HERZ PUMPFIX

Datasheet **1 45XX XX**, Issue 0820

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HERZ PUMPFIX

Pump groups

General information

Description of HERZ PUMPFIX pump group

HERZ PUMPFIX pump group is a high qualitiy product that is assembled and pressure tested during the manufacturing process under constant quality control.

Advantages of the pump group are:

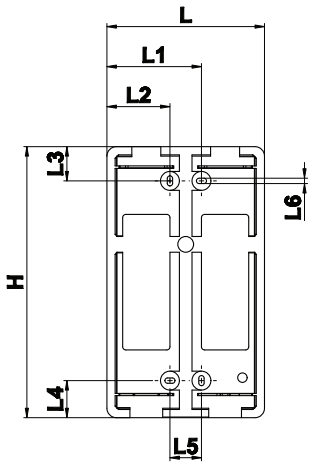
- all integrated components are the result of our own development,
- permanent quality control of production in our own factories,
- we supply complete pump groups,
- easy installation and maintenance,
- circulation pump with installation length of 130 mm and 180 mm
- connection distance between supply and return: 125 mm
- all pump groups are available either with or without circulation pump.

Assembly:

The pump group is mounted vertically, with the ball valves with thermometer facing up. Connection to boiler or distributor from below with external thread. Connection to the consumers above with internal thread.
Every HERZ PUMPFIX must be installed on a set of a mounting plate. Every pumps group is equipped with two mounting plates.
HERZ PUMPFIX distributor DN25 is recommended when using several parallel HERZ PUMPFIX pump groups (in case of multi-circular heating or cold water cooling system). Pump group and distributor are designed in that way that they can be fitted directly to each other. Pump groups can also be fitted to distributors with other dimensions (DN32) with using adaptor connections.

Installation dimensions of the support plate

DN	L	H	L1	L2	L3	L4	L5	L6
20	250	390	50	150	100	56,3	50,8	8,5
25	250	430	50	150	100	54,3	58,8	8,5
32	250	430	50	150	100	54,3	58,8	8,5



Maintenance instructions

If the product is used properly, no special maintenance is required. The circulation pump can be isolated by closing the ball valves and may therefore be maintained without draining the system.
Repairs on the device must be carried out by authorized persons only.

Disposal instructions

The disposal of HERZ PUMPFIX pump groups must not endanger the health or the enviroment. National legal regulations for proper disposal of the HERZ PUMPFIX pump groups have to been followed.

				ΔT (°K)					
dim.	model	kvs	Q (l/h)	20	15	10	7,5	5	
DN 20	DIREKT	4,3	1000	23	17	12	9	6	kW
	MIX	4	1400	30	23	15	11	8	
		6,3	1400	35	26	17	13	9	
DN 25	DIREKT	5,8	1750	41	30	20	15	10	
	MIX	4	1550	36	27	18	13	9	
		6,3	1700	39	30	20	15	10	
		10	2000	46	35	23	17	12	
	CONSTANT	2,6	600	14	10	7	5	3	
DN 32	DIREKT	8,7	2200	51	38	26	19	13	
	MIX	10	2100	49	37	24	18	12	
		16	2300	53	40	27	20	13	

H (circulation pump) = 4 m

HERZ PUMPFIX

Direct DN 20, DN 25, DN 32

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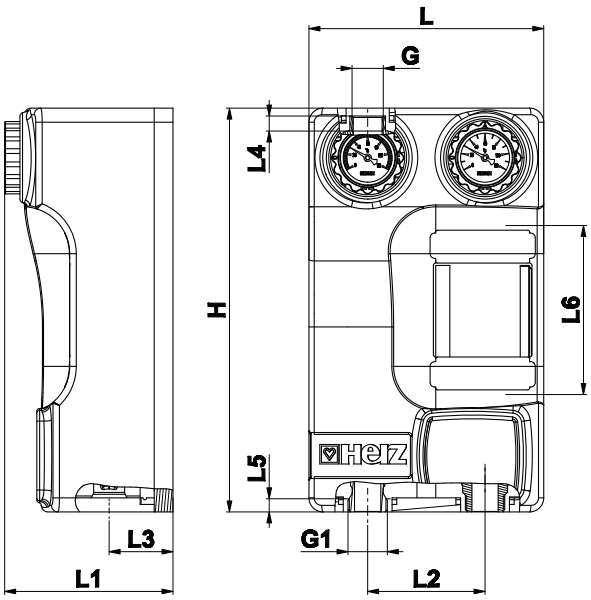
Dimensions



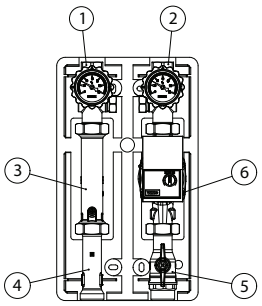
Order Nr.	DN	Pump	kvs	L [mm]	H [mm]	L1 [mm]	L2 [mm]	L3 [mm]	G* [in]	L4 [mm]	L5 [mm]	G1** [in]	L6 [mm]
1 **4514** 12	20	Wilo Yonos PARA RS 15/6-130	4,3	250	390	209	125	68	¾″	16	14	1″	130
1 **4514** 13	20	IMP GHN 15/40-130***	4,3	250	390	167	125	68	¾″	16	14	1″	130
1 **4514** 11	20	without pump	4,3	250	390	167	125	68	¾″	16	14	1″	130
1 **4510** 26	25	Wilo Yonos PARA RS 25/6-180	5,8	250	430	209	125	68	1"	16	12	1-1/4"	180
1 **4510** 27	25	IMP GHN 25/60-180***	5,8	250	430	180	125	68	1"	16	12	1-1/4"	180
1 **4510** 25	25	without pump	5,8	250	430	180	125	68	1"	16	12	1-1/4"	180
1 **4514** 22	32	Wilo Yonos PARA RS 30/6-180	8,7	250	430	209	125	68	1-1/4"	16	12	1-1/2"	180
1 **4514** 23	32	IMP GHN 30/65-180***	8,7	250	430	180	125	68	1-1/4"	16	12	1-1/2"	180
1 **4514** 21	32	without pump	8,7	250	430	180	125	68	1-1/4"	16	12	1-1/2"	180

*Internal thread
**external thread
***Not available in EU (Commission regulations (ES) No 641/2009 and No 622/2012)

Components of HERZ PUMPFIX Direct

1. Valve with thermometer (blue)
2. Valve with thermometer (red)
3. Spacer with check valve
4. Spacer
5. Ball valve
6. Circulation pump*

*see overview table



Material and construction

Ball valve with thermometer:	forged brass EN 12165; CW617N
Ball:	forged brass acc. to EN 12165, hard crome plated, CW617N
Handle of ball valve with thermometer:	plastic, PA66 GF30
Spacer with backflow preventer:	brass; CW617N
Threaded connectors of closing valve:	internal thread acc. to ISO 7-1
Threaded connector of pump group:	external thread acc. to ISO 228-1
Spindle:	machined brass acc. to EN12164, CW614N
Spindle seals:	NBR / EPDM
Ball seals:	PTFE
Gaskets:	EPDM
Heat insulation material of pump group:	EPP

Operating data

Nominal pressure:	6 bar with pump; 10 bar without pump
Max. operating temperature:	110° C
Short-term load:	120°C < 15s
Min. perating temperature:	0° C (water 0,5°)
Opening pressure for check valve :	200mmWc
Propylene glycol mixing ratio:	25-50%

Medium:
Heating water according to ÖNORM H5195 or VDI-Standard 2035. The use of ethylene or propylene glycol in a mixing ratio 25- 50% is allowed. EPDM gaskets can be affected by mineral oils lubricants and thus lead to failure of the EPDM seals. Please refer to manufacturers documentation when using ethylene glycol and propylene glycol products for frost and corrosion protection.

Recommended range of application

DN 20 Max. heat output ΔT = 20K at 1250 l/h:	to 29 kW
DN 20 Max. heat output ΔT = 10K at 1250 l/h:	to 14,5 kW
DN 25 Max. heat output ΔT = 20K at 2155 l/h:	to 50 kW
DN 25 Max. heat output ΔT = 10K at 2155 l/h:	to 25 kW
DN 32 Max. heat output ΔT = 10K at 2500 l/h:	to 58 kW
DN 32 Max. heat output ΔT = 20K at 2500 l/h:	to 29 kW

Field of application:

The HERZ- PUMPFIX pump group is used in heating and chilled water systems in household areas. The installation of circulation pumps of different manufacturers and types is possible.
The HERZ PUMPFIX DIRECT pump group can be used:

- for filling the hot water tanks
- for modulating temperature heating systems

Every HERZ- PUMPFIX pump group can be upgraded with an overflow valve (see page 12)

HERZ PUMPFIX

Mix DN 20, DN 25, DN 32

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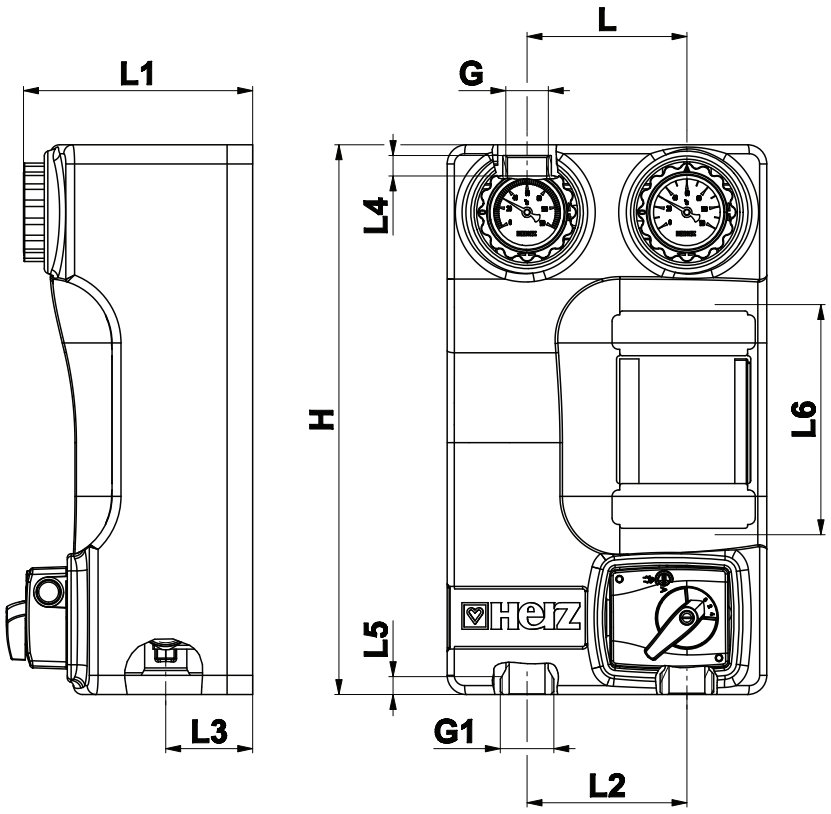
Dimensions



