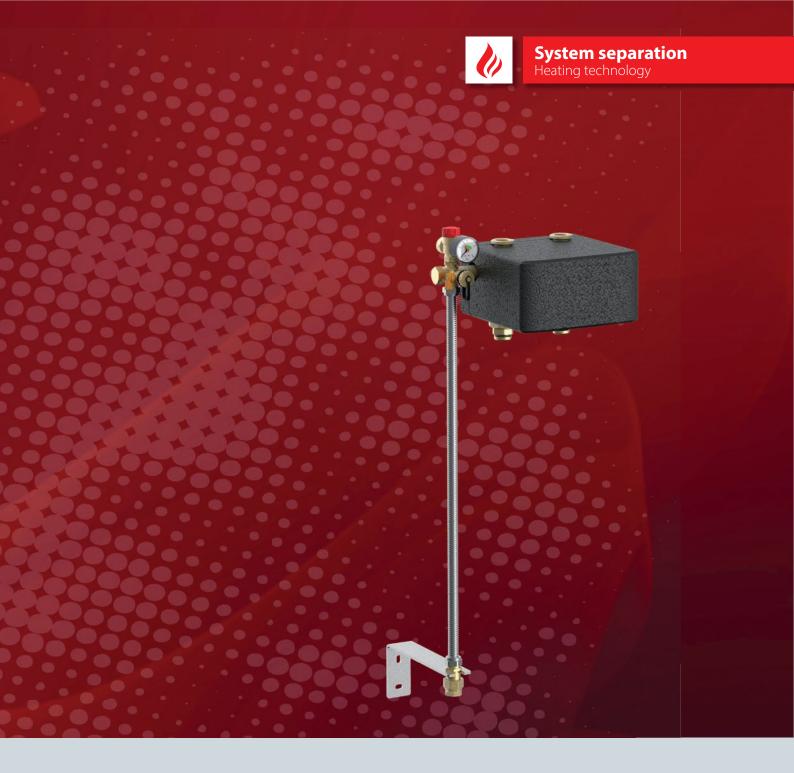


Bypass open

Dimensions







System separation DN 25









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

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Rw

System separation DN 25 (1") for HeatBloC®s





Application range

Separation of the boiler circuit and the consumer circuit

- for the protection of new boilers in older heating installations
- for radiant panel heating systems with plastic pipes

Recommended application range

- depending on the heat exchanger and the pump used
- in the case of a pressure loss of 1.5 m wc up to 25 kW 10 K
- up to 2150 l/h

Operating data

Max. operating pressure 6 bar
Max. operating 110 °C
temperature

Equipment

Safety valve 3 bar, 50 kW Pressure gauge 0-4 bar

Tank connection coupling Stainless-steel corrugated hose: I = 700 mm; Wall

bracket: for tanks with a max. diameter of 430 mm

Fill and drain valve 34" ext. thread x 8" ext. thread, self-sealing, with

counter nut and hose connector

Immersion sleeve for sensor d = 6 mmVent plug 34° ext. thread, self-sealing

Technical data Differential pressure diagram		
Dimensions		5,0 49,0
Nominal diameter	DN 25 (1")	4,5
Connection generator	1" ext. thread / 1½" int. thread (nut)	39,2
Connection consumer	1" PAW flange	3,5 36533 34,3
Height	176 mm	(S) 29,4 (S) 29,5 (S) 29,6 (S)
Installation length	176 mm	§ 2,5
Centre distance	125 mm	2,0
Width	380 mm	1,5
Materials		1,0
Valves and fittings	Brass	0,5
Gaskets	EPDM	0,0
Insulation	EPP	0 500 1000 1500 2000 2500 [l/h]

System separation HeatBloC®s DN 25	Heat exchanger	Kvs value	Range of performance (in the case of a pressure loss of 1.5 m wc up to 25 kW 10 K)	Item no.
	16 plates	3.3	20 kW at 60-50 °C to 35-45 °C	36533
(in the case of a pressure loss of	23 kW at 60-50 °C to 35-45 °C	36553		
	40 plates	4.9	25 kW at 60-50 °C to 35-45 °C	36573



System separation DN 25 (1") for HeatBloC®s Application examples



The heating circuits recommended for combination with the system separations (36533, 36553, 36573) are listed on this page. Equipment and prices of the heating circuits can be found on pages K31, K32 and K34.

