

HERZ PUMPFIX

Datasheet 1 45XX XX, Issue 0323

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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, 180 mm, 240 mm and 280 mm,
- connection distance between supply and return: 125 mm (DN20 - DN32), 180 mm (DN40 - DN50)
- 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.

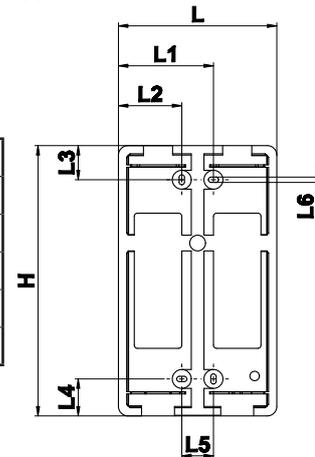
Every HERZ PUMPFIX must be installed on a set of a mounting plate. Every pump group is equipped with two mounting plates.

HERZ PUMPFIX distributor are 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 (DN25) can also be fitted to distributors with other dimension (DN32) with using adaptor (1 4510 51) connections.

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

☑ Installation dimensions of the support plate

| DN | L, mm | H, mm | L1, mm | L2, mm | L3, mm | L4, mm | L5, mm | L6, mm |
|----|-------|-------|--------|--------|--------|--------|--------|--------|
| 20 | 250 | 390 | 150 | 100 | 50 | 56,3 | 50,8 | 8,5 |
| 25 | 250 | 430 | 150 | 100 | 50 | 54,3 | 58,8 | 8,5 |
| 32 | 250 | 430 | 150 | 100 | 50 | 54,3 | 58,8 | 8,5 |
| 40 | 422 | 845 | 300 | 151 | 95 | 86 | 180 | 10,2 |
| 50 | 422 | 845 | 300 | 151 | 95 | 86 | 180 | 10,2 |



☑ Maintenance

According to EN 806-5 (point 6. Operation) ball 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 should be closed and opened periodically (at least twice a year, every 6 months). This prevents the ball valve from blocking, reduces sediment deposition and reduces the possibility of corrosion inside the ball valves. 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.

Pursuant to Article 33 of the REACH Regulation (EC No. 1907/2006), we are obliged to point out that the material lead is listed on the SVHC list and that all brass components manufactured in our products exceed 0.1% (w / w) lead (CAS: 7439-92-1 / EINECS: 231-100-4). Since lead is a component part of an alloy, actual exposure is not possible and therefore no additional information on safe use is necessary.

Technical data

| Dim. | Model | kvs | Q (l/h) | ΔT (K) | | | | | kW |
|----------|--------|------|---------|----------------|-----|-----|-----|----|----|
| | | | | 20 | 15 | 10 | 7,5 | 5 | |
| DN 20 | DIRECT | 7,8 | 1000 | 23 | 17 | 12 | 9 | 6 | |
| | MIX | 4 | 1300 | 30 | 23 | 15 | 11 | 8 | |
| | | 6,3 | 1500 | 35 | 26 | 17 | 13 | 9 | |
| DN 25 | DIRECT | 20 | 1750 | 41 | 30 | 20 | 15 | 10 | |
| | MIX | 4 | 1550 | 36 | 27 | 18 | 13 | 9 | |
| | | 6,3 | 1700 | 39 | 30 | 20 | 15 | 10 | |
| | | 10 | 2000 | 46 | 35 | 23 | 17 | 12 | |
| CONSTANT | 2,6 | 600 | 14 | 10 | 7 | 5 | 3 | | |
| DN32 | DIRECT | 28 | 2200 | 51 | 38 | 26 | 19 | 13 | |
| | MIX | 10 | 2100 | 49 | 37 | 24 | 18 | 12 | |
| | | 16 | 2300 | 53 | 40 | 27 | 20 | 13 | |
| DN40 | DIRECT | 26,4 | 8700 | 202 | 152 | 101 | 76 | 51 | |
| | MIX | 19,8 | 7500 | 174 | 131 | 87 | 65 | 44 | |
| DN50 | DIRECT | 38 | 12500 | 290 | 218 | 145 | 109 | 73 | |
| | MIX | 29,5 | 10400 | 242 | 181 | 121 | 91 | 60 | |

 Order number of the insulation box (spare part)

| | PUMPFIX DIRECT with/without pump | PUMPFIX MIX with/without pump | PUMPFIX CONSTANT with/without pump | PUMPFIX SOLAR with/without pump | PUMPFIX SOLAR Easy with/without pump |
|------|---|--|---|--|---|
| DN20 | 1 4513 62 | | | | 1 4513 61 |
| DN25 | 1 4513 63 | | | - | - |
| DN32 | 1 4513 63 | | - | - | - |
| DN40 | - | | - | - | - |
| DN50 | - | | - | - | - |

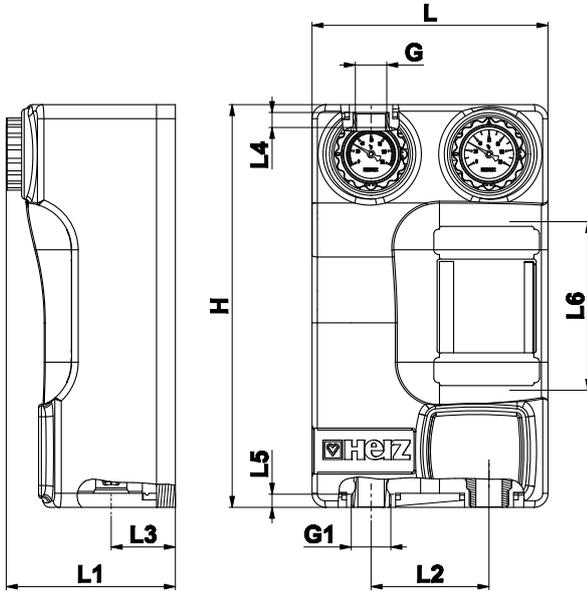
HERZ PUMPFIX

Direct DN 20, DN 25, DN 32, DN 40, DN 50

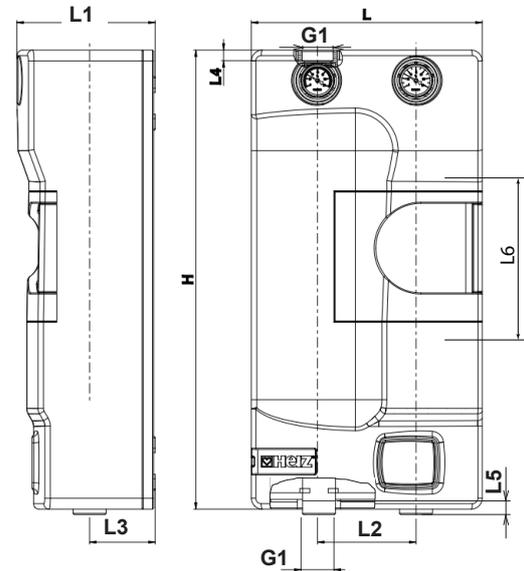
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Dimensions