Order Nr.	DN	Pump	kvs	BP	L [mm]	H [mm]	L1 [mm]	L2 [mm]	L3 [mm]	G* [in]	L4 [mm]	L5 [mm]	G1** [in]	L6 [mm]
1 **4514** 16	20	Wilo Yonos PARA RS 15/6-130	4	NO	250	390	209	125	68	¾″	16	14	1″	130
1 **4514** 17	20	Wilo Yonos PARA RS 15/6-130	6,3	NO	250	390	209	125	68	¾″	16	14	1″	130
1 **4514** 18	20	IMP GHN 15/40-130***	4	NO	250	390	186	125	68	¾″	16	14	1″	130
1 **4514** 19	20	IMP GHN 15/40-130***	6,3	NO	250	390	186	125	68	¾″	16	14	1″	130
1 **4514** 14	20	without pump	4	NO	250	390	186	125	68	¾″	16	14	1″	130
1 **4514** 15	20	without pump	6,3	NO	250	390	186	125	68	¾″	16	14	1″	130

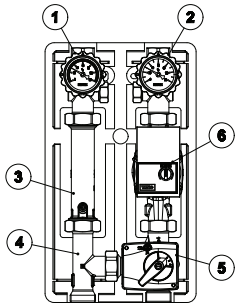
Order Nr.	DN	Pump	kvs	BP	L [mm]	H [mm]	L1 [mm]	L2 [mm]	L3 [mm]	G* [in]	L4 [mm]	L5 [mm]	G1** [in]	L6 [mm]
1 **4511** 47	25	Wilo Yonos PARA RS 25/6-180	4	YES	250	430	209	125	68	1"	16	12	1-1/4"	180
1 **4511** 48	25	Wilo Yonos PARA RS 25/6-180	6,3	YES	250	430	209	125	68	1"	16	12	1-1/4"	180
1 **4511** 49	25	Wilo Yonos PARA RS 25/6-180	10	YES	250	430	209	125	68	1"	16	12	1-1/4"	180
1 **4511** 50	25	IMP GHN 25/60-180***	4	YES	250	430	186	125	68	1"	16	12	1-1/4"	180
1 **4511** 51	25	IMP GHN 25/60-180***	6,3	YES	250	430	188	125	68	1"	16	12	1-1/4"	180
1 **4511** 52	25	IMP GHN 25/60-180***	10	YES	250	430	193	125	68	1"	16	12	1-1/4"	180
1 **4511** 44	25	without pump	4	YES	250	430	186	125	68	1"	16	12	1-1/4"	180
1 **4511** 45	25	without pump	6,3	YES	250	430	188	125	68	1"	16	12	1-1/4"	180
1 **4511** 46	25	without pump	10	YES	250	430	193	125	68	1"	16	12	1-1/4"	180
1 **4514** 26	32	Wilo Yonos PARA RS 30/6-180	10	NO	250	430	209	125	68	1-1/4"	16	12	1-1/2"	180
1 **4514** 27	32	Wilo Yonos PARA RS 30/6-180	16	NO	250	430	209	125	68	1-1/4"	16	12	1-1/2"	180
1 **4514** 28	32	IMP GHN 30/65-180***	10	NO	250	430	193	125	68	1-1/4"	16	12	1-1/2"	180
1 **4514** 29	32	IMP GHN 30/65-180***	16	NO	250	430	196	125	68	1-1/4"	16	12	1-1/2"	180
1 **4514** 24	32	without pump	10	NO	250	430	193	125	68	1-1/4"	16	12	1-1/2"	180
1 **4514** 25	32	without pump	16	NO	250	430	193	125	68	1-1/4"	16	12	1-1/2"	180

*Internal thread
**external thread
***Not available in EU (Commission regulations (ES) No 641/2009 and No 622/2012)
BP - Bypass on the mixing valve

Components of HERZ PUMPFIX Mix

1. Valve with thermometer (blue)
2. Valve with thermometer (red)
3. Spacer with check valve
4. Return T-piece
5. Three way valve with a actuator (1 **2137** 2X)
6. Circulation pump*

*see overview table



Material and constructions

Ball valve with thermometer:	forged brass EN 12165; CW617N
Ball:	forged brass acc. to EN 12165, hard crome plated, CW617N
Handle of ball valve with thermometer:	plastic, PA66 GF30
Spacer with backflow preventer:	brass; CW617N
Threaded connectors of closing valve:	internal thread acc. to ISO 7-1
Threaded connector of pump group:	external thread acc. to ISO 228-1
Spindle:	machined brass acc. to EN12164, CW614N
Spindle seals:	NBR / EPDM
Ball seals:	PTFE
Gaskets:	EPDM
Heat insulation material of pump group:	EPP

Operating data

Nominal pressure:	6 bar with pump; 10 bar without pump
Max. operating temperature:	110° C
Short-term load:	120°C < 15s
Min. perating temperature:	0° C (water 0,5°)
Opening pressure for check valve :	200mmWc
Propylene glycol mixing ratio:	25-50%

Medium:
Heating water according to ÖNORM H5195 or VDI-Standard 2035. The use of ethylene or propylene glycol in a mixing ratio 25- 50% is allowed. EPDM gaskets can be affected by Mineral oils lubricants and thus lead to failure of the EPDM seals. Please refer to manufacturers documentation when using ethylene glycol and propylene glycol products for frost and corrosion protection.

Recommended range of application

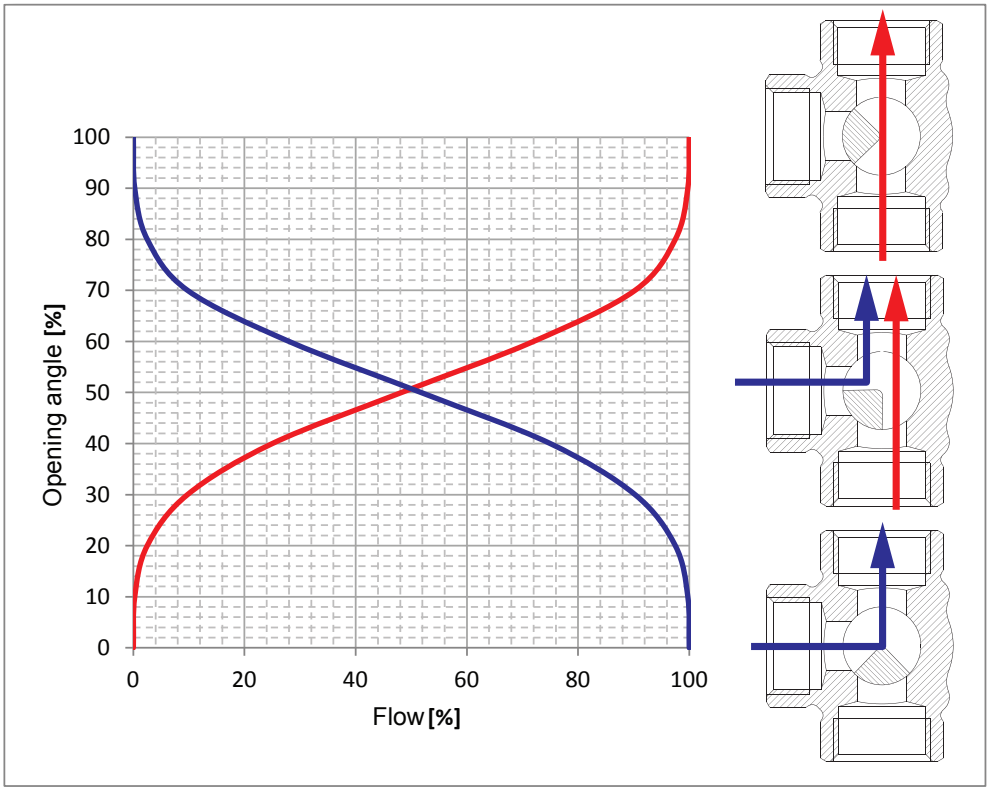
DN 20 Max. heat output ΔT = 20K at 900 l/h:	to 21 kW
DN 20 Max. heat output ΔT = 10K at 900 l/h:	to 10,5 kW
DN 25 Max. heat output ΔT = 20K at 2.100 l/h:	to 35 kW
DN 25 Max. heat output ΔT = 10K at 1508 l/h:	to 17,5 kW
DN 25 Max. heat output ΔT = 5K at 1508 l/h:	to 8,75 kW
DN 32 Max. heat output ΔT = 20K at 2.100 l/h:	to 48 kW
DN 32 Max. heat output ΔT = 10K at 1508 l/h:	to 24 kW
DN 32 Max. heat output ΔT = 5K at 1508 l/h:	to 12 kW

Field of application of PUMPFIX mix DN20 and DN32

The HERZ- PUMPFIX pump group is used in heating and chilled water systems in household areas. The installation of circulation pumps of different manufacturers and types is possible. The integrated 3-way valve can be used for mixing or distribution service in combination with the actuator. An equal percentage, linear or quadratic characteristic curve can be adjusted on the actuator (1 **7712** 63).

Every HERZ- PUMPFIX pump group can be upgraded with an overflow valve (see page 12)

Characteristic curves of three-way valve DN 20 and DN 32



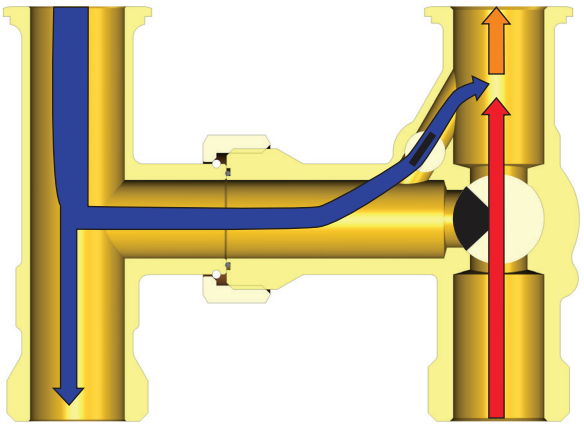
Field of application of PUMPFIX DN25:

The HERZ- PUMPFIX pump group is used in heating and chilled water systems in households areas. The installation of circulation pumps of different manufacturers and types is possible. The integrated 3-way valve can be used for mixing or distribution service in combination with the actuator. An equal percentage, linear or quadratic characteristic curve can be adjusted on the actuator. The 3-way valve has integrated bypass that can be adjusted in relation to the flow trough the mixing vale. The bypass can ensure a constant flow (up to 50% of the flow of the valve) of the liquid from the return circuit. The main function of the integrated bypass comes into use if the system is not working properly and the temperature in the system is too high. The valve with integrated bypass allows fixed flow from the return and so it decreases the temperature. This prevents possible damages in the system.

