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## 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 Herz factories,
- Herz supplies complete pump groups,
- easy installation and maintenance,
- standard lenghts of circulation pumps
- connection distance between supply and return: 125 mm (DN20 / 25 / 32) and 180 mm (DN40 / 50 )
- 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.

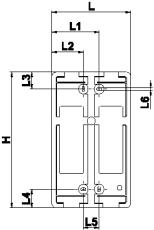
Every HERZ PUMPFIX must be installed on a set of a mounting plate. Every pump group is equipped with two mounting plates.

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.

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 with using adaptor connections.

#### Installation dimensions of the support plate

DN	н	L	L1	L2	L3	L4	L5	L6
20	390	250	150	100	100	56,3	50,8	8,5
25	430	250	150	100	100	54,3	58,8	8,5
32	430	250	150	100	100	54,3	58,8	8,5
40	845	422	300	121	97	87	180	10,2
50	845	422	300	121	97	87	180	10,2



#### Maintenance instructions

According to EN 806-5 (point 6. Operation) valves should always be in their fully opened or closed position and actuated at regular intervals to ensure they remain operational. Therefore HERZ Ball valves must be closed and opened for several times periodically every six months. This prevents the ball valve from blocking, reduces sediment deposition and reduces the possibility of corrosion inside the valve. 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.



						Δ <b>Τ</b> (°K)		
dim.	model	kvs	Q (l/h)	20	15	10	7,5	5
	DIREKT	7,8	1000	23	17	12	9	6
<b>DN 20</b>	МІХ	4	1400	30	23	15	11	8
		6,3	1400	35	26	17	13	9
	DIREKT	20	1750	41	30	20	15	10
DN 25		4	1550	36	27	18	13	9
DN 25	MIX	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	28	2200	51	38	26	19	13
DIN 52	MIX	10	2100	49	37	24	18	12
	IVIIA	16	2300	53	40	27	20	13
	DIREKT	26,4	8700	200	160	110	80	50
DN40	MIX	19,8	7500	175	140	90	68	45
DNEO	DIREKT	38	12500	240	200	160	120	70
DN50	MIX	29,5	10400	220	185	130	95	64

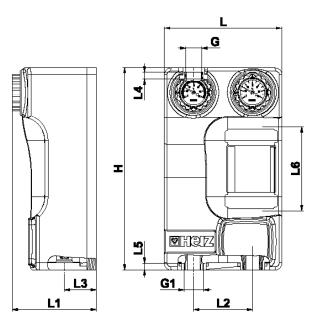
H (circulation pump) = 4 m



## Direct DN 20, DN 25, DN 32

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#### Dimensions



Order Nr.	DN	Pump	<b>kvs</b> [m3/h]	<b>L</b> [mm]	<b>H</b> [mm]	L1 [mm]	L2 [mm]	<b>L3</b> [mm]	G* [in]	L4 [mm]	L5 [mm]	G1** [in]	L6 [mm]
		1. Without pump											
1 <b>4514</b> 11	20	without pump	7,8	250	390	167	125	68	3⁄4″	16	14	1″	130
1 <b>4510</b> 25	25	without pump	20	250	430	180	125	68	1"	16	12	1-1/4"	180
1 <b>4514</b> 21	32	without pump	28	250	430	180	125	68	1-1/4"	16	12	1-1/2"	180
		2. Variable speed pump	-										
1 <b>4514</b> 12	20	WILO PARA 15-130/6-43/SC -12	7,8	250	390	209	125	68	3⁄4″	16	14	1″	130
1 <b>4510 22</b>	20	IMP NMT MINI 15/60 - 130	7,8	250	390	209	125	68	3⁄4″	16	14	1″	130
1 <b>4510</b> 26	25	WILO PARA 25-180/6-43/SC -12	20	250	430	209	125	68	1"	16	12	1-1/4"	180
1 <b>4510</b> 29	25	IMP NMT MINI 25/60-180	20	250	430	180	125	68	1"	16	12	1-1/4"	180
1 <b>4514</b> 22	32	WILO PARA 30-180/6-43/SC -12	28	250	430	209	125	68	1-1/4"	16	12	1-1/2"	180
1 <b>4510</b> 98	32	IMP NMT MINI 30/60 - 180	28	250	430	209	125	68	1-1/4"	16	12	1-1/2"	180
		3. Constant speed pump (3 speed stages)		1	1		1	L		I <u> </u>	1		
			1										

1 <b>4514</b> 13	20	IMP GHN 15/40-130*** (3 speed pump)	7,8	250	390	167	125	68	3⁄4″	16	14	1″	130
1 <b>4510</b> 27	25	IMP GHN 25/60-180*** (3 speed pump)	20	250	430	180	125	68	1"	16	12	1-1/4"	180
1 <b>4514</b> 23	32	IMP GHN 30/65-180*** (3 speed pump)	28	250	430	180	125	68	1-1/4"	16	12	1-1/2"	180

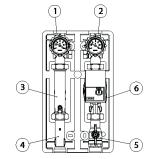
\*Internal thread

\*\*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



forged brass acc. to EN 12165, hard crome plated, CW617N

#### 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:

#### Operating data

Nominal pressure: Max. operating temperature: Short-term load: Min. operating temperature: Opening pressure for check valve : Propylene glycol mixing ratio:

Medium:

Heating water according to ÖNORM H5195 or VDI-Standard 2035. The use of ethylene or propyle+ne 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

DN20/25/32 HERZ- PUMPFIX pump group can be upgraded with an overflow valve (1 4514 99).

max. 10 bar 110° C 120°C < 15s 0° C (water 0,5°)

forged brass EN 12165; CW617N

internal thread acc. to ISO 7-1

external thread acc. to ISO 228-1

machined brass acc. to EN12164, CW614N

plastic, PA66 GF30

brass; CW617N

NBR / EPDM

200mmWc

25-50%

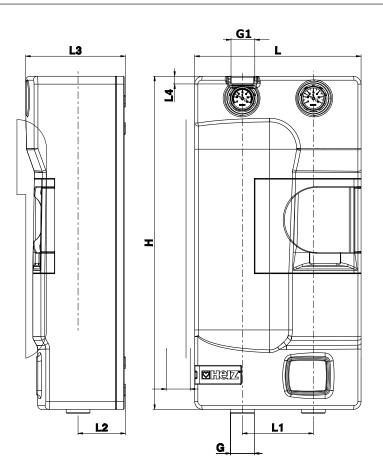
PTFE EPDM

EPP



## HERZ Pumpfix Direct DN40, DN50

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Order Nr.	DN	Pump	Pump Lenght	<b>kvs</b> [m3/h]	<b>L</b> [mm]	L1 [mm]	L2 [mm]	<b>L3</b> [mm]	L4 [mm]	<b>H</b> [mm]	G** [in]	G1* [in]
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#### 1. Without pump

1 <b>4510</b> 05	40	without pump	240	26,4	422	180	120	253	19	845	2"	2"
1 <b>4510</b> 06	50	without pump	280	38	422	180	120	253	19	845	2"	2"

#### 2. Variable speed pump

1 <b>4510</b> 15	40	Wilo Stratos MAXO 40/0,5- 8 PN6/10	240	26,4	422	180	120	253	19	845	2"	2"
1 <b>4510</b> 16	50	Wilo Stratos MAXO 50/0,5- 9 PN6/10	280	38	422	180	120	253	19	845	2"	2"