Note: the heating circuits have to be ordered seperately. The assembly must be carried out on-site!

Application 1:

Extension of already existing heating circuits / installations with a temperature control on the primary side (mixed heating circuit with controlled flow temperature or modulating boiler with boiler circuit pump).

Mounting example	Heating circuit	Pump	EEI*	System separation	Range of performance**
②				36533	1580 l/h = 18.3 kW
**	36013WP6	Wilo Para 25/6-43	≤ 0.2	36553	1830 l/h = 21.2 kW
				36573	1930 l/h = 22.4 kW
+		C		36533	1480 l/h = 17.2 kW
@w ()	36013GH6	Grundfos ALPHA2.1 25-60	≤ 0.17	36553	1710 l/h = 19.9 kW
The second secon				36573	1790 l/h = 20.8 kW
				36533	1720 l/h = 20.0 kW
K31				36553	2020 l/h = 23.5 kW
K31	36013GM6	Grundfps UPM3 Auto L 25-70 PP3	≤ 0.2	36573	2120 l/h = 24.6 kW

Application 2:

Extension of already existing heating circuits / installations with a pump on the primary side and high flow temperatures (bypass operation in addition to the radiator circuits or operation with solid fuel boiler and boiler circuit pump).

Mounting example	Heating circuit	Pump	EEI*	System separation	Range of performance**
<u> </u>				36533	1540 l/h = 17.9 kW
*	36063WP6	Wilo Para 25/6-43	≤ 0.2	36553	1780 l/h = 20.7 kW
				36573	1860 l/h = 21.6 kW
+		6 16 11 11 11 11 11		36533	1450 l/h = 16.8 kW
Raw ()	36063GH6	Grundfos ALPHA2.1 25-60	≤ 0.17	36553	1650 l/h = 19.2 kW
The same of the sa				36573	1730 l/h = 20.1 kW
162.4				36533	1690 l/h = 19.6 kW
K34		C 15 110443 4 1 1		36553	1950 l/h = 22.6 kW
	36063GM6	Grundfos UPM3 Auto L 25-70 PP3	≤ 0.2	36573	2030 l/h = 23.6 kW

Application 3:

Complete system separation with mixing valve control on the primary side. Ensures low return temperatures of the boiler and allows the operation of several parallel heating circuits, f. ex. on a distribution manifold.

Mounting example	Heating circuit	Pump	EEI*	System separation	Range of performance**
9				36533	1540 l/h = 17.9 kW
	prim. 36053MWP6	W/II B 05/5/10		36553	1750 l/h = 20.3 kW
	sec. 36013WP6	Wilo Para 25/6-43	≤ 0.2	36573	1830 l/h = 21.2 kW
				36533	1440 l/h = 16.7 kW
	prim. 36053MGH6	Grundfos ALPHA2.1		36553	1630 l/h = 18.9 kW
кз1 +	sec. 36013GH6	25-60	≤ 0.17	36573	1710 l/h = 19.9 kW
				36533	1670 l/h = 19.4 kW
				36553	1930 l/h = 22.4 kW
K32	prim. 36053MGM6 sec. 36013GM6	Grundfps UPM3 Auto L 25-70 PP3	≤ 0.2	36573	2000 l/h = 23.2 kW
	prim. 36053MGM6	Grundfps UPM3 Auto L		36533 36553	1670 l/h = 19.4 1930 l/h = 22.4

^{**} At a primary temperature of 60 - 50 °C, a secondary temperature of 35 - 45 °C and a secondary residual head of 1.5 m wc





Return flow temperature maintenance







Catalogue 04/2025

Valves and fittings for the use in hot water heating systems

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Return flow temperature maintenance with thermal control valve DN 20 (3/4") / DN 25 (1")



Application range



- Heating systems with return flow temperature maintenance
- Solid fuel boilers, wood firing / stove heating systems

The pump sets for the return flow temperature maintenance are groups of fittings for pumps that can be isolated. They consist of:

Mounting version 1:

- · high-efficiency pump
- control valve with opening temperature 45 °C or 60 °C
- 1 thermometer ball valve with red thermometer integrated in the handle, can be pulled off
- 2 thermometer ball valves with blue thermometer integrated in the handle, can be pulled off
- connections DN 20: 34" int. thread
- connections DN 25: 1" int. thread

Mounting version 2 - Additionally required:

- 1 x sealing: DN 20 item no. 2057, DN 25 item no. 2157
- 1 x screw-in fitting: DN 20 item no. 2053, DN 25 item no. 2153
- 1 x pump fitting DN 20 item no. 2049, DN 25 item no. 2149

Thermal control valve with automatic bypass

- 1. The thermal valve shuts off the connection to the buffer tank, as long as the water in the boiler circuit is colder than the opening temperature of the thermal control valve. The pump circulates the water in the boiler circuit through the bypass. The small quantity of water in the boiler circuit can now heat up quickly.
- 2. When the boiler circuit reaches the opening temperature of the control valve, the valve reduces the bypass flow rate and opens the buffer tank circuit. The cold water from the buffer tank return is mixed with the hot boiler circuit water in the control valve. This leads to an increase of the return temperature in the boiler circuit to the desired level and avoids condensation in the boiler.
- 3. When the buffer tank return temperature is higher than the opening temperature, the control valve completely shuts off the bypass.

 Thus, the water from the buffer tank flows directly into the boiler circuit.

11103, ti

< t_{FIX}



Temperatures

 $t_{KR} = Boiler return$

 $t_{PR} = return buffer tank$

 $t_{\text{Ely}}^{\text{TI}}$ = opening temperature

 $t_{BY} = Bypass$

Please note:

If the boiler output is controlled by the boiler temperature the boiler must heat up 20 °C above the opening temperature of the return flow temperature maintenance. Otherwise, the boiler might reduce the output even before the thermal control valve is completely open.

Mounting versions 1 and 2:

Separate assembly of the group of fittings in the flow and return. This version permits an easy isolation of the heat generator without further shut-off valves. Consider the position of the safety group before mounting.





Return flow temperature maintenance with thermal control valve DN 20 ($^{3}\!4$ ") / DN 25 (1") - types



Thermometer ball valve

- high Kvs value
- 3 ball valves per return flow temperature maintenance allow to shut off the group
- no draining necessary for service work at the pump or at the control valve

fitted with 2 m cable one-piece housing made of brass spindle can be replaced under pressure temperature measuring by means of the spindle in the fluid Immersion thermometer

High-efficiency pump

• with handle, 0 - 120 °C

Serial numbers Return flow temperature maintenance and pump

• reliable identification, fast service

Mounting version 1



Mounting version 2





Return flow temperature maintenance RHT with thermal control valve DN 20 (3/4")





Application range

- for heating installations with return flow temperature maintenance
- for solid fuel boilers, wood-fired and stove heating systems

Recommended application range

- up to 11 kW
- 10 K up to 950 l/h

Operating data

Max. operating pressure 6 bar 110°C Operating temperature Kvs value 4.7

Technical data		Differential pressure diagram
Equipment		8,0
ed and blue dial thermon plastic handles (0-120°C)	neter, integrated into black	7,0 Grundfos UPM3 Auto L 15-70 - CC4
Dimensions		6,0
Nominal diameter	DN 20 (¾")	₹ 5,0 Wilo Para SC 15/6
onnection generator	¾" int. thread	Wilo Para SC 15/6 Grundfos ALPHA2.1 15-60 Wilo Yonos PICO 15/1-6
onnection consumer	¾" int. thread	Wilo Yonos PICO 15/1-6
stallation height	112 mm	E 3,0
stallation length	336 mm	2,0
aterials		1,0 RHT - DN 20
alves and fittings	Brass	
askets	EPDM	0,0
nsulation	EPP	[I/h]