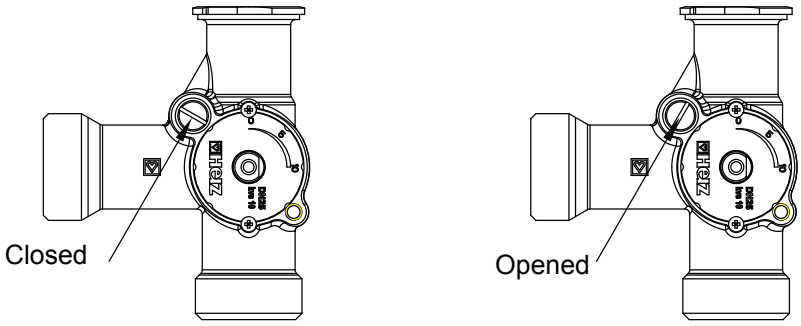
Every HERZ- PUMPFIX pump group can be upgraded with an overflow valve (see page)

Functional principle of three-way valve DN 25

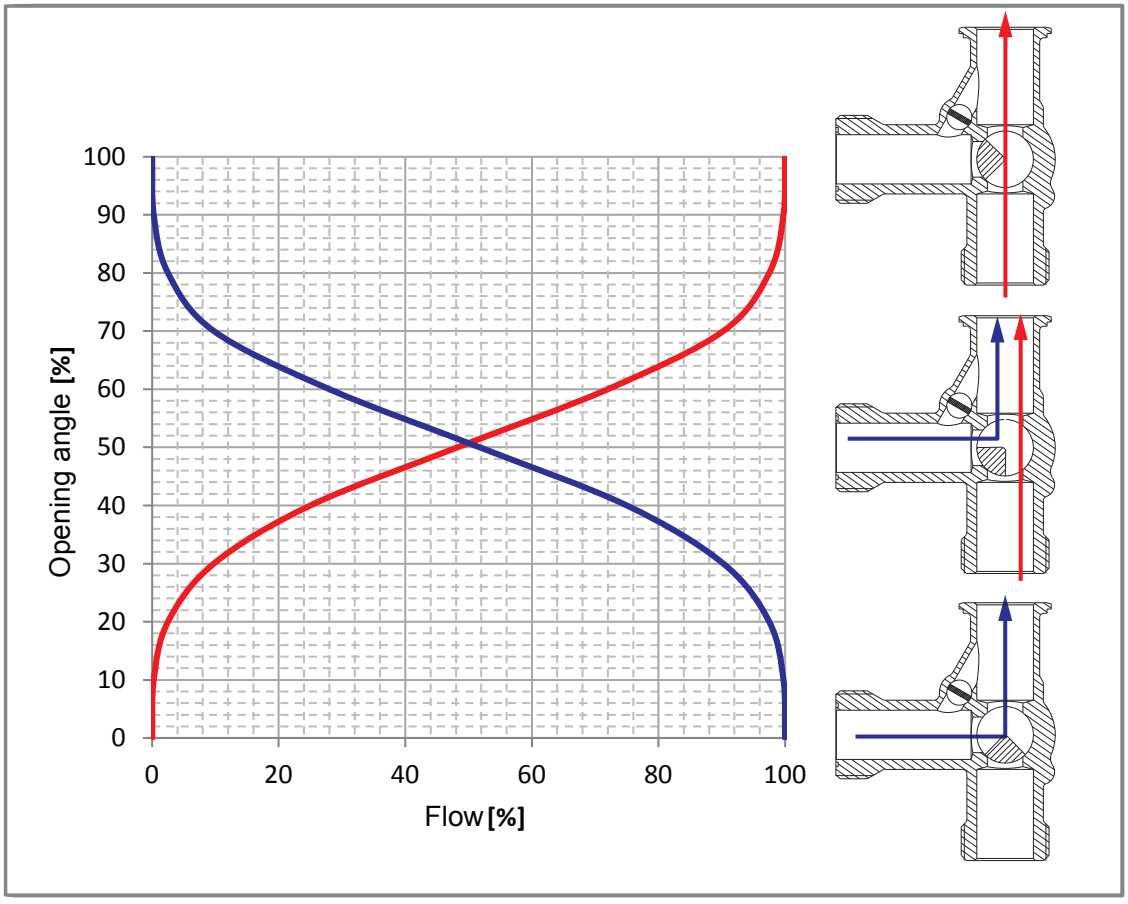
A part of the heatflow from the pump on the bypass operation is primed in normal operation – for example, when the return water mixer is closed. This current (smaller blue arrow) pictures 50% of the mixer capacitance (red arrow). A very high flow and a low temperature are sustained.



Bypass position of three-way valve DN25



Characteristic curves of three-way valve (closed bypass) of three-way valve DN25



HERZ - 3-point actuator

1 **7712** 63

General information

3-Point actuator (1 **7712** 63)

The actuator can be operated by 3-point and open-close control (see diagram). The mounting position in relation to the ball valve can be selected in 90° steps. The actuator is automatically disconnected when the end stops are reached. The actuator can be mounted in any position except with its head down. Two-piece body made of self-extinguishing plastic, the lower part is black and upper part is red. Straightforward direct mounting on the mixing ball valve with a screw. The screw is supplied with actuator.

Manual operation possible by lever:

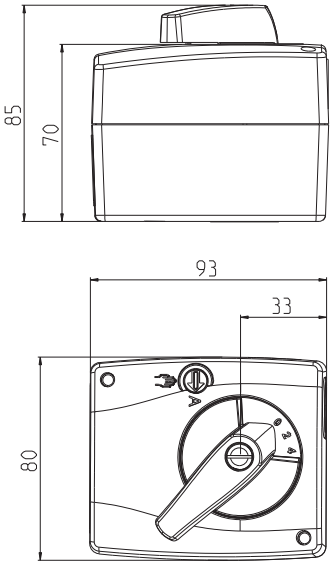
Press for temporary disengagement, permanent gearing disengagement by rotary switch on the housing to the manual position-

Safety note:

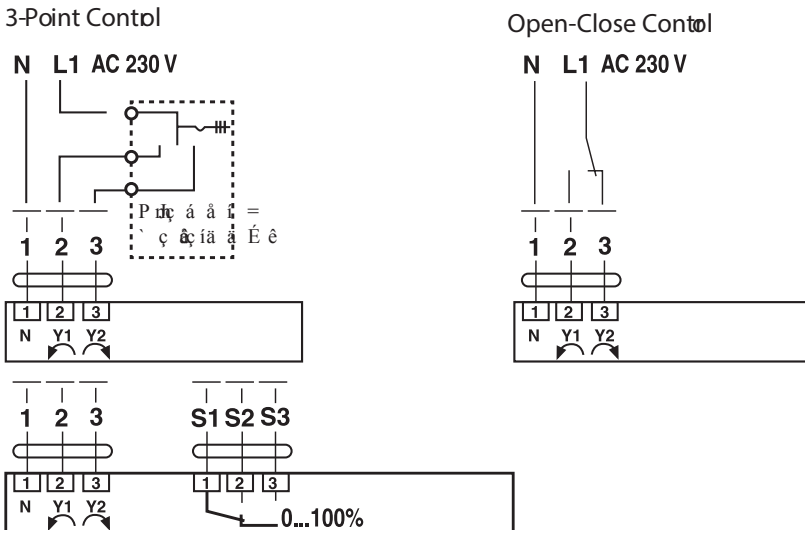
The actuator may only be opened at the factory. It contains no components which can be replaced or repaired by the user.

Technical data

Nominal voltage	AC 230 V 50 / 60 Hz
Power supply range	AC 198 ... 264 V
Dimensioning	3,5 VA
Power consumption	3,5 W
Auxiliary switch	1 x EPU 5 (1) A, AC 250 V
Switching point	adjustable 0 … 100%
Manual operation	Temporary and permanent disengagement of the gearing latch
Torque	min. 10 Nm (at nominal voltage)
Angle of rotation	90°
Running time	140 s
Sound power level	max. 35 dB(A)
Position indication	Scale 0 ... 10
Protection class	II (totally insulated)
Degree of protection	IP40
Ambient temperature range	0 … + 50 °C (duty cycle 140/35 s)
Media temperature	+ 5 ... + 120 °C (ball valve)
Non-operating temperature	– 30 … + 80 °C
Humidity test	according to EN 60730-1
EMC	CE according to 89/336/EWG
LV directive	CE according to 73/23/EWG
Mode of operation	Typ 1.B (EN 60730-1)
Maintenance	Maintenance-free



Wiring diagram

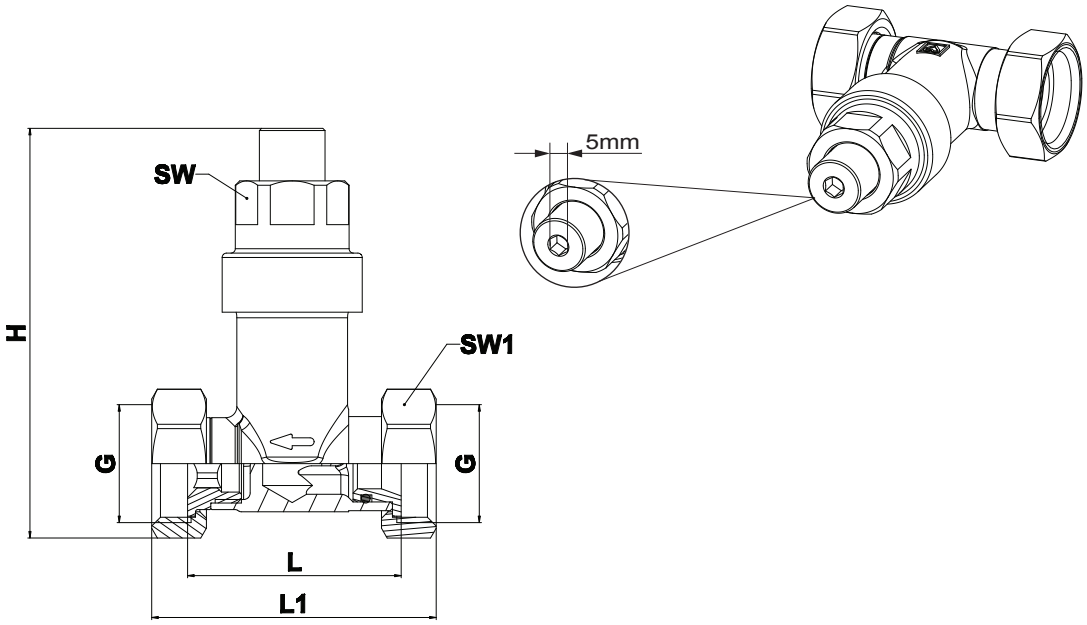


HERZ overflow valve

1 **4514** 99

General information

Overflow valve (1 **4514** 99)



Order Nr.	L [mm]	L1 [mm]	H [mm]	SW [mm]	SW1 [mm]	G [in]
1 **4514** 99	48.8	65	93.6	30	24	¾″

Material and construction:

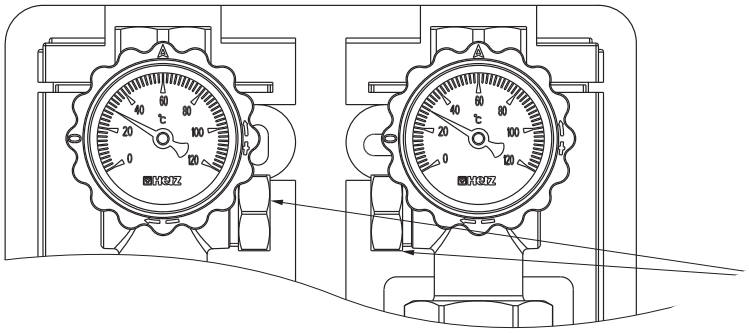
Housing: forged brass acc. to EN 12165, CW 617N
Nuts: forged brass acc. to EN 12165, CW 617N; internal thread G3/4″ acc. to ISO228-1
Sealings: EPDM
Spring: stainless steel

