



HeatBloC® DN 20

Catalogue 01/2018

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

Valid for the UK



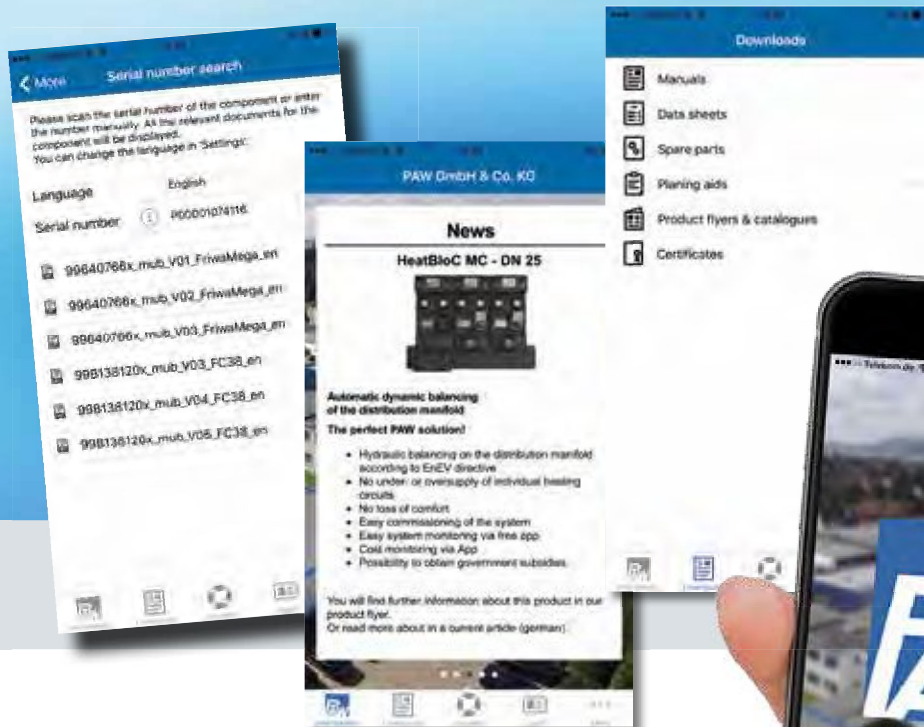


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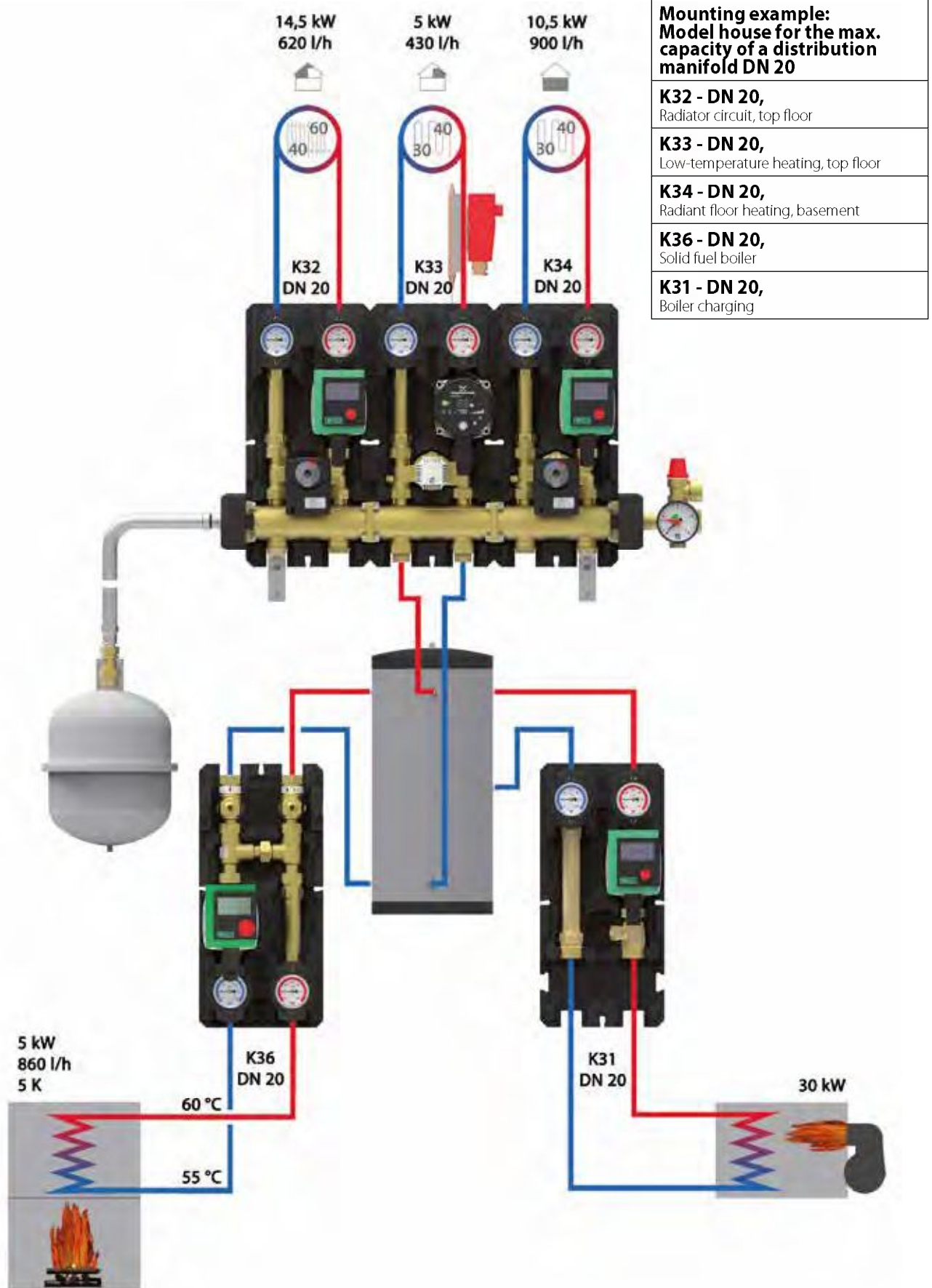
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Modular system DN 20 Mounting example



DN 20



All HeatBloC®s offer the following advantages:

Preassembled group of fittings for heating circuits

High flexibility during assembly
 modules can be combined as required

Full port ball valve, gaskets of the spindle can be replaced during operation

Flat-sealing connections ¾" internal thread
 with 1" union nut for assembly on a PAW distribution manifold. With PAW mounting equipment, the HeatBloCs can be installed on wall brackets.

Large ball valve handles,
 easy handling, visible closing position

EnEV conform 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, thus suited for horizontal and overhead installation

PAW mixing valve with suitable actuator
 Easy assembly and disassembly thanks to the smart PAW snap-in mechanism

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

PAW heating pumps with high-efficiency (ECM) technology
 fitted with 2 m cable, completely premounted, integrated in the insulation, pressure tested, with serial number, perfectly designed system, pump characteristics, EuP/ErP READY

Pump can be isolated,
 so that it can be replaced without draining

As of page 56, you will find the complete mounting equipment for the modular system DN 20.



