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# HERZ PUMPFIX

## Pump groups

General information

### ☑ Description of HERZ PUMPFIX pump group

HERZ PUMPFIX pump group is a high quality 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:

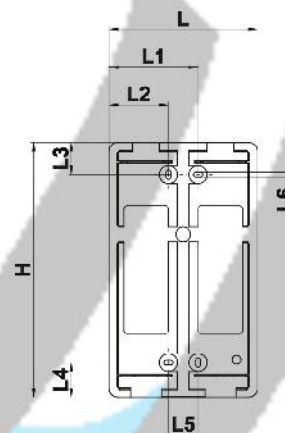
The pump group is mounted vertically, with the ball valves with thermometer facing up. Connection to boiler or distributor from below with external thread. Connection to the consumers above with internal thread.

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	H	L	L1	L2	L3	L4	L5	L6
20	390	250	50	150	100	56,3	50,8	8,5
25	430	250	50	150	100	54,3	58,8	8,5
32	430	250	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 environment. National legal regulations for proper disposal of the HERZ PUMPFIX pump groups have to be followed.

dim.	model	kvs	Q (l/h)	$\Delta T$ (°K)				
				20	15	10	7,5	5
DN 20	DIREKT	4,3	1000	23	17	12	9	6
		MIX	4	1400	30	23	15	11
		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
		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
		16	2300	53	40	27	20	13

kW

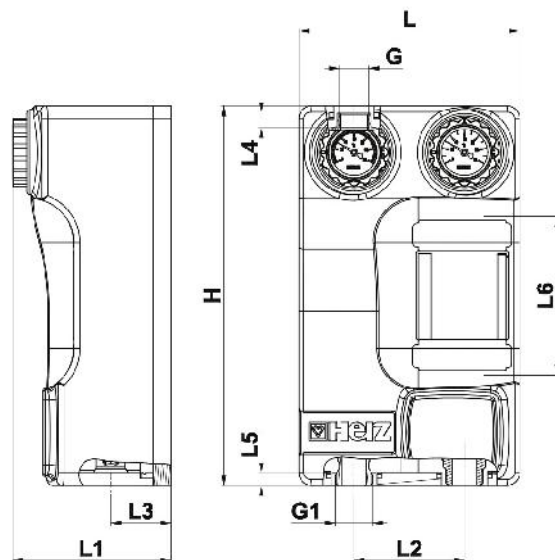
H (circulation pump) = 4 m

# HERZ PUMPFIX

## Direct DN 20, DN 25, DN 32

Datasheet 1 451X XX

**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 HS 15/6-130	4,3	250	390	209	125	68	3/4"	16	14	1"	130
1 4514 13	20	IMP GH IN 15/40-130***	4,3	250	390	167	125	68	3/4"	16	14	1"	130
1 4514 11	20	without pump	4,3	250	390	167	125	68	3/4"	16	14	1"	130
1 4510 26	25	Wilo Yonos PARA HS 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 HS 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

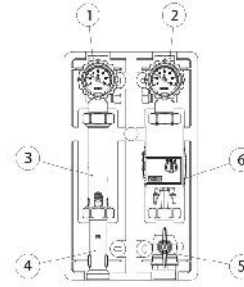
\*internal thread

\*\*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 chrome plated, CW617N
Handle of ball valve with thermometer:	plastic, PA66 GF30
Spacer with backflow preventor:	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 EN 12164, 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. operating 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 $\Delta T = 20K$ at 1250 l/h:	to 29 kW
DN 20 Max. heat output $\Delta T = 10K$ at 1250 l/h:	to 14,5 kW
DN 25 Max. heat output $\Delta T = 20K$ at 2155 l/h:	to 50 kW
DN 25 Max. heat output $\Delta T = 10K$ at 2155 l/h:	to 25 kW
DN 32 Max. heat output $\Delta T = 10K$ at 2500 l/h:	to 58 kW
DN 32 Max. heat output $\Delta T = 20K$ 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

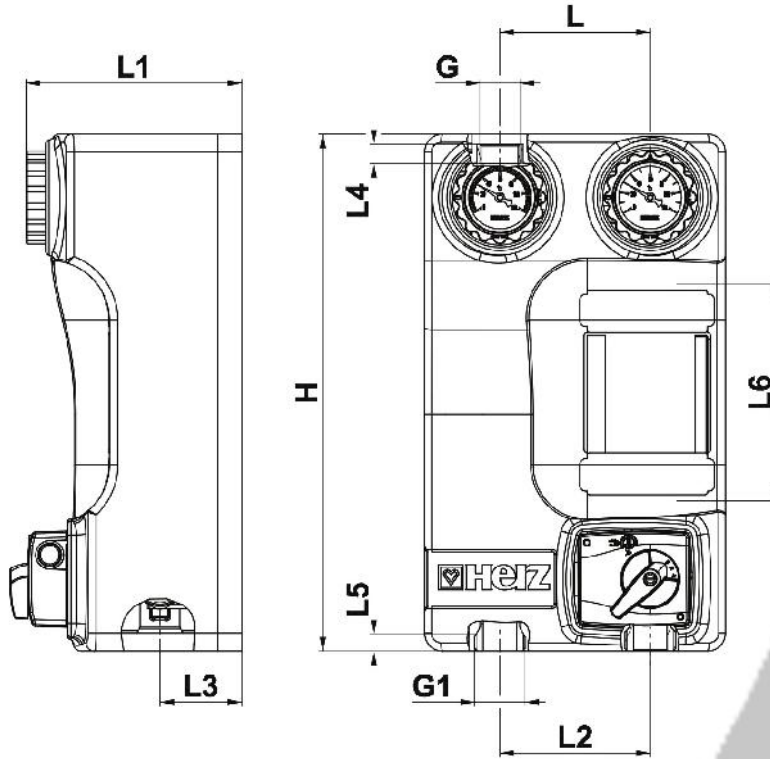
Every HERZ- PUMPFIX pump group can be upgraded with an overflow valve (see page 12)

# HERZ PUMPFIX

## Mix DN 20, DN 25, DN 32

Datasheet 1 451X XX

☑ 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 Ycnos PARA RS 15/6-130	4	NO	250	390	209	125	68	3/4"	16	14	1"	130
1 4514 17	20	Wilo Ycnos PARA RS 15/6-130	6,3	NO	250	390	209	125	68	3/4"	16	14	1"	130
1 4514 18	20	IMP GI IN 15/40-130***	4	NO	250	390	186	125	68	3/4"	16	14	1"	130
1 4514 19	20	IMP GHN 15/40 130***	6,3	NO	250	390	186	125	68	3/4"	16	14	1"	130
1 4514 14	20	without pump	4	NO	250	390	186	125	68	3/4"	16	14	1"	130
1 4514 15	20	without pump	6,3	NO	250	390	186	125	68	3/4"	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

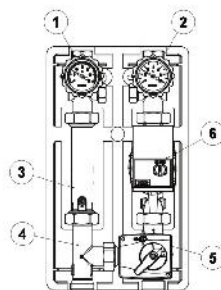
\*\*external thread

\*\*\*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 chrome 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. operating 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 $\Delta T = 20K$ at 900 l/h:	to 21 kW
DN 20 Max. heat output $\Delta T = 10K$ at 900 l/h:	to 10,5 kW
DN 25 Max. heat output $\Delta T = 20K$ at 2.100 l/h:	to 35 kW
DN 25 Max. heat output $\Delta T = 10K$ at 1508 l/h:	to 17,5 kW
DN 25 Max. heat output $\Delta T = 5K$ at 1508 l/h:	to 8,75 kW
DN 32 Max. heat output $\Delta T = 20K$ at 2.100 l/h:	to 48 kW
DN 32 Max. heat output $\Delta T = 10K$ at 1508 l/h:	to 24 kW
DN 32 Max. heat output $\Delta T = 5K$ at 1508 l/h:	to 12 kW