enance with thermal control valv	e - DN 20 (¾")	EEI*	Item no.
Opening temperature: 45 °C	Wilo Para SC 15/6-43	< 0.20	960250WP6
Opening temperature: 45 °C	Wilo Yonos PICO 15/1-6	< 0.20	960250WN06
Opening temperature: 45 °C Wilo Para SC 15/6-43 < 0.20 960250WPG Opening temperature: 45 °C Wilo Yonos PICO 15/1-6 < 0.20 960250WNG Opening temperature: 45 °C Grundfos UPM3 Auto 15-70 < 0.20 960250GMG Opening temperature: 45 °C Grundfos ALPHA2.1 15-60 < 0.17 960250GHG Opening temperature: 45 °C without pump - for pumps with 1" ext. thread 960250 Opening temperature: 60 °C Wilo Para SC 15/6-43 < 0.20 960260WPG Opening temperature: 60 °C Wilo Yonos PICO 15/1-6 < 0.20 960260WNG Opening temperature: 60 °C Grundfos UPM3 Auto 15-70 < 0.20 960260GMG	960250GM6		
Opening temperature: 45 °C	Grundfos ALPHA2.1 15-60	< 0.17	<0.20 960250GM6 <0.17 960250GH6 960250 <0.20 960260WP6 <0.20 960260WN06
Opening temperature: 45 °C	without pump - for pumps with 1" ext. thread		960250
Opening temperature: 60 °C	Wilo Para SC 15/6-43	< 0.20	960260WP6
Opening temperature: 45 °C Grundfos UPM3 Auto 15-70 < 0.20	960260WN06		
Opening temperature: 60 °C	Grundfos UPM3 Auto 15-70	 < 0.20 960250WI < 0.20 960250WI < 0.20 960250GI < 0.17 960250GI ext. thread 960250 < 0.20 960260WI < 0.20 960260WI < 0.20 960260GI < 0.17 960260GI 	960260GM6
Opening temperature: 60 °C	Grundfos ALPHA2.1 15-60	< 0.17	960250WP6 960250WN06 960250GM6 960250GH6 960250 960260WP6 960260WN06 960260GM6
Opening temperature: 60 °C	without pump - for pumps with 1" ext. thread		960260
	Opening temperature: 45 °C Opening temperature: 60 °C Opening temperature: 60 °C Opening temperature: 60 °C Opening temperature: 60 °C	Opening temperature: 45 °C Wilo Para SC 15/6-43 Opening temperature: 45 °C Wilo Yonos PICO 15/1-6 Opening temperature: 45 °C Grundfos UPM3 Auto 15-70 Opening temperature: 45 °C Grundfos ALPHA2.1 15-60 Opening temperature: 45 °C without pump - for pumps with 1" ext. thread Opening temperature: 60 °C Wilo Para SC 15/6-43 Opening temperature: 60 °C Wilo Yonos PICO 15/1-6 Opening temperature: 60 °C Grundfos UPM3 Auto 15-70 Opening temperature: 60 °C Grundfos ALPHA2.1 15-60	Opening temperature: 45 °C Wilo Para SC 15/6-43 <0.20 Opening temperature: 45 °C Wilo Yonos PICO 15/1-6 <0.20 Opening temperature: 45 °C Grundfos UPM3 Auto 15-70 <0.20 Opening temperature: 45 °C Grundfos ALPHA2.1 15-60 <0.17 Opening temperature: 45 °C without pump - for pumps with 1" ext. thread Opening temperature: 60 °C Wilo Para SC 15/6-43 <0.20 Opening temperature: 60 °C Wilo Yonos PICO 15/1-6 <0.20 Opening temperature: 60 °C Grundfos UPM3 Auto 15-70 <0.20 Opening temperature: 60 °C Grundfos ALPHA2.1 15-60 <0.17

^{*} EEI = Energy Efficiency Index



Return flow temperature maintenance RHT with thermal control valve DN 25 (1")





Application range

- for heating installations with return flow temperature maintenance
- for solid fuel boilers, wood-fired and stove heating systems