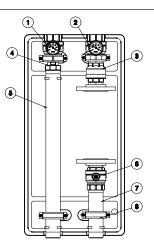
\*Internal thread

\*\*external thread



#### Components

- 1. Ball valve with thermometer ( blue)
- 2. Valve with thermometer (red)
- 3. Check valve
- 4. Connector with free moving nut
- 5. T-piece spacer
- 6. Ball valve
- 7. Mixing valve with actuator
- 8. Mounting bracket



#### Material and construction

Ball valve with thermometer: Ball: Handle in ball valve: Spacer (short & long): Check valve body: Threaded connectors of closing valve: Threaded connector of check valve: Spindle: Ball seals: Gaskets: Heat insulation material of pump group: forged brass acc. to EN 12165, CW 617N forged brass acc. to EN 12165, hard chrome plated, CW617N turned brass acc. to EN12164, CW617N galvanized steel forged brass (CW617N) acc. EN 12420 internal thread acc. to ISO 7-1 internal thread acc. to ISO 7-1 turned brass acc. to EN12164, CW614N PTFE EPDM / Klingerit EPP

#### Operating data

Nomial pressure : Max. operating temperature: Max short-term temperature: Min. operating temperature: Propylene glycol mixing ratio:

#### Medium:

Heating water according to ÖNORM H5195 or VDI-Standard 2035. The use of ethylene or propyle+ne 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.

max. 10 bar 110°C 120°C < 15s 0° C (water 0,5°)

200mmWc

25-50%

#### Recommended range of application

DN 40 Max. heat output  $\Delta T = 20K$  at 8700 l/h: DN 50 Max. heat output  $\Delta T = 20K$  at 12500 l/h: to 200 kW to 240 kW

#### ☑ Field of application:

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

The HERZ PUMPFIX DIRECT pump group can be used:

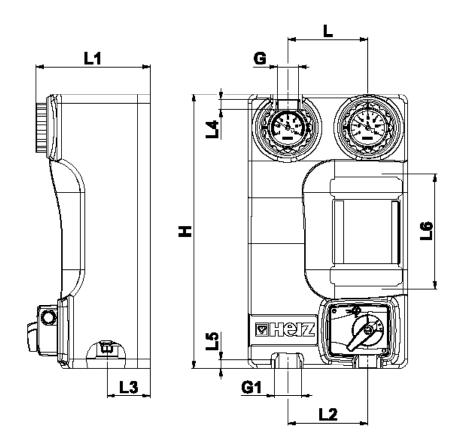
• for filling the hot water tanks

• for modulating temperature heating systems



## HERZ PUMPFIX Mix DN 20, DN 25, DN 32

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Order Nr.	DN	Pump	<b>kvs</b> [m3/h]	BP	<b>L</b> [mm]	<b>H</b> [mm]	L1 [mm]	<b>L2</b> [mm]	L3 [mm]	<b>G*</b> [in]	L4 [mm]	<b>L5</b> [mm]	G1** [in]	<b>L6</b> [mm]
		1. Without pump												
1 <b>4514</b> 14	20	without pump	4	NO	250	390	186	125	68	3⁄4″	16	14	1″	130
1 <b>4514</b> 15	20	without pump	6,3	NO	250	390	186	125	68	3⁄4″	16	14	1″	130
1 <b>4511</b> 44	25	without pump	4	YES	250	430	186	125	68	1"	16	12	1-1/4"	180
1 <b>4511</b> 45	25	without pump	6,3	YES	250	430	188	125	68	1"	16	12	1-1/4"	180
1 <b>4511</b> 46	25	without pump	10	YES	250	430	193	125	68	1"	16	12	1-1/4"	180
1 <b>4514</b> 24	32	without pump	10	NO	250	430	193	125	68		16	12	1-1/2"	180
1 <b>4514</b> 25	32	without pump	16	NO	250	430	193	125	68		16	12	1-1/2"	180

Dimensions

Order Nr.	DN	Pump	<b>kvs</b> [m3/h]	BP	<b>L</b> [mm]	<b>H</b> [mm]	<b>L1</b> [mm]	<b>L2</b> [mm]	L3 [mm]	<b>G</b> * [in]	L4 [mm]	L5 [mm]	G1** [in]	L6 [mm]
	· · · · ·	2. Variable speed pump												
1 <b>4514</b> 16	20	WILO PARA 15-130/6-43/SC -12	4	NO	250	390	209	125	68	3⁄4″	16	14	1″	130
1 <b>4514</b> 17	20	WILO PARA 15-130/6-43/SC -12	6,3	NO	250	390	209	125	68	3⁄4″	16	14	1″	130
1 <b>4510</b> 96	20	IMP NMT MINI 15/60 - 130	4	NO	250	390	209	125	68	3⁄4″	16	14	1″	130
1 <b>4510</b> 97	20	IMP NMT MINI 15/60 - 130	6,3	NO	250	390	209	125	68	3⁄4″	16	14	1″	130
1 <b>4511</b> 47	25	WILO PARA 25-180/6-43/SC -12	4	YES	250	430	209	125	68	1"	16	12	1-1/4"	180
1 <b>4511</b> 48	25	WILO PARA 25-180/6-43/SC -12	6,3	YES	250	430	209	125	68	1"	16	12	1-1/4"	180
1 <b>4511</b> 49	25	WILO PARA 25-180/6-43/SC -12	10	YES	250	430	209	125	68	1"	16	12	1-1/4"	180
1 <b>4511</b> 24	25	IMP NMT MINI 25/60-180	4	YES	250	430	186	125	68	1"	16	12	1-1/4"	180
1 <b>4511</b> 25	25	IMP NMT MINI 25/60-180	6,3	YES	250	430	188	125	68	1"	16	12	1-1/4"	180
1 <b>4511</b> 26	25	IMP NMT MINI 25/60-180	10	YES	250	430	193	125	68	1"	16	12	1-1/4"	180
1 <b>4514</b> 26	32	WILO PARA 30-180/6-43/SC -12	10	NO	250	430	209	125	68	1-1/4"	16	12	1-1/2"	180
1 <b>4514</b> 27	32	WILO PARA 30-180/6-43/SC -12	16	NO	250	430	209	125	68	1-1/4"	16	12	1-1/2"	180
1 <b>4510</b> 99	32	IMP NMT MINI 30/60-180	10	NO	250	430	209	125	68	1-1/4"	16	12	1-1/2"	180
1 <b>4511</b> 00	32	IMP NMT MINI 30/60-180	16	NO	250	430	209	125	68	1-1/4"	16	12	1-1/2"	180

## 3. Constant speed pump (3 speed stages)

1 <b>4514</b> 18	20	IMP GHN 15/40-130*** (3 speed pump)	4	NO	250	390	186	125	68	3⁄4″	16	14	1″	130
1 <b>4514</b> 19	20	IMP GHN 15/40-130*** (3 speed pump)	6,3	NO	250	390	186	125	68	3⁄4″	16	14	1″	130
1 <b>4511</b> 50	25	IMP GHN 25/60-180*** (3 speed pump)	4	YES	250	430	186	125	68	1"	16	12	1-1/4"	180
1 <b>4511</b> 51	25	IMP GHN 25/60-180*** (3 speed pump)	6,3	YES	250	430	188	125	68	1"	16	12	1-1/4"	180
1 <b>4511</b> 52	25	IMP GHN 25/60-180*** (3 speed pump)	10	YES	250	430	193	125	68	1"	16	12	1-1/4"	180
1 <b>4514</b> 28	32	IMP GHN 30/65-180*** (3 speed pump)	10	NO	250	430	193	125	68	1-1/4"	16	12	1-1/2"	180
1 <b>4514</b> 29	32	IMP GHN 30/65-180*** (3 speed pump)	16	NO	250	430	196	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
- 6. Circulation pump\*
- \*see overview table

#### Material and constructions

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:

#### Operating data

Nominal pressure: Max. operating temperature: Short-term load: Min. perating temperature: Opening pressure for check valve : Propylene glycol mixing ratio:

Medium

Heating water according to ÖNORM H5195 or VDI-Standard 2035. The use of ethylene or propyle+ne 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.

max. 10 bar

200mmWc

25-50%

0° C (water 0,5°)

110° C 120°C < 15s

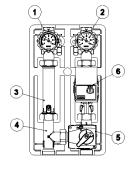
#### ☑ Recommended range of application

• • • • • • • • • • • • • • • • • • • •	
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 $\Delta T = 10$ K at 1508 l/h:	to 24 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).