DN 20 - DN 32



DN 40 - DN 50



| 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 PARA 15-130/6-43/SC -12 | 7,8 | 250 | 390 | 209 | 125 | 68 | 3/4" | 16 | 14 | 1" | 130 |
| 1 4510 22 | 20 | IMP NMT MINI 15/60 - 130 | 7,8 | 250 | 390 | 209 | 125 | 68 | 3/4" | 16 | 14 | 1" | 130 |
| 1 4514 13 | 20 | IMP GHN 15/40-130*** (3 speed pump) | 7,8 | 250 | 390 | 167 | 125 | 68 | 3/4" | 16 | 14 | 1" | 130 |
| 1 4514 11 | 20 | without pump | 7,8 | 250 | 390 | 167 | 125 | 68 | 3/4" | 16 | 14 | 1" | 130 |
| 1 4510 26 | 25 | WILO PARA 25-180/6-43/SC -12 | 20 | 250 | 430 | 209 | 125 | 68 | 1" | 16 | 12 | 1-1/4" | 180 |
| 1 4510 29 | 25 | IMP NMT MINI 25/60-180 | 20 | 250 | 430 | 209 | 125 | 68 | 1" | 16 | 12 | 1-1/4" | 180 |
| 1 4510 27 | 25 | IMP GHN 25/60-180*** (3 speed pump) | 20 | 250 | 430 | 180 | 125 | 68 | 1" | 16 | 12 | 1-1/4" | 180 |
| 1 4510 25 | 25 | without pump | 20 | 250 | 430 | 180 | 125 | 68 | 1" | 16 | 12 | 1-1/4" | 180 |
| 1 4514 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 4510 98 | 32 | IMP NMT MINI 30/60 - 180 | 28 | 250 | 430 | 209 | 125 | 68 | 1-1/4" | 16 | 12 | 1-1/2" | 180 |
| 1 4514 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 |
| 1 4514 21 | 32 | without pump | 28 | 250 | 430 | 180 | 125 | 68 | 1-1/4" | 16 | 12 | 1-1/2" | 180 |
| 1 4510 15 | 40 | Wilo Stratos MAXO 40/0,5-8 PN6/10 | 26,4 | 422 | 845 | 253 | 180 | 120 | 2" | 19 | 25 | 2" | 220 |
| 1 4510 05 | 40 | without pump | 26,4 | 422 | 845 | 253 | 180 | 120 | 2" | 19 | 25 | 2" | 220 |
| 1 4510 16 | 50 | Wilo Stratos MAXO 50/0,5-9 PN6/10 | 38 | 422 | 845 | 253 | 180 | 120 | 2" | 19 | 25 | 2" | 220 |
| 1 4510 06 | 50 | without pump | 38 | 422 | 845 | 253 | 180 | 120 | 2" | 19 | 25 | 2" | 220 |

*Internal thread

**external thread

***According to the Commission regulations (EU) No. 641/2009 and No. 622/2012, these pumps may not be used within the EU

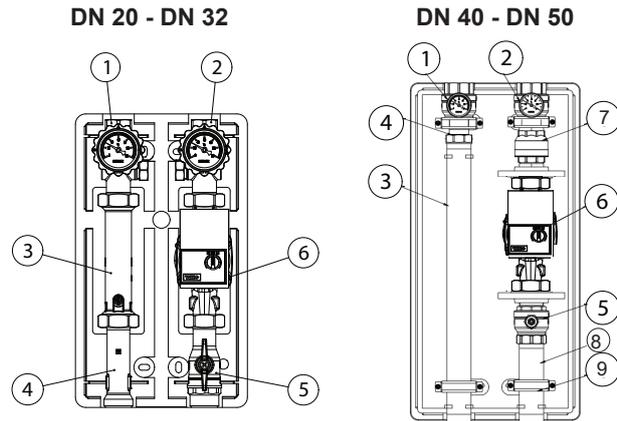
☑ Components of HERZ PUMPFIX Direct

DN 20 - DN 32

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

DN 40 - DN 50

1. Valve with thermometer (blue)
2. Valve with thermometer (red)
3. Long spacer
4. Connector with free moving nut
5. Ball valve
6. Circulation pump*
7. Check valve
8. Short spacer
9. Mounting bracket



☑ Material and construction

| | |
|---|---|
| Ball valve with thermometer: | forged brass EN 12165 |
| Ball: | forged brass acc. to EN 12165, hard chrome plated |
| Handle of ball valve with thermometer: | plastic, PA66 GF30 |
| Spacer with backflow preventer: | brass |
| 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 |
| Spindle seals: | NBR / EPDM |
| Ball seals: | PTFE |
| Gaskets: | EPDM |
| Heat insulation material of pump group: | EPP |

☑ Operating data

| | |
|------------------------------------|---------------------|
| Nominal pressure: | max. 10 bar |
| Max. operating temperature: | 110 °C |
| Short-term load: | 120 °C < 15 s |
| Min. operating temperature: | 0 °C (water 0,5 °C) |
| Opening pressure for check valve : | 200 mmWc |
| 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.

☑ 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).

☑ Maintenance instruction

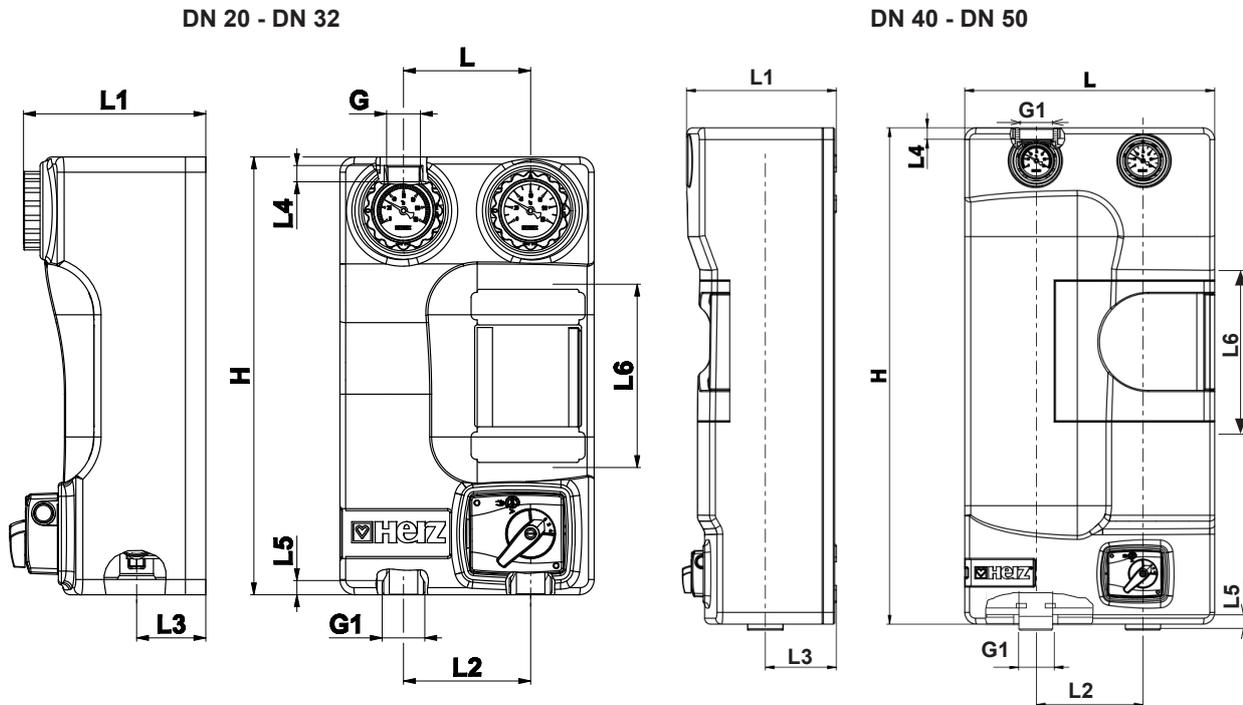
According to EN 806-5 (point 6. Operation) ball valves should always be in their fully opened or closed position and actuated at regular intervals to ensure they remain operational. Therefore HERZ ball valves should be closed and opened periodically (at least twice a year, every 6 months). This prevents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