Operating data:

Setting range: 0 - 0,5bar
close the valve
2 turns → 0,1 bar
max. 10 turns → 0,5 bar

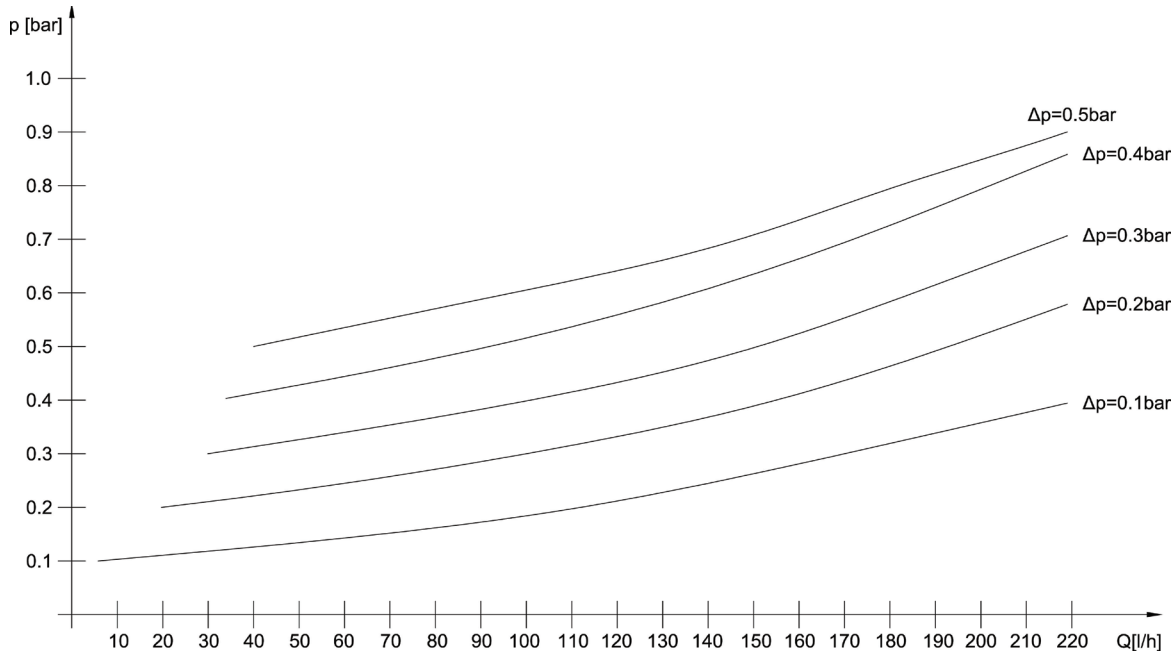
Field of application

Overflow valve is used to balance the pressure of the heating installation. Setting range 0-0,5 bar. The amount of water required to reduce the differential pressure is derived in the bypass (depending on the over dimensioning of the pump and the steepness of the pump curve).



Overflow valve can be installed on every HERZ PUMPFIX pump group.

Characteristic curves of overflow valve:



HERZ PUMPFIX Constant

constant control for temperature DN 25

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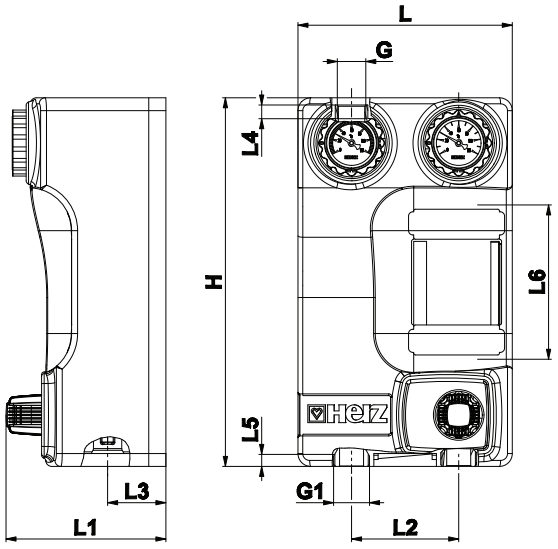
Dimensions



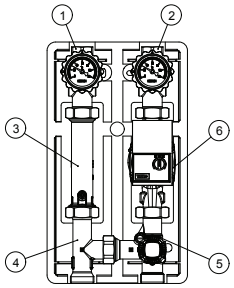
Order Nr.	DN	Pump	kvs [m³/h]	BP	L [mm]	H [mm]	L1 [mm]	L2 [mm]	L3 [mm]	G* [in]	L4 [mm]	L5 [mm]	G1** [in]	L6 [mm]
1 **4514** 08	25	Wilo Yonos PARA RS 25/6-180	2,6	yes	250	430	209	125	68	1"	16	12	1-1/4"	180
1 **4514** 09	25	IMP GHN 25/60-180***	2,6	yes	250	430	190	125	68	1"	16	12	1-1/4"	180
1 **4514** 07	25	without pump	2,6	yes	250	430	190	125	68	1"	16	12	1-1/4"	180

*Internal thread
**external thread
***Not available in EU (Commission regulations (ES) No 641/2009 and No 622/2012)
BP - Bypass on the mixing valve

Components of HERZ PUMPFIX Constant

1. Valve with thermometer (blue)
2. Valve with thermometer (red)
3. Spacer with check valve
4. Return T-piece
5. Valve with HERZ Thermostatic head with contact sensor
6. Circulation pump*

*see overview table



Material and construction

Ball valve with thermometer:	forged brass acc. to EN 12165; CW 617N
Ball:	forged brass acc. to EN 12165, hard crome plated, CW617N
Handle of ball valve with thermometer:	plastic, PA66 GF30
Spacer with backflow preventer:	brass; CW617N
Threaded connectors of closing valve:	internal thread acc. to ISO 7-1; G1"
Threaded connector of pump group:	external thread acc. to ISO 228-1; G1 1/4"
Spindle:	machined brass acc. to EN12164, CW614N
Spindle seals:	NBR / EPDM
Ball seals:	PTFE
Gaskets:	EPDM
Heat insulation material of pump group:	EPP
Features:	Temperature regulator with contact sensor
Control range (1 **7420** 06)*:	25 - 50°C

*HERZ Thermostatic head with contact sensor

Operating data

Nominal pressure:	6 bar with pump; 10 bar without pump
Max. operating temperature:	110° C
Short-term load:	120°C < 15s
Min. perating temperature:	0° C (water 0,5°)
Opening pressure for check valve :	200mmWc
Kvs value:	5,8 m³/h
Propylene glycol mixing ratio:	25-50%

Medium:
Heating water according to ÖNORM H5195 or VDI-Standard 2035. The use of ethylene or propylene glycol in a mixing ratio 25- 50% is allowed. EPDM gaskets can be affected by Mineral oils lubricants and thus lead to failure of the EPDM seals. Please refer to manufacturers documentation when using ethylene glycol and propylene glycol products for frost and corrosion protection.

Recommended range of application

Max. heat output AT = 10°K at 860 l/h: to 10 kW

Field of application:

The HERZ- PUMPFIX pump group is used in heating and chilled water systems in household areas. The installation of circulation pumps of different manufacturers and types is possible.

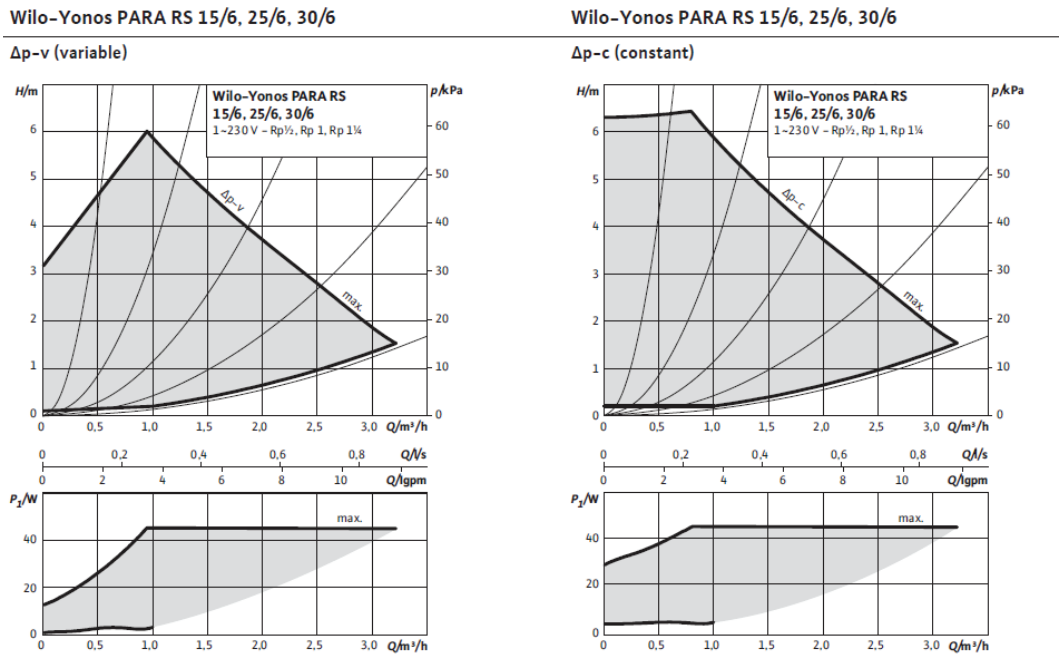
Every HERZ- PUMPFIX pump group can be upgraded with an overflow valve (see page 12).

HERZ PUMPFIX

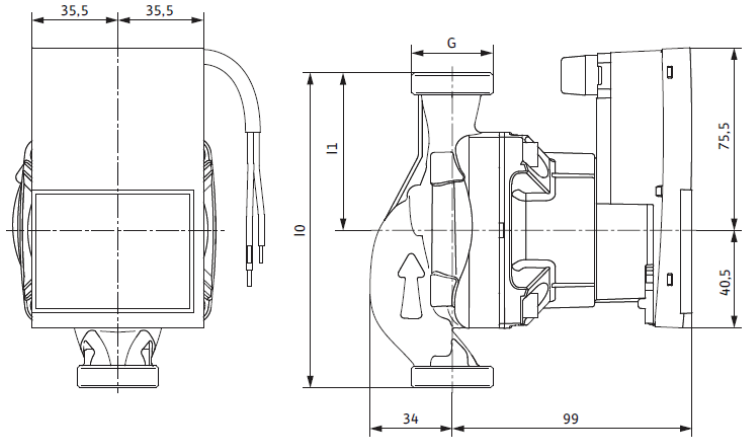
Circulation pumps used in pump groups

General information

Pump characteristic Wilo Yonos PARA RS



Pump dimensions



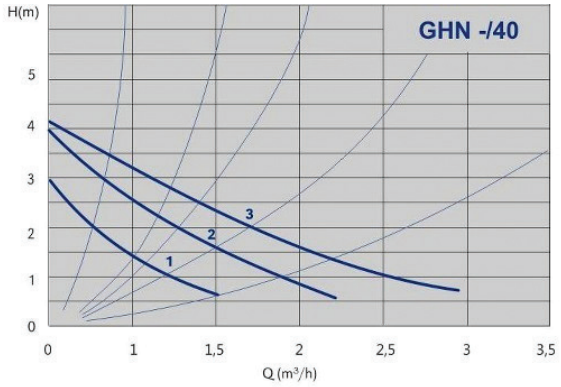
DN	G	I0	I1
20	1“	130	65
25	1½“	180	90
32	2“	180	90