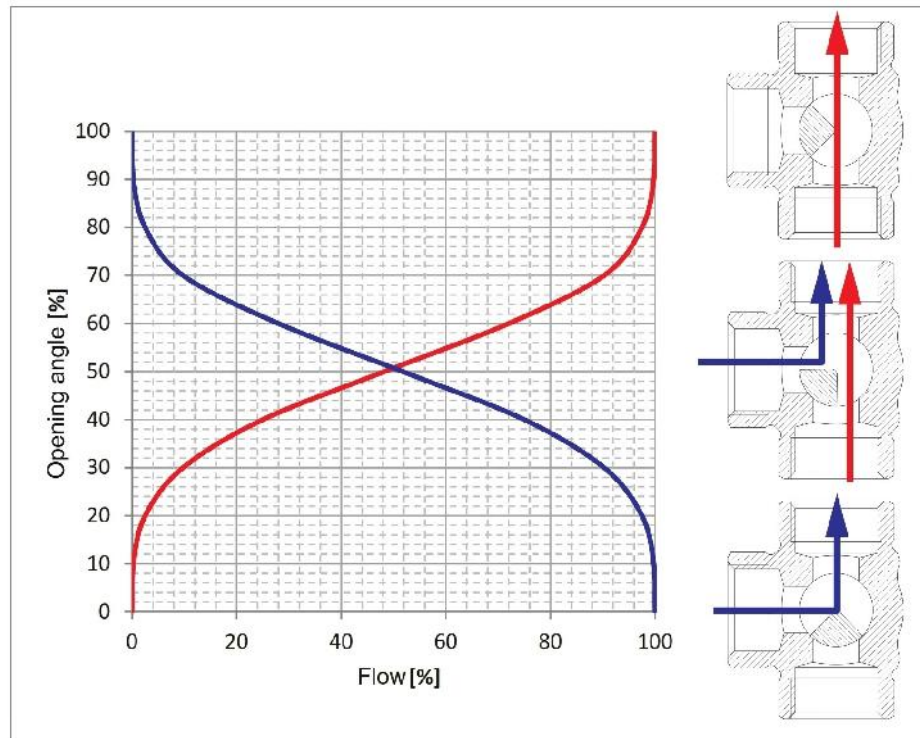
☑ **Field of application of PUMPFIX mix DN20 and DN32**

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**



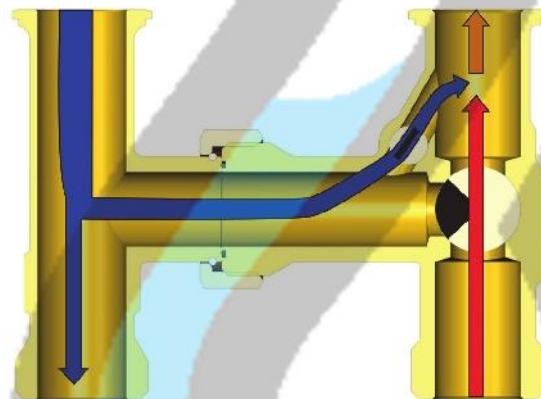
☑ **Field of application of PUMPFIX DN25:**

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 through the mixing valve. 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.

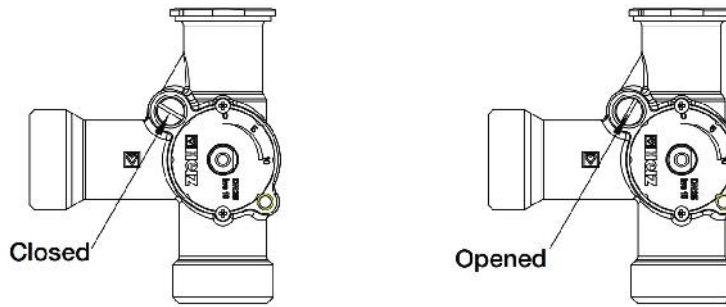
Every HERZ- PUMPFIX pump group can be upgraded with an overflow valve (see page)

☑ **Functional principle of three-way valve DN 25**

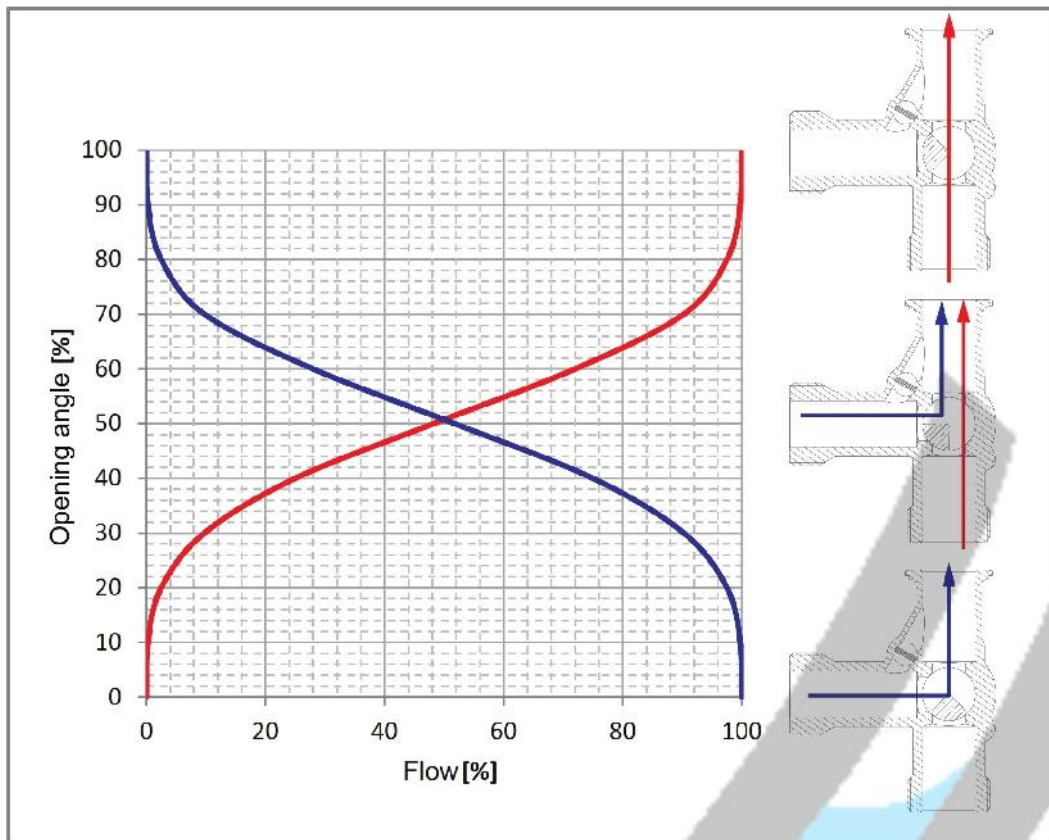
A part of the heatflow from the pump on the bypass operation is primed in normal operation – for example, when the return water mixer is closed. This current (smaller blue arrow) pictures 50% of the mixer capacitance (red arrow). A very high flow and a low temperature are sustained.