HERZ PUMPFIX

Mix DN 20, DN 25, DN 32, DN 40, DN 50

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Dimensions



| Order Nr. | DN | Pump | kvs | BP | L [mm] | H [mm] | L1 [mm] | L2 [mm] | L3 [mm] | G* [in] | L4 [mm] | L5 [mm] | G1** [in] | L6 [mm] |
|-----------|----|--|-----|----|-----------|-----------|------------|------------|------------|------------|------------|------------|--------------|------------|
| 1 4514 16 | 20 | WILO PARA 15-130/6-43/SC -12 | 4 | NO | 250 | 390 | 209 | 125 | 68 | 3/4 | 16 | 14 | 1 | 130 |
| 1 4514 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 4510 96 | 20 | IMP NMT MINI 15/60 - 130 | 4 | NO | 250 | 390 | 209 | 125 | 68 | 3/4 | 16 | 14 | 1 | 130 |
| 1 4510 97 | 20 | IMP NMT MINI 15/60 - 130 | 6,3 | NO | 250 | 390 | 209 | 125 | 68 | 3/4 | 16 | 14 | 1 | 130 |
| 1 4514 18 | 20 | IMP GHN 15/40-130*** (3 speed pump) | 4 | NO | 250 | 390 | 186 | 125 | 68 | 3/4 | 16 | 14 | 1 | 130 |
| 1 4514 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 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 |

*Internal thread

**external thread

***According to the Commission regulations (EU) No. 641/2009 and No. 622/2012, these pumps may not be used within the EU

BP - Bypass on the mixing valve

| 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 PARA 25-180/6-43/SC-12 | 4 | YES | 250 | 430 | 209 | 125 | 68 | 1 | 16 | 12 | 1-1/4 | 180 |
| 1 4511 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 4511 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 4511 24 | 25 | IMP NMT MINI 25/60-180 | 4 | YES | 250 | 430 | 209 | 125 | 68 | 1 | 16 | 12 | 1-1/4 | 180 |
| 1 4511 25 | 25 | IMP NMT MINI 25/60-180 | 6,3 | YES | 250 | 430 | 209 | 125 | 68 | 1 | 16 | 12 | 1-1/4 | 180 |
| 1 4511 26 | 25 | IMP NMT MINI 25/60-180 | 10 | YES | 250 | 430 | 209 | 125 | 68 | 1 | 16 | 12 | 1-1/4 | 180 |
| 1 4511 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 4511 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 4511 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 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 PARA 30-180/6-43/SC-12 | 10 | NO | 250 | 430 | 209 | 125 | 68 | 1-1/4 | 16 | 12 | 1-1/2 | 180 |
| 1 4514 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 4510 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 4511 00 | 32 | IMP NMT MINI 30/60-180 | 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*** (3 speed pump) | 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*** (3 speed pump) | 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 |
| 1 4511 71 | 40 | Wilo Stratos MAXO 40/0,5-8 PN6/10 | 19,8 | NO | 422 | 845 | 253 | 180 | 120 | 2 | 19 | 25 | 2 | 220 |
| 1 4511 78 | 40 | without pump | 19,8 | NO | 422 | 845 | 253 | 180 | 120 | 2 | 19 | 25 | 2 | 220 |
| 1 4511 72 | 50 | Wilo Stratos MAXO 50/0,5-9 PN6/10 | 29,5 | NO | 422 | 845 | 253 | 180 | 120 | 2 | 19 | 25 | 2 | 220 |
| 1 4511 79 | 50 | without pump | 29,5 | NO | 422 | 845 | 253 | 180 | 120 | 2 | 19 | 25 | 2 | 220 |

*Internal thread

**external thread

***According to the Commission regulations (EU) No. 641/2009 and No. 622/2012, these pumps may not be used within the EU

BP - Bypass on the mixing valve

☑ Components of HERZ PUMPFIX Mix
DN 20 - DN 32

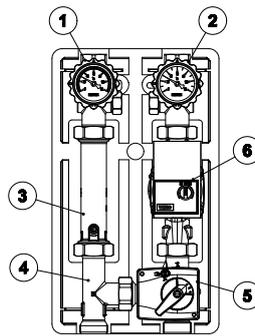
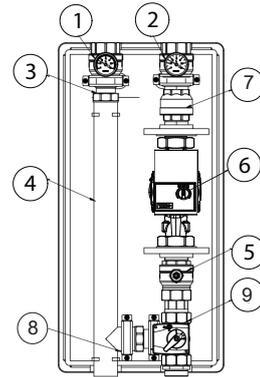
1. Valve with thermometer (blue)
2. Valve with thermometer (red)
3. Spacer with check valve
4. Return T-piece
5. Three way valve with a actuator (1 2137 2X)
6. Circulation pump*

*see overview table

DN 40 - DN 50

1. Valve with thermometer (blue)
2. Valve with thermometer (red)
3. Connector with free moving nut
4. T-piece spacer
5. Ball valve
6. Circulation pump*
7. Check valve
8. Mounting bracket
9. Mixing valve with actuator (1 7712 63)

*see overview table

DN 20 - DN 32

DN 40 - DN 50

☑ Material and constructions

| | |
|---|---|
| Ball valve with thermometer: | forged brass EN 12165 |
| Ball: | forged brass acc. to EN 12165, hard chrome plated |
| Handle of ball valve with thermometer: | plastic, PA66 GF30 |
| Spacer with backflow preventer: | brass |
| 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 |
| Spindle seals: | NBR / EPDM |
| Ball seals: | PTFE |
| Gaskets: | EPDM |
| Heat insulation material of pump group: | EPP |

☑ Operating data

| | |
|------------------------------------|----------------------|
| Nominal pressure: | max. 10 bar |
| Max. operating temperature: | 110 °C |
| Short-term load: | 120 °C < 15 s |
| Min. operating temperature: | 0 ° C (water 0,5 °C) |
| Opening pressure for check valve : | 200 mmWc |
| 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.

☑ Field of application of PUMPFIX Mix DN20, DN32, DN40, DN50

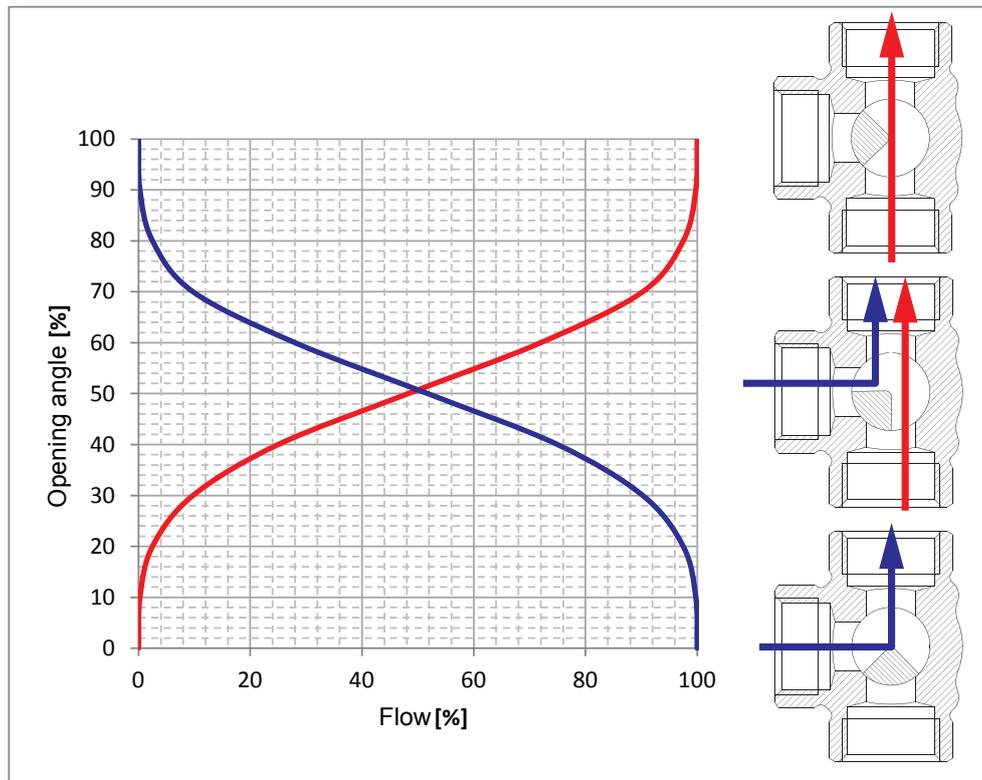
The HERZ- PUMPFIX pump group is used in heating and chilled water systems in household areas. The installation of circulation pumps of different manufacturers and types is possible. The integrated 3-way valve can be used for mixing in combination with the actuator.