Product range HeatBloC® Heating circuits and modular distribution manifolds DN 20 - Types

DN 20

K31
direct / unmixed



up to 30 kW*

K32
with 3-way mixing valve



up to 21 kW*

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



up to 5 kW*

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



up to 21 kW*

K36
Boiler charging set
with thermal control valve



up to 10 kW*

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



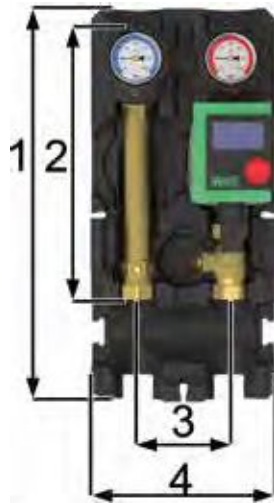
up to 50 kW* for each boiler connection

Hydraulic separators



up to 2200 l/h

*Temperature difference = 20 K



Application range

- for boiler charging, for modulating temperature heating systems

Recommended range of application

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

Operating data

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

Technical data

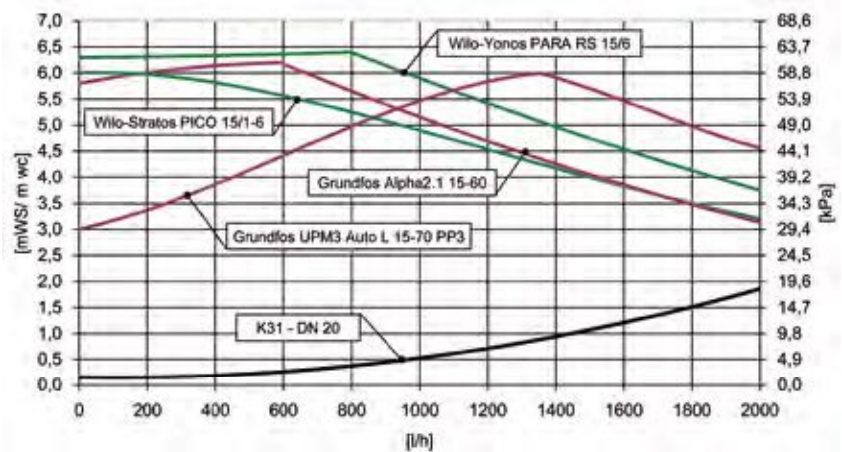
Dimensions

Nominal diameter	DN 20 (3/4")
Connection generator	1" external thread, flat sealing
Connection consumer	3/4" internal thread
(1) Height	385 mm
(2) Installation length	255 mm
(3) Centre distance	90 mm
(4) Width	180 mm

Materials

Valves and fittings	Brass
Gaskets	EPDM / NBR
Insulation	EPP

Differential pressure diagram



HeatBloC® K31 - DN 20 (3/4")



Wilco-Stratos PICO 15/1-6

Grundfos Alpha2.1 15-60

Grundfos UPM3 Auto L 15-70 PP3

for pumps with 1" external thread x 130 mm

for pumps with 1" external thread x 130 mm

EEI*	incl.	Item no.	€/ piece
< 0.20	▲	32013WY6	-
< 0.20	▲	32013WH6	-
< 0.17	▲	32013GH6	-
< 0.20	▲	32013GM6	-
	⊖	32013	-

Overflow set for HeatBloCs DN 20

31301 -

See page 56

Wall bracket set DN 20

3122SET -

See page 56

Cutting-ring compression fittings 3/4"

561012 d = 12 mm -

561215 d = 15 mm -

561218 d = 18 mm -

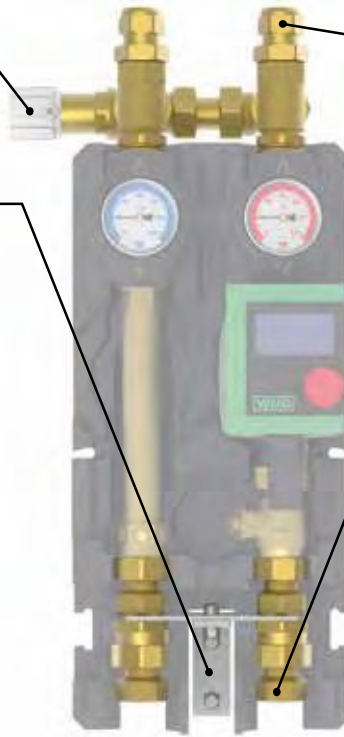
561222 d = 22 mm -

See page 56

Connection set DN 20

3131 -

See page 56



Fitting for heat flowmeter DN 20

3145 -

See page 58

Flush and drain set DN 20

3161 -

See page 56

Modular distribution manifold - DN 20

3112 2-fold -

3113 3-fold -

3114 4-fold -

3115 5-fold -

3116 6-fold -

See page 52

Wall bracket DN 20

3121 -

See page 56

Coupling piece for overhead installation DN 20

31241 -

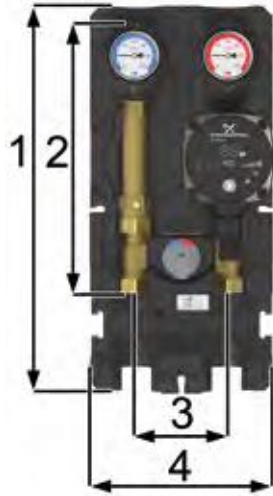
See page 57

Mounting plate DN 20

3125 -

See page 56





Application range

- for heating systems controlled by a mixing valve

Recommended range of application

- up to 21 kW
- 20 K up to 905 l/h

Operating data

Max. pressure	6 bars
Max. operating temperature	110 °C
Kvs value	3.7

Technical data

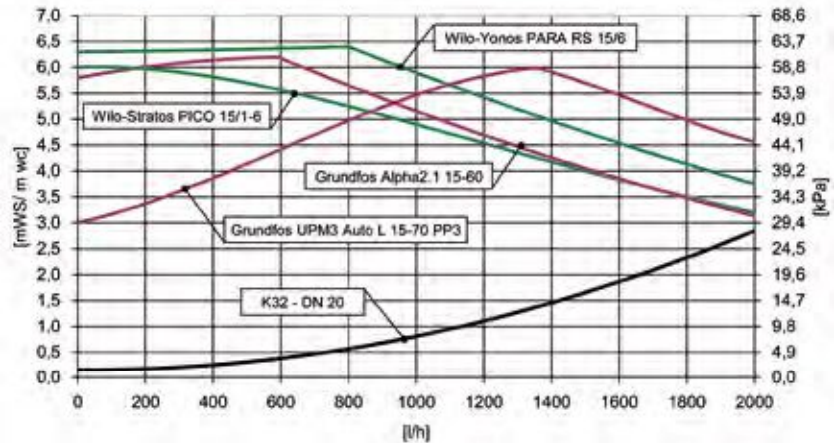
Dimensions

Nominal diameter	DN 20 (3/4")
Connection generator	1" external thread, flat sealing
Connection consumer	3/4" internal thread
(1) Height	385 mm
(2) Installation length	255 mm
(3) Centre distance	90 mm
(4) Width	180 mm

