



## HeatBloC® DN 32

Catalogue 01/2018

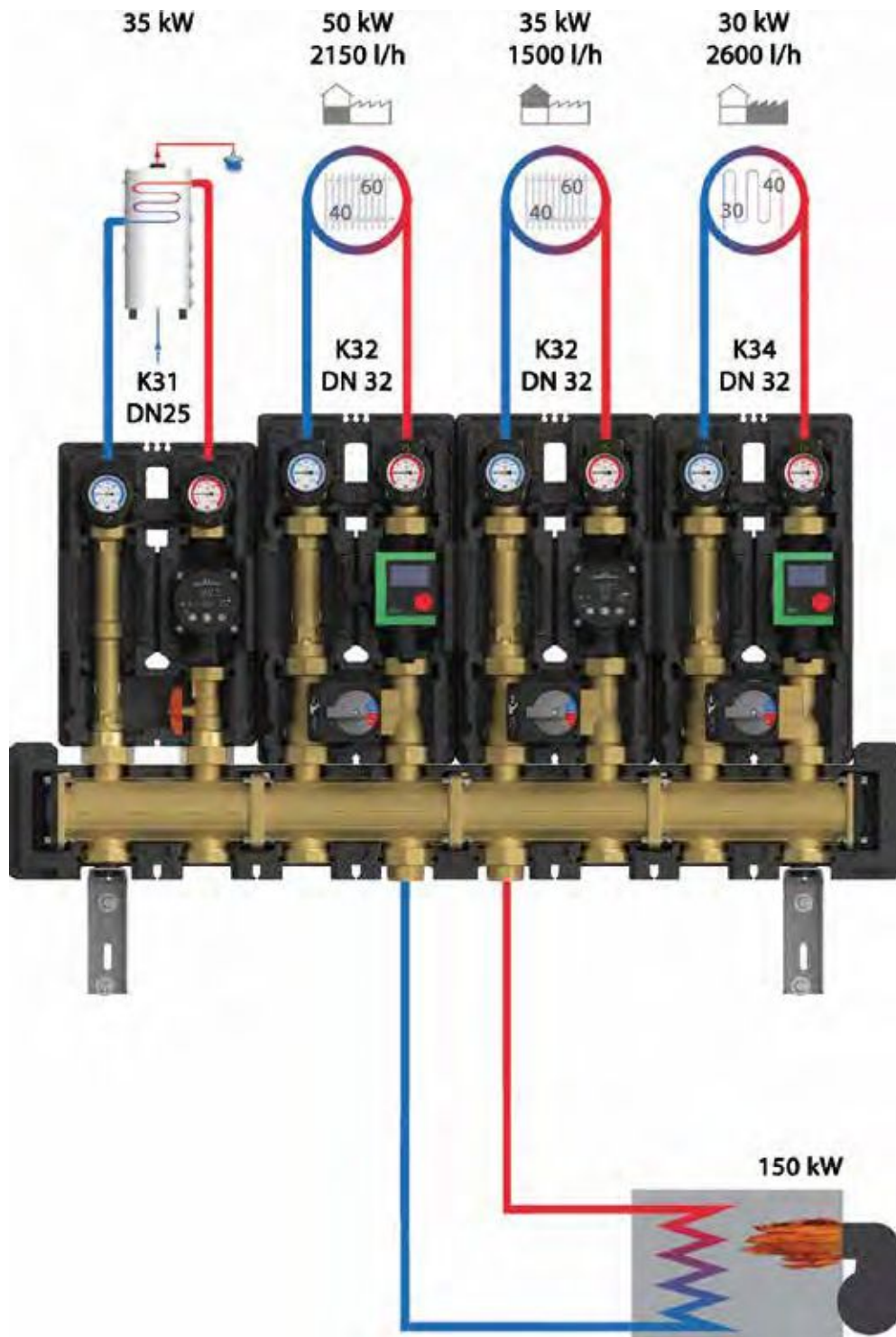
Systems, valves and fittings for the use  
in hot water heating systems

Valid for the UK





## Modular system DN 32 Mounting example

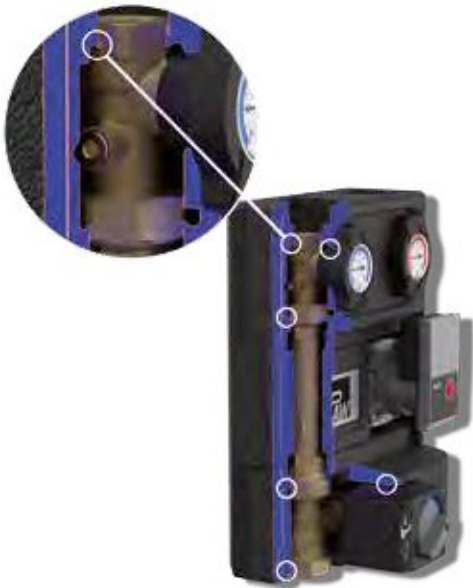


<b>Mounting example: Model house for max. capacity of a distribution manifold DN 32</b>
<b>K31 - DN 25,</b> Boiler charging
<b>K32 - DN 32,</b> Radiator circuit, basement, office
<b>K32 - DN 32,</b> Radiator circuit, top floor, seminar rooms
<b>K34 - DN 32,</b> Radiant floor heating, production hall

DN 32



## Product range HeatBloC® Heating circuits and modular distribution manifolds DN 32



### 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 2" external thread**  
with 2" 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-compliant functional insulation**  
made of permanently elastic EPP, complete insulation of the valves and fittings with sealing lips, ventilation duct to cool the pump

**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 132, you will find the complete mounting equipment for the modular system DN 32.