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

☑ Maintenance instruction

According to EN 806-5 (point 6. Operation) ball 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 should be closed and opened periodically (at least twice a year, every 6 months). This prevents the ball valve from blocking, reduces sediment deposition and reduces the possibility of corrosion inside the valve.

☑ Characteristic curves of three-way valve DN20, DN32, DN40, DN50



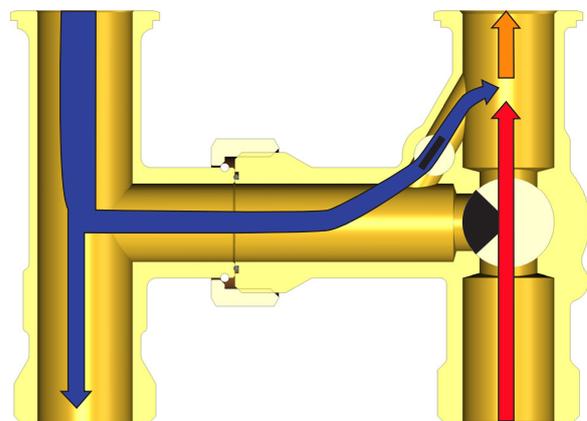
☑ Field of application of PUMPFIX DN25

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 in combination with 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.

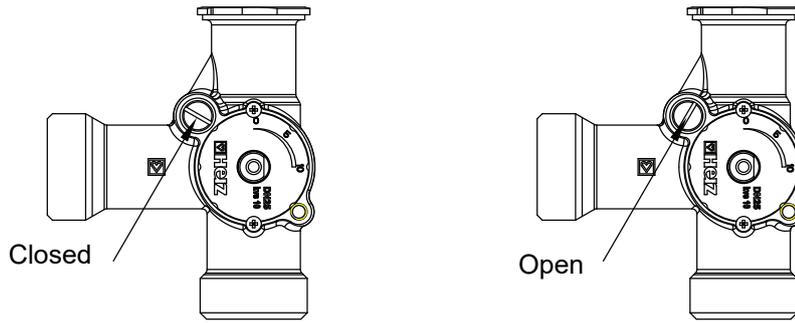
DN20/25/32 HERZ- PUMPFIX pump group can be upgraded with an overflow valve (1 4514 99).

☑ Functional principle of three-way valve DN 25

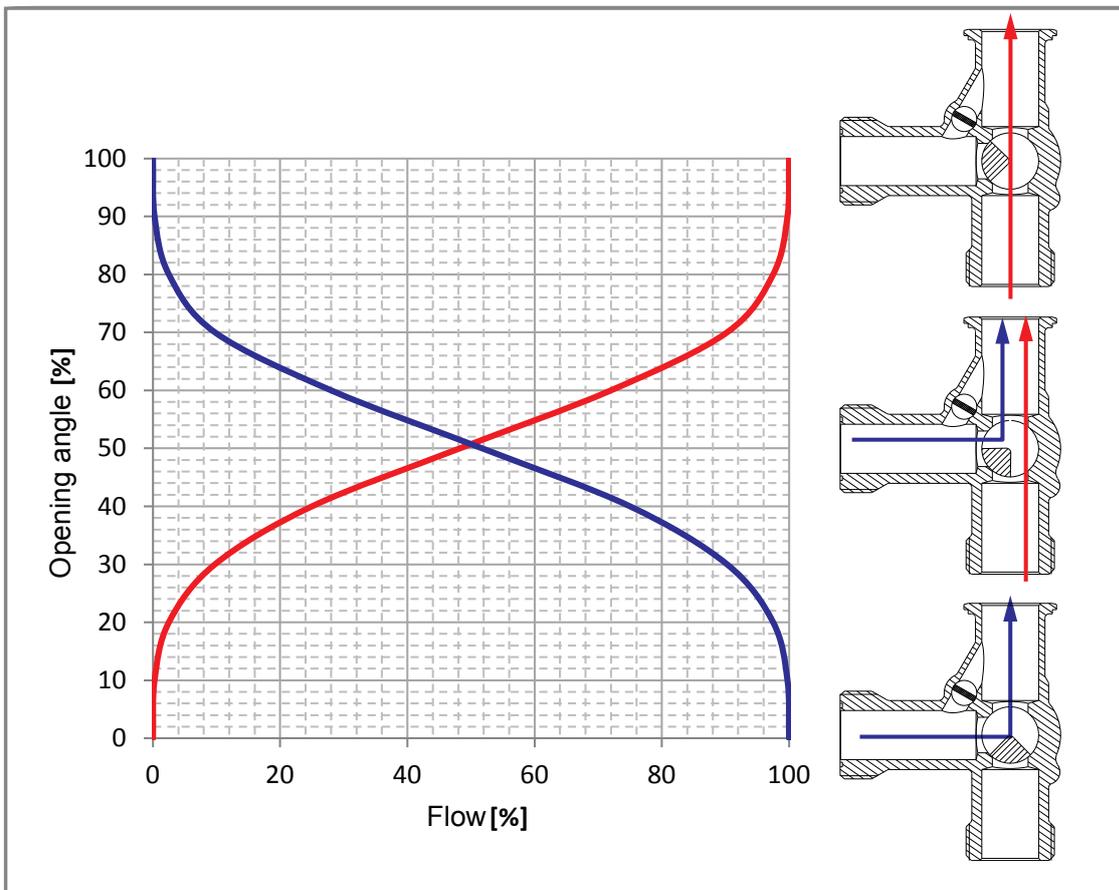
A part of the heatflow from the pump on the bypass operation is primed in normal operation – for example, when the return water mixer is closed. This current (smaller blue arrow) pictures 50% of the mixer capacitance (red arrow). A very high flow and a low temperature are sustained.



Bypass position of three-way valve DN25



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:

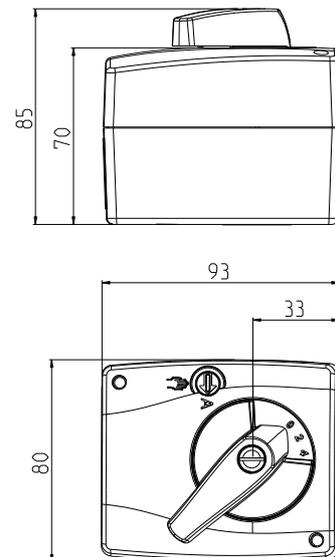
Press for temporary disengagement, permanent gearing disengagement by rotary switch on the housing to the manual position.

