



HeatBloC® DN 40/50

Catalogue 01/2018

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

Valid for the UK

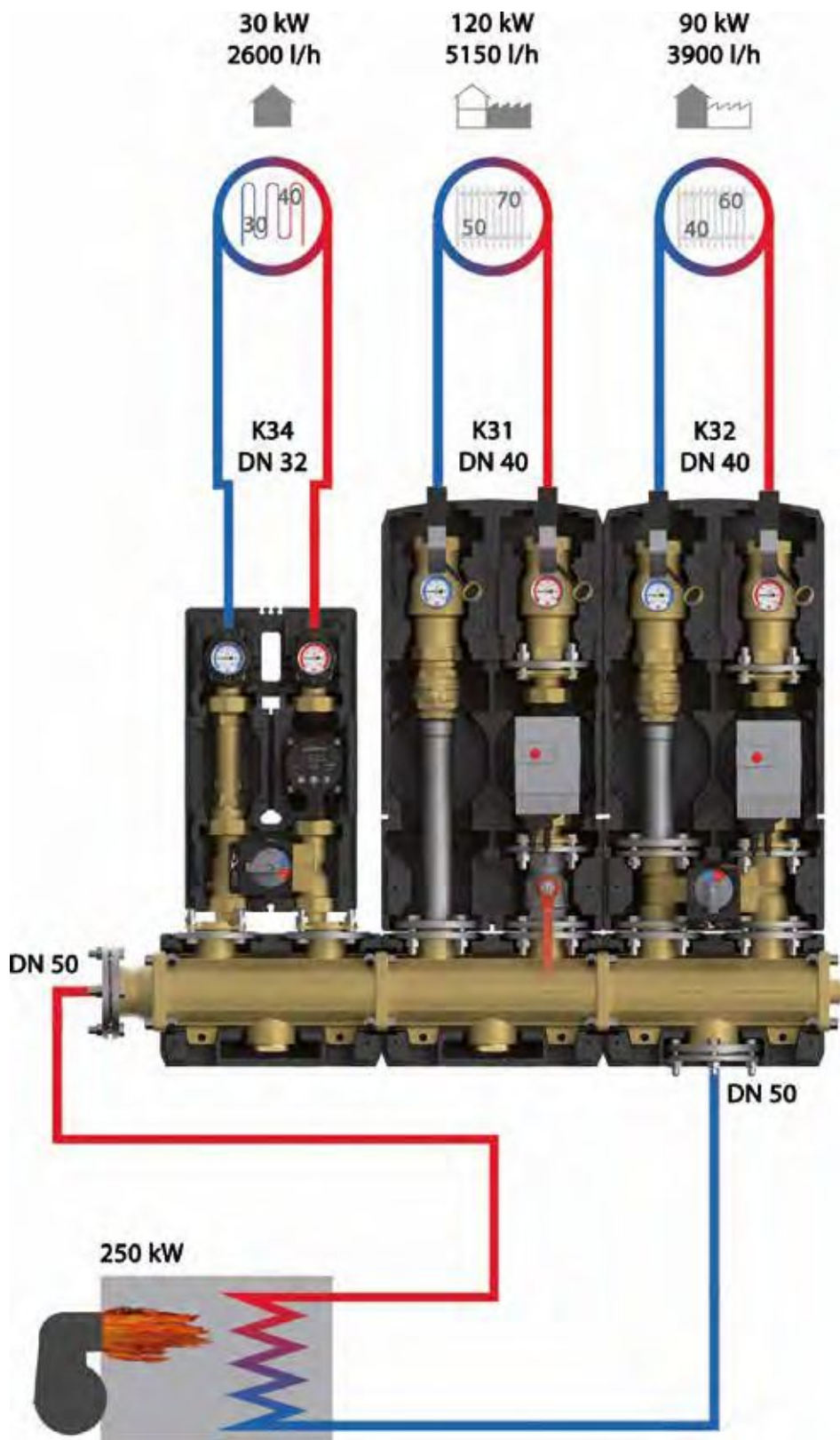


Mounting example:
Distribution manifold
DN 40 with 3 zones and
a boiler capacity of up to
250 kW