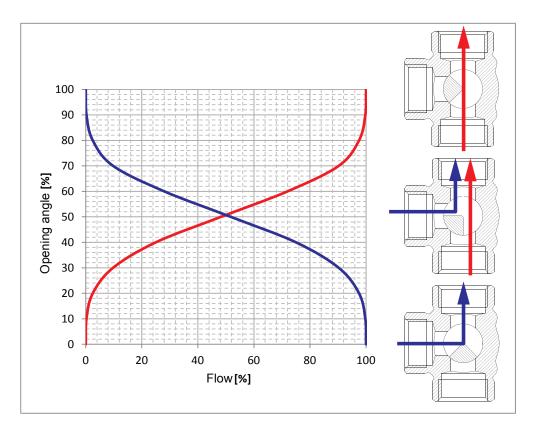
DN20/25/32 HERZ- PUMPFIX pump group can be upgraded with an overflow valve (1 4514 99).



forged brass EN 12165; CW617N forged brass acc. to EN 12165, hard crome plated, CW617N plastic, PA66 GF30 brass; CW617N internal thread acc. to ISO 7-1 external thread acc. to ISO 728-1 machined brass acc. to EN12164, CW614N NBR / EPDM PTFE EPDM EPP



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



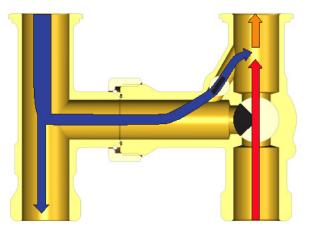
#### ☑ Field of application of PUMPFIX DN25:

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.

DN20/25/32 HERZ- PUMPFIX pump group can be upgraded with an overflow valve (1 4514 99).

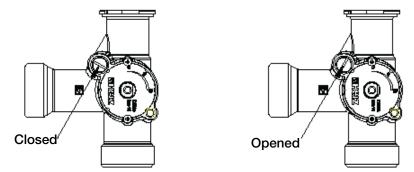
#### ☑ Functional principle of three-way valve DN 25

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.

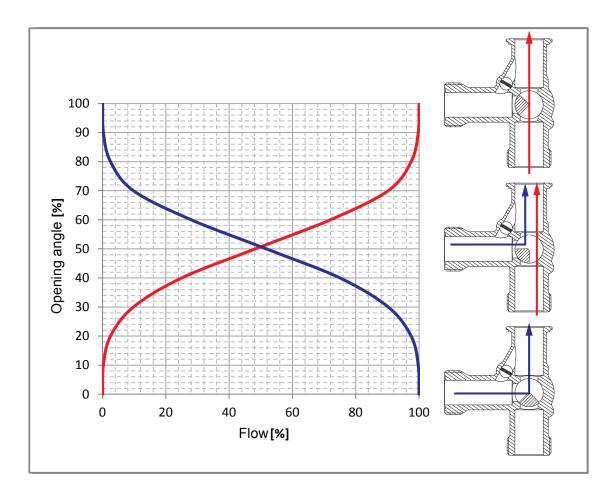




#### ☑ Bypass position of three-way valve DN25



 $\ensuremath{\boxtimes}$  Characteristic curves of three-way valve (closed bypass) of three-way valve DN25

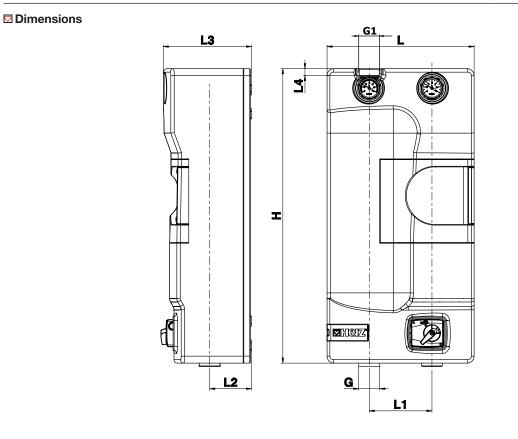




# **HERZ** Pumpfix Mix

## DN40, DN50

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Order Nr.	DN	Pump	Pump Lenght	<b>kvs</b> [m3/h]	<b>L</b> [mm]	<b>L1</b> [mm]	<b>L2</b> [mm]	<b>L3</b> [mm]	<b>L4</b> [mm]	<b>H</b> [mm]	G** [in]	G1* [in]
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#### 1. Withouth pump

1 <b>4511</b> 78	40	without pump	240	19,8	422	180	120	253	19	845	2"	2"
1 <b>4511</b> 79	50	without pump	280	29,5	422	180	120	253	19	845	2"	2"

#### 2. Variable speed pump

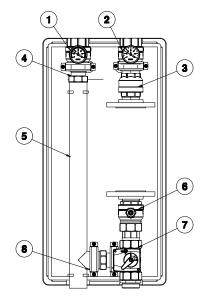
1 <b>4511</b> 71	40	Wilo Stratos MAXO 40/0,5-8 PN6/10	240	19,8	422	180	120	253	19	845	2"	2"
1 <b>4511</b> 72	50	Wilo Stratos MAXO 50/0,5-9 PN6/10	280	29,5	422	180	120	253	19	845	2"	2"

\*Internal thread \*\*external thread



#### Components

- 1. Valve with thermometer (blue)
- 2. Valve with thermometer (red)
- 3. Check valve
- 4. Connector with free moving nut
- 5. T-piece spacer
- 6. Ball valve
- 7. Mixing valve with actuator
- 8. Mounting bracket



#### Material and construction

Ball valve with thermometer: Ball: Handle in ball valve: Spacer (short & long): Check valve body: Threaded connectors of closing valve: Threaded connector of check valve: Spindle: Ball seals: Gaskets: Insulation material of pump group: forged brass acc. to EN 12165, CW 617N forged brass acc. to EN 12165, hard chrome plated, CW617N turned brass acc. to EN12164, CW617N galvanized steel forged brass (CW617N) acc. EN 12420 internal thread acc. to ISO 7-1 internal thread acc. to ISO 7-1 turned brass acc. to EN12164, CW614N PTFE EPDM / Klingerit EPP

#### Operating data

Nomial pressure : Max. operating temperature: Max short-term temperature: Min. operating temperature: Propylene glycol mixing ratio:

Medium:

Heating water according to ÖNORM H5195 or VDI-Standard 2035. The use of ethylene or propyle+ne 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.

max. 10 bar 110°C

120°C < 15s

25-50%

0° C (water 0,5°)

#### Recmmended range of application

DN 40 Max. heat output $\Delta T = 20K$ at 7500 l/h:	to 175 kW
DN 50 Max. heat output $\Delta T = 20K$ at 10400 l/h:	to 220 kW

#### Field of application:

The HERZ- PUMPFIX pump group is used in heating and chilled water systems. 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).