Materials

Valves and fittings	Brass
Gaskets	EPDM / NBR
Insulation	EPP

Differential pressure diagram



HeatBloC® K32 - DN 20 (3/4")



	EEI*	incl.	Item no.	€ / piece
Wilo-Yonos PARA RS 15/6-RKA	< 0.20	▲M	32053MYY6	-
Wilo-Stratos PICO 15/1-6	< 0.20	▲M	32053MWH6	-
Grundfos Alpha2.1 15-60	< 0.17	▲M	32053MGH6	-
Grundfos UPM3 Auto L 15-70 PP3	< 0.20	▲M	32053MGM6	-
for pumps with 1" external thread x 130 mm		⊖M	32053M	-
Wilo-Yonos PARA RS 15/6-RKA	< 0.20	▲	32053WY6	-
Wilo-Stratos PICO 15/1-6	< 0.20	▲	32053WH6	-
Grundfos Alpha2.1 15-60	< 0.17	▲	32053GH6	-
Grundfos UPM3 Auto L 15-70 PP3	< 0.20	▲	32053GM6	-
for pumps with 1" external thread x 130 mm		⊖	32053	-
Extra charge for assembly with flow on the left per HeatBloC (no discount possible)			999300	-

Overflow set for HeatBloCs DN 20

31301 -

See page 56

Wall bracket set DN 20

3122SET -

See page 56

Cutting-ring compression fittings 3/4"

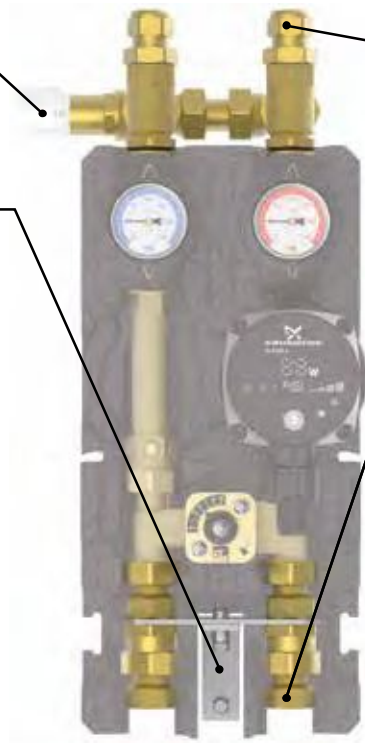
561012	d = 12 mm	-
561215	d = 15 mm	-
561218	d = 18 mm	-
561222	d = 22 mm	-

See page 56

Connection set DN 20

3131 -

See page 56



Fitting for heat flowmeter DN 20

3145 -

See page 58

Flush and drain set DN 20

3161 -

See page 56

Non-return valve DN 20

31011 -

See page 56

Modular distribution manifold - DN 20

3112	2-fold	-
3113	3-fold	-
3114	4-fold	-
3115	5-fold	-
3116	6-fold	-

See page 52

Wall bracket DN 20

3121 -

See page 56

Actuator SR2

705013	230 V	-
705015	24 V	-

See page 58

Coupling piece for overhead installation DN 20

31241 -

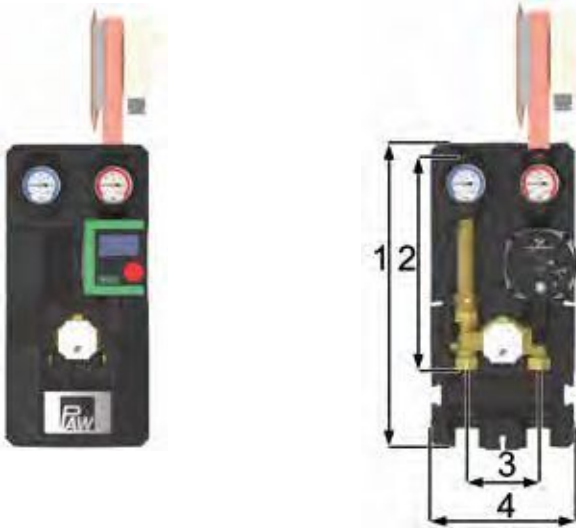
See page 57

Mounting plate DN 20

3125 -

See page 56





Application range

- for radiant floor heating, for low-temperature heating installations

Recommended range of application

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

Operating data

Max. pressure	6 bars
Max. operating temperature	110 °C
Kvs value	1.3

Technical data

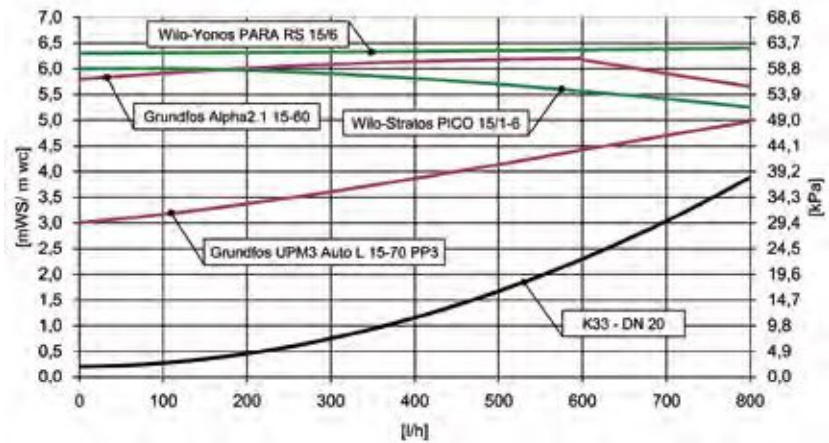
Dimensions

Nominal diameter	DN 20 (3/4")
Connection generator	1" external thread, flat sealing
Connection consumer	3/4" internal thread
(1) Height	385 mm
(2) Installation length	255 mm
(3) Centre distance	90 mm
(4) Width	180 mm

Materials

Valves and fittings	Brass
Gaskets	EPDM / NBR
Insulation	EPP

Differential pressure diagram



HeatBloC® K33 - DN 20 (3/4")



	EEI*	incl.	Item no.	€ / piece
Wilo-Yonos PARA RS 15/6-RKA	< 0.20	▲	32073WY6	-
Wilo-Stratos PICO 15/1-6	< 0.20	▲	32073WH6	-
Grundfos Alpha2.1 15-60	< 0.17	▲	32073GH6	-
Grundfos UPM3 Auto L 15-70 PP3	< 0.20	▲	32073GM6	-
for pumps with 1" external thread x 130 mm		⊖	32073	-
Extra charge for assembly with flow on the left per HeatBloC (no discount possible)			999300	-

Overflow set for HeatBloCs DN 20

31301 -

See page 56

Wall bracket set DN 20

3122SET -

See page 56

Cutting-ring compression fittings 3/4"