K34 - DN 32,
 Low-temperature heating
 with mixing valve,
 training centre

K31 - DN 40,
 Air heater,
 production hall

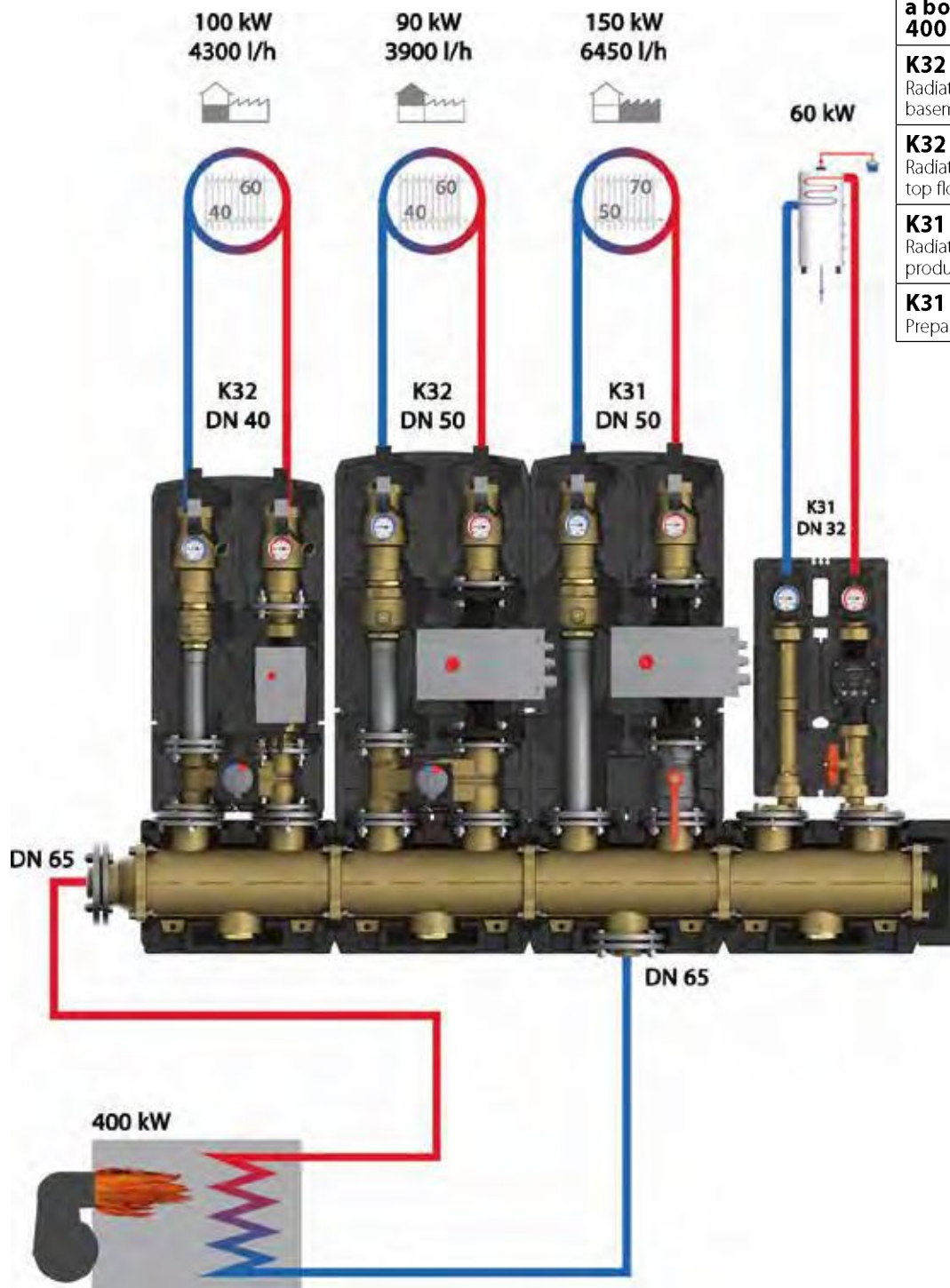
K32 - DN 40,
 Radiator circuit,
 office block