# Product range HeatBloC® Heating circuits and modular distribution manifolds DN 32 - Types

**K31**  
direct / unmixed



up to 65 kW\*

**K32**  
with 3-way mixing valve



up to 51 kW\*

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



up to 64 kW\*

**K36E**  
Boiler charging set  
with integrated overflow valve



up to 60 kW\*

**K38**  
with 4-way mixing valve



up to 52 kW\*

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



up to 150 kW\*  
for each boiler connection

**Hydraulic separators**



up to 4800 l/h

DN 32

\*Temperature difference = 20 K



### Application range

- for boiler charging, for modulating temperature heating systems

### Recommended range of application

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

### Operating data

Max. pressure	6 bars
Max. operating temperature	110 °C
Kvs value	15.1

### Technical data

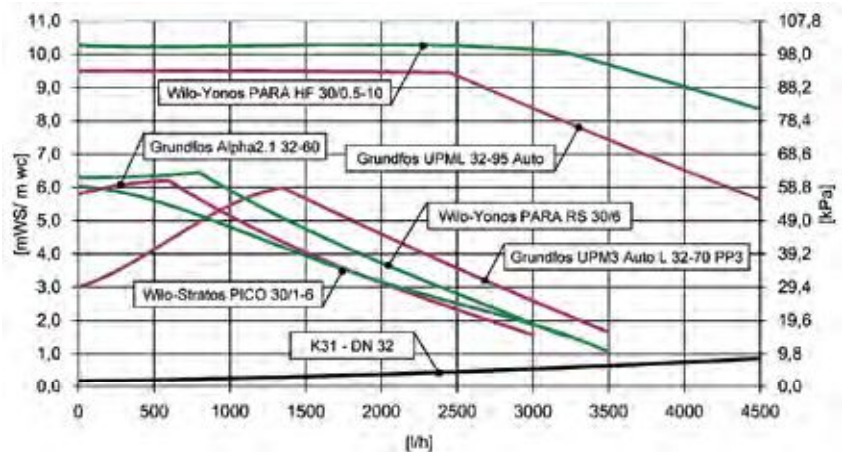
#### Dimensions

Nominal diameter	DN 32 (1¼")
Connection generator	2" ext. thread, flat sealing
Connection consumer	1¼" internal thread
(1) Height	441 mm
(2) Installation length	400 mm
(3) Centre distance	125 mm
(4) Width	250 mm

#### Materials

Valves and fittings	Brass
Gaskets	EPDM
Insulation	EPP

### Differential pressure diagram



DN 32

### HeatBloC® K31 - DN 32 (1¼")



HeatBloC® K31 - DN 32 (1¼")	EEI*	incl.	Item no.	€/ piece
Wilo-Stratos PICO 30/1-6	< 0.20	▲	39013WH6	-
Wilo-Yonos PARA RS 30/6-RKA	< 0.20	▲	39013WY6	-
Wilo-Yonos PARA HF 30/0.5-10	< 0.20	▲	39013WY10	-
Grundfos UPML 32-95 Auto	< 0.23	▲	39013GL9	-
Grundfos Alpha2.1 32-60	< 0.17	▲	39013GH6	-
Grundfos UPM3 Auto L 32-70 PP3	< 0.20	▲	39013GM6	-
for pumps with 2" ext. thread x 180 mm		⊖	39013	-

### Wall bracket DN 25 - DN 32

**34723** -

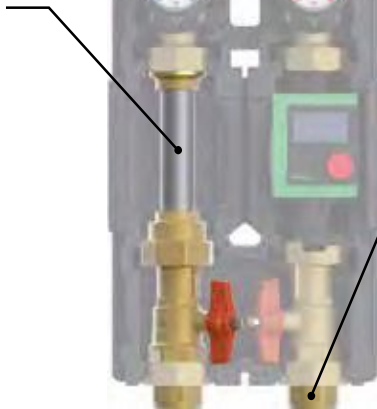
See page 133



### Fitting for heat flowmeter DN 32 for unmixed HeatBloCs

**433745** -

See page 132



### Connection set DN 32

**3731** -

See page 133

### Wall bracket set DN 32

**3722SET** -

See page 133

### Flush and drain set DN 32

**3761** -

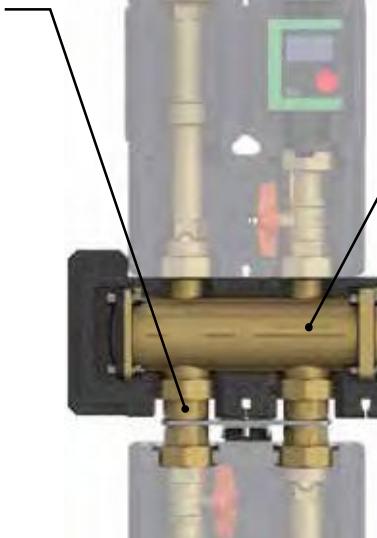
See page 132



### Coupling piece for overhead installation DN 32

**3724** -

See page 133



### Modular distribution manifold - DN 32

<b>37123</b>	<b>2-fold</b>	-
<b>37133</b>	<b>3-fold</b>	-
<b>37143</b>	<b>4-fold</b>	-
<b>37153</b>	<b>5-fold</b>	-
<b>37163</b>	<b>6-fold</b>	-

See page 128

### Mounting plate DN 32

**3725** -

See page 133

### Wall bracket DN 25 - DN 32

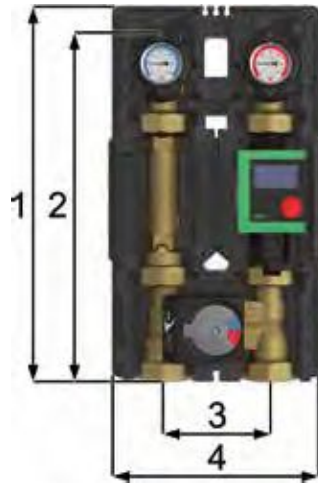
**34722** for HeatBloC -

See page 133

### Wall bracket set for distribution manifolds

**34721** -

See page 133



### Application range

- for heating systems controlled by a mixing valve

### Recommended range of application

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

### Operating data

Max. pressure	6 bars
Max. operating temperature	110 °C
Kvs value	9.6

### Technical data

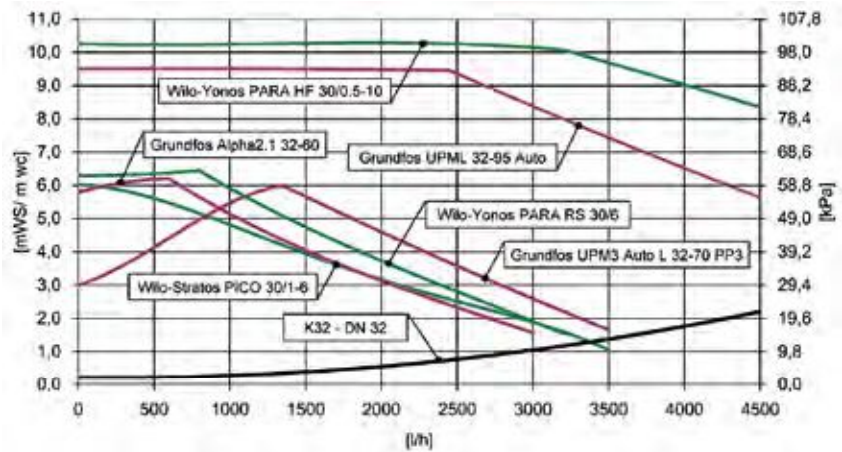
#### Dimensions

Nominal diameter	DN 32 (1¼")
Connection generator	2" ext. thread, flat sealing
Connection consumer	1¼" internal thread
(1) Height	441 mm
(2) Installation length	400 mm
(3) Centre distance	125 mm
(4) Width	250 mm