☑ 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:

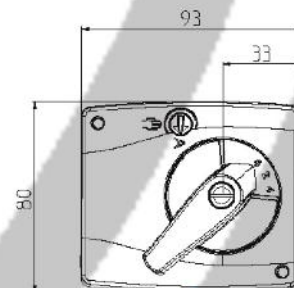
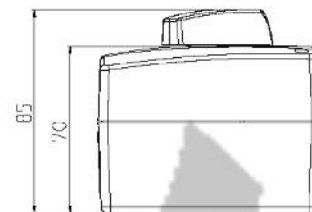
Press for temporary disengagement, permanent gearing disengagement by rotary switch on the housing to the manual position-

### Safety note:

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

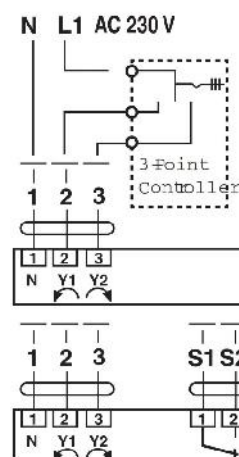
## Technical data

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

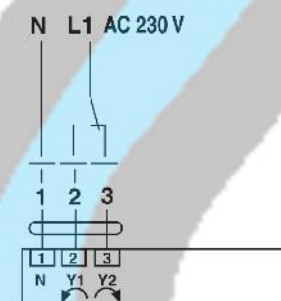


## Wiring diagram

3-Point Control



Open-Close Control

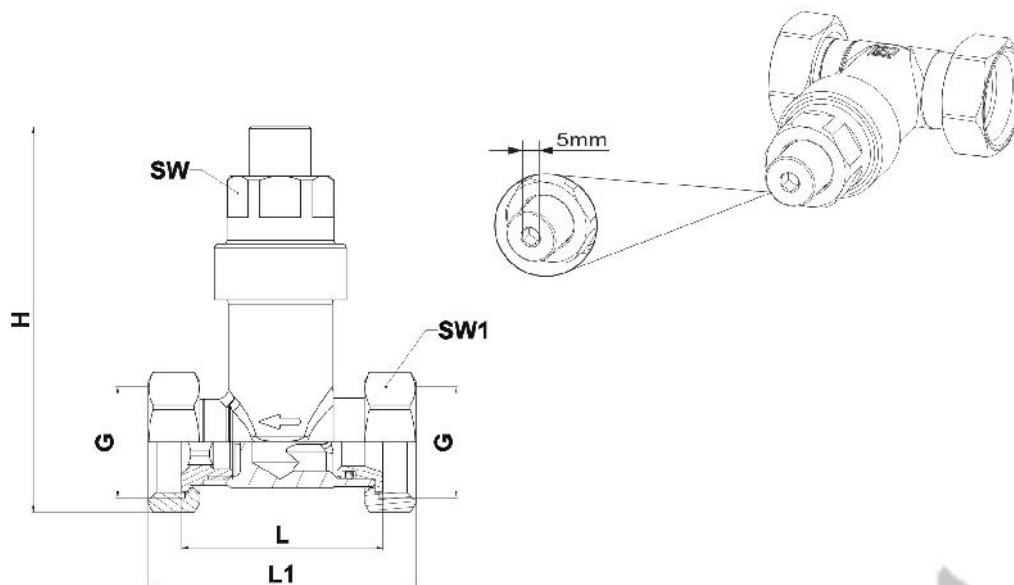


# HERZ overflow valve

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	3/4"

**Material and construction:**

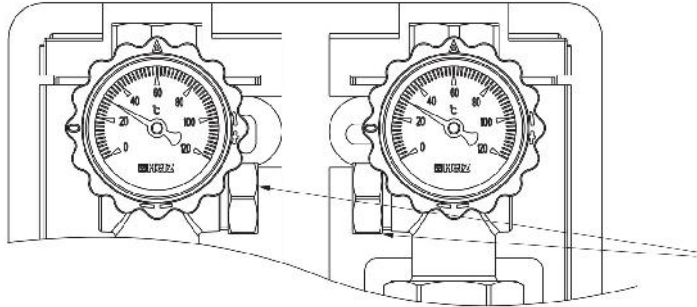
Housing: forged brass acc. to EN 12165, CW 617N  
 Nuts: forged brass acc. to EN 12165, CW 617N; internal thread G3/4" acc. to ISO228-1  
 Sealings: EPDM  
 Spring: stainless steel

**Operating data:**

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

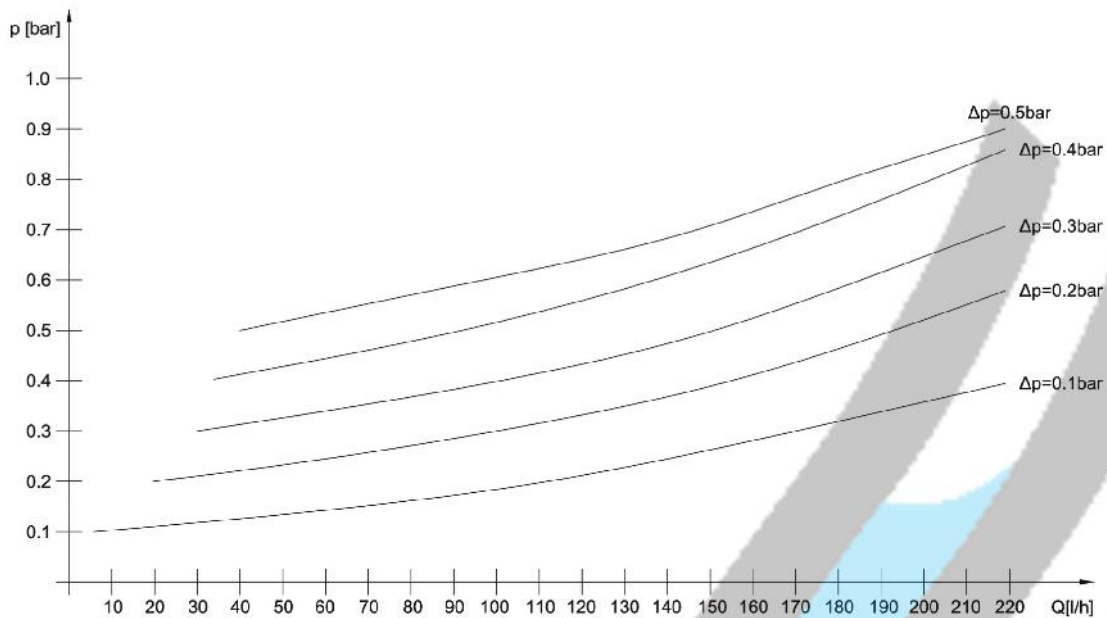
### Field of application

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:

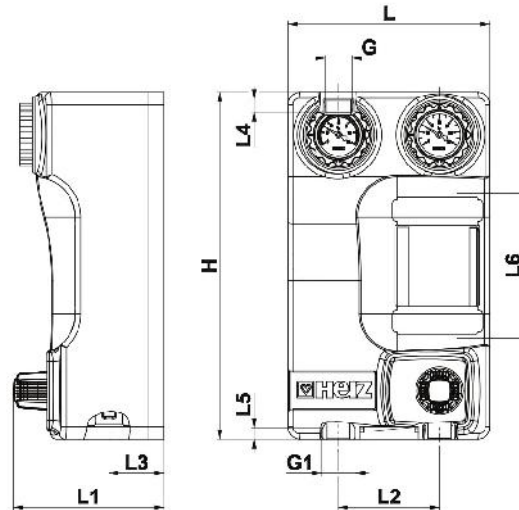


# HERZ PUMPFIX Constant

## constant control for temperature DN 25

Datasheet 1 4514 XX

☑ **Dimensions**



Order Nr.	DN	Pump	kvs [m <sup>3</sup> /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