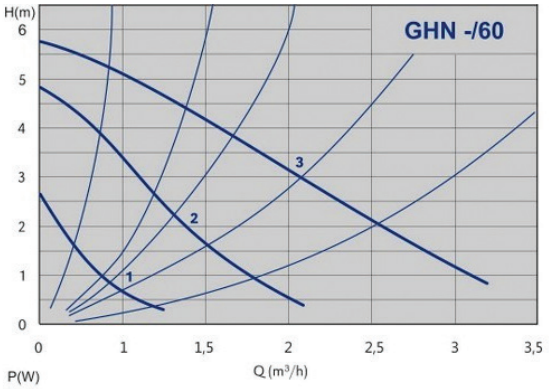
Pump data

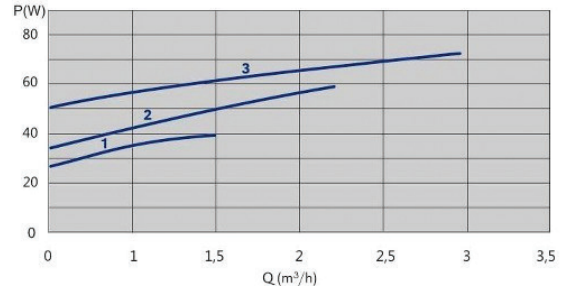
Type:	DN 20: Wilo Yonos PARA RS 15/6 RKA 130 DN 25: Wilo Yonos PARA RS 25/6 RKA 180 DN 32: Wilo Yonos PARA RS 30/6 RKA 180
Energy Efficiency Index (EEI):	≤ 0,20
Max. delivery head:	6.2 m
Max. volume flow:	3.3 m3/h
Max. operating temperature:	110°C
Max. static pressure:	6 bar
Mains connection:	1~230 V +10%/-15%, 50/60 Hz (IEC 60038 standard voltage)
Protection class:	IPx4D
Insulation class:	F

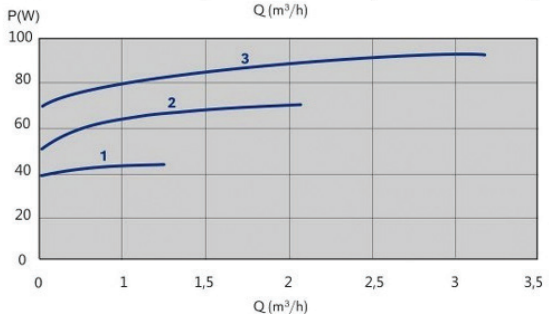
Minimum suction head at suction port to avoid cavitation at water pumping temperature
Minimum suction head at 50/95°C: 0.5/4.5 m

Pump characteristic- IMP GHN only available outside EU

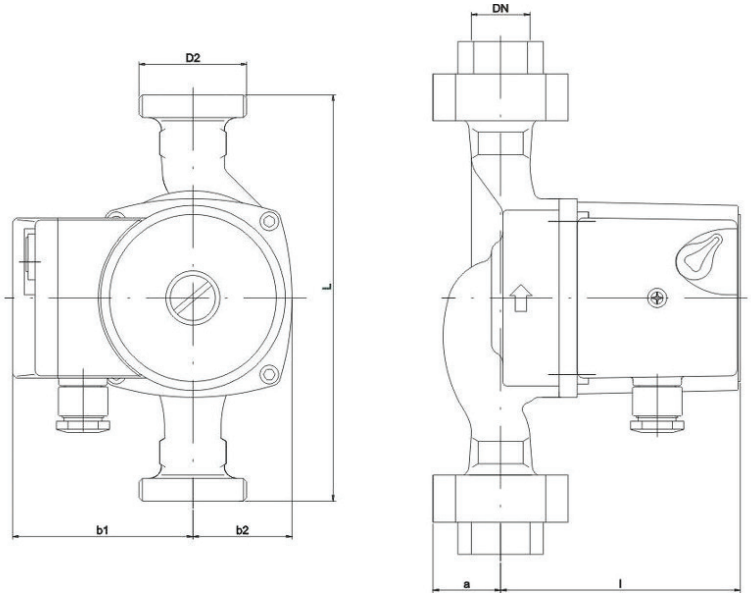








Pump dimensions



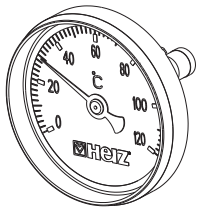
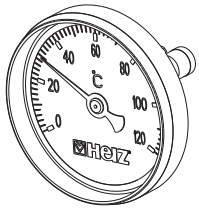
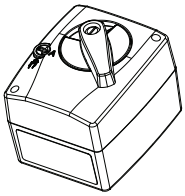
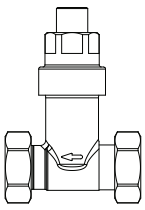
DN	G	L	H_{max}
20	1“	130	4 m
25	1½“	180	6 m

Pump data

Type:	DN 20: IMP GHN 15/40-130 DN 25: IMP GHN 25/60-180 DN 32: IMP GHN 30/60-180
Max. volume flow:	3,5 m3/h
Max. operating temperature:	110°C
Max. static pressure:	10 bar
Power supply:	1 ~ 230 V
Degree of protection:	IP 44
Insulation class:	H

HERZ PUMPFIX

Pump groups accessories

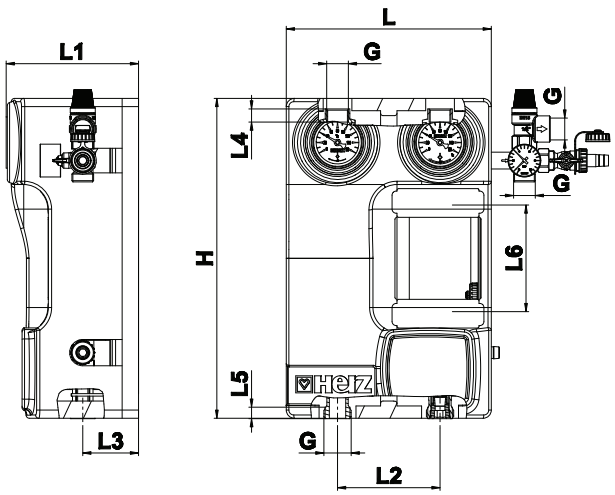
Illustration	Description	Item number
	**Red thermometer for HERZ PUMPFIX**	1 **2201** 91
	**Blue thermometer for HERZ PUMPFIX**	1 **2201** 90
	**3 - point actuator**	1 **7712** 63
	**Overflow valve**	1 **4514** 99

HERZ PUMPFIX

Solar

Datasheet **1 4513 X2**

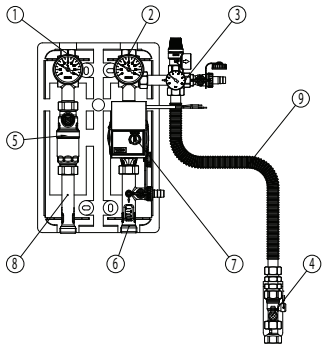
Dimensions



Art. nr.	DN	Pump	L [mm]	H [mm]	L1 [mm]	L2 [mm]	L3 [mm]	G* [in]	L4 [mm]	L5 [mm]	G** [in]	L6 [mm]
1 **4513** 12	20	Wilo Yonos Para ST 15/7,0 PWM 2	250	390	167	125	68	3/4"	16	14	1"	130
1 **4513** 02	20	Without pump	250	390	161	125	68	3/4"	16	14	1"	130

*Internal thread
**external thread

Components of HERZ PUMPFIX solar pump group



1. Valve with Thermometer (red)
2. Valve with Thermometer (blue)
3. Saftey group
4. Service Valve* (1 **2205** 02)
5. Air vent
6. Flowmeter
7. Solar pump**
8. Spacer
9. Connecting tube with console* (1 **4513** 30)

*Not included in set, available as an accessory **see overview table

Material and construction

Ball valve with thermometer:	forged brass EN 12165; CW617N
Ball:	forged brass acc. to EN 12165, hard crome plated, CW617N
Handle of ball valve with thermometer:	plastic, PA66 GF30
Spacer with backflow preventer:	brass; CW617N
Threaded connectors of closing valve:	internal thread acc. to ISO 7-1; G1"
Threaded connector of pump group:	external thread acc. to ISO 228-1; G3/4"
Spindle:	machined brass acc. to EN12164, CW614N
Spindle seals:	NBR / EPDM
Ball seals:	PTFE
Gaskets:	EPDM
Range of flow:	4-24 l/min
Heat insulation material of pump group:	EPP

Operating data

Nominal pressure:	6 bar with pump; 10 bar without pump
Pressure relief valve:	6 bar
Max. operating temperature:	110° C
Short-term load:	120°C < 15s
Min. perating temperature:	0° C (water 0,5°)
Opening pressure for check valve :	200mmWc
Propylene glycol mixing ratio:	25-50%

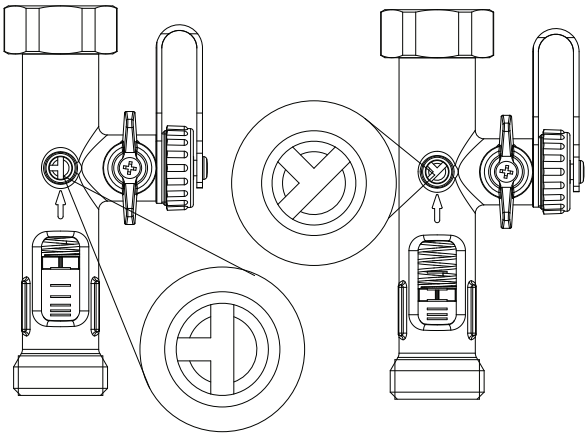
Medium:
Usage of ethylene glycol is not recommended due its toxicity. Any risk of leakage in the solar system that is used for the preparation of sanitary warm water may pose a danger for humans and animals. The use of propylene glycol in a mixing ratio 25- 50% is allowed. EPDM gaskets can be affected by Mineral oils lubricants and thus lead to failure of the EPDM seals. Please refer to manufacturers documentation when using propylene glycol products for frost and corrosion protection.

Field of application:

The pump stations are vertically assembled with a ball valve and the thermometer facing upwards. The pump group is part of the solar system for the preparation of sanitary warm water. The installation of the circulating pump of other manufacturers and designs is possible. The pump group is equipped with a flow meter, which enables the setting of the water flow. Furthermore, the pump station is equipped with a venting element, which is manually vented.

Flowmeter:

The flow rate of the solar system can be read off the flow meter. The flow meter has range from 0-24 l/min.