#### Materials

Valves and fittings	Brass
Gaskets	EPDM
Insulation	EPP

### Differential pressure diagram



DN 32

HeatBloC® K32 - DN 32 (1¼")	EEI*	incl.	Item no.	€/ piece
Wilo-Stratos PICO 30/1-6	< 0.20	▲M	39053MWH6	-
Wilo-Yonos PARA RS 30/6-RKA	< 0.20	▲M	39053MWY6	-
Wilo-Yonos PARA HF 30/0.5-10	< 0.20	▲M	39053MWY10	-
Grundfos UPML 32-95 Auto	< 0.23	▲M	39053MGL9	-
Grundfos Alpha2.1 32-60	< 0.17	▲M	39053MGH6	-
Grundfos UPM3 Auto L 32-70 PP3	< 0.20	▲M	39053MGM6	-
for pumps with 2" ext. thread x 180 mm		⊖M	39053M	-
Wilo-Stratos PICO 30/1-6	< 0.20	▲	39053WH6	-
Wilo-Yonos PARA RS 30/6-RKA	< 0.20	▲	39053WY6	-
Wilo-Yonos PARA HF 30/0.5-10	< 0.20	▲	39053WY10	-
Grundfos UPML 32-95 Auto	< 0.23	▲	39053GL9	-
Grundfos Alpha2.1 32-60	< 0.17	▲	39053GH6	-
Grundfos UPM3 Auto L 32-70 PP3	< 0.20	▲	39053GM6	-
for pumps with 2" ext. thread x 180 mm		⊖	39053	-
Extra charge for assembly with flow on the left per HeatBloC (no discount possible)			999300	-



**Wall bracket DN 25 - DN 32**

**34723** -

See page 133



**Fitting for heat flowmeter DN 32 for mixed HeatBloCs**

**433746** -

See page 132

**Wall bracket set DN 32**

**3722SET** -

See page 133



**Actuator SR5**

**705001** -

See page 134

**Connection set DN 32**

**3731** -

See page 132

**Flush and drain set DN 32**

**3761** -

See page 132



**Non-return valve DN 32**

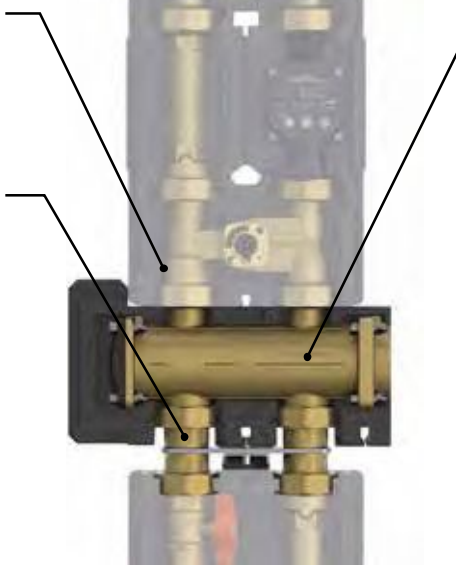
**37011** -

See page 133

**Coupling piece for overhead installation DN 32**

**3724** -

See page 133



**Modular distribution manifold - DN 32**

**37123** 2-fold -

**37133** 3-fold -

**37143** 4-fold -

**37153** 5-fold -

**37163** 6-fold -

See page 128

**Mounting plate DN 32**

**3725** -

See page 133

**Wall bracket set for distribution manifolds**

**34721** -

See page 133

**Wall bracket DN 25 - DN 32**

**34722 for HeatBloC** -

See page 133





### Application range

- for mixed low-temperature heating

### Recommended range of application

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

### Operating data

Max. pressure	6 bars
Max. operating temperature	110 °C
Kvs value	10.1

### Technical data

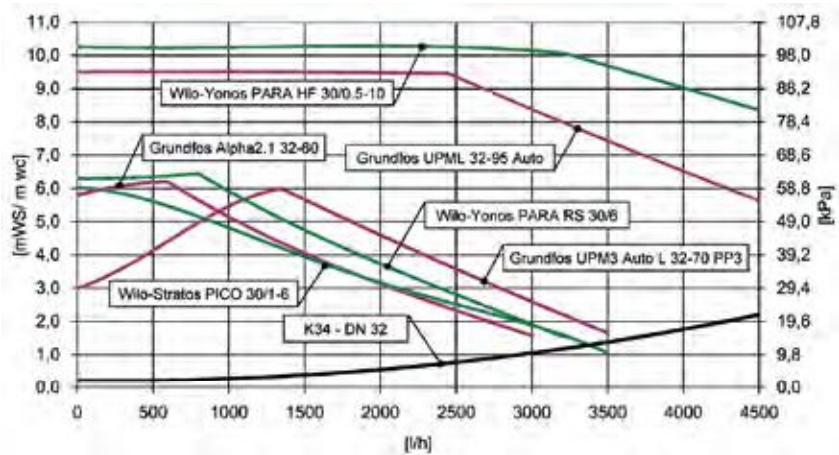
#### Dimensions

Nominal diameter	DN 32 (1¼")
Connection generator	2" ext. thread, flat sealing
Connection consumer	1¼" internal thread
(1) Height	441 mm
(2) Installation length	400 mm
(3) Centre distance	125 mm
(4) Width	250 mm

#### Materials

Valves and fittings	Brass
Gaskets	EPDM
Insulation	EPP

### Differential pressure diagram



DN 32

HeatBloC® K34 - DN 32 (1¼")	EEl*	incl.	Item no.	€/ piece
Wilo-Stratos PICO 30/1-6	< 0.20	▲M	39063MWH6	-
Wilo-Yonos PARA RS 30/6-RKA	< 0.20	▲M	39063MWY6	-
Wilo-Yonos PARA HF 30/0.5-10	< 0.20	▲M	39063MWY10	-
Grundfos UPML 32-95 Auto	< 0.23	▲M	39063MGL9	-
Grundfos Alpha2.1 32-60	< 0.17	▲M	39063MGH6	-
Grundfos UPM3 Auto L 32-70 PP3	< 0.20	▲M	39063MGM6	-
for pumps with 2" ext. thread x 180 mm		⊖M	39063M	-
Wilo-Stratos PICO 30/1-6	< 0.20	▲	39063WH6	-
Wilo-Yonos PARA RS 30/6-RKA	< 0.20	▲	39063WY6	-
Wilo-Yonos PARA HF 30/0.5-10	< 0.20	▲	39063WY10	-
Grundfos UPML 32-95 Auto	< 0.23	▲	39063GL9	-
Grundfos Alpha2.1 32-60	< 0.17	▲	39063GH6	-
Grundfos UPM3 Auto L 32-70 PP3	< 0.20	▲	39063GM6	-
for pumps with 2" ext. thread x 180 mm		⊖	39063	-
Extra charge for assembly with flow on the left per HeatBloC (no discount possible)			999300	-



### Wall bracket DN 25 - DN 32

**34723** -

See page 133



### Contact thermostat

**Q00145** 20-60 °C -

See page 134

### Fitting for heat flowmeter DN 32 for mixed HeatBloCs

**433746** -

See page 132



### Actuator SR5

**705001** -

See page 134

### Wall bracket set DN 32

**3722SET** -

See page 133

### Connection set DN 32

**3731** -

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### Flush and drain set DN 32