561012 d = 12 mm -

561215 d = 15 mm -

561218 d = 18 mm -

561222 d = 22 mm -

See page 56

Connection set DN 20

3131 -

See page 56



Fitting for heat flowmeter DN 20

3145 -

See page 58

Flush and drain set DN 20

3161 -

See page 56

Non-return valve DN 20

31011 -

See page 56

Modular distribution manifold - DN 20

3112 2-fold -

3113 3-fold -

3114 4-fold -

3115 5-fold -

3116 6-fold -

See page 52

Conversion kit for changing the flow

31071 from flow on the left to flow on the right -

31072 from flow on the right to flow on the left -

See page 57

Coupling piece for overhead installation DN 20

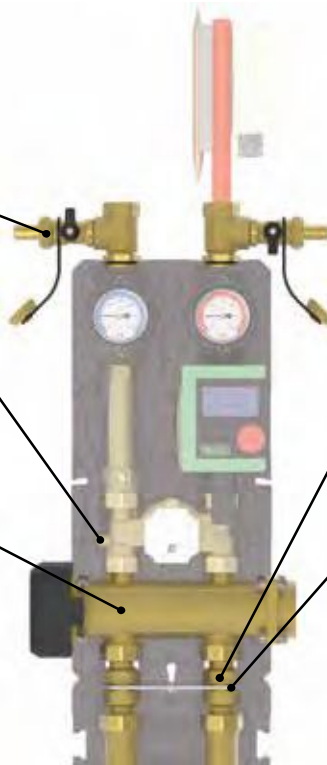
31241 -

See page 57

Mounting plate DN 20

3125 -

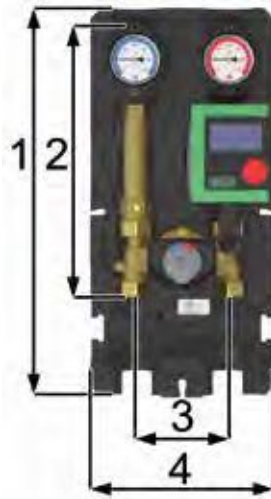
See page 56



Wall bracket DN 20

3121 -

See page 56



Application range

- for mixed low-temperature heating

Recommended range of application

- up to 21 kW
- 20 K up to 905 l/h

Operating data

Max. pressure	6 bars
Max. operating temperature	110 °C
Kvs value	3.7

Technical data

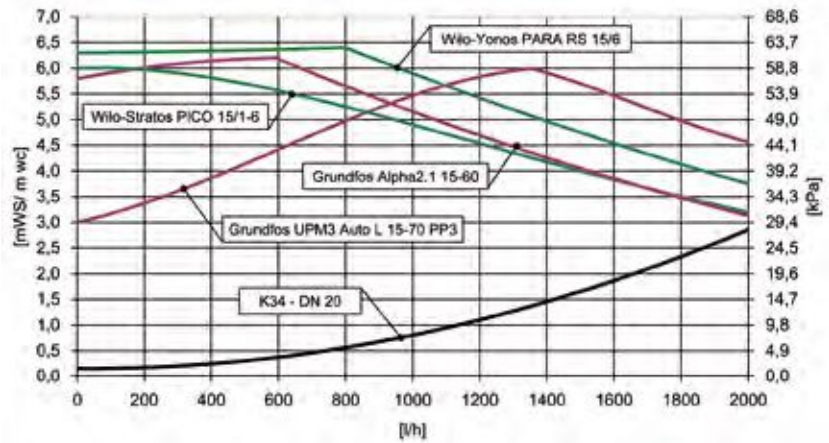
Dimensions

Nominal diameter	DN 20 (3/4")
Connection generator	1" external thread, flat sealing
Connection consumer	3/4" internal thread
(1) Height	385 mm
(2) Installation length	255 mm
(3) Centre distance	90 mm
(4) Width	180 mm

Materials

Valves and fittings	Brass
Gaskets	EPDM / NBR
Insulation	EPP

Differential pressure diagram



HeatBloC® K34 - DN 20 (3/4")



	EEI*	incl.	Item no.	€ / piece
Wilo-Yonos PARA RS 15/6-RKA	< 0.20	▲M	32063MYY6	-
Wilo-Stratos PICO 15/1-6	< 0.20	▲M	32063MWH6	-
Grundfos Alpha2.1 15-60	< 0.17	▲M	32063MGH6	-
Grundfos UPM3 Auto L 15-70 PP3	< 0.20	▲M	32063MGM6	-
for pumps with 1" external thread x 130 mm		⊖M	32063M	-
Wilo-Yonos PARA RS 15/6-RKA	< 0.20	▲	32063WY6	-
Wilo-Stratos PICO 15/1-6	< 0.20	▲	32063WH6	-
Grundfos Alpha2.1 15-60	< 0.17	▲	32063GH6	-
Grundfos UPM3 Auto L 15-70 PP3	< 0.20	▲	32063GM6	-
for pumps with 1" external thread x 130 mm		⊖	32063	-
Extra charge for assembly with flow on the left per HeatBloC (no discount possible)			999300	-

Overflow set for HeatBloCs DN 20

31301 -

See page 56

Wall bracket set DN 20

3122SET -

See page 56

Contact thermostat

Q00145 20-60 °C -

See page 58

Cutting-ring compression fittings 3/4"