DN 40



Modular system DN 50 Mounting example



Mounting example: Distribution manifold DN 50 with 4 zones and a boiler capacity of up to 400 kW
K32 - DN 40, Radiator circuit, basement, office
K32 - DN 50, Radiator circuit, top floor, office
K31 - DN 50, Radiator circuit, production hall
K31 - DN 32, Preparation of domestic hot water

DN 40



Product range HeatBloC® Heating circuits and modular distribution manifolds DN 40/50



DN 40



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

Connections
Flange connection DN 40/PN 6 or DN 50/PN6 as slip-on flange and 1½" / 2" internal thread
incl. gaskets and screws for the installation on PAW modular distribution manifolds
With PAW mounting equipment, the HeatBloCs 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 conform 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
by simply removing the front insulation shell

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

You will find the complete mounting equipment for the modular system DN 40 at page 151, for the modular system DN 50 at page 155.



Product range HeatBloC® Heating circuits and modular distribution manifolds DN 40/50 - Types

**K31 - DN 40 (1½")
direct / unmixed**



up to 150 kW*

**K32 - DN 40 (1½")
with 3-way mixing valve**



up to 125 kW*

**Modular distribution manifold DN 40 (1½")
2-fold, 3-fold, 4-fold**



up to 250 kW*

**K31 - DN 50 (2")
direct / unmixed**



up to 250 kW*

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



up to 230 kW*

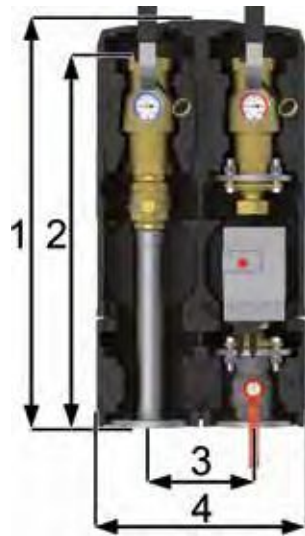
**Modular distribution manifold DN 50 (2")
2-fold, 3-fold, 4-fold**



up to 400 kW*

*Temperature difference = 20 K

DN 40



Application range

- for boiler charging, for modulating temperature heating systems

Recommended range of application

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

Operating data

Max. pressure	6 bars
Max. operating temperature	110 °C
Kvs value	28.3

Technical data

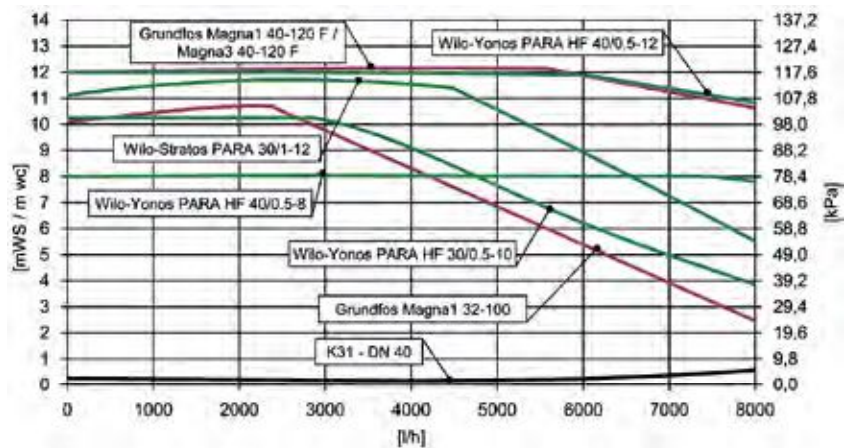
Dimensions

Nominal diameter	DN 40 (1½")
Connection generator	Flange DN 40 / PN 6
Connection consumer	1½" int. thread
(1) Height	610 mm
(2) Installation length	560 mm
(3) Centre distance	160 mm
(4) Width	320 mm