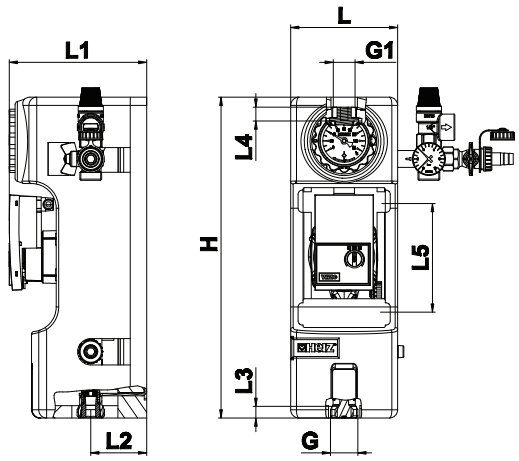


HERZ PUMPFIX

Solar Simple

Datasheet 1 **4511 8**X

Dimensions

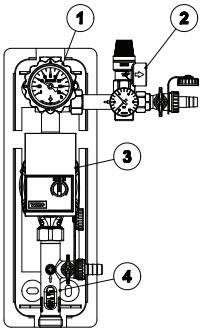


Art. nr.	DN	Pump	H [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	G** [in]	G1* [in]
1 **4511** 81	20	Wilo Yonos Para ST 15/7,0 PWM 2	390	130	167	68	14	16	1"	3/4"
1 **4511** 82	20	Without pump	390	130	167	68	14	16	1"	3/4"

*Internal thread
**external thread

Components of HERZ PUMPFIX solar simple pump group

1. Ball valve with thermometer and check ball
2. Security group
3. Solar pump
4. Flowmeter



Material and constructions

Heat insulation material of pump group:	EPP
Ball valve with thermometer and check ball:	forged brass EN 12420; CW617N
Sealing:	FPM, Klingirsil
Valve connection with thermometer:	int. thread ISO 7-1 (top side of PUMPFIX); G 1"
Pump group connection:	ext. thread ISO 228 (bottom side of PUMPFIX) G 3/4"

Operating data

Max. operating temperature:	110° C
Short-term load:	120°C < 15s
Max. admissible pressure:	PN10
Pressure relief valve:	6 bar
Pressure gauge:	0-10 bar
Opening pressure for check valve :	200mmWc
Adjustable flow Cotroller - flow meter:	(4-24 l/min)
Propylene glycol mixing ratio:	25-50%

Medium:
Usage of ethylene glycol is not recommended due its toxicity. Any risk of leakage in the solar system that is used for the preparation of sanitary warm water may pose a danger for humans and animals. The use of propylene glycol in a mixing ratio 25- 50% is allowed. EPDM gaskets can be affected by Mineral oils lubricants and thus lead to failure of the EPDM seals. Please refer to manufacturers documentation when using propylene glycol products for frost and corrosion protection.

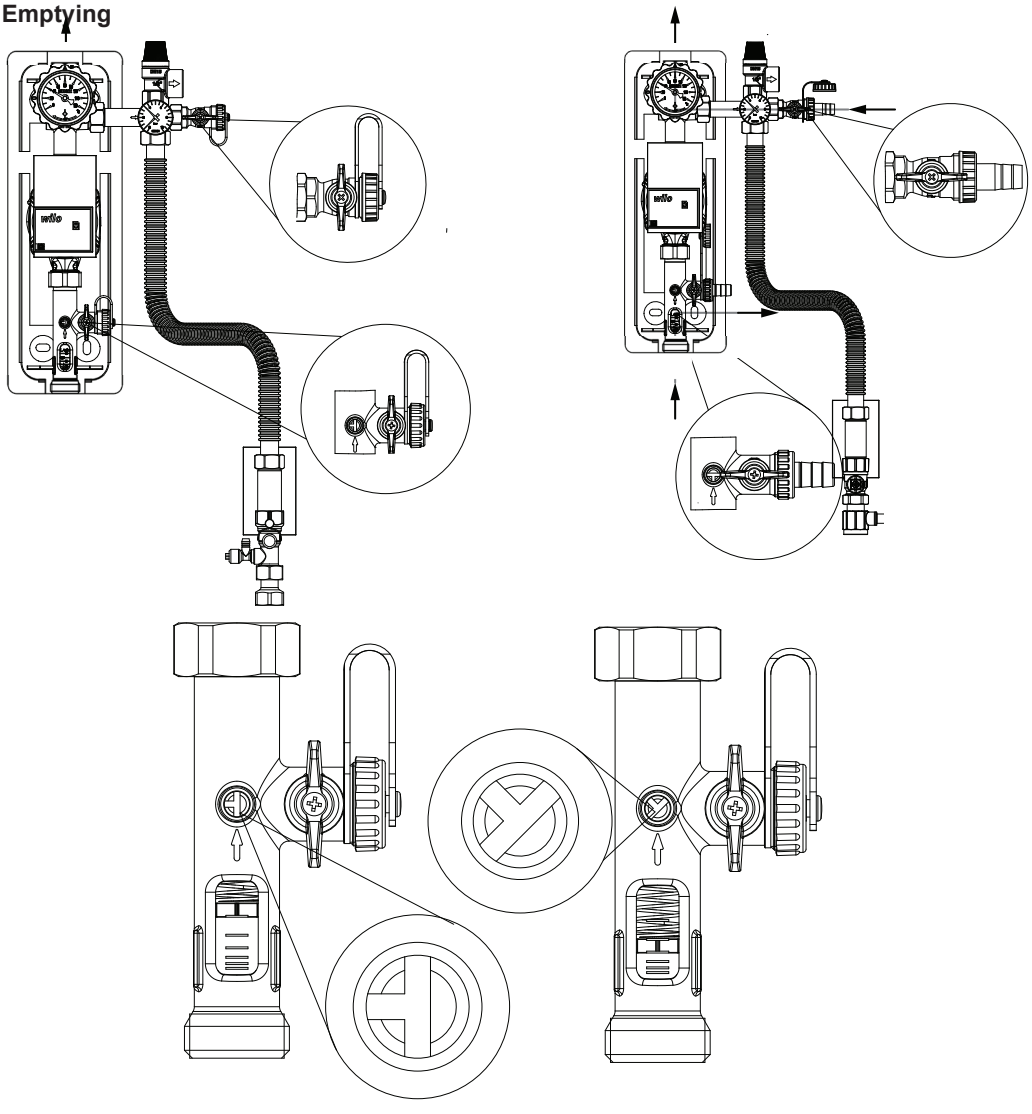
Field of application

The pump stations are vertically assembled with a ball valve and the thermometer facing upwards. The pump group is part of the solar system for the preparation of sanitary warm water. The installation of the circulating pump of other manufacturers and designs is possible. The pump group is equipped with a flow meter, which enables the setting of the
water flow. Safety group which contains of safety valve, manometer, drain valve and connection to expansion tank. Ball valve vithe thermometer and check ball.

Functions of components

SOLAR checkball: it is included into the ball valve. It The ball valve is used as shut-ofvalve can be blocked, for example, for draining the system. Rotate the handle by 45° clockwise for deactivating the check valve.

Filling - Emptying



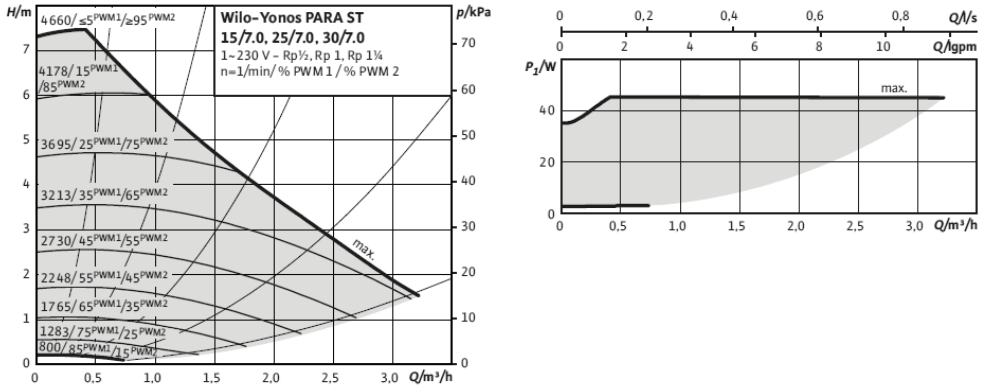
HERZ PUMPFIX

Circulation pumps used in pump groups solar

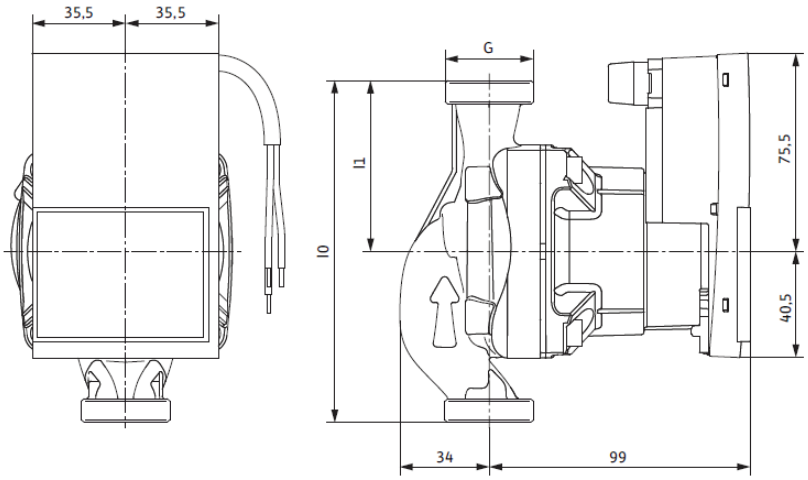
General information

Pump characteristic

External control via PWM



Pump dimensions



Pump data

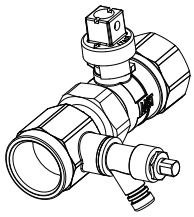
Type:	Wilo - Yonos PARA ST 15/7.0 PWM2 130 12
Thread:	G 1"
Overall length:	130 mm
Energy Efficiency Index (EEI):	≤ 0,20
Max. delivery head:	7.3 m
Max. volume flow:	3.3 m3/h
Max. operating temperature:	110°C
Maxi. operating pressure:	6 bar
Mains connection:	1~230 V +10%/-15%, 50/60 Hz (IEC 60038 standard voltage)
Protection class:	IPx4D
Insulation class:	F

Minimum suction head at suction port to avoid cavitation at water pumping temperature