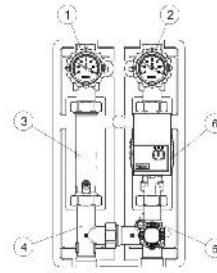
\*\*external thread

\*\*\*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:  
 Ball:  
 Handle of ball valve with thermometer:  
 Spacer with backflow preventer:  
 Threaded connectors of closing valve:  
 Threaded connector of pump group:  
 Spindle:  
 Spindle seals:  
 Ball seals:  
 Gaskets:  
 Heat insulation material of pump group:  
 Features:  
 Control range (1 7420 06)\*:

forged brass acc. to EN 12165; CW 617N  
 forged brass acc. to EN 12165, hard chrome plated, CW617N  
 plastic, PA66 GF30  
 brass; CW617N  
 internal thread acc. to ISO 7-1; G1"  
 external thread acc. to ISO 228-1; G1 1/4"  
 machined brass acc. to EN12164, CW614N  
 NBR / EPDM  
 PTFE  
 EPDM  
 EPP  
 Temperature regulator with contact sensor  
 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. operating 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  $\Delta T = 10^{\circ}K$  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

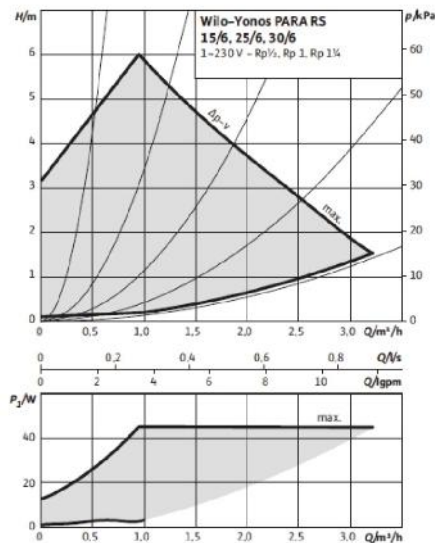
## Circulation pumps used in pump groups

General information

### ☑ Pump characteristic Wilo Yonos PARA RS

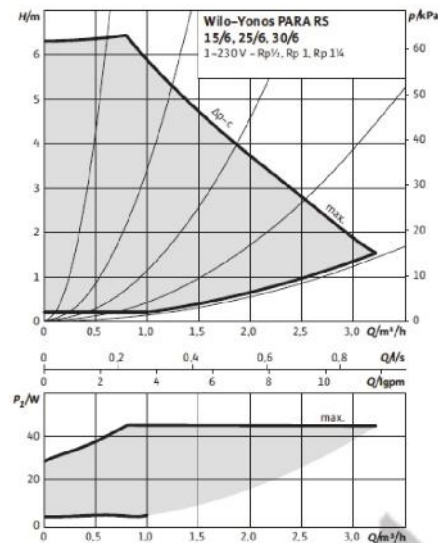
Wilo-Yonos PARA RS 15/6, 25/6, 30/6

$\Delta p-v$  (variable)

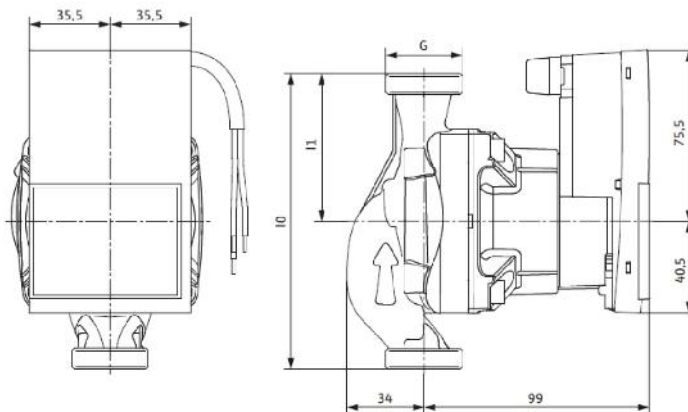


Wilo-Yonos PARA RS 15/6, 25/6, 30/6

$\Delta p-c$  (constant)



### ☑ 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:

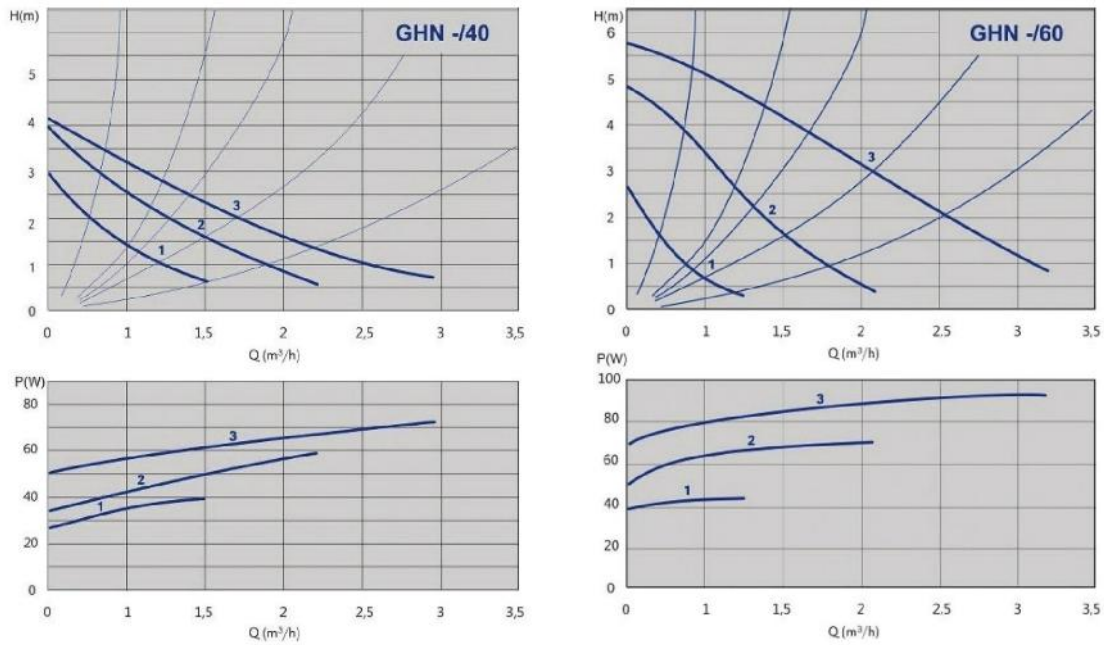
F

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

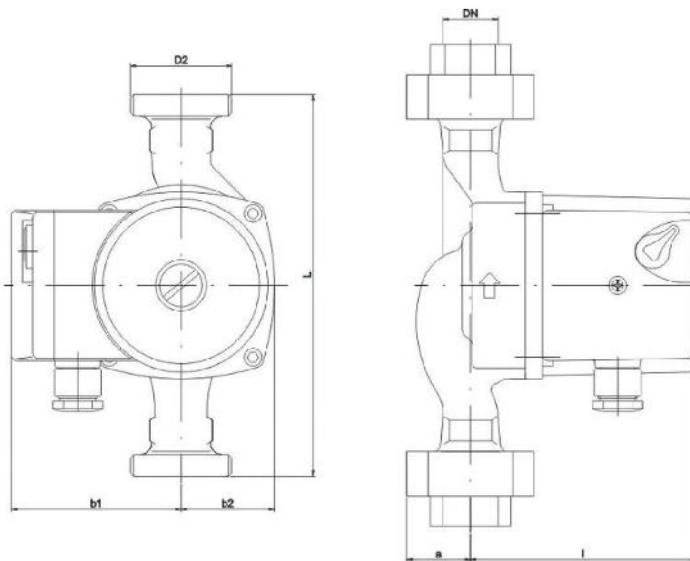
Minimum suction head at 50/95°C: 0.5/4.5 m