**3761** -

See page 132



### Coupling piece for overhead installation DN 32

**3724** -

See page 133



### Modular distribution manifold - DN 32

**37123** 2-fold -

**37133** 3-fold -

**37143** 4-fold -

**37153** 5-fold -

**37163** 6-fold -

See page 128

### Mounting plate DN 32

**3725** -

See page 133

### Wall bracket DN 25 - DN 32

**34722** for HeatBloC -

See page 133

### Wall bracket set for distribution manifolds

**34721** -

See page 133



### Application range

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

### Recommended range of application

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

### Operating data

Max. pressure	6 bars
Max. operating temperature	110 °C
Kvs value	9.7

### Technical data

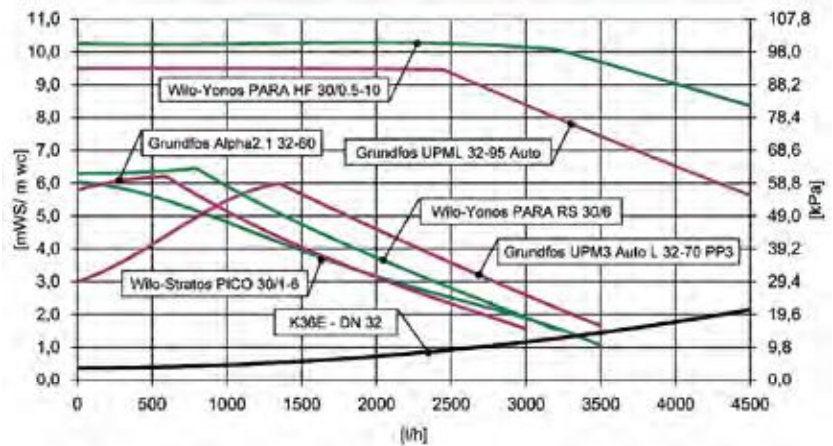
#### Dimensions

Nominal diameter	DN 32 (1¼")
Connection generator	1¼" internal thread
Connection consumer	2" internal thread
(1) Height	441 mm
(2) Installation length	465 mm
(3) Centre distance	125 mm
(4) Width	250 mm

#### Materials

Valves and fittings	Brass
Gaskets	EPDM
Insulation	EPP

### Differential pressure diagram



### HeatBloC® K36E - DN 32 (1¼")

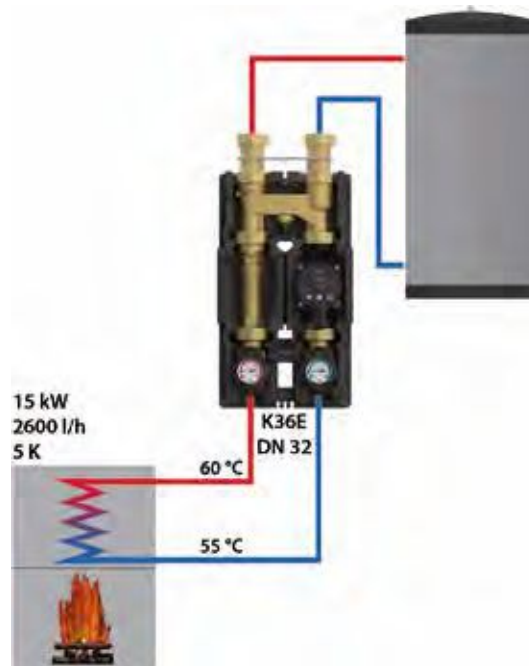
	Opening temperature	EEl*	incl.	Item no.	€/ piece
Wilo-Stratos PICO 30/1-6	45 °C	< 0.20	▲	390343WH6	-
Wilo-Yonos PARA RS 30/6-RKA	45 °C	< 0.20	▲	390343WY6	-
Wilo-Yonos PARA HF 30/0.5-10	45 °C	< 0.20	▲	390343WY10	-
Grundfos Alpha2.1 32-60	45 °C	< 0.17	▲	390343GH6	-
Grundfos UPM3 Auto L 32-70 PP3	45 °C	< 0.20	▲	390343GM6	-
Grundfos UPML 32-95 Auto	45 °C	< 0.23	▲	390343GL9	-
for pumps with 2" ext. thread x 180 mm	45 °C		⊖	390343	-
Wilo-Stratos PICO 30/1-6	60 °C	< 0.20	▲	390373WH6	-
Wilo-Yonos PARA RS 30/6-RKA	60 °C	< 0.20	▲	390373WY6	-
Wilo-Yonos PARA HF 30/0.5-10	60 °C	< 0.20	▲	390373WY10	-
Grundfos Alpha2.1 32-60	60 °C	< 0.17	▲	390373GH6	-
Grundfos UPM3 Auto L 32-70 PP3	60 °C	< 0.20	▲	390373GM6	-
Grundfos UPML 32-95 Auto	60 °C	< 0.23	▲	390373GL9	-
for pumps with 2" ext. thread x 180 mm	60 °C		⊖	390373	-





## Description of function K36E - DN 32 (1¼")

The K36E should always be used with a buffer tank, if not, a hydraulic separator is mandatory.



### Thermal control valve with bypass

#### Functioning:

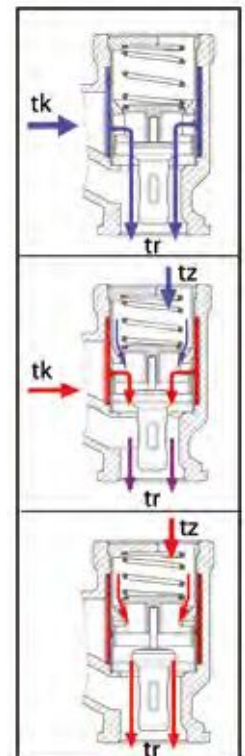
The thermal valve shuts off the connection to the consumers, as long as the water in the boiler circuit is colder than the opening temperature of the thermal control valve. The pump in the K36E circulates the water in the boiler circuit by means of the automatic bypass which is completely open.

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 thus enables 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 K36E. Otherwise there will not be enough power available for the consumers (the boiler output may be reduced before the thermal control valve opens completely).



DN 32

### Mounting equipment



#### Wall bracket for HeatBloC DN 25 (1") - DN 32 (1¼")

Parts: Wall bracket (steel, zincd), mounting equipment  
DN 25: Wall distance possible = 150 mm  
DN 32: Wall distance possible = 180 mm  
**Not** required for installation with a PAW distribution manifold.

Item no.

34722

€/ piece

-



#### Connection set DN 32 (1¼")

Connection set for DN 32 (1¼"), consisting of 2 screw-in fittings with 2" external thread and 1¼" internal thread for connecting pipes with 1¼" external thread.