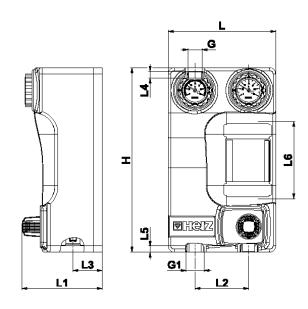
Please note: All specifications and information within this document are reflecting the information available at the time of going to print and meant for informational purpose only. Herz Armaturen reserves the right to modify and change products as well as its technical specifications and/or it function according to technological progress and requirements. All diagrams are indicative in nature and do not to be complete. It is understood that all images of Herz products are symbolic representations and therefore may visually differ from the actual product. Colours may differ due to printing technology used. In case of any further questions don't hesitate to contact your closest HERZ Branch-Office.



# **HERZ PUMPFIX Constant**

## constant control for temperature DN 25

Datasheet 1 4514 XX



Order Nr. DN Pump kvs [m³/h]	BP L	H L1 [mm] [mm]	<b>L2</b> [mm]	L3 [mm]	G* [in]	L4 [mm]	L5 [mm]	G1** [in]	<b>L6</b> [mm]
------------------------------	------	-------------------	-------------------	------------	------------	------------	------------	--------------	-------------------

#### 1. Without pump

1 <b>4514</b> 07	25	without pump	2,6	yes	250	430	190	125	68	1"	16	12	1-1/4"	180	
------------------	----	--------------	-----	-----	-----	-----	-----	-----	----	----	----	----	--------	-----	--

#### 2. Variable speed pump

1 <b>4514</b> 08	25	WILO PARA 25-180/6-43/SC -12	2,6	yes	250	430	209	125	68	1"	16	12	1-1/4"	180
1 <b>4514</b> 06	25	IMP NMT MINI 25/60-180	2,6	yes	250	430	190	125	68	1"	16	12	1-1/4"	180

#### 3. Constant speed pump (3 speed stages)

1 <b>4514</b> 09 25 IMF	P GHN 25/60-180*** (3 speed 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 (1 7420 06)
- 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 crome 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: Max. operating temperature: Short-term load: Min. perating temperature: Opening pressure for check valve : Kvs value: Propylene glycol mixing ratio: max 10 bar 110° C 120°C < 15s 0° C (water 0,5°) 200mmWc 5,8 m<sup>3</sup>/h 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  $AT = 10^{\circ}K$  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.

The HERZ- PUMPFIX CONSTANT can be used:

For thermostatic control of the heating circuit (such as underfloor heating system).

HERZ- PUMPFIX DN25 pump group constant can be upgraded with an overflow valve (1 4514 99).



## HERZ - 3-point actuator

1 7712 63

General information

#### 23-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:

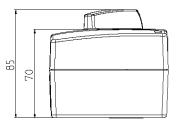
The actuator may only be opened at the factory. It contains no components which can be replaced or repaired by the user.

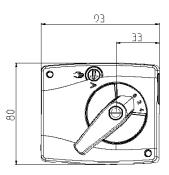
#### Technical data

Nominal voltage Power supply range Dimensioning Power consumption Auxiliary switch Switching point Manual operation

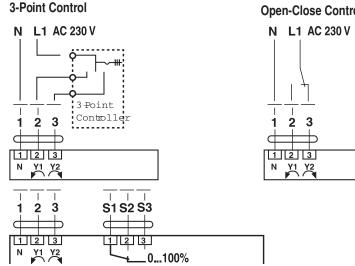
Torque Angle of rotation Running time Sound power level Position indication Protection class Degree of protection Ambient temperature range Media temperature Non-operating temperature Humidity test EMC LV directive Mode of operation Maintenance

AC 230 V 50 / 60 Hz AC 198 ... 264 V 3,5 VA 3,5 W 1 x EPU 5 (1) A, AC 250 V adjustable 0 ... 100% Temporary and permanent disengagement of the gearing latch min. 10 Nm (at nominal voltage) 90° 140 s max. 35 dB(A) Scale 0 ... 10 II (totally insulated) IP40 0 ... + 50 °C (duty cycle 140/35 s) + 5 ... + 120 °C (ball valve) – 30 ... + 80 °C according to EN 60730-1 CE according to 89/336/EWG CE according to 73/23/EWG Typ 1.B (EN 60730-1) Maintenance-free





#### Wiring diagram



**Open-Close Control** 



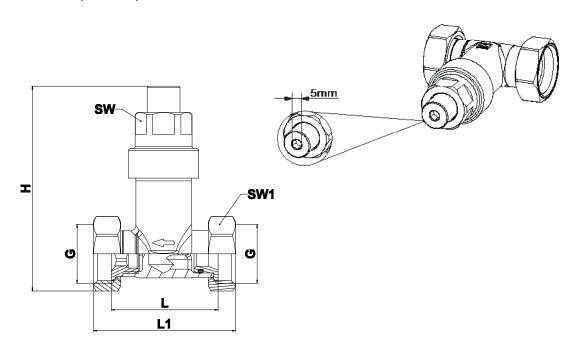


# HERZ overflow valve

1 **4514** 99

General information

**Overflow valve (1 4514** 99)



Order Nr.	<b>L</b> [mm]	<b>L1</b> [mm]	H [mm]	SW [mm]	<b>SW1</b> [mm]	G [in]
1 <b>4514</b> 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:

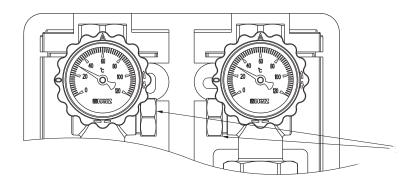
0 - 0,5bar  $\bigcirc$  close the valve  $\bigcirc$  2 turns  $\rightarrow$  0,1 bar

0 max. 10 turns  $\rightarrow$  0,5 bar



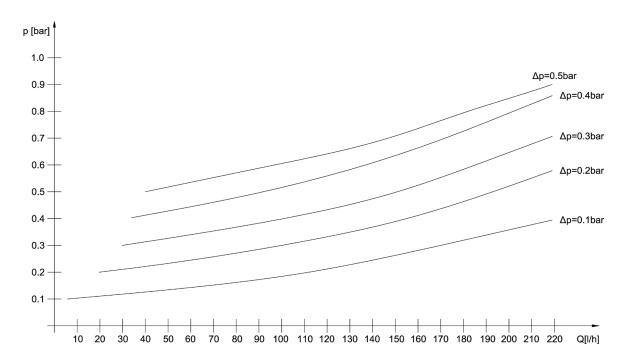
#### Field of application

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). Over flow valve can be used in Pumpfix DN 20, 25 and 32.



Overflow valve can be installed on DN20/25/32 HERZ PUMPFIX pump group.