Recommended application range

- up to 26 kW
- 10 K up to 2250 l/h

Operating data

Max. operating pressure 6 bar 110°C Operating temperature Kvs value 7.2

Technical data		Differential pressure diagram
Equipment		8,0 78,4
red and blue dial thermom plastic handles (0-120°C)	eter, integrated into black	7,0 Grundfos UPM3 Auto L 25-70 - CC4 68,6
Dimensions		6,0
Nominal diameter	DN 25 (1")	© 5,0 Wilo Para SC 25/6 49,0
Connection generator	1" int. thread	9,0 E 4,0 Grundfos ALPHA2.1 25-60 Wilo Yonos PICO 25/1-6
Connection consumer	1" int. thread	4,0 Grundfos ALPHA2.1 25-60
Installation height	128 mm	€ 3,0 Wilo Yonos PICO 25/1-6
Installation length	428 mm	2,0
Materials		1,0 RHT - DN 25 9,8
Valves and fittings	Brass	
Gaskets	EPDM	0,0
Insulation	EPP	[I/h]

Return flow temperature maintenance	with thermal control valve - DN	25 (1")	EEI*	Item no.
	Opening temperature: 45 °C	Wilo Para SC 25/6-43	< 0.20	961250WP6
	Opening temperature: 45 °C	Wilo Yonos PICO 25/1-6	< 0.20	961250WN06
	Opening temperature: 45 °C	Grundfos UPM3 Auto 25-70	< 0.20	961250GM6
	Opening temperature: 45 °C	Grundfos ALPHA2.1 25-60	< 0.17	961250GH6
	Opening temperature: 45 °C	without pump - for pumps with 1½" ext. thread		961250
	Opening temperature: 60 °C	Wilo Para SC 25/6-43	< 0.20	961260WP6
	Opening temperature: 60 °C	Wilo Yonos PICO 25/1-6	< 0.20	961260WN06
	Opening temperature: 60 °C	Grundfos UPM3 Auto 25-70	< 0.20	961260GM6
	Opening temperature: 60 °C	Grundfos ALPHA2.1 25-60	< 0.17	961260GH6
	Opening temperature: 60 °C	without pump - for pumps with 1½" ext. thread		961260

^{*} EEI = Energy Efficiency Index



Return flow temperature maintenance RHT with thermal control valve DN 25 (1") - 32 ($1\frac{1}{4}$ ")





Application range

- for heating installations with return flow temperature maintenance
- for solid fuel boilers, wood-fired and stove heating systems

Recommended application range

- up to 26 kW
- 10 K up to 2250 l/h

Operating data

 $\begin{array}{ll} \text{Max. operating pressure} & 6 \, \text{bar} \\ \text{Operating temperature} & 110 \, ^{\circ}\text{C} \\ \text{Kvs value} & 7.2 \end{array}$

Technical data				Different	tial pressure o	liagram		
Equipment		11,0						107,9
red and blue dial thermom plastic handles (0-120°C)	neter, integrated into black	10,0						98,1
Dimensions		8,0			Grundfos UPM3	Elev AS 15.75		78,5
Nominal diameter	DN 25 (1") - DN 32 (11/4")	7,0			Grandios OPINIS	Flex A3 13-73		68,7
Connection generator	11/4" int. thread	6,0						58,9
Connection consumer	11/4" int. thread	[5m m / S,0						49,1
nstallation height	116 mm	<u>E</u> 4,0						39,2
nstallation length	274 mm	3,0						29,4
Vlaterials		2,0						19,6
/alves and fittings	Brass	1,0				RHT 96604	xGF7, DN 25-32	9,8
Gaskets	EPDM	0,0						0
Insulation	EPP	0	500	1000	1500 [l/h]	2000	2500 30	000

Return flow temperature maintenance with thermal control valve (60 °C) - DN 25 (1") - 32 (1 $\frac{1}{4}$ ")			EEI*	Item no.
	Opening temperature: 45 °C	Grundfos UPM3 Flex AS 15-75 GGES3	< 0.20	966041GF7
	Opening temperature: 60 °C	Grundfos UPM3 Flex AS 15-75 GGES3	< 0.20	966042GF7

^{*} EEI = Energy Efficiency Index



Pump sets for return flow temperature maintenance with actuator DN 20 ($\frac{3}{4}$ ") - DN 50 (2")



Application range



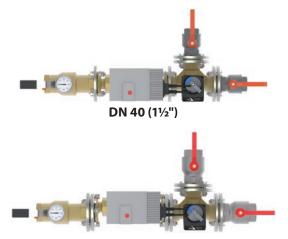
DN 20 (34")