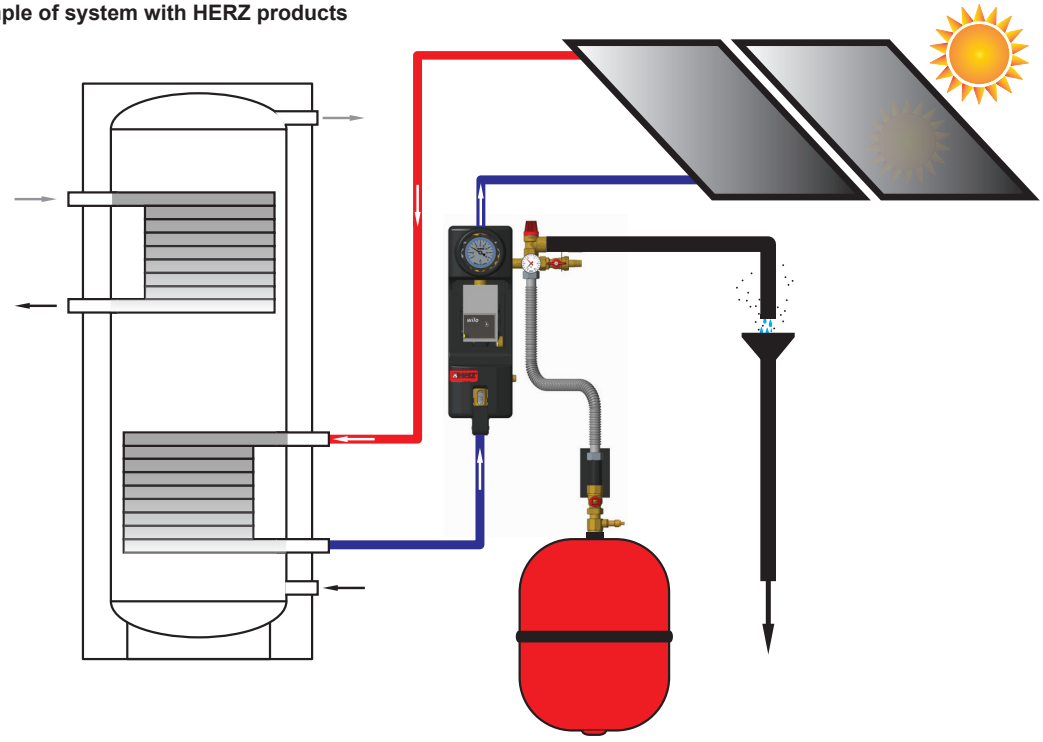
Minimum suction head at 50/95/110°C:	0.5 / 4.5 / 11 m

HERZ PUMPFIX

Solar accessories

Illustration	Description	Item number
	**Service valve**	1 **2205** 02
	**Connecting tube with console**	1 **4513** 30
	**Blue thermometer for HERZ PUMPFIX Solar**	1 **2201** 92
	**Red thermometer for HERZ PUMPFIX Solar**	1 **2201** 93

Example of system with HERZ products



HERZ PUMPFIX

Distibutor

General information

Description of HERZ PUMPFIX distributor
HERZ PUMPFIX distributor is high qualitiy product that is assembled and pressure tested during the manufacturing process under constant quality control. The distributor is designed so that it is compatible with HERZ PUMPFIX pump group. Because of compatibility of the PUMPFIX system the customer can achieve cost, time and space saving when installing PUMPFIX system to the boiler and piping system.

Application:
HERZ distributor is used in heating systems when there are several heating circuits in the facility / system that we want to regulate according to different temperature and time regimes.

Assembly:
The set is equipped with mounting equipment (2 brackets, 4 wall screws, 4 wall inserts, 2 screws M8, 6 washers M8 and 2 spacer gears) for the assembly of the distributor on the wall. The supply and return flow of the HERZ PUMPFIX distributor are connected with boiler with the help of pipe fittings and flat seals. The pump group and distributor are connected with the help of pipe fittings and EPDM seals. When mounting the HERZ PUMPFIX pump group DN25 on the HERZ PUMPFIX distributor DN 32 always use special adapter 1 **4510** 51 (see accessories).

Maintenance instructions
If the product is used properly, no special maintenance is required. Repairs on the device must be carried out by authorized persons only.

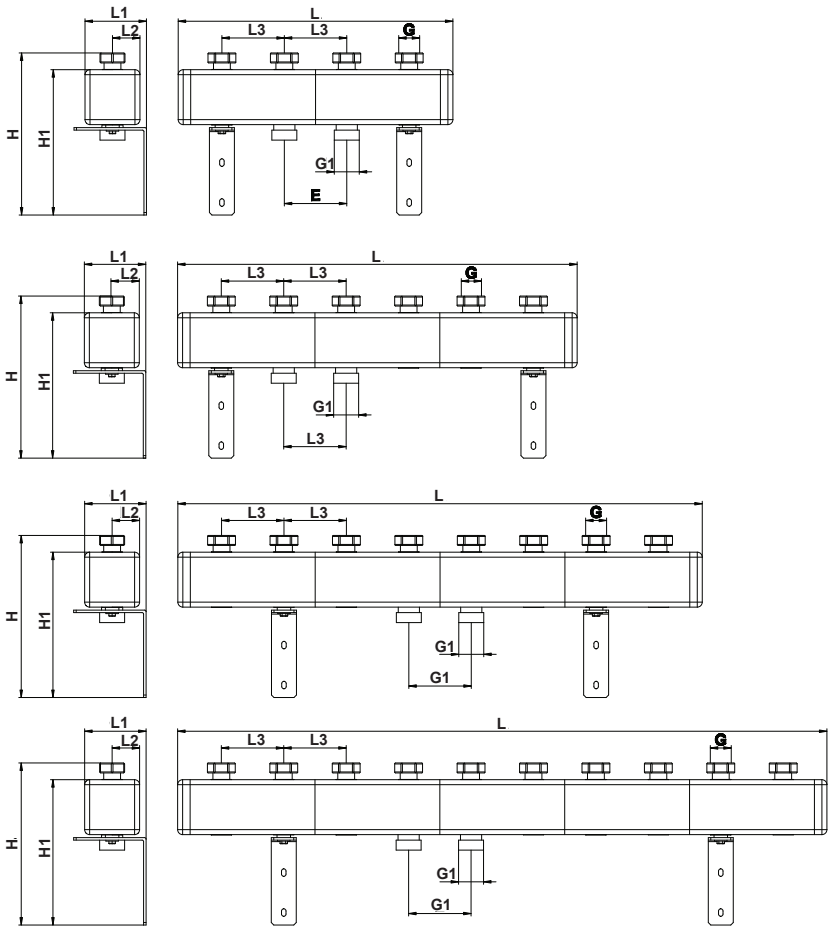
Disposal instructions
The disposal of the HERZ PUMPFIX distributors must not endanger health or environment. Users have to follow the national legal regulations for proper disposal of the HERZ PUMPFIX distributors.

HERZ PUMPFIX

Distributor made from sheet metal DN 25 and DN 32

Datasheet **1 4501 XX**

Dimensions

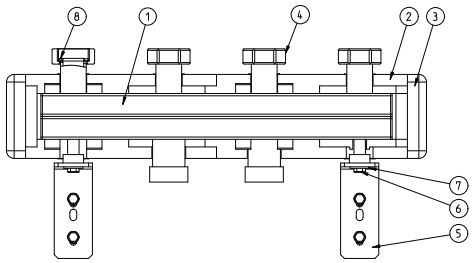


Order Nr.	DN	Nr. of Circuits	L [mm]	H [mm]	L1 [mm]	L2 [mm]	L3 [mm]	H1 [mm]	G* [in]	G1** [in]
1 **4501** 11	25	2	550	324	123	55	125	291	1-1/4"	1-1/2"
1 **4501** 12	25	3	800	324	123	55	125	291	1-1/4"	1-1/2"
1 **4501** 13	25	4	1050	324	123	55	125	291	1-1/4"	1-1/2"
1 **4501** 14	25	5	1300	324	123	55	125	291	1-1/4"	1-1/2"
1 **4501** 30	32	2	515	430	193	75	125	401	1-1/2"	2"
1 **4501** 31	32	3	765	430	193	75	125	401	1-1/2"	2"
1 **4501** 32	32	4	1015	430	193	75	125	401	1-1/2"	2"
1 **4501** 33	32	5	1265	430	193	75	125	401	1-1/2"	2"

*Internal thread (free turning nut)
**external thread

Components of HERZ PUMPFIX distributor made from sheet metal

1. Distributor body
2. Insulation cap
3. Side cover
4. Nut
5. Mounting bracket
6. Screw M8 (DN 25), M10 (DN 32)
7. Washer
8. Flat sealing



Brackets, wall inserts, wall screws, screws M8 / M10, washers and spacer gears for assembly of the distributor on the wall are included in the set.

Material and construction

Fittings:	Cast iron EN-GJMW-400-5, DIN EN 1562
Flat sealing:	EPDM
Insulation:	EPP
Mounting brackets:	Galvanized steel
Housing:	Powder coated steel (black)

Operating data

Max. operating temperature:	110°C
Max. admissible pressure:	4 bar
Max flow (DN 25):	3 m3/h
Max flow (DN 32):	7 m3/h

Wheelbase between the connections (boiler and heating circuit): 125mm

Medium
Heating water quality according to ÖNORM H5195 or VDI- Standard 2035. The use of ethylene or propylene glycol in a mixing ratio 25- 50% is allowed. EPDM gaskets can be affected by mineral oil lubricants and thus lead to failure of the sealings. Please refer to manufacturers documentation when using ethylene glycol and propylene glycol products for freezing and corrosion protection.

HERZ PUMPFIX

Hydraulic separator DN 25

General information

Description of HERZ hydraulic separator

HERZ PUMPFIX hydraulic separator is high qualitiy product that is pressure tested during the manufacturing process under constant quality control. The hydraulic separator is designed so that is compatible with HERZ pumpfix distributor DN25.

.Assembly

It is recommended to connect the hydraulic separator and pump distributor DN25 using EPDM flat sealings. Alternatively, the temperature sensor can also be connected to the hydraulic separator where the G 1/2 "connector is located.

Application

HERZ hydraulic separator is a compensation chamber that allows independent operation of individual heating circuits.We use them in cases where the primary circulation pumps affect one or more secondary circuits. This solves the problems related to the flows and pressures of individual circuits. The hydraulic switch DN25 is installed horizontally on the pumpix distributor.

Maintenance instructions

When the hydraulic separator DN25 is mounted does not require any special maintenance. It is recommended that the switch remains in the original packaging until installation.

Disposal instructions

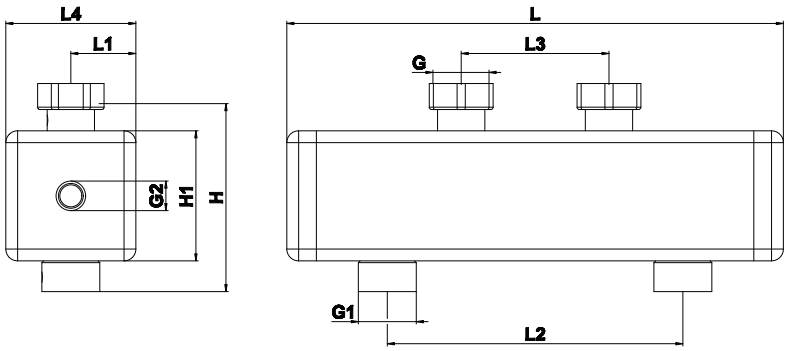
The disposal of the HERZ PUMPFIX hydraulic separators must not endanger health or environment. Users have to follow the national legal regulations for proper disposal of the HERZ PUMPFIX distributors.