561012 d = 12 mm -

561215 d = 15 mm -

561218 d = 18 mm -

561222 d = 22 mm -

See page 56

Connection set DN 20

3131 -

See page 56



Fitting for heat flowmeter DN 20

3145 -

See page 58

Flush and drain set DN 20

3161 -

See page 56

Non-return valve DN 20

31011 -

See page 56

Modular distribution manifold - DN 20

3112 2-fold -

3113 3-fold -

3114 4-fold -

3115 5-fold -

3116 6-fold -

See page 52

Actuator SR2

705013 230 V -

705015 24 V -

See page 58

Coupling piece for overhead installation DN 20

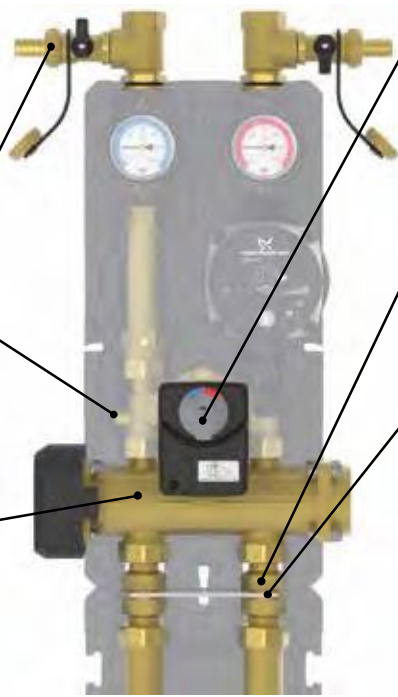
31241 -

See page 57

Mounting plate DN 20

3125 -

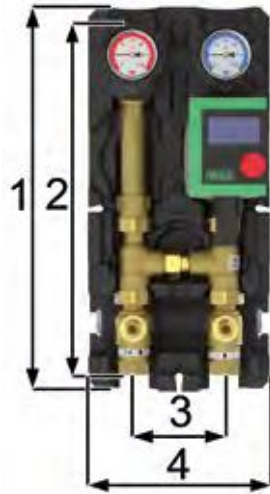
See page 56



Wall bracket DN 20

3121 -

See page 56



Application range

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

Recommended range of application

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

Operating data

Max. pressure	6 bars
Max. operating temperature	110 °C
Kvs value	2.5

Technical data

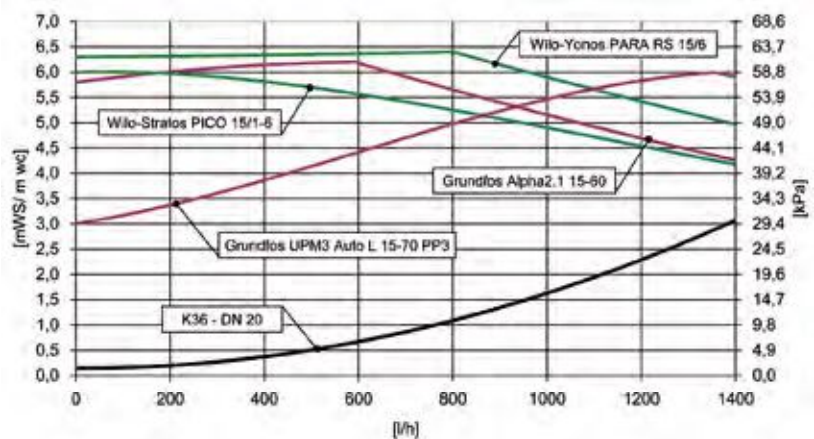
Dimensions

Nominal diameter	DN 20 (3/4")
Connection generator	3/4" internal thread
Connection consumer	3/4" internal thread
(1) Height	385 mm
(2) Installation length	347 mm
(3) Centre distance	90 mm
(4) Width	180 mm

Materials

Valves and fittings	Brass
Gaskets	EPDM / NBR
Insulation	EPP

Differential pressure diagram

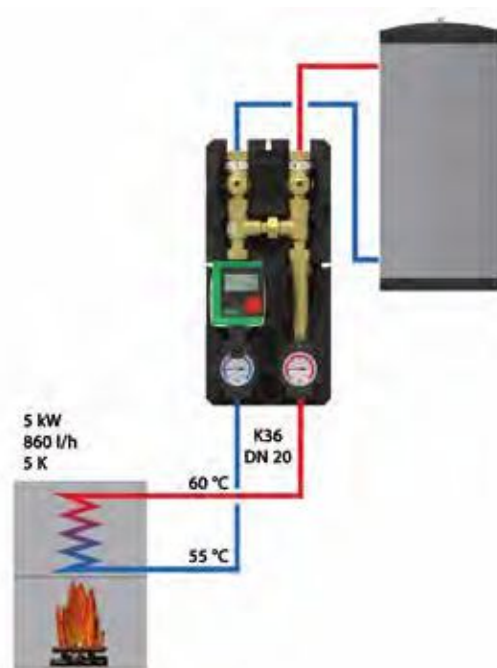


HeatBloC® K36 - DN 20 (3/4")



	Opening temperature	EEl*	incl.	Item no.	€/ piece
Wilo-Yonos PARA RS 15/6-RKA	50 °C	< 0.20	▲	320353WY6	-
Wilo-Stratos PICO 15/1-6	50 °C	< 0.20	▲	320353WH6	-
Grundfos Alpha2.1 15-60	50 °C	< 0.17	▲	320353GH6	-
Grundfos UPM3 Auto L 15-70 PP3	50 °C	< 0.20	▲	320353GM6	-
for pumps with 1" ext. thread x 130 mm	50 °C		⊖	320353	-
Wilo-Yonos PARA RS 15/6-RKA	60 °C	< 0.20	▲	320373WY6	-
Wilo-Stratos PICO 15/1-6	60 °C	< 0.20	▲	320373WH6	-
Grundfos Alpha2.1 15-60	60 °C	< 0.17	▲	320373GH6	-
Grundfos UPM3 Auto L 15-70 PP3	60 °C	< 0.20	▲	320373GM6	-
for pumps with 1" ext. thread x 130 mm	60 °C		⊖	320373	-

The K36 should always be used with a buffer tank, if not, a hydraulic separator is mandatory.



Thermal control valve with bypass

Functioning:

The thermal valve shuts off the connection to the consumers, as long as the water in the boiler circuit is colder than the opening temperature of the thermal control valve. The pump in the K36 circulates the water in the boiler circuit through the automatic bypass in the K36 which is completely open.

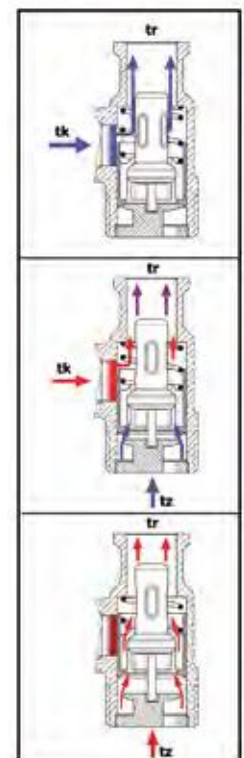
When the water in the boiler circuit has obtained the opening temperature (+/- 3 K) of the thermal control valve, the valve opens the connection from/to the consumers.

The bypass shuts off to the same extent as the connection to the consumers is opened. The control valve opens the return line from the consumers and enables thus the water to circulate in the consumer circuit. The cold water from the consumer return line is mixed in the control valve with the hot water from the bypass. Depending on the temperature and the flow rate of the water from the return line, the thermal control valve shuts off or opens the line to the consumers. Thus the return line which leads to the boiler always remains at a certain temperature level.

With rising temperature in the flow line of the boiler or with rising temperature from the return line of the consumers, the thermal control valve opens the connection to the consumers. The temperature of the return line of the boiler remains nearly constant (+/- 3 K).

Please note:

When the boiler output is controlled by the boiler temperature, the boiler must heat up 20 K above the opening temperature of the K36. Otherwise, there will not be enough power available for the consumers (the boiler output may be reduced before the thermal control valve opens completely).





Application range

- for wall-mounted boilers

Recommended range of application

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

Operating data

Max. pressure	6 bars
Max. operating temperature	110 °C
Kvs value unmixed	4.7
Kvs value mixed	3.7
Kvs value distribution manifold	78

Technical data

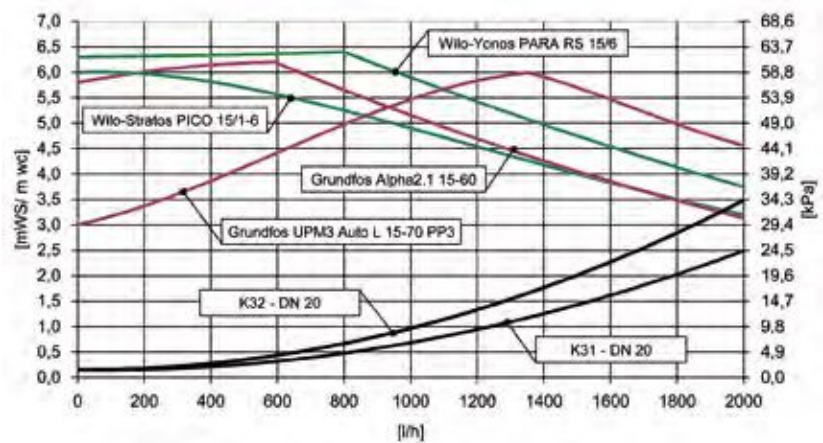
Dimensions

Nominal diameter	DN 20 (3/4")
Connection generator	1" ext./3/4" int. thread
Connection consumer	3/4" internal thread
(1) Width	408 mm
(2) Centre distance	90 mm
(3) Height	400 mm
(4) Installation length	335 mm
(5) Distance	291 mm
(6) Depth	100 mm