Safety note:

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

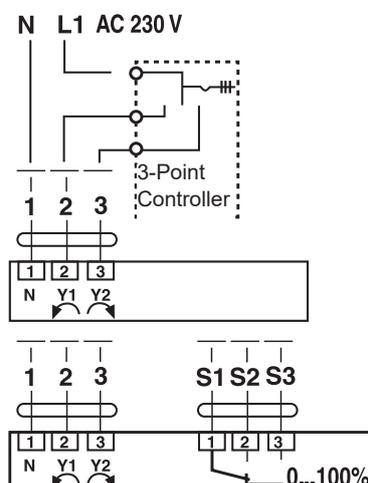
☑ Technical data

| | |
|---------------------------|--|
| 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 (mixing valve) |
| Non-operating temperature | - 30 ... + 80 °C |
| Humidity test | according to EN 60730-1 |
| EMC | CE according to 2014/30/EU |
| LV directive | CE according to 2014/35/EU |
| Mode of operation | Typ 1.B (EN 60730-1) |
| Maintenance | maintenance-free |

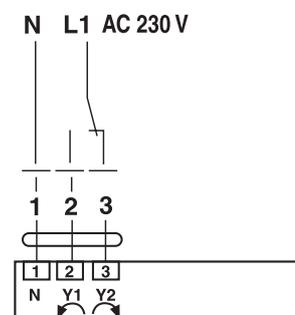


☑ Wiring diagram

3-Point Control



Open-Close Control

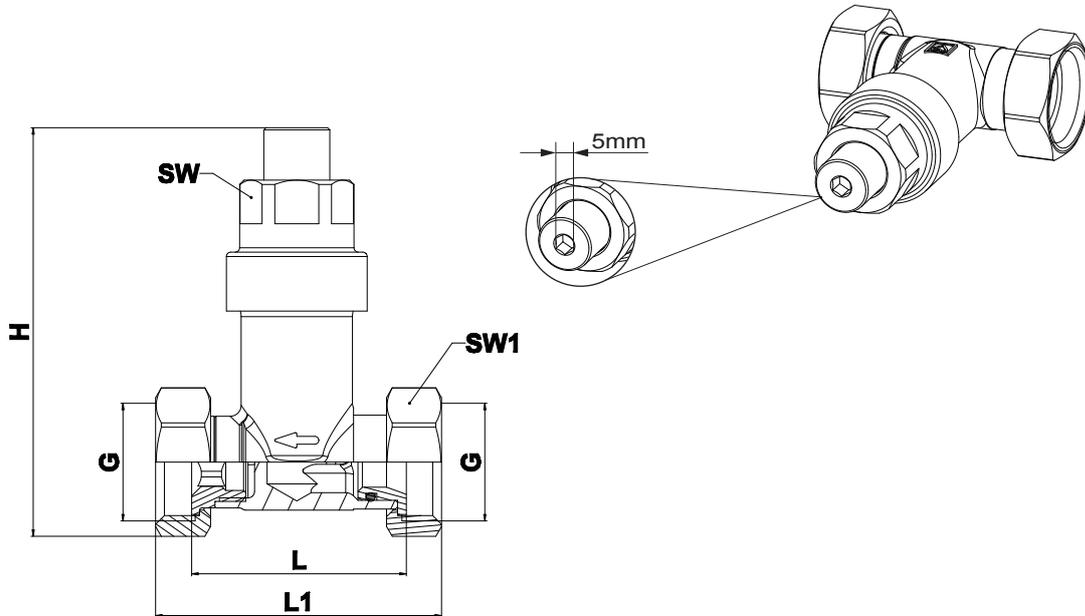


HERZ overflow valve

1 4514 99

General information

Overflow valve (1 4514 99)



| Order Nr. | L [mm] | L1 [mm] | H [mm] | SW [mm] | SW1 [mm] | G ["] |
|-----------|-----------|------------|-----------|------------|-------------|----------|
| 1 4514 99 | 48.8 | 65 | 93.6 | 30 | 24 | 3/4 |

Material and construction

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

Operating data

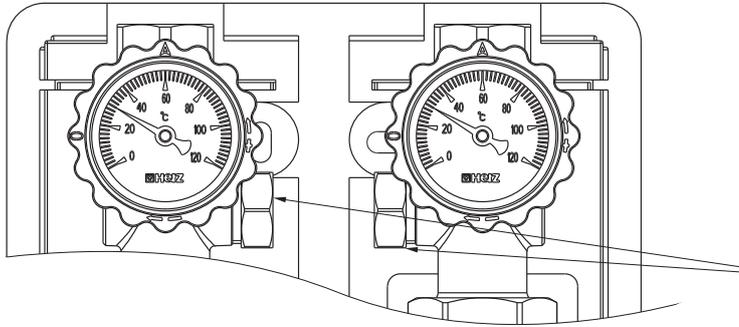
Setting range: 0 - 0,5 bar
 2 turns → 0,1 bar
 max. 10 turns → 0,5 bar
 close the valve

Application

DN20/25/32 HERZ- PUMPFIX pump group can be upgraded with an overflow valve.

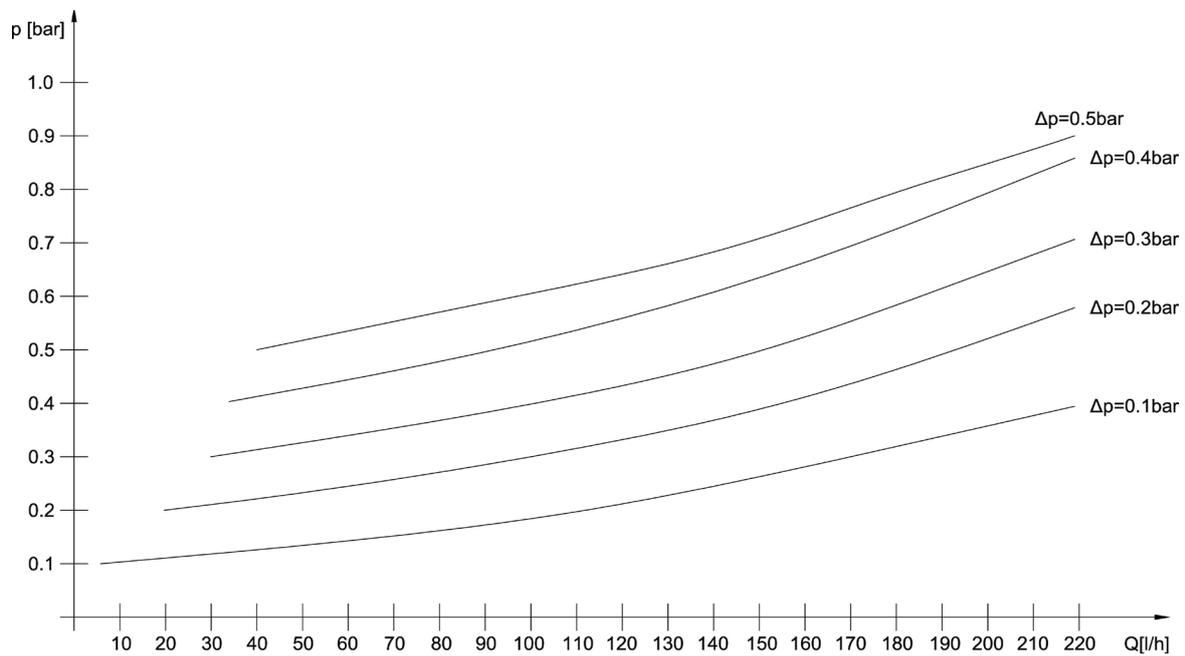
☑ Field of application

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 DN20/25/32 HERZ PUMPFIX pump group.