DN 25 (1")



DN 32 (11/4")



DN 50 (2")



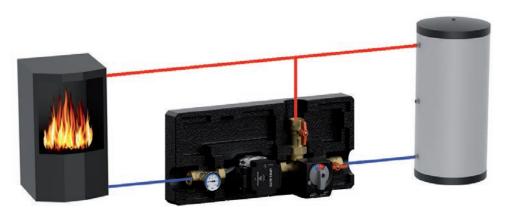
· Solid fuel boilers, wood firing / stove heating systems

Product description:

The return flow temperature maintenance with actuator is a preassembled fitting group for heating circuits. The pump and the mixing valve can be isolated by means of the ball valves. The pump can thus be maintained without draining the heating circuit.

Description of function:

The pump set prevents the temperature in the boiler from falling under the dew point, thus reducing contamination of the boiler. The pump set is mounted between the buffer tank and the boiler. The actuator is controlled by an external controller. The actuator opens the 3-way valve only when the boiler circuit has reached the opening temperature set. By means of the mixing valve, the return flow temperature in the boiler is kept at a constant level and the maximum amount of energy for the storage tank charging is provided.



Mounting example return flow temperature maintenance with actuator DN 25



Return flow temperature maintenance RHM with actuator DN 20 (3/4")





Application range

- for heating installations with return flow temperature maintenance
- for solid fuel boilers, wood-fired and stove heating systems

Recommended application range

- up to 19,5 kW
- 10 K up to 1650 l/h

Operating data

Max. operating pressure 6 bar 110°C Operating temperature Kvs value 5.45

Technical data

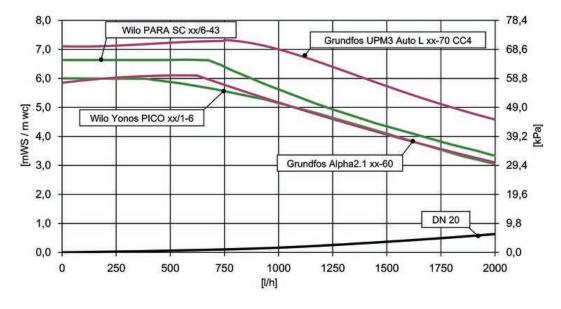
Actuator	
Equipment	Actuator SR2
Electrical data	230 V / 50 Hz
Power consumption	19,5 kW
Torque	2 Nm
Setting time 90°	105 s

Materials

Valves and fittings **Brass** Gaskets AFM 34 Insulation

Dimensions

Nominal diameter DN 20 (3/4") Connection generator 34" int. thread 34" int. thread Connection consumer Installation height 134 mm Installation length 359 mm



Return flow temperature maintenance with actuator - DN 20 (¾")		EEI*	Item no.
	Wilo Para SC 15/6-43	< 0.20	96083WP6
	Wilo Yonos PICO 15/1-6	< 0.20	96083WN06
	Grundfos UPM3 Auto 15-70	< 0.20	96083GM6
	Grundfos ALPHA2.1 15-60	< 0.17	96083GH6

^{*} EEI = Energy Efficiency Index

Return flow temperature maintenance RHM with actuator DN 25 (1")





Application range

- for heating installations with return flow temperature maintenance
- for solid fuel boilers, wood-fired and stove heating systems

Recommended application range

- up to 31 kW
- 10 K up to 2670 l/h

Operating data

Max. operating pressure 6 bar 110°C Operating temperature Kvs value 10

rec	nnıcai	data

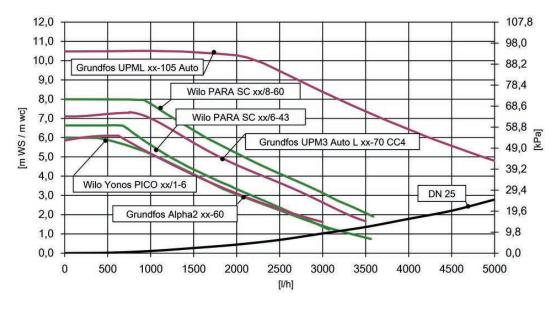
Actuator	
Equipment	Actuator SR5
Electrical data	230 V / 50 Hz
Power consumption	31 kW
Torque	5 Nm
Setting time 90°	140 s