Materials

Valves and fittings	Brass
Gaskets	EPDM / NBR / AFM34
Insulation	EPP

Differential pressure diagram

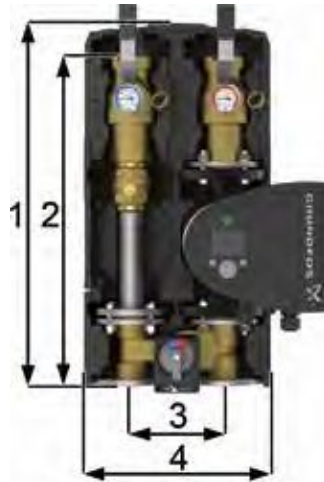


DN 40

HeatBloC® K31 - DN 40 (1½")



	EEI*	incl.	Item no.	€/ piece
Wilo-Yonos PARA HF 30/0.5-10	< 0.20	▲	41211WY10	-
Wilo-Stratos PARA 30/1-12	< 0.23	▲	41211WH12	-
Wilo-Yonos PARA HF 40/0.5-8	< 0.20	▲	41211WY8	-
Wilo-Yonos PARA HF 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	-
for pumps with flange DN 40/PN 6 x 250 mm		⊖	41211	-



Application range

- for heating systems controlled by a mixing valve

Recommended range of application

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

Operating data

Max. pressure	6 bars
Max. operating temperature	110 °C
Kvs value	17.7

Technical data

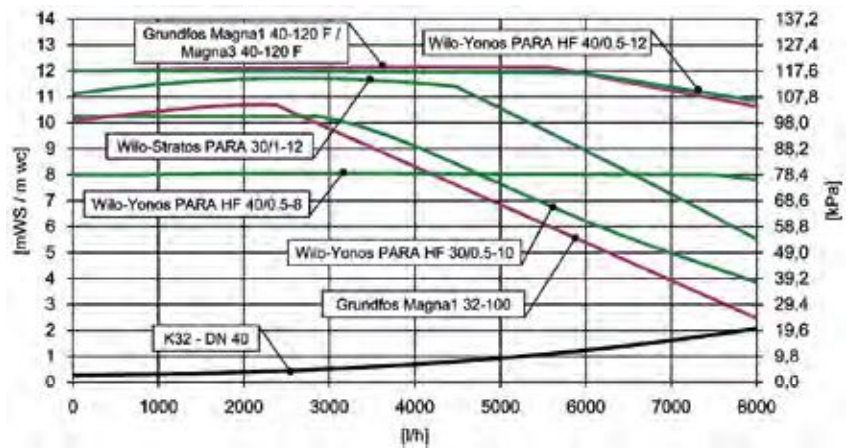
Dimensions


Nominal diameter	DN 40 (1½")
Connection generator	Flange DN 40 / PN 6
Connection consumer	1½" int. thread
(1) Height	610 mm
(2) Installation length	560 mm
(3) Centre distance	160 mm
(4) Width	320 mm

Materials

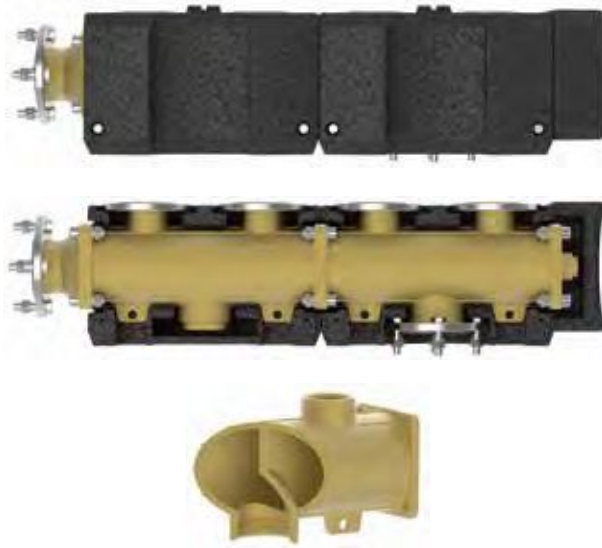
Valves and fittings	Brass
Gaskets	EPDM / NBR / AFM34
Insulation	EPP