Materials

Valves and fittings	Brass
Gaskets	EPDM / NBR
Insulation	EPP / ABS

Differential pressure diagram



Thermax - K31-K32 - DN 20



	EEI*	incl.	Item no.	€ / piece
2 x Wilo-Stratos PICO 15/1-6	< 0.20	▲M	323621WH6	-
2 x Wilo-Yonos PARA RS 15/6-RKA	< 0.20	▲M	323621WY6	-
2 x Grundfos Alpha2.1 15-60	< 0.17	▲M	323621GH6	-
2 x Grundfos UPM3 Auto L 15-70 PP3	< 0.20	▲M	323621GM6	-

Thermax - K32-K32 - DN 20



	EEI*	incl.	Item no.	€ / piece
2 x Wilo-Stratos PICO 15/1-6	< 0.20	▲M	323622WH6	-
2 x Wilo-Yonos PARA RS 15/6-RKA	< 0.20	▲M	323622WY6	-
2 x Grundfos Alpha2.1 15-60	< 0.17	▲M	323622GH6	-
2 x Grundfos UPM3 Auto L 15-70 PP3	< 0.20	▲M	323622GM6	-



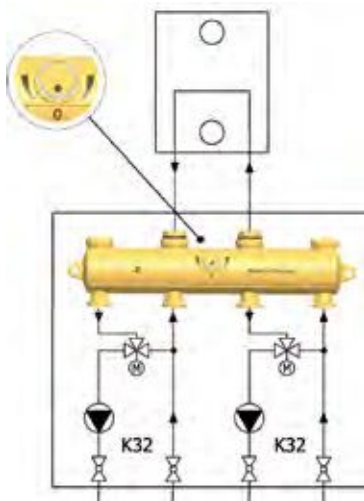
Installation beside the boiler:

Thermax is directly mounted to the wall without distance pieces.

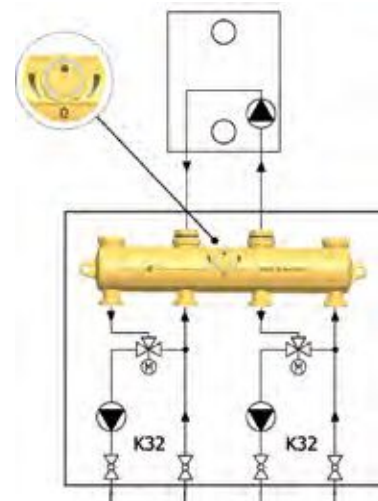
Installation below the boiler:

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)..

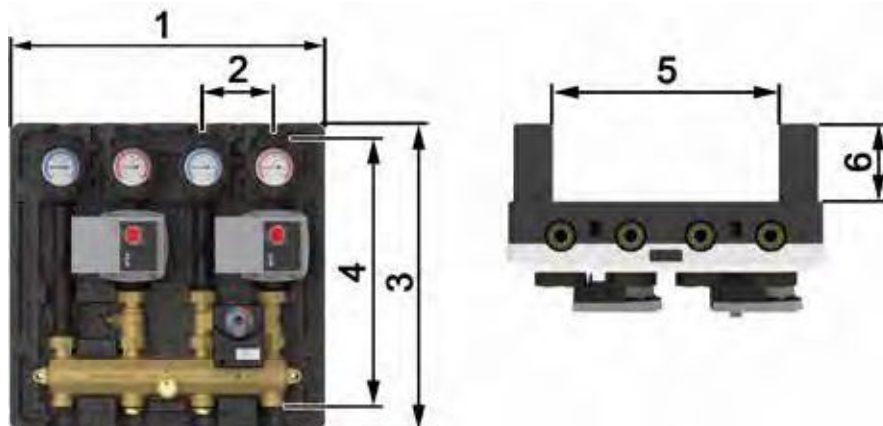


Bypass closed



Bypass open

Dimensions





Application range

- modular design
- with patented thermal separation of flow and return chamber
- for outputs up to 50 kW (for each boiler connection) at a temperature difference of 20 K

Operating data

Max. pressure	6 bars
Max. operating temperature	110 °C
Kvs value	78

Technical data

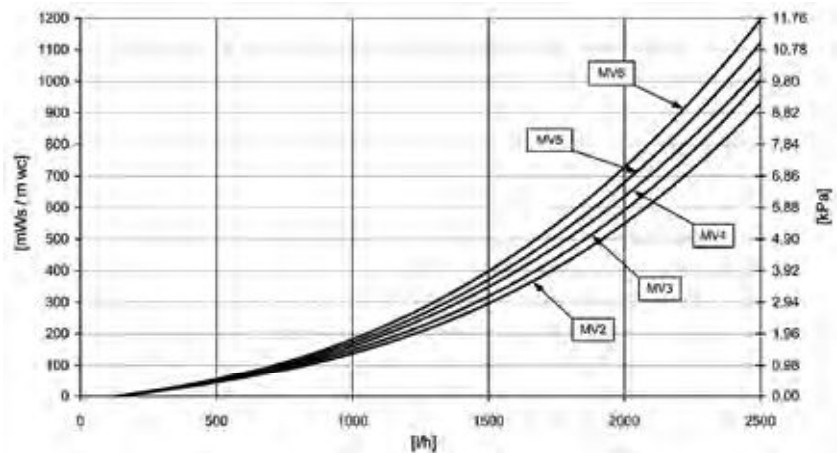
Dimensions

Nominal diameter	DN 20 (3/4")
Connection generator	3/4" internal thread x 1" external thread, flat sealing (bottom), 2 x for boiler connection, others plugged
Connection consumer	3/4" PAW flange for nut 1" (top)
Connection on the side	3/4" internal thread, sealed with plug, for safety group and expansion tank
Installation height	80 mm
Height insulation	85 mm
Centre distance	90 mm

Materials

Valves and fittings	Brass
Gaskets	EPDM / NBR
Insulation	EPP shells

Differential pressure diagram



Modular distribution manifold - DN 20 (3/4")		Item no.	€ / piece
	2-fold Number of connections for HeatBloCs = 3 Width = 440 mm	3112	-
	3-fold Number of connections for HeatBloCs = 5 Width = 620 mm	3113	-
	4-fold Number of connections for HeatBloCs = 7 Width = 800 mm	3114	-
	5-fold Number of connections for HeatBloCs = 9 Width = 980 mm	3115	-
	6-fold Number of connections for HeatBloCs = 11 Width = 1160 mm	3116	-



Mounting equipment modular distribution manifold - DN 20 (3/4")

Extension module DN 20

3111 -

For the extension of already existing HeatBloCs
The installation may only be made by qualified experts!