Materials

Valves and fittings Brass Gaskets AFM 34 Insulation EPP

Dimensions

Nominal diameter	DN 25 (1")
Connection generator	1" int. thread
Connection consumer	1" int. thread
Installation height	187 mm
Installation length	437 mm



Return flow temperature maintenance with actuator - DN 25 (1")		EEI*	Item no.
	Wilo Para SC 25/6-43	< 0.20	960841WP6
	Wilo Para SC 25/8-60/O	< 0.20	960841WP8
	Wilo Yonos PICO 25/1-6	< 0.20	960841WN06
	Grundfos UPM3 Auto 25-70	< 0.20	960841GM6
	Grundfos ALPHA2.1 25-60	< 0.17	960841GH6
	Grundfos UPML 25-105 AUTO	< 0.23	960841GL9

^{*} EEI = Energy Efficiency Index



Return flow temperature maintenance RHM with actuator DN 32 (11/4")





Application range

- for heating installations with return flow temperature maintenance
- for solid fuel boilers, wood-fired and stove heating systems

Recommended application range

- up to 50 kW
- 10 K up to 4310 l/h

Operating data

Max. operating pressure 6 bar 110°C Operating temperature Kvs value 16

Technical data

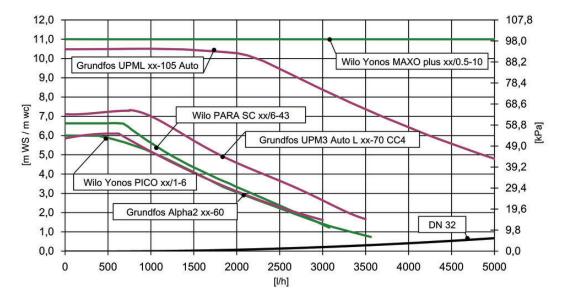
Actuator	
Equipment	Actuator SR5
Electrical data	230 V / 50 Hz
Power consumption	50 kW
Torque	5 Nm
Setting time 90°	140 s

Materials

Valves and fittings **Brass** Gaskets AFM 34 EPP Insulation

Dimensions

Nominal diameter DN 32 (11/4") Connection generator 11/4" int. thread Connection consumer 11/4" int. thread Installation height 217 mm Installation length 497 mm



Return flow temperature maintenance with actuator - DN 32 (11/4")		EEI*	Item no.
	Wilo Para SC 30/6-43	< 0.20	960851WP6
	Wilo Yonos PICO 30/1-6	< 0.20	960851WN06
	Wilo Yonos MAXO plus 30/0.5-10	< 0.20	960851WY10
	Grundfos UPM3 Auto 32-70	< 0.20	960851GM6
	Grundfos ALPHA2.1 32-60	< 0.20	960851GH6
	Grundfos UPML 32-105 AUTO	< 0.23	960851GL9

^{*} EEI = Energy Efficiency Index

Return flow temperature maintenance RHM with actuator DN 40 (1½")





Application range

- for heating installations with return flow temperature maintenance
- for solid fuel boilers, wood-fired and stove heating systems

Recommended application range

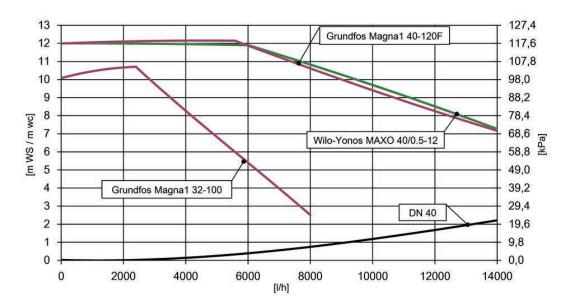
- up to 80 kW
- 10 K up to 6890 l/h

Operating data

Max. operating pressure 6 bar 110°C Operating temperature Kvs value 23

> DN 40 (1½") 11/2" int. thread $1\frac{1}{2}$ " int. thread 266 mm 735 mm

Technical data		
Actuator		Dimensions
Equipment	Actuator SR5	Nominal diameter
Electrical data	230 V / 50 Hz	Connection generator
Power consumption	80 kW	Connection consumer
Torque	5 Nm	Installation height
Setting time 90°	140 s	Installation length
Materials		
Valves and fittings	Brass	
Gaskets	AFM 34	
Insulation		