Differential pressure diagram



HeatBloC® K32 - DN 40 (1½")	EEI*	incl.	Item no.	€/ piece
 Wilo-Yonos PARA HF 30/0.5-10	< 0.20	▲M	41221MWY10	-
Wilo-Stratos PARA 30/1-12	< 0.23	▲M	41221MWH12	-
Wilo-Yonos PARA HF 40/0.5-8	< 0.20	▲M	41221MWY8	-
Wilo-Yonos PARA HF 40/0.5-12	< 0.20	▲M	41221MWY12	-
Grundfos Magna1 32-100	< 0.21	▲M	41221MGL10	-
Grundfos Magna1 40-120 F	< 0.21	▲M	41221MGL12	-
Grundfos Magna3 40-120 F	< 0.18	▲M	41221MGH12	-
for pumps with flange DN 40/PN 6 x 250 mm		⊖M	41221M	-
Extra charge for assembly with flow on the left per HeatBloC (no discount possible)			999300	-

DN 40



Application range

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

Operating data

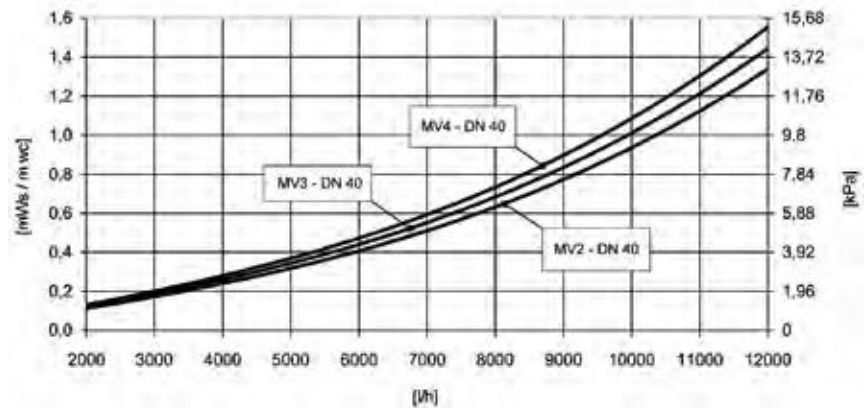
Max. pressure	6 bars
Max. operating temperature	110 °C
Kvs value	32.8

Technical data

Differential pressure diagram

Dimensions

Nominal diameter	DN 40 (1½")
Connection generator	Flange DN 50 / PN 6, flow at the side, return to the bottom, others sealed with 2" plug
Connection consumer	Flange DN 40 / PN 6 (on top)
Connection on the side	1" internal thread, sealed with plug, for safety group and expansion tank
Installation height	179 mm
Height insulation	190 mm
Centre distance	160 mm



Materials

Valves and fittings	Brass
Gaskets	EPDM / NBR
Insulation	EPP shells

Modular distribution manifold - DN 40 (1½")

Item no.

€ / piece

2-fold
Number of connections for HeatBloCs = 2
Width = 740 mm

4112

-

3-fold
Number of connections for HeatBloCs = 3
Width = 1060 mm

4113

-

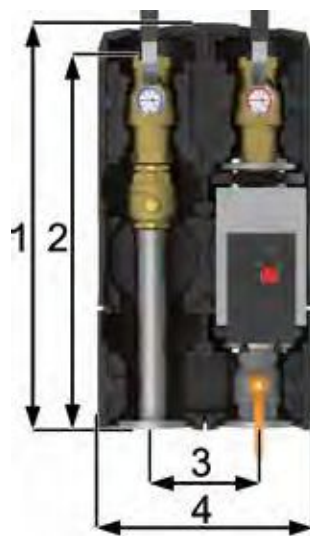
4-fold
Number of connections for HeatBloCs = 4
Width = 1380 mm