3732

-



### Application range

- for heating systems controlled by a mixing valve in combination with a boiler temperature maintenance

### Recommended range of application

- up to 52 kW
- 20 K up to 2240 l/h

### Operating data

Max. pressure	6 bars
Max. operating temperature	110 °C
Kvs value	6.1

### Technical data

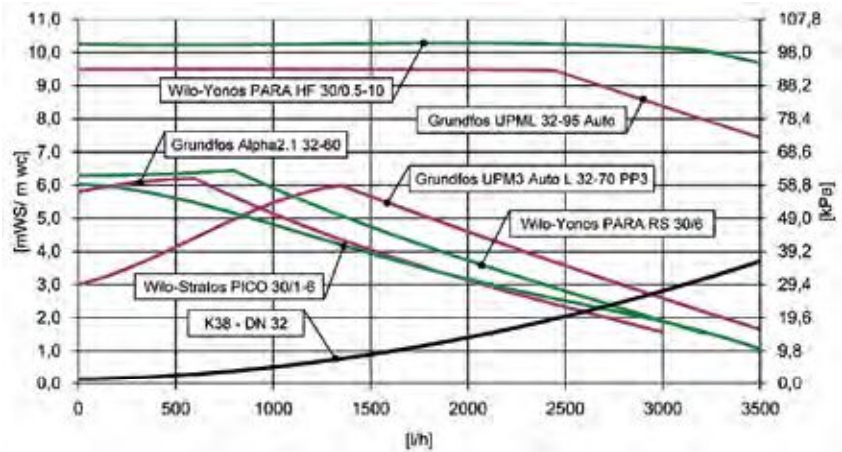
#### Dimensions

Nominal diameter	DN 32 (1¼")
Connection generator	2" ext. thread, flat sealing
Connection consumer	1¼" internal thread
(1) Height	441 mm
(2) Installation length	400 mm
(3) Centre distance	125 mm
(4) Width	250 mm

#### Materials

Valves and fittings	Brass
Gaskets	EPDM
Insulation	EPP

### Differential pressure diagram



DN 32

HeatBloC® K38 - DN 32 (1¼")	EEI*	incl.	Item no.	€/ piece
Wilo-Stratos PICO 30/1-6	< 0.20	▲M	39083MWH6	-
Wilo-Yonos PARA RS 30/6-RKA	< 0.20	▲M	39083MWY6	-
Wilo-Yonos PARA HF 30/0.5-10	< 0.20	▲M	39083MWY10	-
Grundfos UPML 32-95 Auto	< 0.23	▲M	39083MGL9	-
Grundfos Alpha2.1 32-60	< 0.17	▲M	39083MGH6	-
Grundfos UPM3 Auto L 32-70 PP3	< 0.20	▲M	39083MGM6	-
for pumps with 2" ext. thread x 180 mm		⊖M	39083M	-
Wilo-Stratos PICO 30/1-6	< 0.20	▲	39083WH6	-
Wilo-Yonos PARA RS 30/6-RKA	< 0.20	▲	39083WY6	-
Wilo-Yonos PARA HF 30/0.5-10	< 0.20	▲	39083WY10	-
Grundfos UPML 32-95 Auto	< 0.23	▲	39083GL9	-
Grundfos Alpha2.1 32-60	< 0.17	▲	39083GH6	-
Grundfos UPM3 Auto L 32-70 PP3	< 0.20	▲	39083GM6	-
for pumps with 2" ext. thread x 180 mm		⊖	39083	-



### Wall bracket DN 25 - DN 32

**34723** -

See page 133



### Fitting for heat flowmeter DN 32 for mixed HeatBloCs

**433746** -

See page 132

### Wall bracket set DN 32

**3722SET** -

See page 133



### Actuator SR5

**705001** -

See page 134

### Connection set DN 32

**3731** -

See page 132

### Flush and drain set DN 32

**3761** -

See page 132

### Non-return valve DN 32

**37011** -

See page 133

### Coupling piece for overhead installation DN 32

**3724** -

See page 133

### Mounting plate DN 32

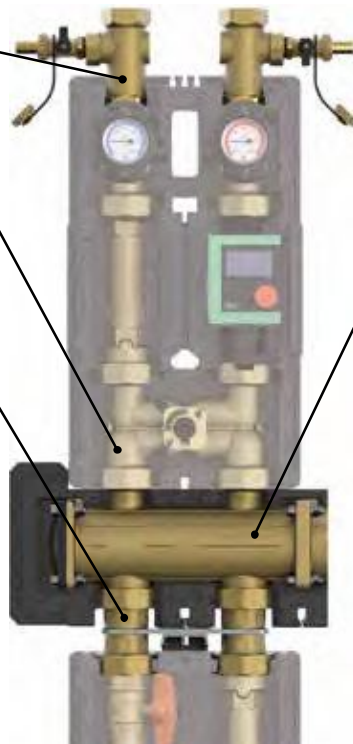
**3725** -

See page 133

### Wall bracket DN 25 - DN 32

**34722 for HeatBloC** -

See page 133



### Modular distribution manifold - DN 32

**37123 2-fold** -

**37133 3-fold** -

**37143 4-fold** -

**37153 5-fold** -

**37163 6-fold** -

See page 128

### Wall bracket set for distribution manifolds

**34721** -

See page 133



### Application range

Extension of an already existing PAW heating circuit from the current series 2017, to a HeatBloC MC for the automatic, dynamic balancing of the distribution manifold

### Scope of delivery

- controller MCom
- 2 x temperature sensor Pt1000
- differential pressure sensor DPS
- high-efficiency pump
- PAW actuator SR10 24/ST - 10 Nm 24 V

### Temperature sensor Pt1000

- sensor for temperature measurement in the return
- measuring range: -20 °C ... +150 °C
- blue mark for a clear assignment of the sensor

### Differential pressure sensor DPS

- measuring range: 0-0.6 bars
- incl. brass fitting for the sensor and 2 x 1/2" union nut
- with connection cable

### Actuator

- 10 Nm / 24 V / 50 Hz
- constant control voltage
- manual operation possible
- controlled by MCom
- easy mounting through snap-in assembly on the PAW mixing valve



### Controller MCom

- autarkic controller for an automatic, dynamic balancing of the distribution manifold through an electronic regulation of the differential pressure, 0-0.6 bars
- display of the flow rate values of the pump (Grundfos)
- Modbus for an optional integration in a smart home system with an external nominal value indication

### Temperature sensor Pt1000

- sensor for temperature measurement in the return
- measuring range: -20 °C ... +150 °C
- red mark for a clear assignment of the sensor