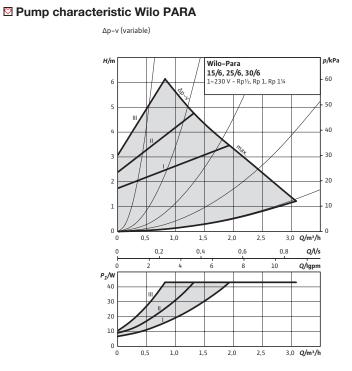
#### Characteristic curves of overflow valve:

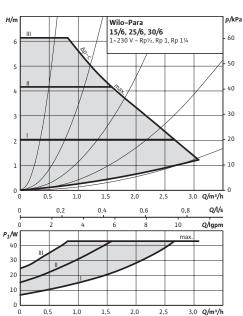


## Circulation pumps used in pump group DN20/25/32

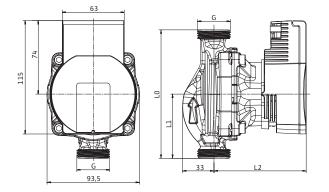
∆p-c (constant)

Genaral information





#### Pump dimensions



DN	G	10	11
20	1"	130	65
25	11⁄2"	180	90
32	2"	180	90

#### 🛛 Pump data

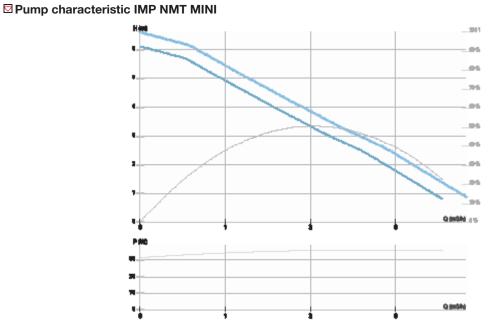
Туре:	DN 20: Wilo PARA 15/6 SC 130 DN 25: Wilo PARA 25/6 SC 180 DN 32: Wilo PARA 30/6 SC 180
Energy Efficiency Index (EEI):	≤ 0,20
Max. delivery head:	6.7 m
Max. volume flow:	3.2 m3/h
Max. operating temperature:	110°C
Max. static pressure:	10 bar
Mains connection:	1~230 V +10%/-15%, 50/60 Hz (IEC 60038 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

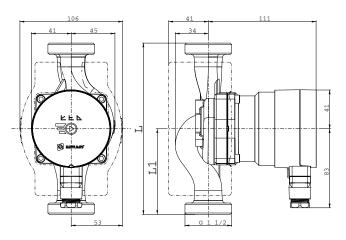


## Circulation pumps used in pump groups DN20/25/32

General information



#### Pump dimensions



DN	G	L	L1
20	1"	130	65
25	1½"	180	90
32	2"	180	90

#### 🗹 Pump data

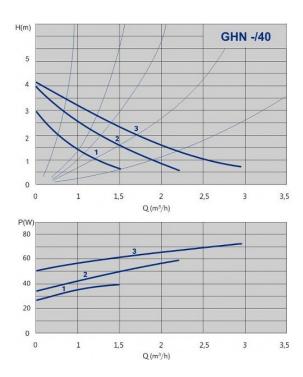
Type:

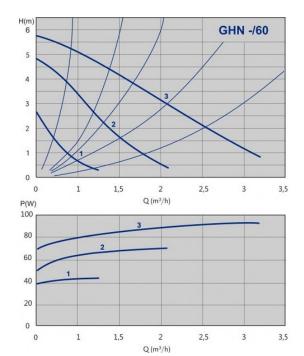
EEI: Hmax: Qmax: Hmax: Fluid temperature: Max pressure: Power supply: Mains frequency: Declared protection: Insulation class: NMT MINI 15/60 -130 NMT MINI 25/60 -180 NMT MINI 32/60 -180 0.16 6.1 [m] 4.0. [m3/h] 6.1 [m] -10.0 / 110.0 [°C] 10 bar 1-230 V 50/60 Hz IP44 F

## Circulation pumps used in pump groups DN20/25/32

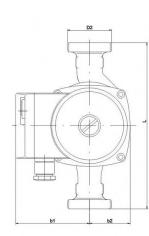
General information

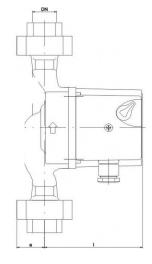
#### Pump characteristic - IMP GHN only available outside EU





#### Pump dimensions





$\heartsuit$	Pump	data

Type:

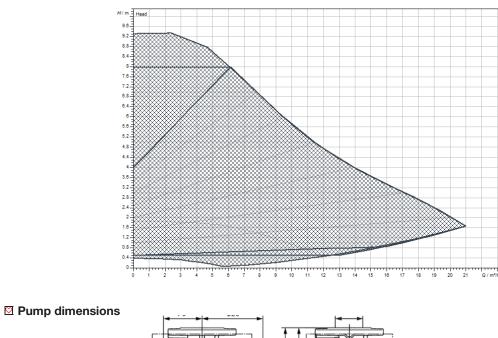
Max. volume flow: Max. operating temperature: Max. static pressure: Power supply: Degree of protection: Insulation class: DN 20: IMP GHN 15/40-130 DN 25: IMP GHN 25/60-180 DN 32: IMP GHN 30/60-180 3,5 m3/h 110°C 10 bar 1 ~ 230 V IP 44 H

DN	G	L	H <sub>max</sub>
20	1"	130	4 m
25	11⁄2"	180	6 m
32	2"	180	6 m

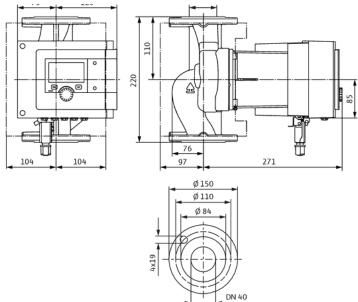


## Circulation pumps used in pump groups DN40

General information



#### Pump characteristic Wilo Stratos MAXO 40/0,5 - 8 PN6/10



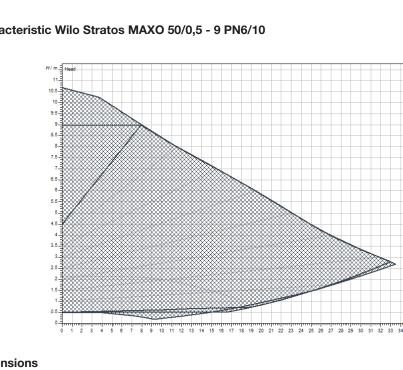
#### Pump data

Туре:	Stratos MAXO 40/0,5-8 PN6/10
Energy Efficiency Index (EEI):	≤ 0,19
Max. delivery head:	8 m
Max. volume flow:	21 m3/h
Max. operating temperature:	110°C
Max. static pressure:	10 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 50 °C m	3 m
Minimum suction head at 95 °C m	10 m
Minimum suction head at 110 °C	16 m



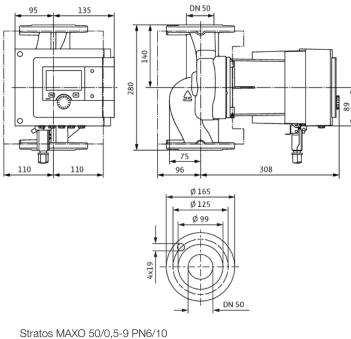
## Circulation pumps used in pump groups DN50

General information



Pump characteristic Wilo Stratos MAXO 50/0,5 - 9 PN6/10

Pump dimensions



#### Pump data

Type: Energy Efficiency Index (EEI): Max. delivery head: Max. volume flow: Max. operating temperature: Max. static pressure: Mains connection: Protection class: Insulation class:

Minimum suction head at 50 °C m

Minimum suction head at 95 °C m

Minimum suction head at 110 °C

≤ 0,17 9 m 33 m3/h 110°C 10 bar 1~230 V +10%/-15%, 50/60 Hz (IEC 60038 standard voltage) IPx4D F 5 m 12 m 18 m

## Pump groups accessories

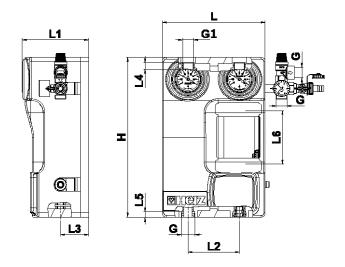
Illustration	Description	Item number
	Red thermometer for HERZ PUMPFIX	1 <b>2201</b> 91
	Blue thermometer for HERZ PUMPFIX	1 <b>2201</b> 90
	3 - point actuator	1 <b>7712</b> 63
	Overflow valve	1 <b>4514</b> 99