4114

-



Illustration		Item no.	€ / piece
	<p>Wall bracket set for modular distribution manifold DN 40</p> <p>Parts: 2 wall brackets (steel, zinc), 4 wall plugs, 4 screws, 2 fixing screws for distribution manifold on the wall bracket Wall distance possible: A = 230 mm</p>	41651	-
	<p>Wall bracket for HeatBloC DN 40</p> <p>Parts: Wall bracket (steel, zinc), 2 gaskets, mounting equipment Wall distance possible: A = 230 mm</p>	41641	-
	<p>Floor bracket set for modular distribution manifold DN 40/DN 50</p> <p>Parts: 2 floor brackets (steel, zinc), 4 wall plugs, 4 screws, 2 fixing screws to fix the distribution manifold onto the floor brackets Adjustable high: 1050 - 1080 mm, for shortening simply cut off</p>	41671	-
	<p>Extension module DN 40</p> <p>for the extension of already existing PAW HeatBloC systems, with insulation The installation may only be made by qualified experts! A = 160 mm, H = 170 mm, L = 320 mm</p>	4111	-
	<p>Set reducer flanges DN 40 - DN 32</p> <p>Reducing flanges made of brass for connecting a DN 32 pump in the DN 40 HeatBloC or for mounting a DN 32 HeatBloC on a DN 40 modular distribution manifold. One side DN 40 flange with PN 6, other side flange for 2" flat sealing union nut. Reduction of the centre distance from 160 mm to 125 mm, installation height 35 mm each.</p>	41610	-
	<p>Conversion kit for low-loss header DN 40</p> <p>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.</p>	4143	-
	<p>Blind flange DN 40 / PN 6</p> <p>PN 6, as per DIN 2527, with 1 gasket, 4 screws and 4 nuts</p>	41611	-
	<p>Screwed flange DN 40 / PN 6 on 1 1/2" internal thread</p> <p>Screwed flange DN 50 / PN 6 on 2" internal thread</p> <p>PN 6, as per DIN 2565, steel, black</p>	41612 41613	- -
	<p>Weld neck flange DN 40 / PN 6</p> <p>Weld neck flange DN 50 / PN 6</p> <p>PN 6, as per DIN 2631, steel, black</p>	41614 41615	- -
	<p>PAW actuator SR10 - 10 Nm 230 V</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>Technical data</p> <p>Electrical connection: 230 V / 50 Hz Input power: 3.5 W Torque: 10 Nm Setting time for 90°: 140 s</p>	705002	-



Application range

- for modulating temperature heating systems

Recommended range of application

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

Operating data

Max. pressure	6 bars
Max. operating temperature	110 °C
Kvs value	31.2

Technical data

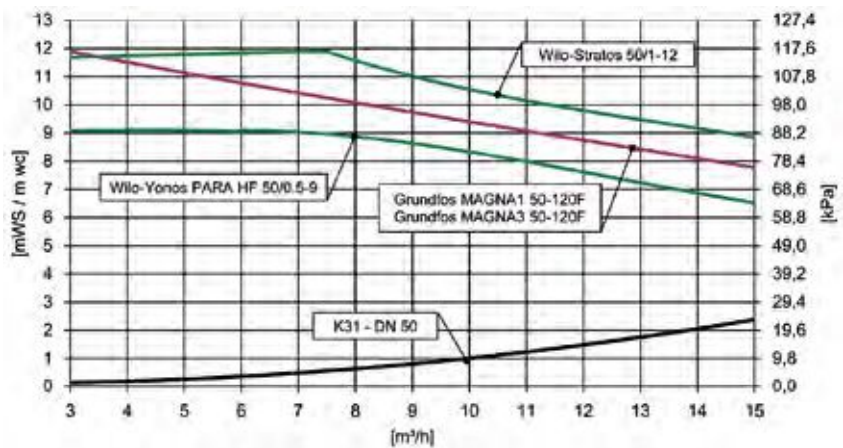
Dimensions

Nominal diameter	DN 50 (2")
Connection generator	Flange DN 50 / PN 6
Connection consumer	2" internal thread
(1) Height	660 mm
(2) Installation length	630 mm
(3) Centre distance	180 mm
(4) Width	360 mm