**☑ Pump characteristic- IMP GHN only available outside EU**



**☑ Pump dimensions**



DN	G	L	H <sub>max</sub>
20	1"	130	4 m
25	1½"	180	6 m
32	2"	180	6 m



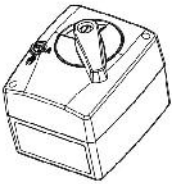
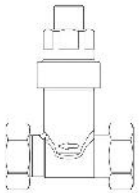
**☑ Pump data**

Type: DN 20: IMP GI IN 15/40-130  
 DN 25: IMP GHN 25/60-180  
 DN 32: IMP GHN 30/60-180

Max. volume flow: 3,5 m<sup>3</sup>/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

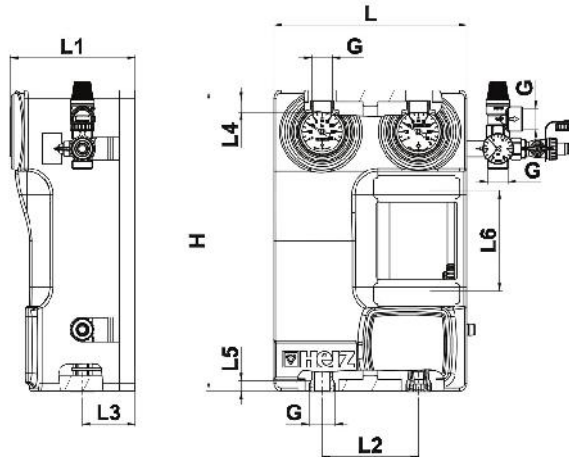
Illustration	Description	Item number
	<p><b>Red thermometer for HERZ PUMPFIX</b></p>	<p>1 2201 91</p>
	<p><b>Blue thermometer for HERZ PUMPFIX</b></p>	<p>1 2201 90</p>
	<p><b>3 - point actuator</b></p>	<p>1 7712 63</p>
	<p><b>Overflow valve</b></p>	<p>1 4514 99</p>

# HERZ PUMPFIX

## Solar

Datasheet 1 4513 X2

### ☑ Dimensions

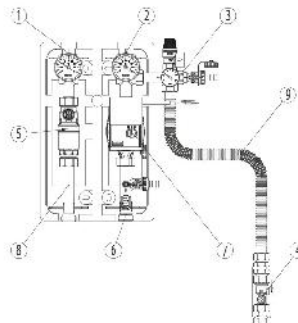


Art. nr.	DN	Pump	L [mm]	H [mm]	L1 [mm]	L2 [mm]	L3 [mm]	G* [in]	L4 [mm]	L5 [mm]	G** [in]	L6 [mm]
1 4513 12	20	Wilo Yonos Para ST 15/7,0 PWM 2	250	390	167	125	68	3/4"	16	14	1"	130
1 4513 02	20	Without pump	250	390	161	125	68	3/4"	16	14	1"	130

\*internal thread  
 \*\*external thread

☑ **Components of HERZ PUMPFIX solar pump group**

1. Valve with Thermometer (red)
2. Valve with Thermometer (blue)
3. Safety 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 chrome 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. operating temperature:	0° C (water 0,5°)
Opening pressure for check valve :	200mmWc
Propylene glycol mixing ratio:	25-50%

Medium:

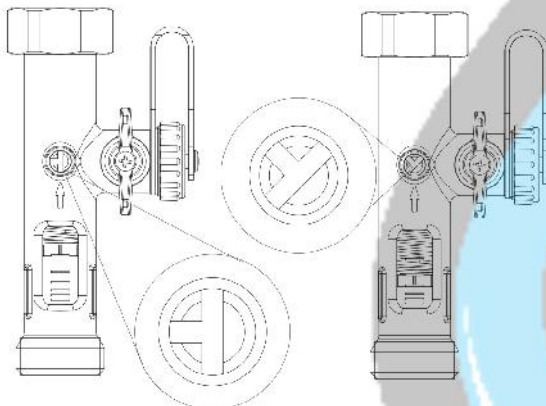
Usage of ethylene glycol is not recommended due its toxicity. Any risk of leakage in the solar system that is used for the preparation of sanitary warm water may pose a danger for humans and animals. The use of propylene glycol in a mixing ratio 25- 50% is allowed. EPDM gaskets can be affected by Mineral 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.

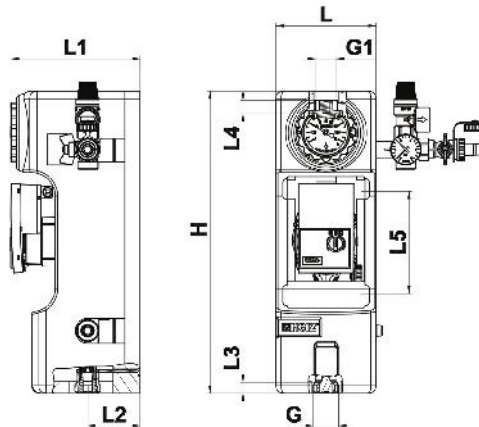


# HERZ PUMPFIX

## Solar Simple

Datasheet 1 4511 8X

### ☑ Dimensions



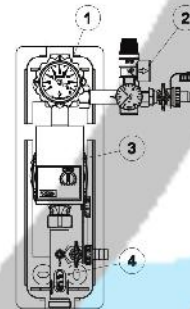
Art. nr.	DN	Pump	H [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	G** [In]	G1* [In]
1 4511 81	20	Wilo Yonos Para ST 15/7,0 PWM 2	390	130	167	68	14	16	1"	3/4"
1 4511 82	20	Without pump	390	130	167	68	14	16	1"	3/4"

\*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:  
 Ball valve with thermometer and check ball:  
 Sealing:  
 Valve connection with thermometer:  
 Pump group connection:

EPP  
 forged brass EN 12420; CW617N  
 FPM, Klingirsil  
 int. thread ISO 7-1 (top side of PUMPFIX); G 1"  
 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.