☑ Characteristic curves of overflow valve

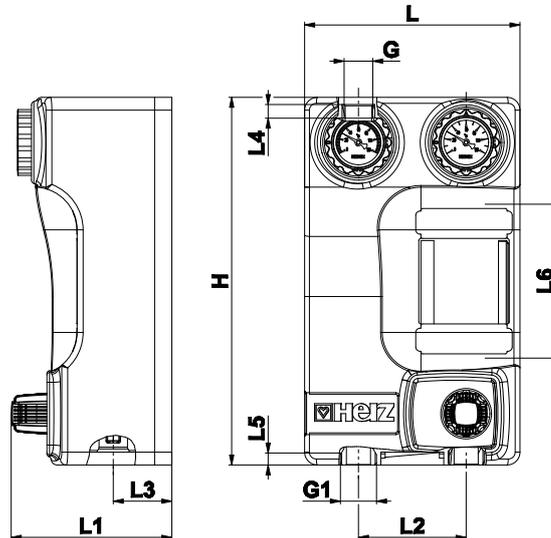


HERZ PUMPFIX Constant

constant control for temperature DN 25

Datasheet 1 4514 XX

☑ Dimensions



| Order Nr. | DN | Pump | kvs [m ³ /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 PARA 25-180/6-43/SC -12 | 2,6 | yes | 250 | 430 | 209 | 125 | 68 | 1" | 16 | 12 | 1-1/4" | 180 |
| 1 4514 06 | 25 | IMP NMT MINI 25/60-180 | 2,6 | yes | 250 | 430 | 209 | 125 | 68 | 1" | 16 | 12 | 1-1/4" | 180 |
| 1 4514 09 | 25 | IMP GHN 25/60-180*** (3 speed pump) | 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

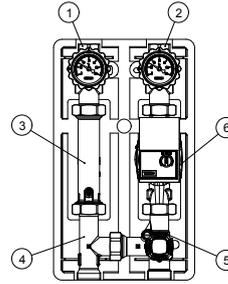
**external thread

***According to the Commission regulations (EU) No. 641/2009 and No. 622/2012, these pumps may not be used within the EU

BP - Bypass on the mixing valve

☑ Components of HERZ PUMPFIX Constant

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



☑ Material and construction

Ball valve with thermometer:

forged brass acc. to EN 12165

Ball:

forged brass acc. to EN 12165, hard chrome plated

Handle of ball valve with thermometer:

plastic, PA66 GF30

Spacer with backflow preventer:

brass

Threaded connectors of closing valve:

internal thread acc. to ISO 7-1; G1"

Threaded connector of pump group:

external thread acc. to ISO 228-1; G1 1/4"

Spindle:

machined brass acc. to EN12164

Spindle seals:

NBR / EPDM

Ball seals:

PTFE

Gaskets:

EPDM

Heat insulation material of pump group:

EPP

Features:

Temperature regulator with contact sensor

Control range (1 7420 06)*:

25 - 50°C

*HERZ Thermostatic head with contact sensor

☑ Operating data

Nominal pressure:

max. 10 bar

Max. operating temperature:

110 °C

Short-term load:

120 °C < 15 s

Min. operating temperature:

0 °C (water 0,5 °C)

Opening pressure for check valve :

200 mmWc

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.

☑ Field of application

The HERZ- PUMPFIX CONSTANT pump group is used in heating 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).

☑ Maintenance instruction

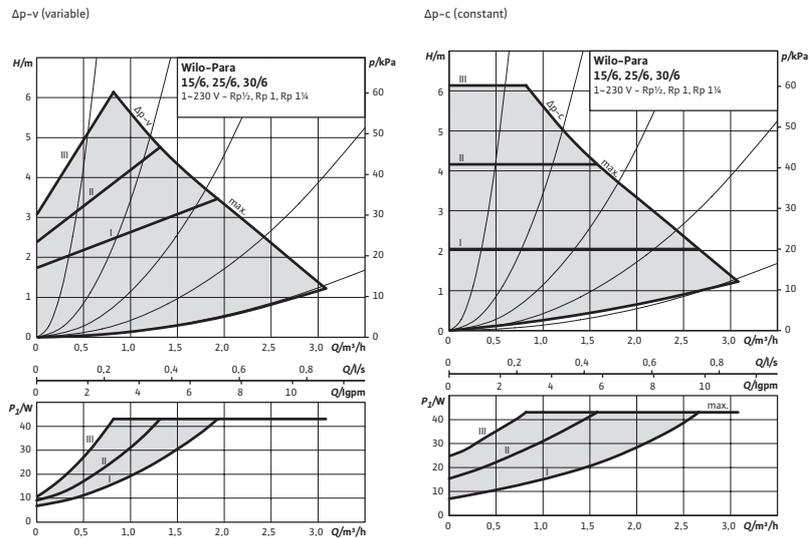
According to EN 806-5 (point 6. Operation) ball valves should always be in their fully opened or closed position and actuated at regular intervals to ensure they remain operational. Therefore HERZ ball valves should be closed and opened periodically (at least twice a year, every 6 months). This prevents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

HERZ PUMPFIX

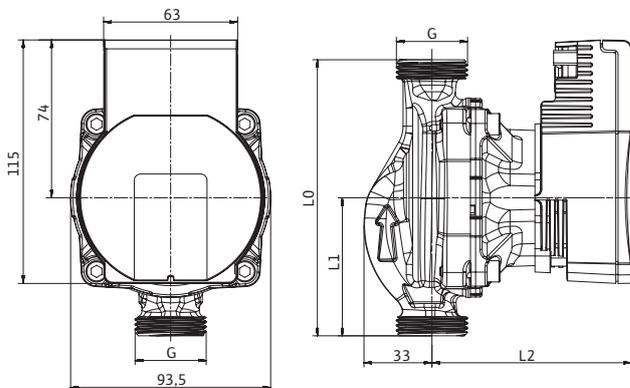
Circulation pumps Wilo PARA used in pump group DN20/25/32

General information

☑ Pump characteristic Wilo PARA



☑ Pump dimensions



| DN | G | L0 | L1 |
|----|-----|-----|----|
| 20 | 1" | 130 | 65 |
| 25 | 1½" | 180 | 90 |
| 32 | 2" | 180 | 90 |

☑ Pump data

Type:

 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):

 $\leq 0,20$

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

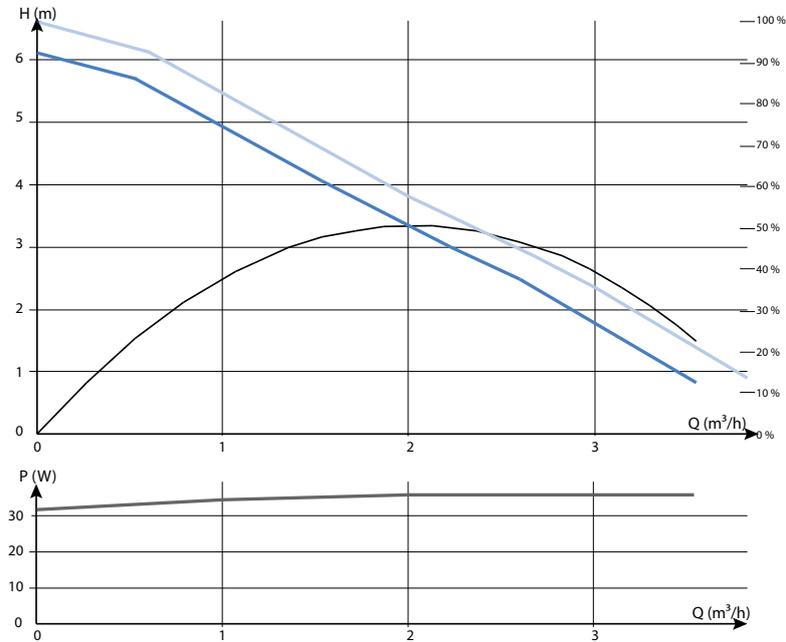
Minimum suction head at 50/95°C: 0.5/4.5 m