## Solar

Datasheet 1 4513 X2

#### Dimensions



Art. nr.	DN	Pump	<b>L</b> [mm]	<b>H</b> [mm]	<b>L1</b> [mm]	<b>L2</b> [mm]		G1* [in]	L4 [mm]	L5 [mm]	G** [in]	L6 [mm]
1 <b>4513</b> 12	20	Wilo Para STG 15-130/8-75	250	390	167	125	68	3/4"	16	14	1"	130
1 <b>4513</b> 02	20	Without pump	250	390	161	125	68	3/4"	16	14	1"	130

\*Internal thread \*\*external thread

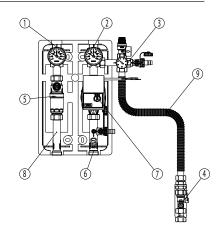
Page 26



#### 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 I/min
Heat insulation material of pump group:	EPP
☑ Operating data	
Nominal pressure:	PN10
Pressure relief valve:	6 bar
Max. operating temperature:	110° C
Short-term load:	120°C < 15s
Min. perating temperature:	0° C (water 0.5°)

200mmWc

25-50%

#### Medium:

Heating water according to ÖNORM H5195 or VDI-Standard 2035. The use of ethylene or propyle+ne 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

#### Field of application:

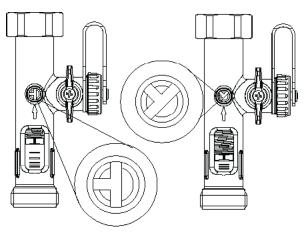
Opening pressure for check valve :

Propylene glycol mixing ratio:

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.

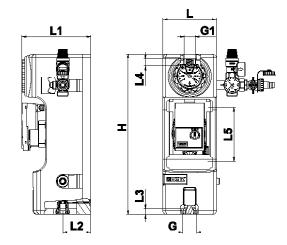




## **Solar Simple**

Datasheet 1 4511 8X

#### Dimensions

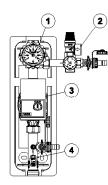


Art. nr.	DN	Pump	<b>H</b> [mm]	<b>L</b> [mm]	<b>L1</b> [mm]	<b>L2</b> [mm]	<b>L3</b> [mm]	L4 [mm]	G** [in]	G1* [in]
1 <b>4511</b> 81	20	Wilo Para STG 15-130/8-75	390	130	167	68	14	16	1"	3/4"
1 <b>4511</b> 82	20	Without pump		130	167	68	14	16	1"	3/4"

\*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:

Heating water according to ÖNORM H5195 or VDI-Standard 2035. The use of ethylene or propyle+ne 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.

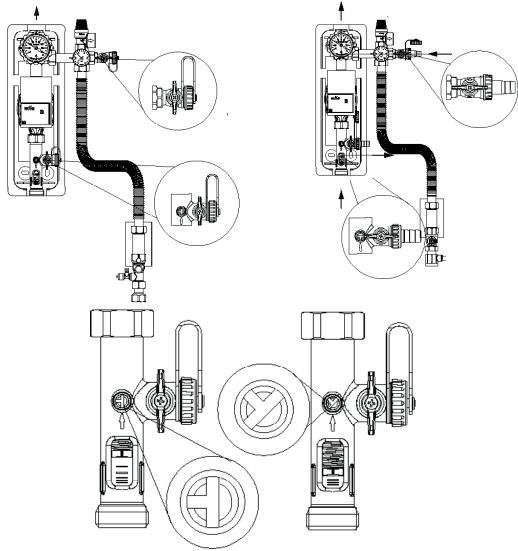
#### Field of application

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





## Circulation pumps used in pump groups solar

General information

p/kPa

80

60

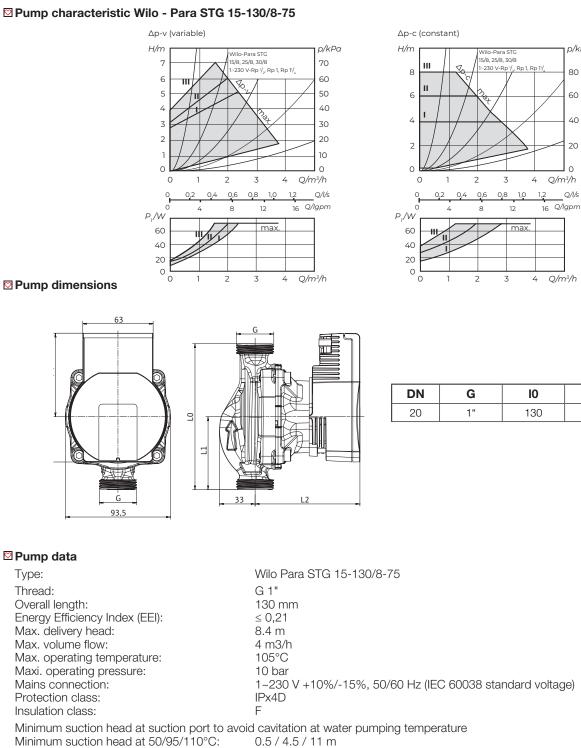
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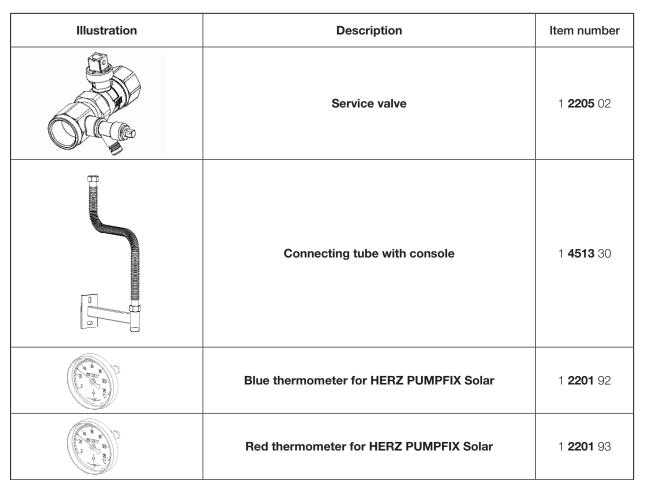
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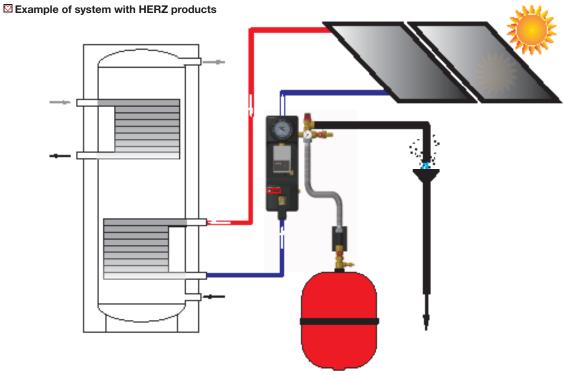
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65



**Solar accessories** 







### Distibutor

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.

HERZ PUMPFIX distributors DN25 and 32 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.

HERZ PUMP distributor DN50 is suitable to PUMPFIX groups DN40 and DN50.

#### Assembly:

#### DN 25/32:

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).