Set extension pieces DN 20 - DN 25

34352 -

See page 57

Sealing for nut

2057 3/4" -

See page 57

Safety set DN 20

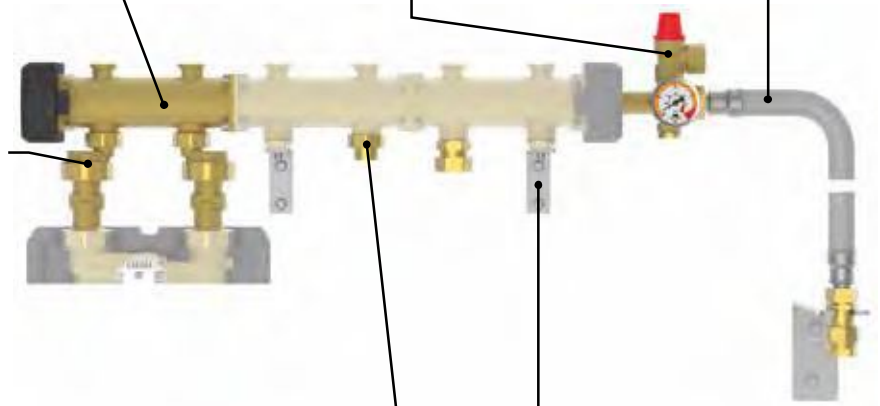
5257 -

See page 57

Connection set for diaphragm expansion tank - DN 20 (3/4")

7509 -

See page 58



Wall bracket DN 20

3121 -

See page 56

Union nut

2055 1" int. thread -

See page 57

Wall bracket DN 20 (3/4")

3121 -

See page 56

Coupling piece for overhead installation DN 20 (3/4")

31241 -

See page 57



Connection set DN 20 (3/4")

3131 -

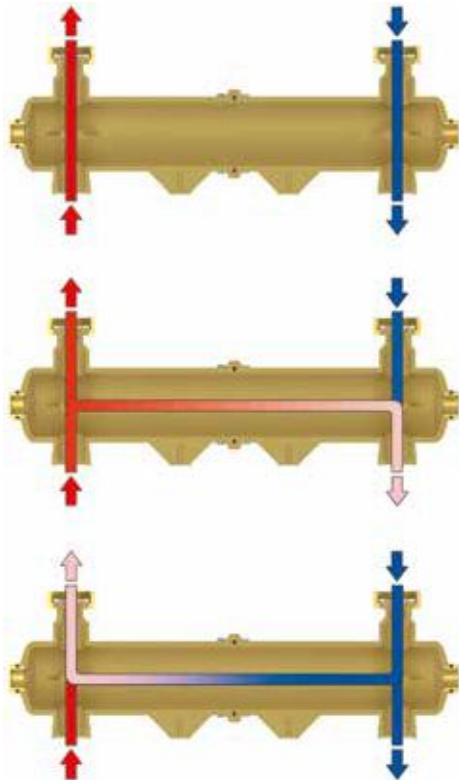
See page 56

Mounting plate DN 20 (3/4")

3125 -

See page 56

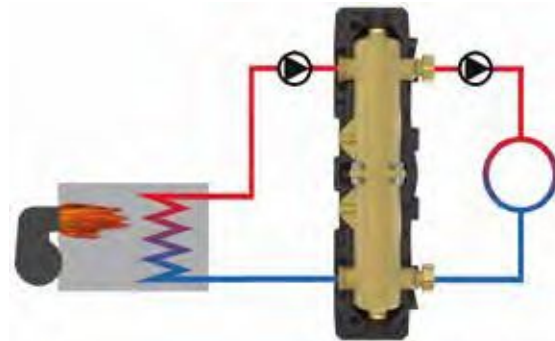
DN 20



Description of function

Hydraulic separators are used when there are one or more heat generating circuits/primary circuits with pump and one or more consumer/secondary circuits with distribution pump in one system. Due to the working conditions in such systems, pumps affect each other and changes in throughput and delivery height can occur. The hydraulic separator causes a neutralization of the connected circuits. Thus, the primary and secondary circuits can work independently. 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 generating 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 left side show three possible conditions of hydraulic stability.



Hydraulic separators - DN 20 (3/4")

Item no.

€/ piece



up to 2200 l/h

31421

-

Completely made of brass, completely insulated with EPP insulation, for the installation below a modular distribution manifold DN 20 or separately on the wall (vertically or horizontally).

Connections:

3/4" PAW flange for nut 1" (top)

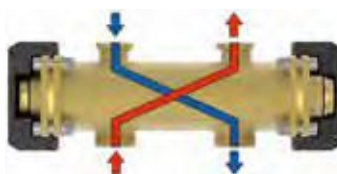
3/4" internal thread x 1" external thread, flat-sealing (bottom), 2 x for boiler connection, others plugged

2 x 1/2" internal thread for immersion sleeve and fill and drain valve

Width = 435 mm

Installation height = 120 mm

Centre distance = 270 mm



up to 950 l/h

3142

-

Completely made of brass, with separate flow and return line, to be mounted under a single HeatBloC DN 20. The EPP insulation is integrated in the HeatBloC.

Can also be installed under a distribution manifold DN 20 (with mounting plate item no. 3125) or separately in the pipe. For separate installation, two additional union nuts item no. 2055 are required and the insulation must be provided on site.

Connections:

3/4" PAW flange for nut 1" (top)

3/4" int. thread x 1" ext. thread, flat sealing (bottom)

2 x 3/4" internal thread, sealed with plug (to the side)

Width = 260 mm

Installation height = 80 mm

Centre distance = 90 mm

Immersion sleeves 1/2" ext. thread

566002 -

See page 57

Wall bracket DN 20

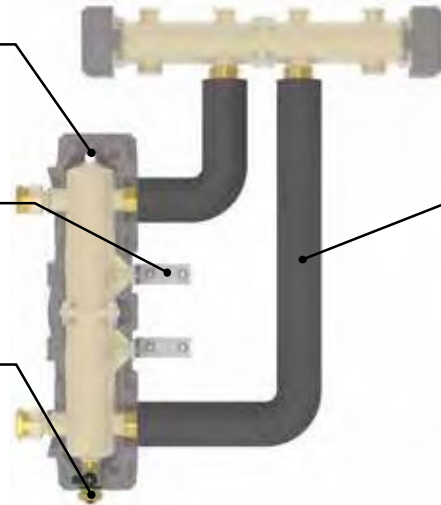
3121 -

See page 56

Fill and drain valve

2260 -

See page 183



Piping group DN 20

3142KS1 -

See page 58

Conversion kit for low-loss header DN 20

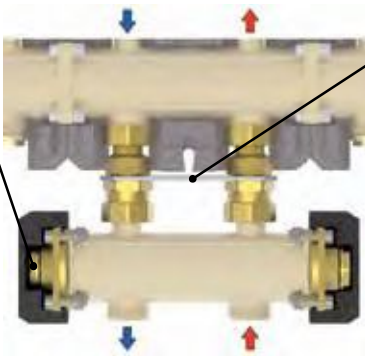
3143 -

See page 58

Installation set DN 20

3127 -

See page 57



Mounting plate DN 20

3125 -

See page 56

Union nut

2055 1" int. thread -

See page 57

Sealing for nut

2057 3/4" -

See page 57

Low-loss header MVW DN 20 (3/4")

for boilers with integrated pump

By means of the conversion kit (item no. 3143), 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 (item no. 3142 or 31421) must be installed below a distribution manifold.