HERZ PUMPFIX

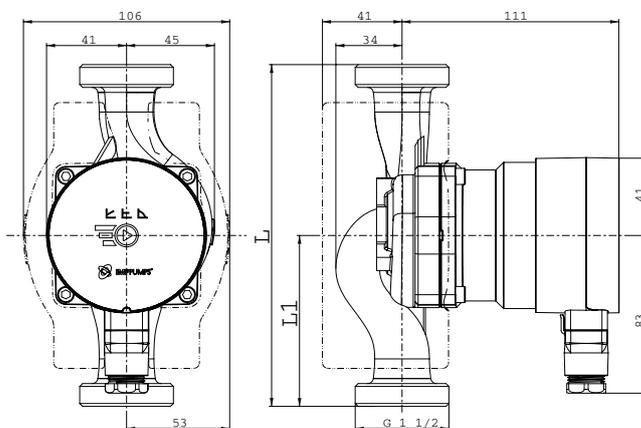
Circulation pumps IMP NMT MINI used in pump group DN20/25/32

General information

☑ Pump characteristic IMP NMT MINI



☑ Pump dimensions



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

☑ Pump data

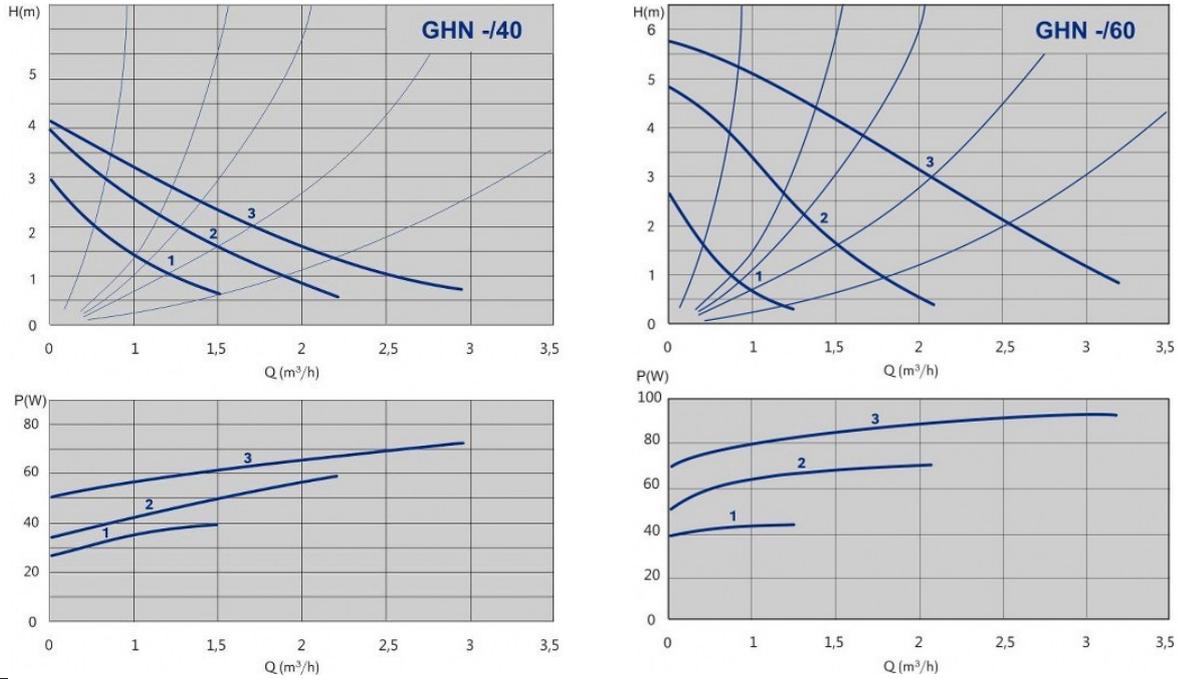
| | |
|--------------------------------|--|
| Type: | DN 20: NMT MINI 15/60 -130 DN 25: NMT MINI 25/60 -180 DN 32: NMT MINI 32/60 -180 |
| Energy Efficiency Index (EEI): | 0.16 |
| Max. delivery head: | 6.1 m |
| Max. volume flow: | 4.0 m³/h |
| Min. operating temperature: | -10 °C |
| Max. operating temperature: | 110 °C |
| Max pressure: | 10 bar |
| Power supply: | 1-230 V |
| Mains frequency: | 50/60 Hz |
| Declared protection: | IP44 |
| Insulation class: | F |

HERZ PUMPFIX

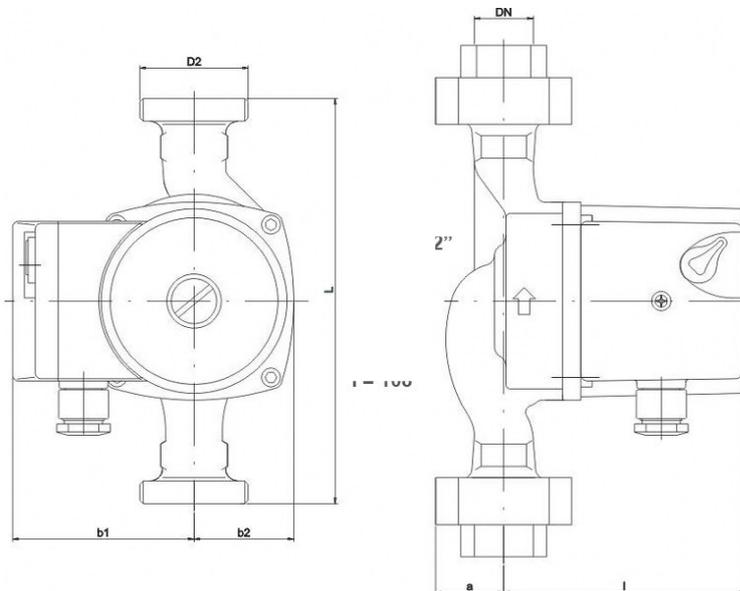
Circulation pumps IMP GHN used in pump group DN20/25/32

General information

☑ Pump characteristic- IMP GHN only available outside EU



☑ Pump dimensions



| DN | G | L | H _{max} |
|----|-----|-----|------------------|
| 20 | 1" | 130 | 4 m |
| 25 | 1½" | 180 | 6 m |
| 32 | 2" | 180 | 6 m |

☑ Pump data

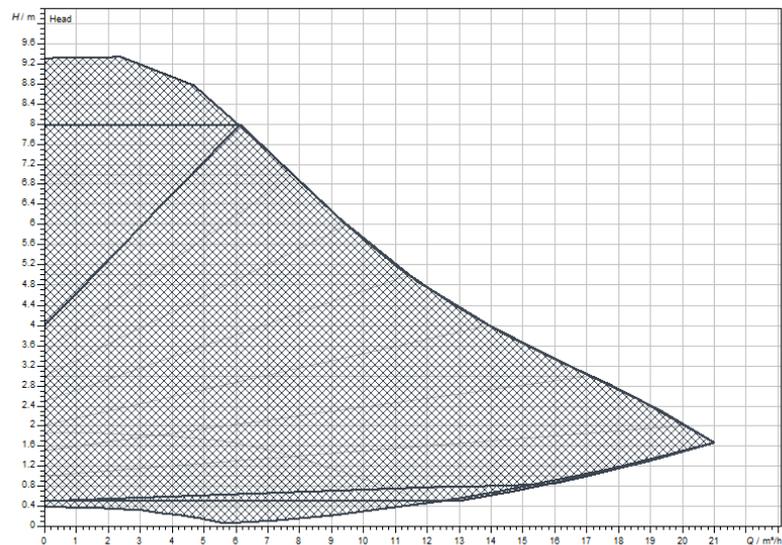
| | |
|-----------------------------|--|
| Type: | DN 20: IMP GHN 15/40-130 DN 25: IMP GHN 25/60-180 DN 32: IMP GHN 30/60-180 |
| Max. volume flow: | 3,5 m ³ /h |
| Max. operating temperature: | 110 °C |
| Max. static pressure: | 10 bar |
| Power supply: | 1 ~ 230 V |
| Degree of protection: | IP 44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