Materials

Valves and fittings	Brass
Gaskets	EPDM / NBR / AFM34
Insulation	EPP

Differential pressure diagram



DN 50

HeatBloC® K31 - DN 50 (2")



Wilo-Stratos 50/1-12

< 0.23



incl.

Item no.

€ / piece

-

Wilo-Yonos PARA HF 50/0.5-9

< 0.20



Item no.

-

Grundfos Magna1 50-120 F

< 0.21



Item no.

-

Grundfos Magna3 50-120 F

< 0.18



Item no.

-

for pumps with flange DN 50/PN 6 x 280 mm



Item no.

-



Application range

- for heating systems controlled by a mixing valve

Recommended range of application

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

Operating data

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

Technical data

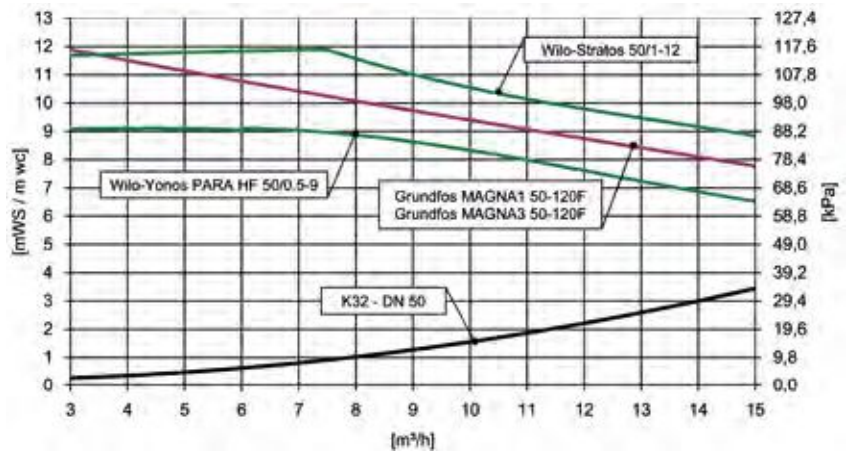
Dimensions

Nominal diameter	DN 50 (2")
Connection generator	Flange DN 50 / PN 6
Connection consumer	2" internal thread
(1) Height	660 mm
(2) Installation length	630 mm
(3) Centre distance	180 mm
(4) Width	360 mm

Materials

Valves and fittings	Brass
Gaskets	EPDM / NBR / AFM34
Insulation	EPP

Differential pressure diagram



HeatBloC® K32 - DN 50 (2")	EEI*	incl.	Item no.	€/ piece
Wilo-Stratos 50/1-12	< 0.23	▲M	51221MWS12	-
Wilo-Yonos PARA HF 50/0.5-9	< 0.20	▲M	51221MWY9	-
Grundfos Magna1 50-120 F	< 0.21	▲M	51221MGL12	-
Grundfos Magna3 50-120 F	< 0.18	▲M	51221MGH12	-
for pumps with flange DN 50/PN 6 x 280 mm		⊖M	51221M	-
Extra charge for assembly with flow on the left per HeatBloC (no discount possible)			999300	-