#### DN 40/50:

The set is equipped with mounting equipment (2 adjustable hight mounting legs, flange screws M16x70, klingerit sealings, plugs G1/2" and mounting screws). Distributor can also be fixed to floor. The supply and return flow of the HERZ PUMPFIX distributor are with boiler with the help of flanges DN80 and flat seals. The pump group and the distributor are connected with the help of pipe fittings and klingerit seals.

#### 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.

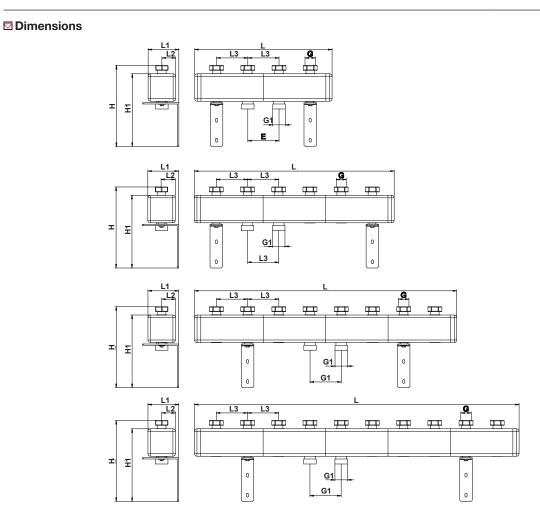
#### Disposal instructions

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.



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

Datasheet 1 4501 XX



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

- 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

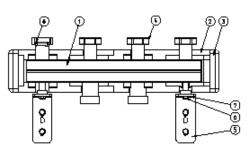
Fittings: Flat sealing: Insulation: Mounting brackets: Housing:

#### 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 according to ÖNORM H5195 or VDI-Standard 2035. The use of ethylene or propyle+ne 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.



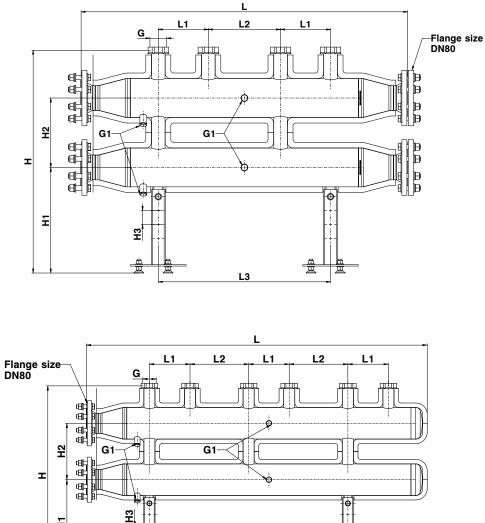
Cast iron EN-GJMW-400-5, DIN EN 1562 EPDM EPP Galvanized steel Powder coated steel (black) Dimensions



## **HERZ PUMPFIX**

## **Distributor DN 50**

Datasheet 1 4501 XX



L3

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Order Nr.	DN	Nr. of Circuits	Flange size (DN)	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	H* [mm]	H 1 [mm]	H2 [mm]	H3 [mm]	G* [in]	G1* [in]
1 <b>4511</b> 97	50	2	80	1173	180	260	620	800 (850,900,950)	380	250	50	2"	1/2 "
1 <b>4511</b> 98	50	3	80	1510	180	260	620	800 (850,900,950)	380	250	50	2"	1/2 "

\* Adjustable height position

H

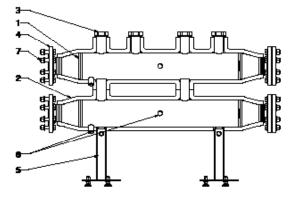
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#### Components

- 1. Distributor body
- 2. Insulation
- 3. Nut G2
- 4. Flange DN80 (acc. to EN1092-1)
- 5. Mounting legs (height adjustable)
- 6. Plug G1/2
- 7. Mounting set for flange M16 (screws, nuts, wasners)



#### ☑ Material and construction

Fittings: Flat sealing: Insulation: Mounting legs: Housing: Flange: Cast iron EN-GJMW-400-5, DIN EN 1562 Klingerit 5 mm NP FR G 2905 + 15 mm C080 RN2 Galvanized steel Powder coated steel (RAL 9005) acc. to EN1092-1 DN80/PN10

#### Operating data

Max. operating temperature:110°CMax. admissible pressure:6 barWheelbase between the connections (boiler and heating circuit):180mm

#### Medium:

Heating water according to ÖNORM H5195 or VDI-Standard 2035. The use of ethylene or propyle+ne 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.

## **Combi distributor DN 25**

General information

#### Description of HERZ PUMPFIX Combi distributor

HERZ PUMPFIX Combi distributor is high quality product that is assembled and pressure tested during the manufacturing process under constant quality control.

Combi distributor is a combination of manifold and hydraulic switch. The distributor is designed so that it is compatible with HERZ PUMPFIX pump groups. Because of compatibility of the PUMPFIX system the customer can achieve cost, time, space saving and system efficiency when installing PUMPFIX system to the boiler and piping system.

#### Application

Herz Combi distributor is used in heating and chilled water systems. It is used when several heating circuits in the facility / system need to be regulated according to different temperature and time regimes.

Combi distributor has double function: distribution of medium into different heating circuits and function of hydraulic switch. 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.

#### Assembly

Herz Combi distributor is mounted vertically. The set is equipped with mounting equipment (2 brackets, 4 wall screws, 4 wall inserts, 2 screws M10, and 2 spacer gears) for the assembly of the distributor on the wall.

Pump groups and distributor are connected with the help of pipe fittings and EPDM seals.

The supply and return flow of the Combi distributor are connected with male thread that have be coated with a suitable sealing material (spinning material, teflon ribbon, sealing paste). There should not be excess of sealing material on the pipe because it can damage the thread. When using cooper or plastic pipes take into account pressure and temperature limits of used material.

When assembling, use a suitable assembly tool that adapts to connections (Sw). Following assembly, the connections of distributor must be checked for water-tightness by the installer. All engineering standards and recognised regulations must be adhered by these specialist staff.

The temperature sensor can also be connected to the hydraulic separator where the G 1/2 "connector is located.

#### 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

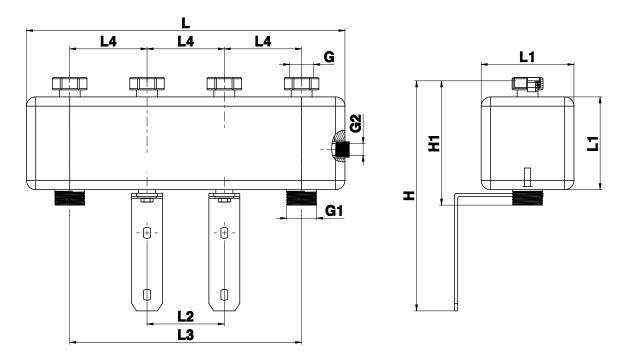
The disposal of the HERZ PUMPFIX Combi distributors must not endanger health or environment. Users have to follow the national legal regulations for proper disposal of the HERZ PUMPFIX Combi distributors.