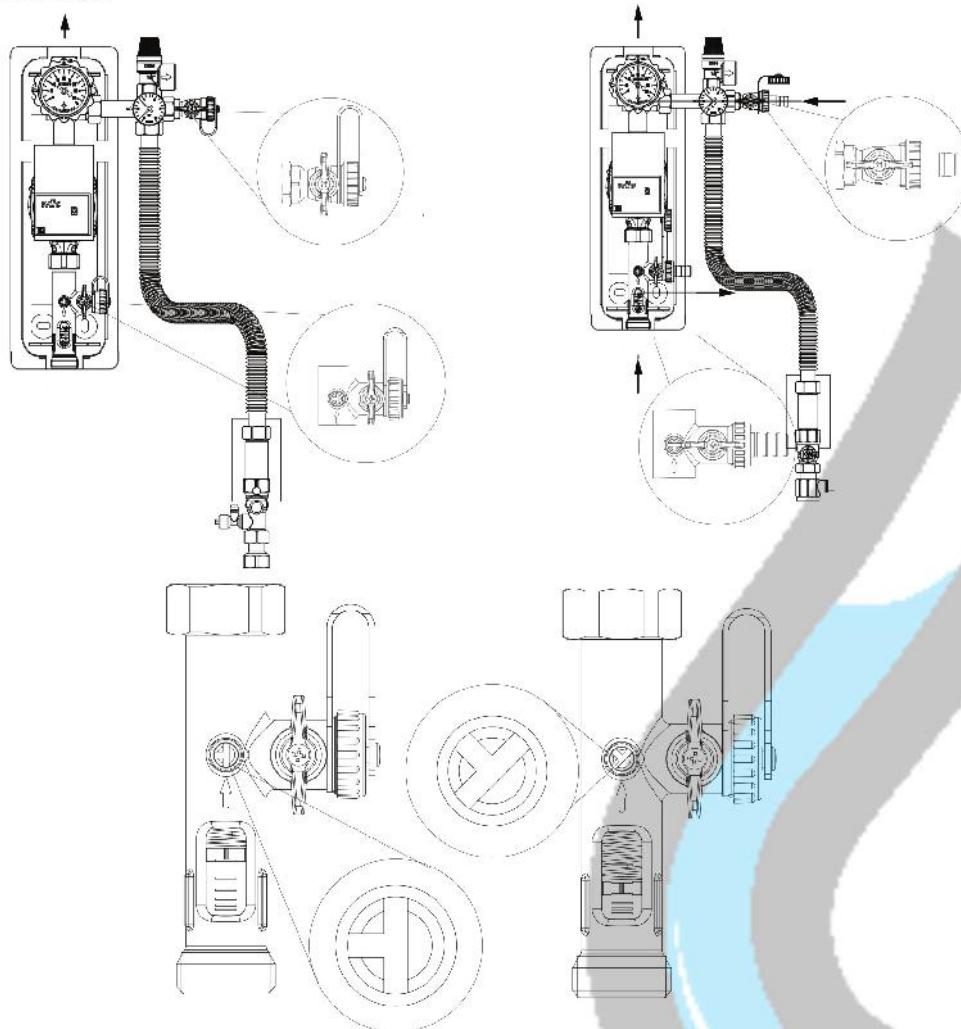
☑ **Field of application**

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 with 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**



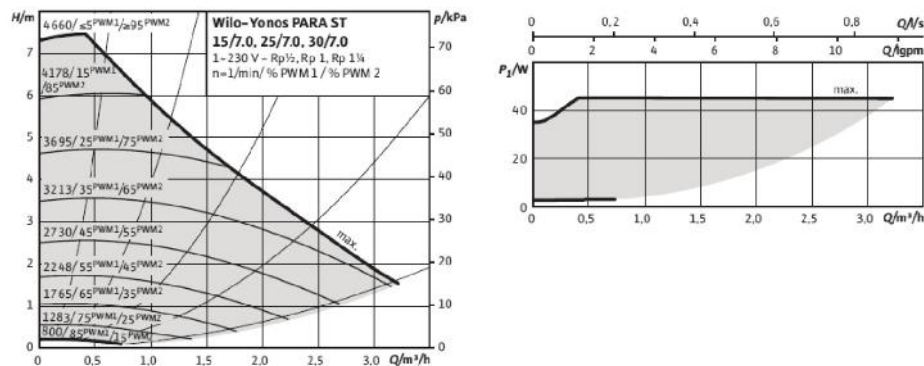
# HERZ PUMPFIX

## Circulation pumps used in pump groups solar

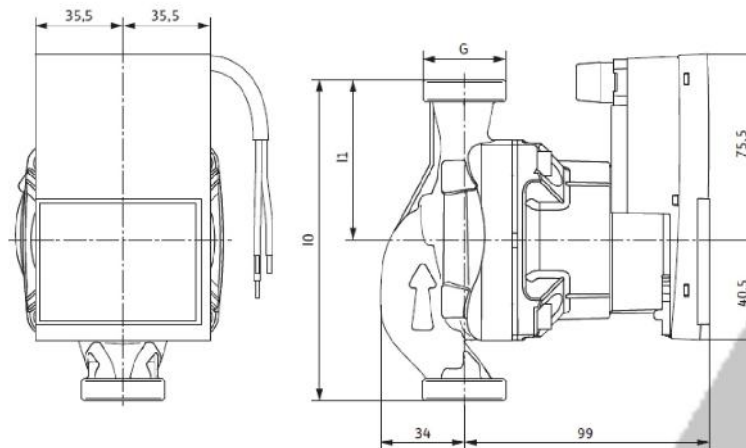
General information

### ☑ Pump characteristic

External control via PWM



### ☑ Pump dimensions

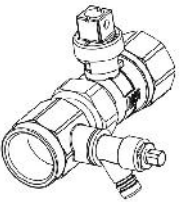





### ☑ Pump data

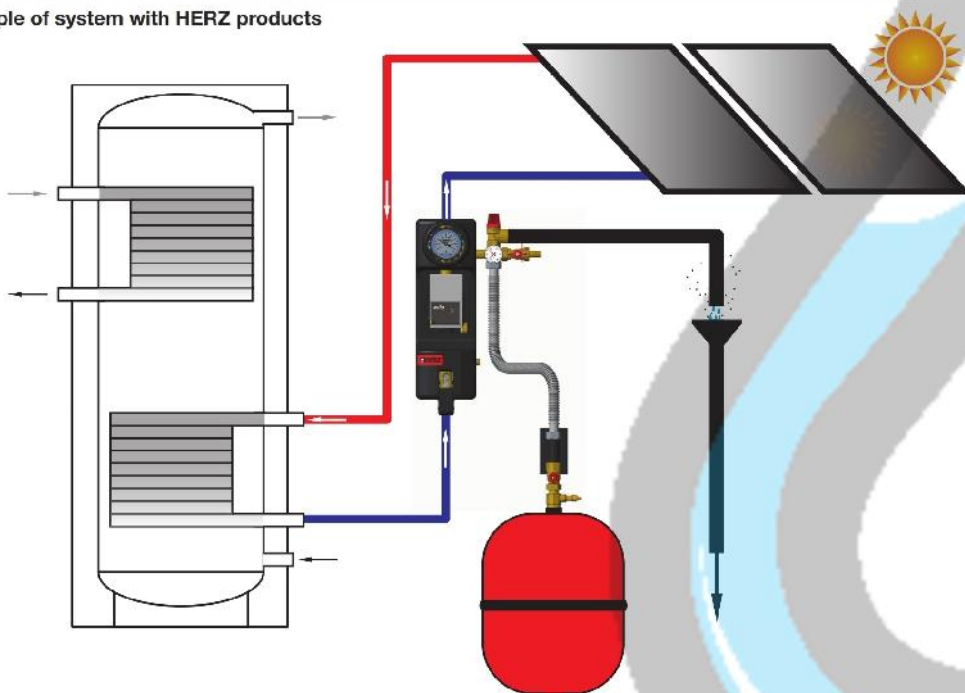
Type:	Wilo - Yonos PARA ST 15/7.0 PWM2 130 12
Thread:	G 1"
Overall length:	130 mm
Energy Efficiency Index (EEI):	≤ 0,20
Max. delivery head:	7.3 m
Max. volume flow:	3.3 m <sup>3</sup> /h
Max. operating temperature:	110°C
Max. operating pressure:	6 bar
Mains connection:	1~230 V +10%/-15%, 50/60 Hz (IEC 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 / 1.5 / 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

## Distributor

General information

### ☒ **Description of HERZ PUMPFIX distributor**

HERZ PUMPFIX distributor is high quality 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 fillings 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**