### High-efficiency pump

- fitted with 2 m cable
- with serial number
- ErP and EuP READY



### Technical data

#### Operating data

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

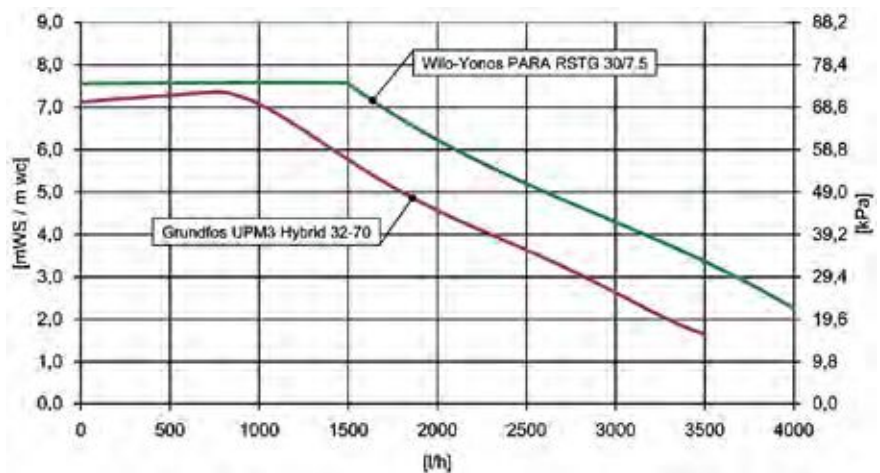
#### Dimensions

Height (controller) 200 mm  
Width (controller) 250 mm  
Centre distance 125 mm

#### Materials

Valves and fittings Brass  
Gaskets AFM34  
Insulation EPP

### Differential pressure diagram



### Extension set MCom - DN 32 (1 1/4")



**Grundfos UPM3 Hybrid 32-70**

EEI\*

< 0.20

Item no.

**139932MGU7**

-

**Wilo-Yonos PARA RSTG 30/7.5**

< 0.21

**139932MWG8**

-



### Application range

Extension of an already existing PAW heating circuit from the current series 2017, to a HeatBloC MC for the automatic, dynamic balancing of the distribution manifold

### Scope of delivery

- controller MCom
- 2 x temperature sensor Pt1000
- differential pressure sensor DPS
- high-efficiency pump

### Temperature sensor Pt1000

- sensor for temperature measurement in the return
- measuring range: -20 °C ... +150 °C
- blue mark for a clear assignment of the sensor

### Differential pressure sensor DPS

- measuring range: 0-0.6 bars
- incl. brass fitting for the sensor and 2 x ½" union nut
- with connection cable



### Controller MCom

- autarkic controller for an automatic, dynamic balancing of the distribution manifold through an electronic regulation of the differential pressure, 0-0.6 bars
- display of the flow rate values of the pump (Grundfos)
- Modbus for an optional integration in a smart home system with an external nominal value indication

### Temperature sensor Pt1000

- sensor for temperature measurement in the return
- measuring range: -20 °C ... +150 °C
- red mark for a clear assignment of the sensor

### High-efficiency pump

- fitted with 2 m cable
- with serial number
- ErP and EuP READY



### Technical data

#### Operating data

Max. operating temperature 110 °C  
Maximum pressure 6 bars

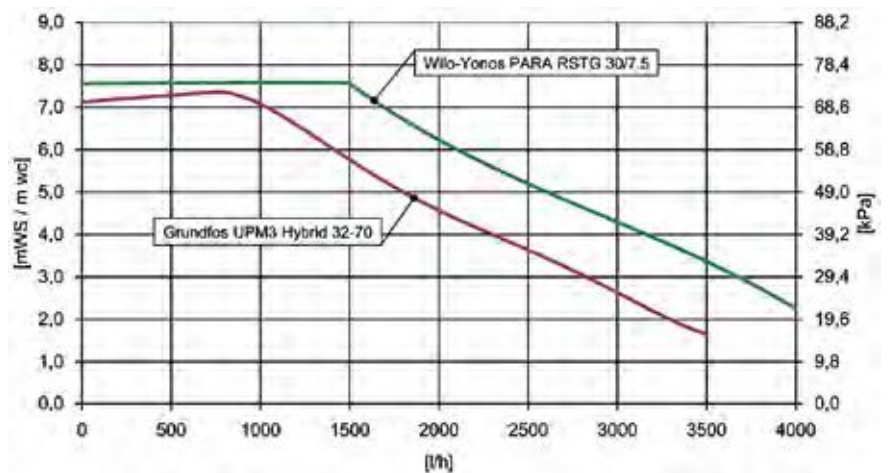
#### Dimensions

Height (controller) 200 mm  
Width (controller) 250 mm  
Centre distance 125 mm

#### Materials

Valves and fittings Brass  
Gaskets AFM34  
Insulation EPP

### Differential pressure diagram



Extension set - DN 32 (1¼")	EEI*	Item no.	-
Grundfos UPM3 Hybrid 32-70	< 0.20	139932GU7	-
Wilo-Yonos PARA RSTG 30/7.5	< 0.21	139932WG8	-







### Application range

- modular design
- for outputs up to 150 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 2-fold	34.0
Kvs value 3-fold	37.0
Kvs value 4-fold	38.0
Kvs value 5-fold	38.0
Kvs value 6-fold	38.0

### Technical data

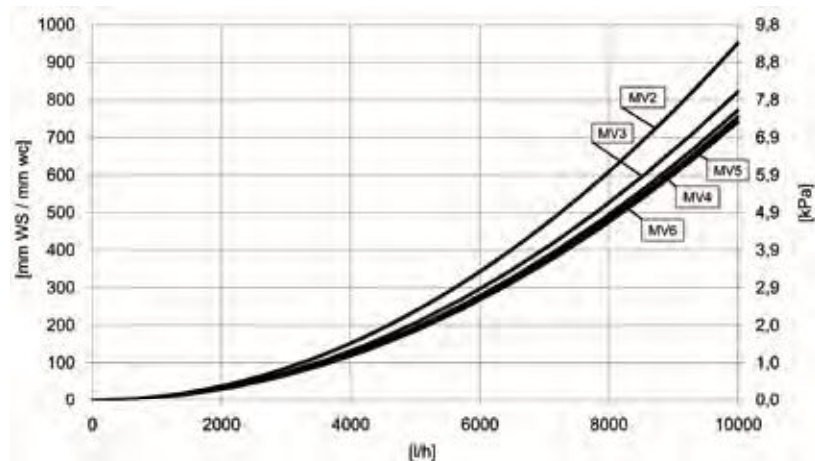
#### Dimensions

Nominal diameter	DN 32 (1 1/4")
Connection generator	2" external thread flat sealing (bottom), 2 x for boiler connection, others plugged
Connection consumer	1 1/4" PAW flange for nut 2" (top)
Installation height	156 mm
Height insulation	156 mm
Centre distance	125 mm