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).

Low-loss header MVW DN 20 (3/4")

Item no.

€ / piece



2-fold
Number of connections for HeatBloCs = 3
Width = 440 mm

31422

-



3-fold
Number of connections for HeatBloCs = 5
Width = 620 mm

31423

-

Illustration		Item no.	€ / piece
	<p>Overflow set DN 20</p> <p>with self-sealing counter-T-pieces and elbow gland, adjustment range 1 - 6 m wc, suitable for HeatBloC</p>	31301	-
	<p>Wall bracket set DN 20</p> <p>Parts: Mounting plate, wall bracket, 2 x nut 1" Wall distance possible: 55-115 mm Distance: 15 mm</p>	3122SET	-
	<p>Cutting-ring compression fitting DN 20, d = 12 mm</p>	561012	-
	<p>Cutting-ring compression fitting DN 20, d = 15 mm</p>	561215	-
	<p>Cutting-ring compression fitting DN 20, d = 18 mm</p>	561218	-
	<p>Cutting-ring compression fitting DN 20, d = 22 mm</p> <p>3/4" external thread, self-sealing with o-ring, with support sleeve, suitable for soft copper pipes. For temperatures up to 150 °C.</p>	561222	-
	<p>Connection set DN 20</p> <p>Consisting of 2 adapters with 1" nut and 3/4" internal thread for connecting pipes with 3/4" external thread below the modular distribution manifolds DN 20 (3/4")</p>	3131	-
	<p>Flush and drain set DN 20</p> <p>2 x counter-T-pieces with fill and drain valve, each equipped with an extension piece, permits to flush and drain individual HeatBloCs.</p>	3161	-
	<p>Wall bracket DN 20</p> <p>Parts: 2 wall brackets as a set (steel, zinced), mounting equipment Wall distance possible: 70-100 mm, distance: 15 mm For 5-fold modular distribution manifolds, we recommend to use 2 wall bracket sets.</p>	3121	-
	<p>Non-return valve DN 20</p> <p>To be inserted into the PAW mixing valve. Prevents unwanted circulation, for example when various mixing valves are connected to one distribution manifold. The non-return valve can simply be inserted into the mixing valve.</p>	31011	-
	<p>Mounting plate DN 20</p> <p>Parts: Mounting plate, 2 gaskets, 2 x nut 1", 2 x nipple adaptor 1" ext. thread x 3/4" ext. thread for installation with flat sealings below a modular distribution manifold and for attaching wall brackets</p>	3125	-

Illustration		Item no.	€ / piece
	<p>Sealing for nut DN 20</p> <p>asbestos-free Dimensions: 30,0 x 21,0 x 2,0 mm</p>	2057	-
	<p>Safety set DN 20 up to 50 kW</p> <p>for distribution manifolds DN 20, with self-sealing counter T-piece 3/4" x 1/2", outlet 3/4" with cap for expansion tank, pressure relief valve 1/2" x 3/4", 3 bars, up to 50 kW, pressure gauge 0-4 bars</p>	5257	-
	<p>Conversion kit from flow on the left to flow on the right</p> <p>Conversion kit from flow on the right to flow on the left</p> <p>The conversion kit for changing the flow line is mandatory for mixing valves K33 with bypass at the front.</p>	31071	-
		31072	-
	<p>Coupling piece for overhead installation DN 20</p> <p>Coupling piece for overhead installation with flat sealings of a HeatBloC below a distribution manifold. Please note: When you use wall brackets, an additional mounting plate is necessary for installing a MV2 2-fold distribution manifold.</p>	31241	-
	<p>Set extension pieces DN 20 - DN 25</p> <p>Set of adaptor pieces for the overhead installation of HeatBloCs DN 25 below distribution manifolds DN 20, centre distance changed from 90 mm to 125 mm, connections 1" nut x 1" flange (for nut 1 1/2") flat sealing.</p>	34352	-
	<p>Union nut DN 20 1" internal thread</p> <p>Brass, to screw insertion pieces for soldering below a distribution manifold</p>	2055	-
	<p>Installation set DN 20</p> <p>Consisting of 2 screw-in fittings with 1" internal thread x 1" external thread and 2 gaskets, for the connection of a hydraulic separator DN 20 below a distribution manifold DN 20</p>	3127	-
	<p>Immersion sleeve 6 mm x 30 mm</p> <p>Immersion sleeve 6 mm x 60 mm</p> <p>Immersion sleeve 6 mm x 60 mm</p> <p>Immersion sleeve 6 mm x 100 mm</p> <p>Immersion sleeve 6 mm x 150 mm</p> <p>for the installation of the temperature sensors (d = 6 mm) in the storage tank, in the collector and for the installation of the hydraulic separator.</p> <p>Please note: The immersion sleeves do not fit into the ball valves of the heating circuits of the current catalogue 01/2017!</p> <p>566001: self-sealing, with o-ring, bare brass, for sensor with a depth of 30 mm 566002: standard, chromed brass, for sensor with a depth of 60 mm 5660021: standard, chromed brass, with valve extension (25 mm), for sensor with a depth of 60 mm 566003: standard, chromed copper, for sensor with a depth of 100 mm 566004: standard, chromed copper, for sensor with a depth of 150 mm</p>	566001	-
		566002	-
		5660021	-
		566003	-
		566004	-

Illustration		Item no.	€ / piece
	<p>Piping group DN 20</p> <p>Piping group for hydraulic separator, consisting of 2 pipe sections, union nuts and gaskets, for connection of a vertically mounted hydraulic separator below a PAW distribution manifold. Flat-sealing connection, completely insulated, outlet on the right or on the left.</p>	3142KS1	-
	<p>Conversion kit for low-loss header DN 20</p> <p>for conversion into a distribution manifold with integrated hydraulic separator (low-loss header). Range of application up to 950 l/h, max. up to MV3 - 3-fold distribution manifold. Consisting of: two distance rings for a resistance-free connection of flow and return chamber, incl. screws and o-rings.</p>	3143	-
	<p>Connection set for diaphragm expansion tank</p> <p>for assembly to distribution manifolds DN 20, with tank connector 3/4", wall bracket and mounting equipment, armoured hose with bend 3/4" x 700 mm, maximum tank diameter = 440 mm</p>	7509	-
	<p>Fitting for heat flowmeter DN 20</p> <p>for DN 20 HeatBloCs, to be mounted above the insulation, top connection: 3/4" internal thread, bottom connection: 3/4" external thread</p>	3145	-
	<p>Contact thermostat 20-60 °C</p> <p>Contact thermostat for limiting the flow temperature, adjustable from 20 - 60 °C</p>	Q00145	-
	<p>PAW actuator SR2 - 2 Nm 230 V</p>	705013	-
	<p>PAW actuator SR2 - 2 Nm 24 V</p> <p>Easy assembly and disassembly thanks to the patented 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</p> <p>Technical data Electrical connection: 230 V - 50 Hz (705013), 24 V - 50/60 HZ, DC 24 V (705015) Input power: 1 W (705013), 0.5 W (705015) Torque: min. 2 Nm Setting time for 90°: 105 s (705013), 100 s (705015)</p>	705015	-