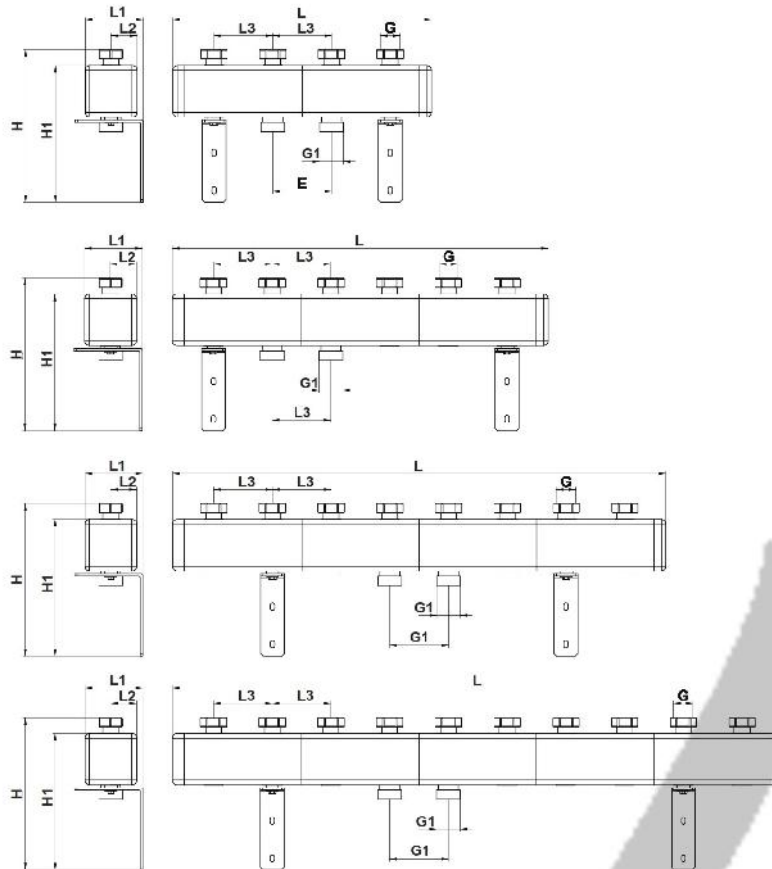
The disposal of the HERZ PUMPFIX distributors must not endanger health or environment. Users have to follow the national legal regulations for proper disposal of the HERZ PUMPFIX distributors.

# HERZ PUMPFIX

## Distributor made from sheet metal DN 25 and DN 32

Datasheet 1 4501 XX

Dimensions



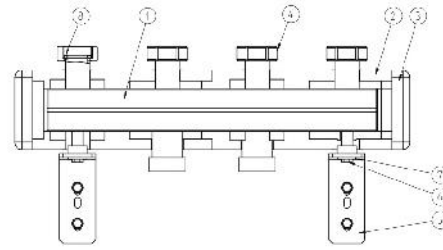
Order Nr.	DN	Nr. of Circuits	L [mm]	H [mm]	L1 [mm]	L2 [mm]	L3 [mm]	H1 [mm]	G* [in]	G1** [in]
1 4501 11	25	2	550	324	123	55	125	291	1-1/4"	1-1/2"
1 4501 12	25	3	800	324	123	55	125	291	1-1/4"	1-1/2"
1 4501 13	25	4	1050	324	123	55	125	291	1-1/4"	1-1/2"
1 4501 14	25	5	1300	324	123	55	125	291	1-1/4"	1-1/2"
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:  
 Flat sealing:  
 Insulation:  
 Mounting brackets:  
 Housing:

Cast iron EN-GJMW-100-5, DIN EN 1562  
 EPDM  
 EPP  
 Galvanized steel  
 Powder coated stool (black)

☑ **Operating data**

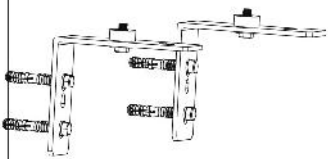
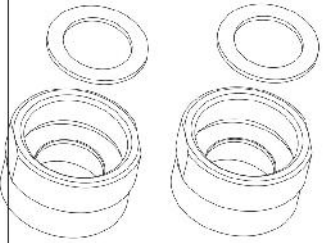


Max. operating temperature: 110°C  
 Max. admissible pressure: 4 bar  
 Max flow (DN 25): 3 m<sup>3</sup>/h  
 Max flow (DN 32): 7 m<sup>3</sup>/h  
 Wheelbase between the connections (boiler and heating circuit): 125mm

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

### Distributor accessories

Illustration	Description	Item number
	<p><b>Wall fixing set</b></p> <p>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.</p>	<p>DN25 1 <b>4513 93</b></p> <p>DN32 1 <b>4513 94</b></p>
	<p><b>Adapter connection set</b></p> <p>Set allows mounting of pump group DN25 on distributor DN32 (only for sheet metal distributor). Set also contains two flat seals.</p> <p>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</p> <p>Flat seal: Material: EPDM</p>	<p>1 <b>4510 51</b></p>
	<p><b>Flat seals set for PUMPFIX system DN25</b></p> <p>Set is equipped with two flat seals for sealing between distributor DN25 and pump group DN25</p> <p>Material: EPDM</p>	<p>1 <b>4510 52</b></p>
	<p><b>Flat seals set for PUMPFIX system DN32</b></p> <p>Set is equipped with two flat seals for sealing between distributor DN32 and pump group DN32</p> <p>Material: EPDM</p>	<p>1 <b>4510 53</b></p>

# HERZ PUMPFIX

## Hydraulic separator DN 25

General information

### ☑ Description of HERZ hydraulic separator

HERZ PUMPFIX hydraulic separator is high quality 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 pumpfix 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

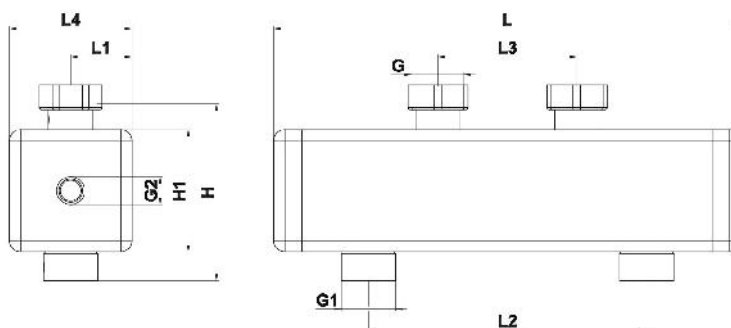
The disposal of the HERZ PUMPFIX hydraulic separators must not endanger health or environment. Users have to follow the national legal regulations for proper disposal of the HERZ PUMPFIX distributors.

# 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"

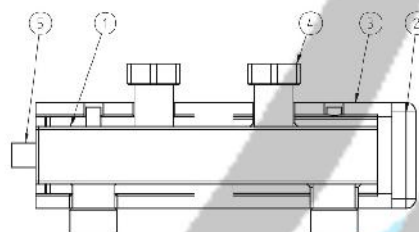
\*Internal thread (free turning nut)

\*\*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 <sup>3</sup> /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 quality 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.

☒ **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.