Return flow temperature maintenance with actuator - DN 40 (1½")		EEI*	Item no.
	Wilo Yonos MAXO plus 40/0,5-12	< 0.20	960861WY12
8	Grundfos MAGNA1 32-100	< 0.21	960861GL10
	Grundfos MAGNA1 40-120 F	< 0.21	960861GL12

^{*} EEI = Energy Efficiency Index



Return flow temperature maintenance RHM with actuator DN 50 (2")





Application range

- for heating installations with return flow temperature maintenance
- for solid fuel boilers, wood-fired and stove heating systems

Recommended application range

- up to 120 kW
- 10 K up to 10340 l/h

Operating data

Max. operating pressure 6 bar 110°C Operating temperature Kvs value 25

Technical data

Actuator	
Equipment	Actuator SR5
Electrical data	230 V / 50 Hz
Power consumption	120 kW
Torque	5 Nm
Setting time 90°	140 s

Materials

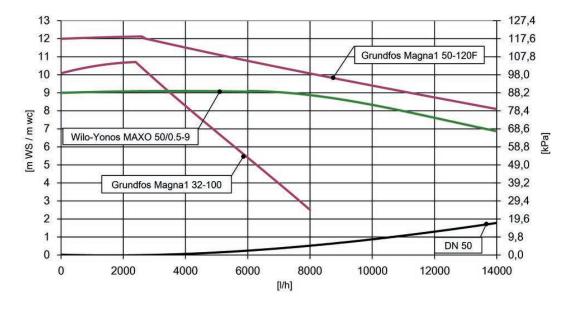
Valves and fittings Brass

Gaskets EPDM / AFM34

Insulation

Dimensions

Nominal diameter	DN 50 (2")
Connection generator	2" int. thread
Connection consumer	2" int. thread
Installation height	296 mm
Installation length	792 mm



Return flow temperature maintenance with actuator - DN 50	(2")	EEI*	Item no.
	Wilo Yonos MAXO plus 50/0.5-9	< 0.20	960871WY9
	Grundfos MAGNA1 32-100	< 0.21	960871GL10
	Grundfos MAGNA1 50-120 F	< 0.21	960871GL12

^{*} EEI = Energy Efficiency Index



Equipment for return flow temperature maintenance



	Sealing for nut - DN 20 (¾")	2057
	asbestos-free, outside diameter: 30 mm, inside diameter: 21 mm, height: 2 mm	
	Sealing for nut - DN 25 (1")	2157
	asbestos-free, outside diameter: 44 mm, inside diameter: 32 mm, height: 2 mm	
	Screw-in fitting DN 20 (¾")	2053
	1" external thread, flat-sealing x ¾" internal thread	
	Screw-in fitting 25 (1")	2153
	1½" external thread, flat-sealing x 1" internal thread	
	Pump fitting DN 20 (¾")	2049
	with union nut, insert fitting and gasket, length: 30 mm	
	Pump fitting 25 (1") with union nut, insert fitting and gasket, length: 28 mm	2149
	Cutting-ring compression fitting DN 20 (¾"), d = 15 mm	561215
	Cutting-ring compression fitting DN 20 (¾"), d = 18 mm	561218
	Cutting-ring compression fitting DN 20 (¾"), d = 22 mm	561222
	$^{3}4$ " external thread, self-sealing with o-ring, with support sleeve, suitable for soft copper pipes. For temperatures up to 150 °C.	
	Cutting-ring compression fitting DN 25 (1"), d = 15 mm	562915
	Cutting-ring compression fitting DN 25 (1"), d = 18 mm	562918
	Cutting-ring compression fitting DN 25 (1"), d = 22 mm	562922
	1" external thread, self-sealing with o-ring, with support sleeve, suitable for soft copper pipes. For temperatures up to 150 °C.	
1		