HERZ PUMPFIX

Hydraulic separator DN 25

Datasheet 1 **4513** 53

Dimensions

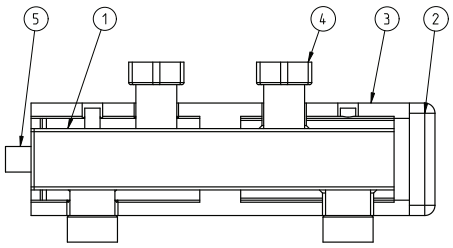


Order Nr.	DN	L [mm]	H [mm]	H1 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	G* [in]	G1** [in]	G2*** [in]
1 **4513** 53	25	420	162	110	55	250	125	110	1-1/2"	1-1/4"	1/2"

*Internal thread (free turning nut)
**external thread
***Internal thread

Components of HERZ PUMPFIX Hydraulic separator

1. Separator body
2. Insulation cap
3. Side cover
4. Nut
5. Connection for temperature sensor



Material and construction

Fittings:	Cast iron EN-GJMW-400-5, DIN EN 1562
Flat sealing:	EPDM
Insulation:	EPP
Casing:	Powder coated steel (black)

Operating data

Max. operating temperature:	110°C
Max. admissible pressure:	4 bar
Max flow:	3 m^3/h

Medium
Heating water quality according to ÖNORM H5195 or VDI- Standard 2035. The use of ethylene or propylene glycol in a mixing ratio 25- 50% is allowed. EPDM gaskets can be affected by mineral oil lubricants and thus lead to failure of the sealings. Please refer to manufacturers documentation when using ethylene glycol and propylene glycol products for freezing and corrosion protection.

HERZ PUMPFIX

Hydraulic separator DN 32

General information

Description of HERZ hydraulic separator
HERZ PUMPFIX hydraulic separator is high qualitiy product that is pressure tested during the manufacturing process under constant quality control.

Assembly
On the hydraulic separator is G1" external thread connection for air vent and two internal tread connections G1/2" for drain valve and sensor.

Application
HERZ hydraulic separator is a compensation chamber that allows independent operation of individual heating circuits. It is used in cases where the primary circulation pumps affect one or more secondary circuits. This solves the problems related to the flows and pressures of individual circuits. The hydraulic switch DN25 is installed vertically before the pumpix distributor.

Maintenance instructions
When the hydraulic separator DN32 is mounted it does not require any special maintenance. It is recommended that the separator remains in the original packaging until installation.

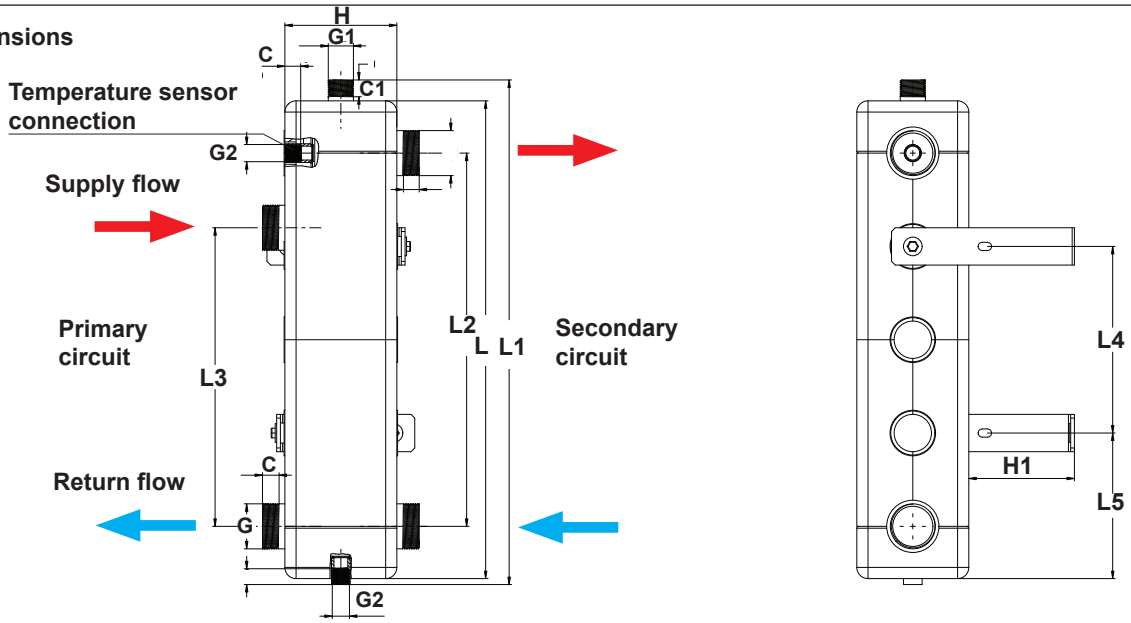
Disposal instructions
The disposal of the HERZ PUMPFIX hydraulic separator must not endanger health or environment. Users have to follow the national legal regulations for proper disposal of the HERZ PUMPFIX hydraulic separator.

HERZ PUMPFIX

Hydraulic separator DN 32

Datasheet 1 **4513** 54

Dimensions

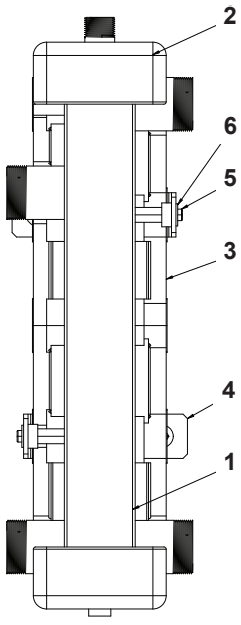


Order Nr.	DN	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]	G** [in]	G1** [in]	G2* [in]	C [mm]	C1 [mm]
1 **4513** 54	32	640	680	500	400	250	195	150	141	2"	1"	1/2"	20	20,5

*Internal thread
**external thread

Components of HERZ PUMPFIX Hydraulic separator

1. Separator body
2. Insulation cap
3. Side cover
4. Mounting bracket
5. Mounting screw M10
6. Washer



Brackets, wall inserts, wall screws, mounting screws M10, washers and spacer gears for assembly of the separator on the wall are included in the set.

Material and construction

Housing	Powder coated steel (black)
Insulation	EPP
Flat sealing	EPDM
Mounting brackets	Galvanized steel

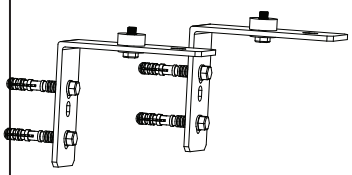
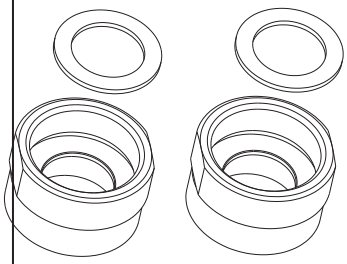
Operating data

Max. operating temperature	110°C
Max. admissible pressure	4 bar
Max flow	7 m^3/h

Medium
Heating water quality according to ÖNORM H5195 or VDI- Standard 2035. The use of ethylene or propylene glycol in a mixing ratio 25- 50% is allowed. EPDM gaskets can be affected by mineral oil lubricants and thus lead to failure of the sealings. Please refer to manufacturers documentation when using ethylene glycol and propylene glycol products for freezing and corrosion protection.

HERZ PUMPFIX

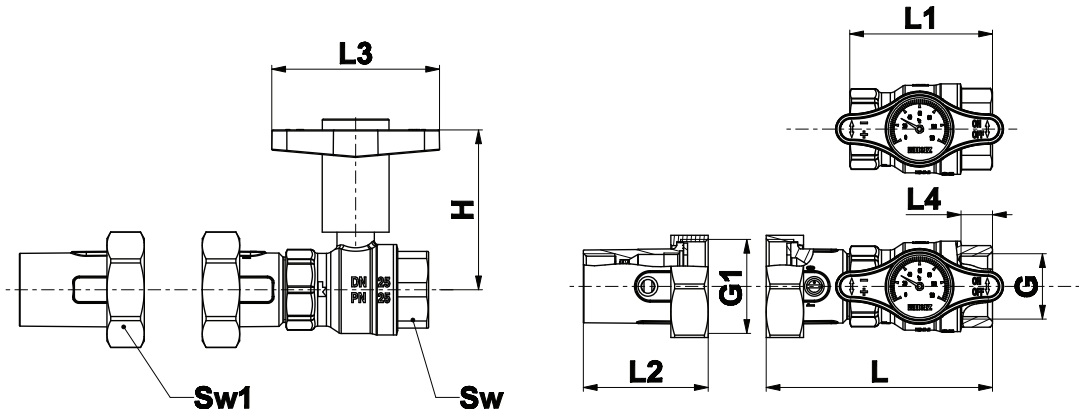
Distibutor accessories

Illustration	Description	Item number
	**Wall fixing set** Set contains: 2 mounting brackets, 4 plastic plugs, 4 screws and 4 nuts for the assembly of the distributor on the wall. Set also contains two M12 nuts and two washers for assembly of the distributor on brackets.	DN25 1 **4513** 93 DN32 1 **4513** 94
	**Adapter connection set** Set allows mounting of pump group DN25 on distributor DN32 (only for sheet metal distributor). Set also contains two flat seals. Adapter: Material: turned brass acc. to EN12164, CW614N Upper internal thread: 1-1/4'' acc. to ISO 228 Lower external thread: 1-1/2'' acc. to ISO 228 Flat seal: Material: EPDM	1 **4510** 51
	**Flat seals set for PUMPFIX system DN25** Set is equipped with two flat seals for sealing between distributor DN25 and pump group DN25 Material: EPDM	1 **4510** 52
	**Flat seals set for PUMPFIX system DN32** Set is equipped with two flat seals for sealing between distributor DN32 and pump group DN32 Material: EPDM	1 **4510** 53

HERZ PUMPFIX EASY

Datasheet 1 4513 31

Dimensions



Model	PN [bar]	DN	G* [in]	G1* [in]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	H [mm]	Sw	Sw1
1 **4513** 31	25	25	G1	G1-1/2	115	73	64	85	16	87	39	52

*Internal thread

Material and construction

Ball valve body:	forged brass acc. to EN 12165, chrome plated, CW617N
Connectors:	threads acc. to ISO 228
Ball:	forged brass acc. to EN 12165, hard chrome plated, CW617N
Spindle:	turned brass acc. to EN 12164, CW614N
Handle:	plastic (red, blue), PA66 GF30
Spindle seals:	PTFE
Ball seals:	PTFE
Gaskets:	EPDM

Operating data

Operating pressure:	max. 25 bar
Operating temperature range:	-30 °C to 150°C (water 0,5°C - 110°C, no steam)
Opening presure check valve:	200mm Vc
Propylene glycol mixing ratio:	25-50%

Medium:
Heating water according ÖNORM H5195 or VDI- Standard 2035. The use of ethylene, or propylene glycol in a mixing ratio 25- 50% is allowed. EPDM gaskets can be affected by Mineral oils lubricants and thus lead to failure of the EPDM seals. Please refer to manufacturers documentation when using ethylene glycol products for frost and corrosion protection.

Field of application

It is used as closing fitting in central heating and other installations and for fast connection of circulating pump through screw joint. Ball valve is only used in two basic positions: open, closed.

Assembly instructions

Taking into account the direction of flow of the installation is possible horizontally or vertically, with the screening space should face down. HERZ recommends the use of standard thread sealants for the connection between drain valves and pipe. Ball valve is mounted in front of the central heating circulating pump. The circulation pump is mounted with screw joint G1-1/2" that is attached to the valve flange. When assembling, use suitable assembly tool that adapts to valve end connections.

Maintenance instructions

The ball valves don't need any special maintenance.

Example of system with HERZ products