## **Combi distributor DN 25**

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#### Dimensions



Order Nr.	Nr. of Circuits	<b>L</b> [mm]	<b>L1</b> [mm]	<b>L2</b> [mm]	L3 [mm]	L4 [mm]	<b>H</b> [mm]	<b>H1</b> [mm]	<b>G</b> * [in]	G1** [in]	G2* [in]
1 <b>4513</b> 57	2	515	150	125	375	125	372	201	1-1/4"	1-1/2"	1/2"
1 <b>4513</b> 58	3	765	150	375	625	125	372	201	1-1/4"	1-1/2"	1/2"
1 <b>4513</b> 59	4	1015	150	625	875	125	372	201	1-1/4"	1-1/2"	1/2"

\*Internal thread \*\*external thread



#### Components of HERZ PUMPFIX Combi distributor

- 1. Distributor body
- 2. Nut G1 1-4"
- 3. Insulation cap
- 4. Side insulation
- 5. Mounting bracket
- 6. Washer
- 7. Screw M10

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

#### Material and construction

Nuts & fittings:	Cast iron				
Flat sealing:	EPDM				
Insulation:	EPP				
Mounting brackets:	Galvanized steel				
Housing:	Powder coated steel (black)				
☑ Operating data					
Max. operating temperature:	110°C				
Max. admissible pressure:	6 bar				
Max flow:	3 m3/h				
Heat capacity:	up to 70 kW				

Medium:

Heating water according to ÖNORM H5195 or VDI-Standard 2035. The use of ethylene or propyle+ne 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.



## 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 <b>4513</b> 93 DN32 1 <b>4513</b> 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 <b>4510</b> 51
	Flat seals set for PUMPFIX system DN25 Set is equipped with two flat seals for sealing between distribu- tor DN25 and pump group DN25 Material: EPDM	1 <b>4510</b> 52*
	Flat seals set for PUMPFIX system DN32 Set is equipped with two flat seals for sealing between distribu- tor DN32 and pump group DN32 Material: EPDM	1 <b>4510</b> 53

\*compatible with Combi distributor.

## 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 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

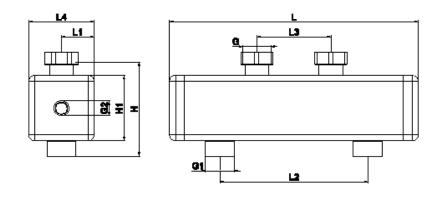
The disposal of the HERZ PUMPFIX hydraulic separators must not endanger health or environment. Users have to follow the national legal regulations for proper disposal of the HERZ PUMPFIX distributors.



## Hydraulic separator DN 25

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#### Dimensions



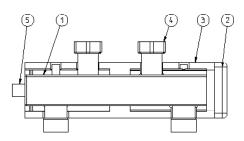
Order Nr.	DN	<b>L</b> [mm]	<b>H</b> [mm]	<b>H1</b> [mm]	<b>L1</b> [mm]	L2 [mm]	<b>L3</b> [mm]	L4 [mm]	G* [in]	G1** [in]	G2*** [in]
1 <b>4513</b> 53	25	420	162	110	55	250	125	110	1-1/2"	1-1/4"	1/2"

\*Internal thread (free turning nut)

\*\*external 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:
Flat sealing:
Insulation:
Casing:

Cast iron EN-GJMW-400-5, DIN EN 1562 EPDM EPP Powder coated steel (black)

#### Operating data

Max. operating temperature:	110°C
Max. admissible pressure:	4 bar
Max flow:	3 m3/h

#### Medium:

Heating water according to ÖNORM H5195 or VDI-Standard 2035. The use of ethylene or propyle+ne 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.



## 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.

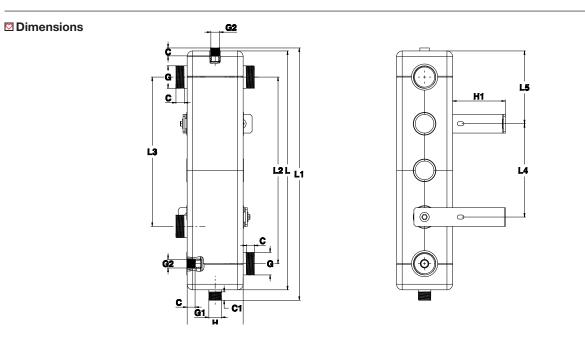
#### Disposal instructions

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.



## Hydraulic separator DN 32

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Order Nr.	DN	<b>L</b> [mm]	<b>L1</b> [mm]	<b>L2</b> [mm]	<b>L3</b> [mm]	L4 [mm]	<b>L5</b> [mm]	<b>H</b> [mm]	<b>H1</b> [mm]	G** [in]	G1** [in]	G2* [in]	<b>C</b> [mm]	<b>C1</b> [mm]
1 <b>4513</b> 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.

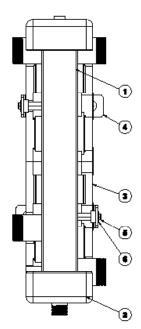
#### Material and construction

Housing:	
Insulation:	
Flat sealing:	
Mounting brackets:	

Powder coated steel (black) EPP EPDM Galvanized steel

#### Operating data

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



Medium:

Heating water according to ÖNORM H5195 or VDI-Standard 2035. The use of ethylene or propyle+ne 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.

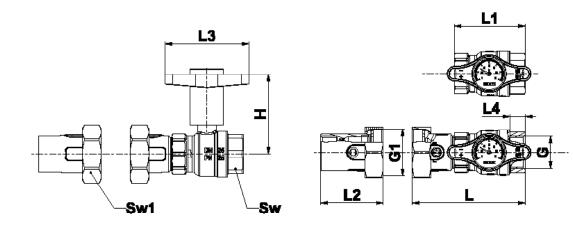
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## HERZ PUMPFIX EASY

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7N

#### Dimensions



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

\*Internal thread

#### ☑ Material and construction

Propylene glycol mixing ratio:

forged brass acc. to EN 12165, chrome plated, CW617N threads acc. to ISO 228 forged brass acc. to EN 12165, hard chrome plated, CW617 turned brass acc. to EN 12164, CW614N plastic (red, blue), PA66 GF30 PTFE PTFE EPDM
max. 25 bar

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

#### Medium:

 $\heartsuit$ 

Heating water according to ÖNORM H5195 or VDI-Standard 2035. The use of ethylene or propyle+ne 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.

#### 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.

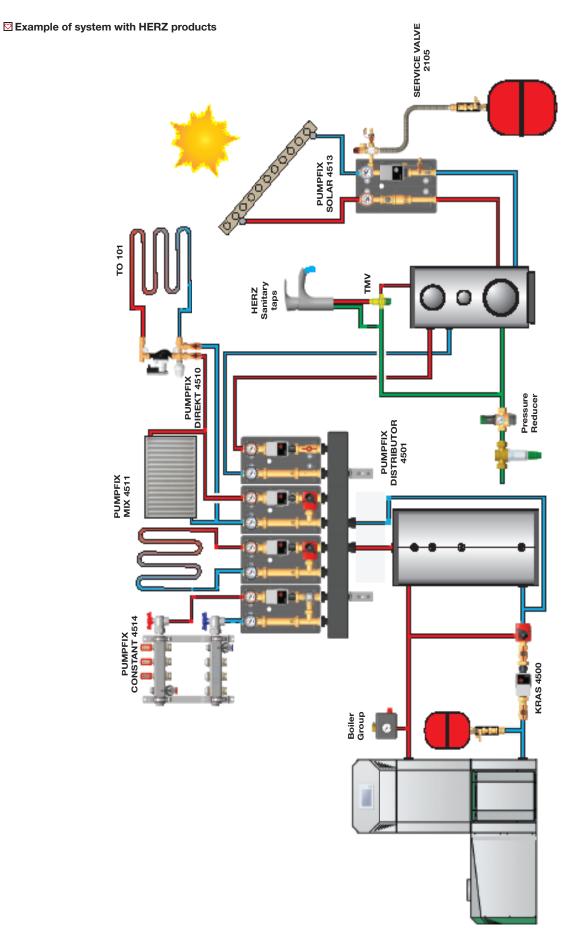
#### Assembly instructions

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.





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