DN 50



Application range

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

Operating data

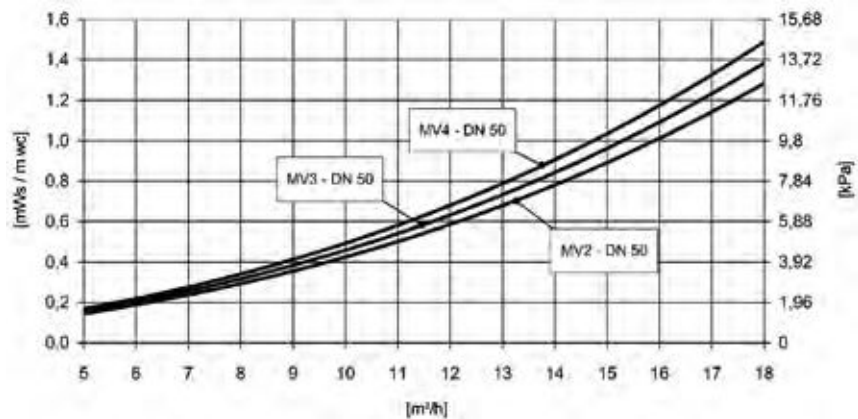
Max. pressure	6 bars
Max. operating temperature	110 °C
Kvs value	48.9

Technical data

Differential pressure diagram

Dimensions

Nominal diameter	DN 50 (2")
Connection generator	Flange DN 65 / PN 6, flow at the side, return to the bottom, others sealed with 2½" plug
Connection consumer	Flange DN 50/PN 6 (on top)
Connection on the side	1¼" internal thread, sealed with plug, for safety group and expansion tank
Installation height	225 mm
Height insulation	220 mm
Centre distance	180 mm



Materials

Valves and fittings	Brass
Gaskets	EPDM / NBR
Insulation	EPP shells

Modular distribution manifold - DN 50 (2")

Item no.

€ / piece



2-fold
Number of connections for HeatBloCs = 2
Width = 840 mm

5112

-



3-fold
Number of connections for HeatBloCs = 3
Width = 1200 mm

5113

-



4-fold
Number of connections for HeatBloCs = 4
Width = 1560 mm

5114

-



Equipment for modular system DN 50

Illustration		Item no.	€ / piece
	<p>Floor bracket set for modular distribution manifold DN 40/DN 50</p> <p>Parts: 2 floor brackets (steel, zincd), 4 wall plugs, 4 screws, 2 fixing screws to fix the distribution manifold onto the floor brackets Adjustable height: 1050 - 1080 mm, for shortening simply cut off</p>	41671	-
	<p>Extension module DN 50</p> <p>for the extension of already existing PAW HeatBloC systems, with insulation The installation may only be made by qualified experts! A = 180 mm, H = 225 mm, L = 360 mm</p>	5111	-
	<p>Conversion kit for low-loss header DN 50</p> <p>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.</p>	5143	-
	<p>Set reducer flanges DN 50 - DN 40</p> <p>2 reducing flanges made of zincd 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!</p>	51610	-
	<p>Set reducer flanges DN 50 - DN 32</p> <p>2 reducing flanges made of steel, zincd/brass for connecting a DN 32 HeatBloC on a DN 50 modular distribution manifold. One side DN 50 flange with PN 6, other side DN 32 - 1¼". Reduction of the centre distance from 180 mm to 125 mm, with seals and screws for connection to DN 50. Installation height = 48 mm</p>	5162	-
	<p>Blind flange DN 50 / PN 6</p> <p>PN 6, as per DIN 2527, with 1 gasket, 4 screws and 4 nuts</p>	51611	-
	<p>Screwed flange DN 50 / PN 6 on 2" internal thread</p>	41613	-
	<p>Screwed flange DN 65 / PN 6 on 2½" internal thread</p> <p>PN 6, as per DIN 2565, steel, black</p>	51612	-
	<p>Weld neck flange DN 50 / PN 6</p>	41615	-
	<p>Weld neck flange DN 65 / PN 6</p> <p>PN 6, as per DIN 2631, steel, black</p>	51613	-
	<p>PAW actuator SR10 - 10 Nm 230 V</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>Technical data Electrical connection: 230 V / 50 Hz Input power: 3.5 W Torque: 10 Nm Setting time for 90°: 140 s</p>	705002	-