#### Materials

Valves and fittings	Brass/Polyamide
Gaskets	EPDM
Insulation	EPP

### Differential pressure diagram



DN 32

### Modular distribution manifold - DN 32 (1 1/4")

**2-fold**  
Number of connections for HeatBloCs = 3  
Width = 625 mm

Item no.      € / piece

37123      -

**3-fold**  
Number of connections for HeatBloCs = 5  
Width = 875 mm

37133      -

**4-fold**  
Number of connections for HeatBloCs = 7  
Width = 1125 mm

37143      -

**5-fold**  
Number of connections for HeatBloCs = 9  
Width = 1375 mm

37153      -

**6-fold**  
Number of connections for HeatBloCs = 11  
Width = 1625 mm

37163      -



### Extension module DN 32

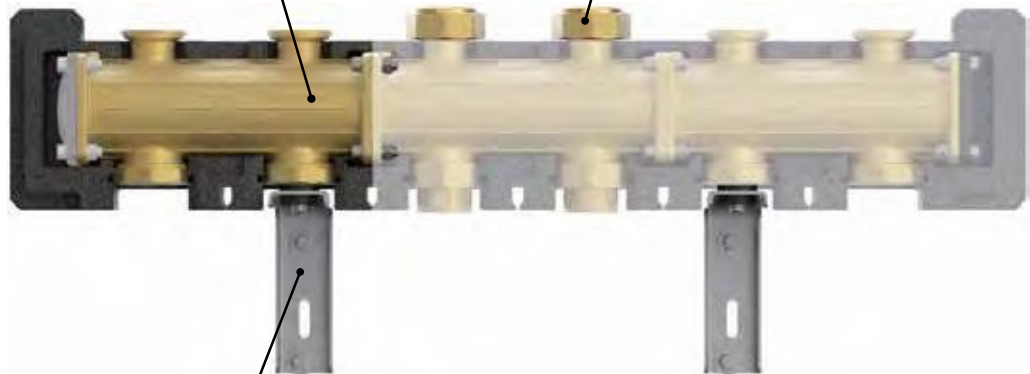
37113 -

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

### Reducer set DN 32 - DN 25

37351 H = 11 mm -

See page 133



### Wall bracket set for distribution manifolds

34721 -

See page 133

### Coupling piece for overhead installation DN 32 (1¼")

3724 -

See page 133

### Mounting plate DN 32 (1¼")

3725 -

See page 133



### Safety group DN 32 (1¼") up to 100 kW

52553 -

See page 134

### MCom communication set

1398730 -



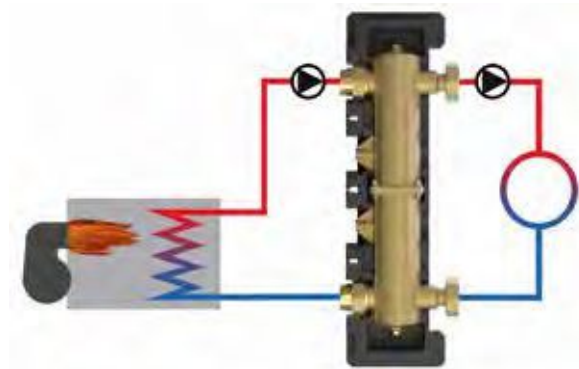
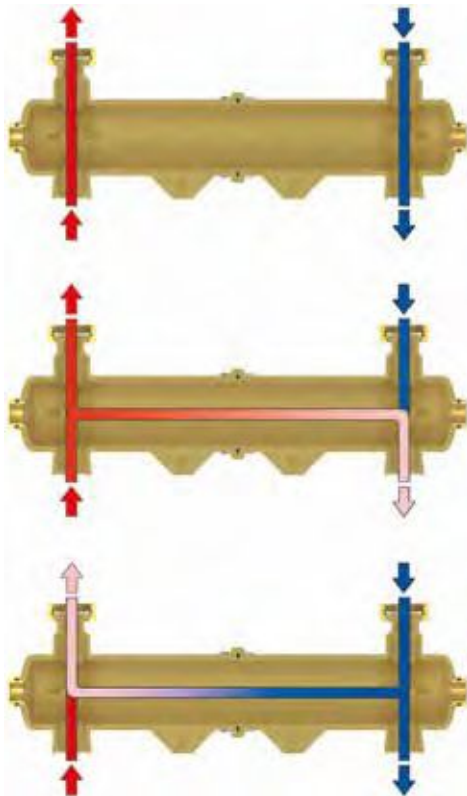
DN 32



## 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 circuit 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 32 (1¼")

Item no.

€/ piece



**up to 4800 l/h**

**374213**

-

Completely made of brass, completely insulated with EPP insulation, for the installation below a modular distribution manifold DN 32 or separately on the wall (vertically or horizontally).

Connections:

1¼" PAW flange for nut 2" (top)

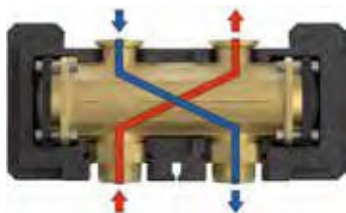
1¼" internal thread / 2" external thread, flat sealing (bottom) with threaded connection

2 x ½" internal thread for immersion sleeve and fill and drain valve

Width = 600 mm

Installation height = 200 mm

Centre distance = 375 mm



**up to 2600 l/h**

**374203**

-

Completely made of brass, with separate flow and return line, for the installation below a HeatBloC DN 32. With EPP insulation.

Can also be installed below a modular distribution manifold DN 32 (with mounting plate item no. 3725)

or separately (in the pipe). When being installed separately, two additional connections sets (item no. 2152) are necessary.

Connections:

1¼" PAW flange for nut 2" (top)

2" external thread, flat-sealing with threaded connection

Width = 330 mm

Installation height = 125 mm

Centre distance = 125 mm

### Immersion sleeves ½" ext. thread

566002 -

See page 132

### Wall bracket set for distribution manifolds

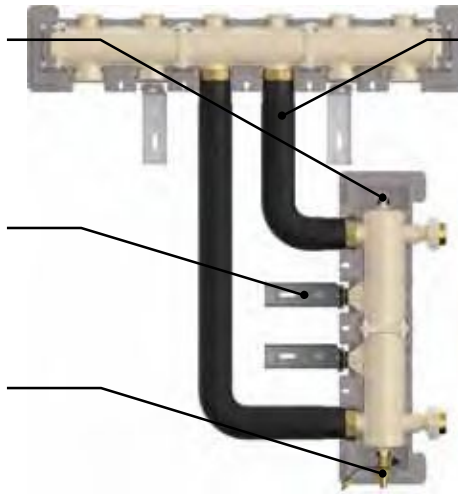
34721 -

See page 133

### Fill and drain valve

2260 -

See page 183



### Piping group DN 32

34742KS1 -

See page 133

### Mounting plate DN 32

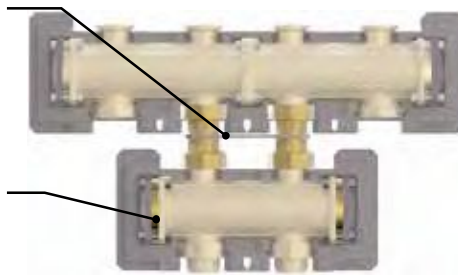
3725 -

See page 133

### Conversion kit for low-loss header DN 32

37431 -

See page 133



### Sealing for nut

2158 1¼" -

See page 177

### Union nut

2156 2" int. thread -

See page 177

DN 32

### Low-loss header MVW DN 32 (1¼")

for boilers with integrated pump

By means of the conversion kit (item no. 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 (item no. 374203 or 374213) 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 32 (1¼")

Item no.