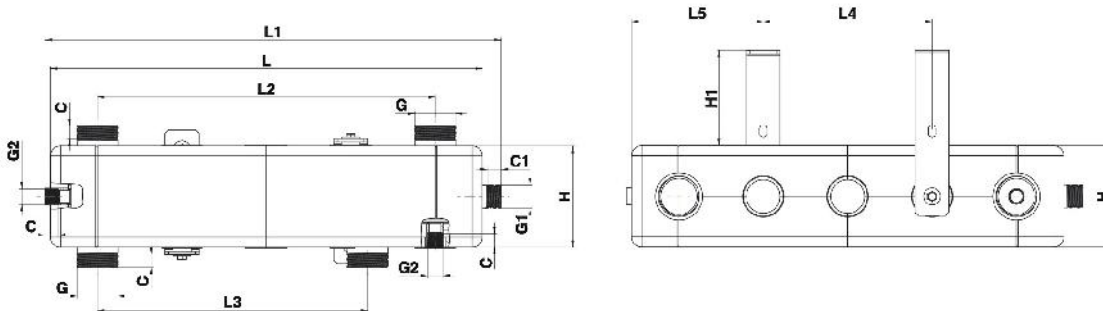


# HERZ PUMPFIX

## Hydraulic separator DN 32

Datasheet 1 4513 54

### ☑ Dimensions



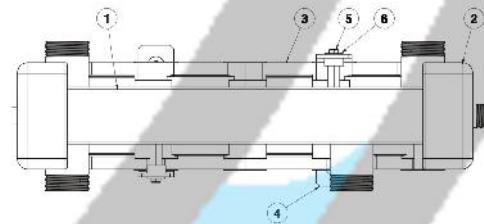
Order Nr.	DN	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]	G** [in]	G1** [in]	G2* [in]	C [mm]	C1 [mm]
1 4513 54	32	640	680	500	400	250	195	150	141	2"	1"	1/2"	20	20,5

\*Internal thread  
\*\*external thread

### ☑ Components of HERZ PUMPFIX Hydraulic separator

1. Separator body
2. Insulation cap
3. Side insulation
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
Fal sealing:	EPDM
Mounting brackets:	Galvanized steel

### ☑ Operating data

Max. operating temperature:	110°C
Max. admissible pressure:	4 bar
Max flow :	7 m3/h

Medium

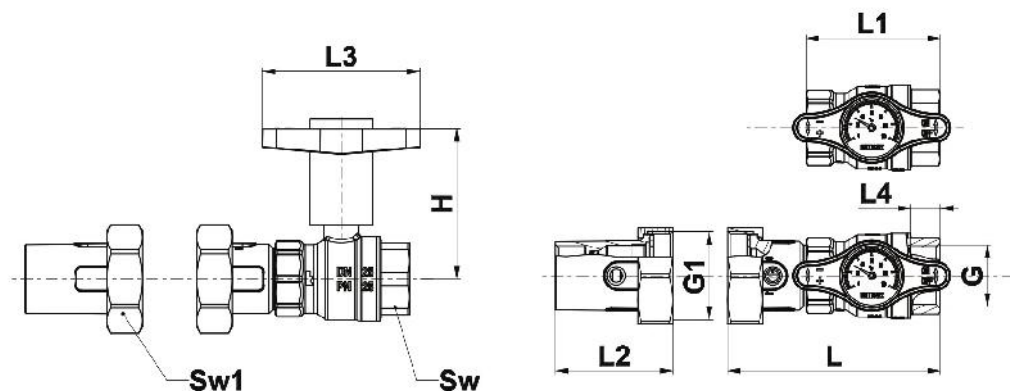
Heating water quality according to ÖNORM H5195 or VDI- Standard 2035. The use of ethylene or propylene glycol in a mixing ratio 25- 50% is allowed. EPDM gaskets can be affected by mineral oil lubricants and thus lead to failure of the sealings. Please refer to manufacturers documentation when using ethylene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



# HERZ PUMPFIX 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 pressure 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.

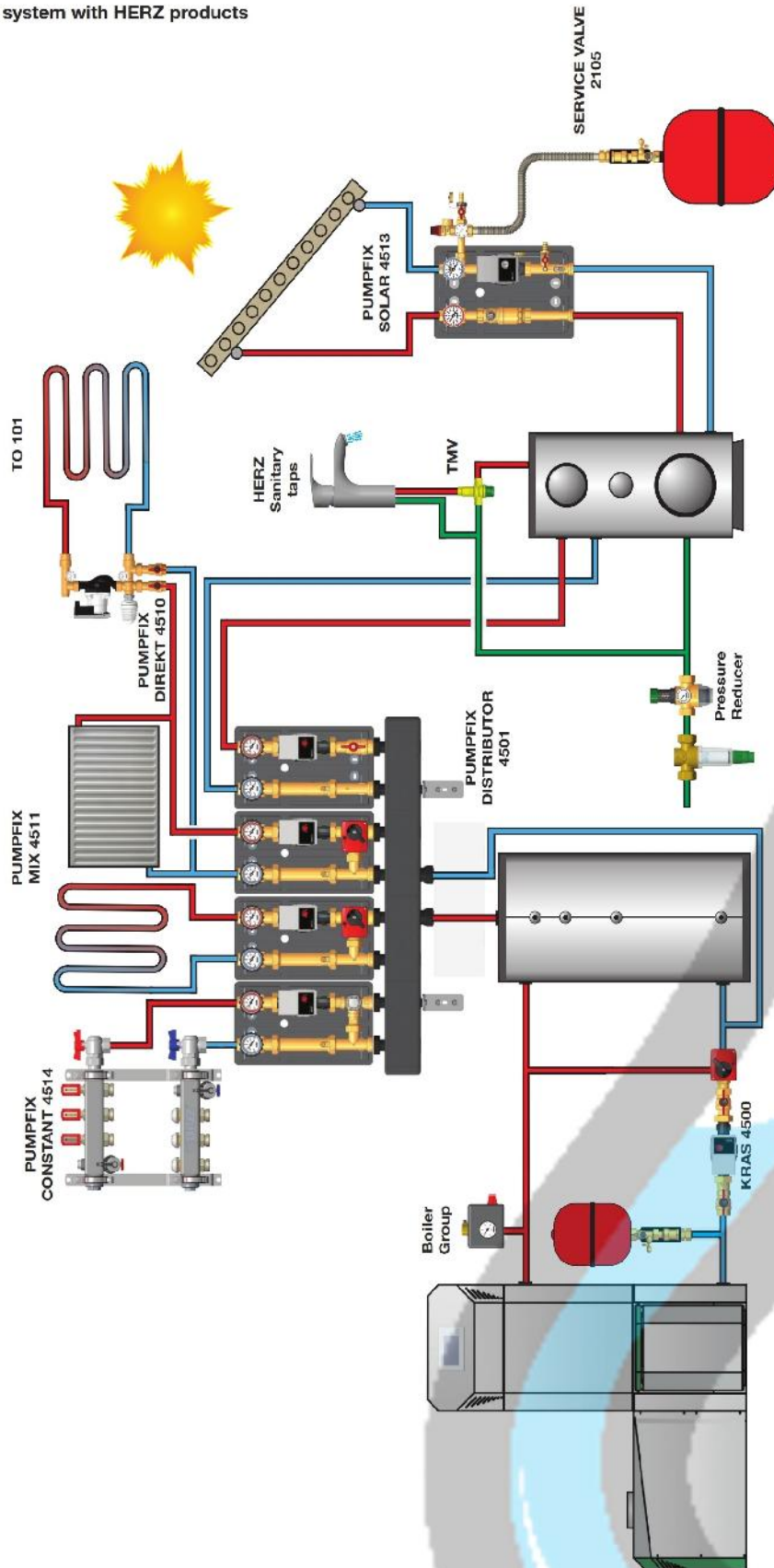
## ☑ Assembly instructions

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



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