€ / piece



**2-fold**  
Number of connections for HeatBloCs = 3  
Width = 600 mm

374223 -










**3-fold**  
Number of connections for HeatBloCs = 5  
Width = 850 mm

374233 -

Illustration		Item no.	€ / piece
	<p><b>Fitting for heat flowmeter (direct HeatBloCs) DN 32</b></p> <p>The fitting can be used for all heat flowmeters (WMZ) with the connecting dimensions 1" x 130 mm. For heat flowmeters with other dimensions, the adapter set must be obtained by the customer. In the delivery included are the required flat sealing fitting pieces, thus enabling to install additionally a heat flowmeter.</p> <p>The fitting is installed into the return line of the heating circuit. The sensors can be installed in the 1/2" sleeves of the thermometer ball valves (extensions might be necessary) or in connections of the customer. The immersion sleeve is not included in delivery. When the heat flowmeter is installed the front insulation may be adapted to the shape of the case (simply by cutting out). As the insulation is closed, it is recommended to install the heat flowmeter separately.</p> <p>The heat flowmeter is not included in delivery!</p> <p>Fitting for direct HeatBloCs DN 32 without mixing valve Consisting of: flat sealing adapter set, 1 adapter pipe, seals, 1 pump ball valve with check valve and union nut.</p>	<b>433745</b>	-
	<p><b>Fitting for heat flowmeter (mixed HeatBloCs) DN 32</b></p> <p>Fitting for HeatBloCs DN 32 with 3- or 4-wax mixing valve Consisting of: flat sealing adapter set, 1 adapter pipe, seals, 1 non-return valve for the return of the mixing valve.</p>	<b>433746</b>	-
	<b>Immersion sleeve 6 mm x 30 mm</b>	<b>566001</b>	-
	<b>Immersion sleeve 6 mm x 60 mm</b>	<b>566002</b>	-
	<b>Immersion sleeve 6 mm x 60 mm</b>	<b>5660021</b>	-
	<b>Immersion sleeve 6 mm x 100 mm</b>	<b>566003</b>	-
	<b>Immersion sleeve 6 mm x 150 mm</b>	<b>566004</b>	-
	<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>		
	<p><b>Adapter pipe DN 32</b></p> <p>Brass, 2 x 2" external thread, flat sealing, length 180 mm, when an external circulation pump is used to bridge the pump connection</p>	<b>3747</b>	-
	<p><b>Connection set DN 32</b></p> <p>Consisting of 2 insertion pieces for connection of pipes with 1 1/4" external thread below the HeatBloCs</p>	<b>3731</b>	-
	<p><b>Flush and drain set DN 32</b></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>	<b>3761</b>	-

Illustration		Item no.	€ / piece
	<b>Non-return valve DN 32</b> 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.	<b>37011</b>	-
	<b>Coupling piece for overhead installation DN 32</b> 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.	<b>3724</b>	-
	<b>Mounting plate DN 32</b> Parts: mounting plate, 2 gaskets, 2 x nut 2" for installation with flat sealings below a modular distribution manifold and for attaching wall brackets	<b>3725</b>	-
	<b>Wall bracket DN 25 - DN 32</b> Zinc-plated wall bracket for the wall assembly of a HeatBloC. Easy snap-in assembly of the HeatBloC on the wall bracket.	<b>34723</b>	-
	<b>Wall bracket for HeatBloC DN 25 - DN 32</b> Parts: Wall bracket (steel, zinc-plated), mounting equipment DN 25: Wall distance possible = 150 mm DN 32: Wall distance possible = 180 mm <b>Not</b> required for installation with a PAW distribution manifold.	<b>34722</b>	-
	<b>Wall bracket set for distribution manifolds</b> Parts: 2 wall brackets as a set, steel, zinc-plated, mounting equipment DN 25: Wall distance possible: 150mm DN 32: Wall distance possible: 180 mm From 5-fold modular distribution manifolds on, we recommend to use 2 wall bracket sets.	<b>34721</b>	-
	<b>Wall bracket set DN 32</b> Parts: 2 x nut 2", mounting plate, wall bracket Wall distance possible: 142.5-167.5 mm	<b>3722SET</b>	-
	<b>Reducer set DN 32 - DN 25, H = 11 mm</b>	<b>37351</b>	-
	<b>Reducer set DN 32 - DN 25, H = 24 mm</b> for installing DN 25 HeatBloCs 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	<b>3735</b>	-
	<b>Piping group DN 32</b> 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.	<b>34742KS1</b>	-
	<b>Conversion kit for low-loss header DN 32</b> for conversion into a distribution manifold with integrated hydraulic separator (low-loss header). Range of application up to 2600 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.	<b>37431</b>	-

Illustration		Item no.	€ / piece
	<p><b>Contact thermostat 20-60 °C</b></p> <p>Contact thermostat for limiting the flow temperature, adjustable from 20 - 60 °C</p>	<b>Q00145</b>	-
	<p><b>Safety group DN 32 up to 100 kW</b></p> <p>for the installation on a modular distribution manifold DN 32, 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 bars, up to 100 kW, pressure gauge 0-4 bars</p>	<b>52553</b>	-
	<p><b>Connection set for diaphragm expansion tank</b></p> <p>for assembly to the safety group DN 32 with self-sealing double nipple 1", cap valve 1", armoured hose with bend 1" x 700 mm.</p>	<b>7508</b>	-
	<p><b>PAW actuator SR5 - 5 Nm 230 V</b></p> <p>Change-over switch for manual / automatic operation, simple 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</p> <p><b>Technical data</b></p> <p>Electrical connection: 230 V / 50 Hz  Input power: 2.5 W  Torque: 5 Nm  Setting time for 90°: 140 s</p>	<b>705001</b>	-
	<p><b>PAW actuator SR10 - 10 Nm 230 V</b></p> <p>Change-over switch for manual / automatic operation, simple 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</p> <p><b>Technical data</b></p> <p>Electrical connection: 230 V / 50 Hz  Input power: 3.5 W  Torque: 10 Nm  Setting time for 90°: 140 s</p>	<b>705002</b>	-
	<p><b>PAW actuator SR10 24/3P - 10 Nm 24 V</b></p> <p>Like PAW actuator SR10 (item no. 705002), but: with electrical connection/supply voltage 24 VAC for control systems with 3-level-control</p> <p><b>Technical data</b></p> <p>Electrical connection: 24 V/50 Hz  Input power: 1.5 W  Torque: 10 Nm  Setting time for 90°: 140 s</p>	<b>7054</b>	-
	<p><b>PAW actuator SR10 24/ST - 10 Nm 24 V</b></p> <p>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 0...10 V output</p> <p><b>Technical data</b></p> <p>Electrical connection: 24 V/50 Hz  Input power: 1.5 W  Torque: 10 Nm  Setting time for 90°: 140 s</p>	<b>70541</b>	-