HERZ PUMPFIX

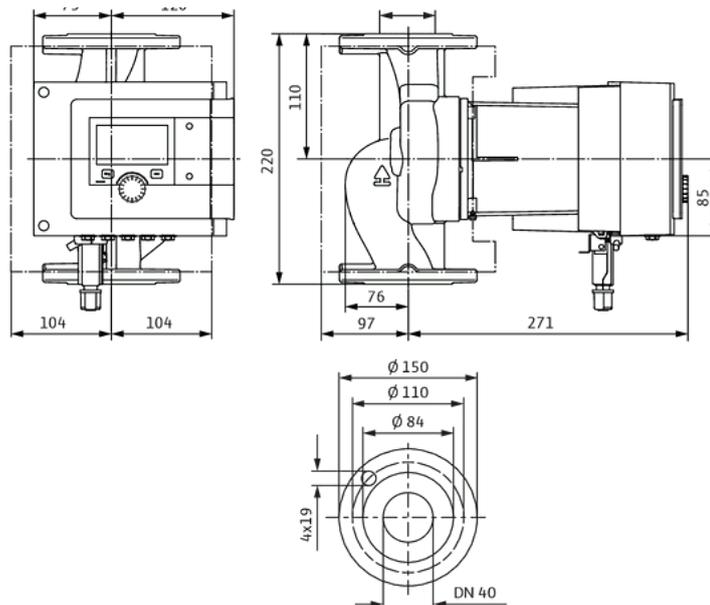
Circulation pumps Wilo Stratos MAXO used in pump group DN40

General information

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



☑ Pump dimensions



☑ Pump data

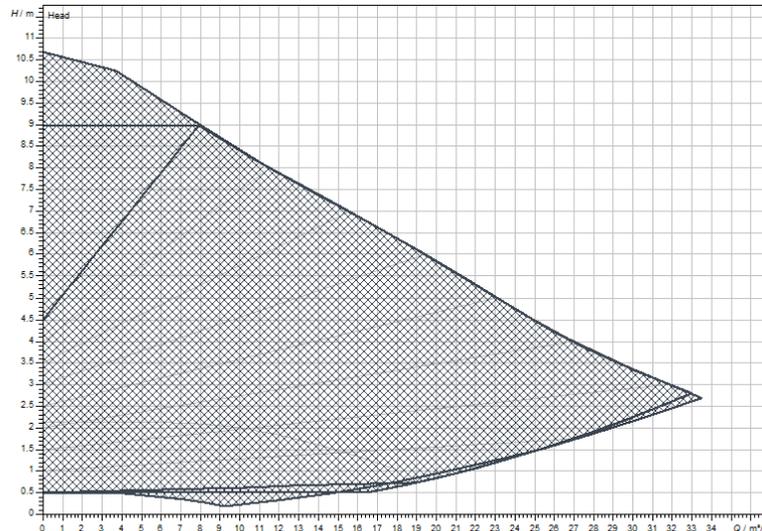
| | |
|--------------------------------|--|
| Type: | Stratos MAXO 40/0,5-8 PN6/10 |
| Energy Efficiency Index (EEI): | ≤ 0,19 |
| Max. delivery head: | 8 m |
| Max. volume flow: | 21 m ³ /h |
| Max. operating temperature: | 110 °C |
| Max. static pressure: | 10 bar |
| Mains connection: | 1~230 V +10%/-15%, 50/60 Hz (IEC 60038 standard voltage) |
| Protection class: | IPx4D |
| Insulation class: | F |
| Minimum suction head at 50 °C | 3 m |
| Minimum suction head at 95 °C | 10 m |
| Minimum suction head at 110 °C | 16 m |

HERZ PUMPFIX

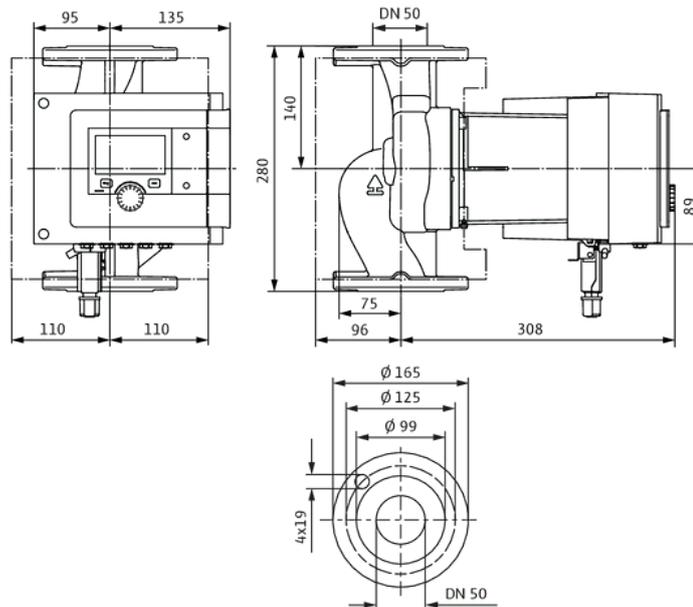
Circulation pumps Wilo Stratos MAXO used in pump group DN50

General information

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



☑ Pump dimensions

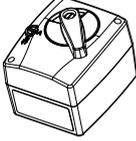
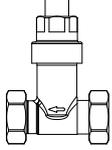
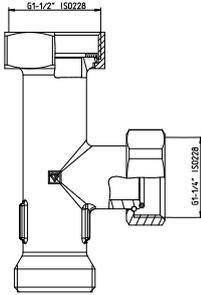
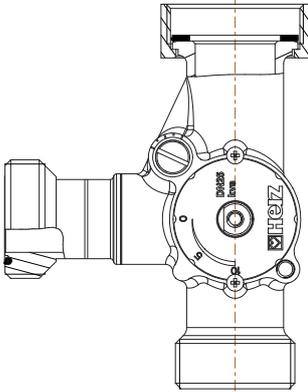


☑ Pump data

| | |
|--------------------------------|--|
| Type: | Stratos MAXO 50/0,5-9 PN6/10 |
| Energy Efficiency Index (EEI): | $\leq 0,17$ |
| Max. delivery head: | 9 m |
| Max. volume flow: | 33 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 | 5 m |
| Minimum suction head at 95 °C | 12 m |
| Minimum suction head at 110 °C | 18 m |

HERZ PUMPFIX

Pump groups accessories

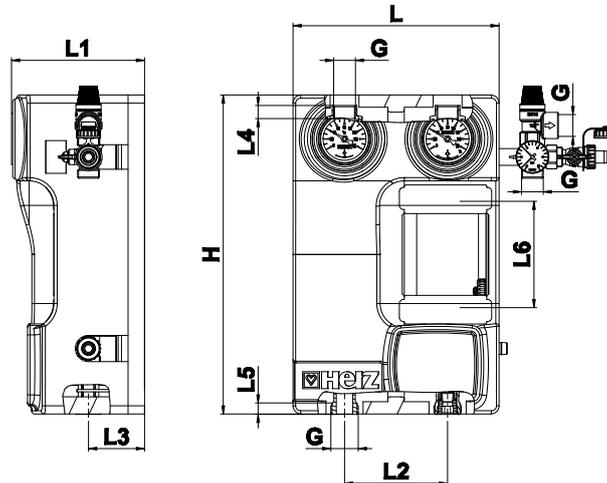
| Illustration | Description | Item number |
|---|-----------------------------------|-------------|
|  | Red thermometer for HERZ PUMPFIX | 1 2201 91 |
|  | Blue thermometer for HERZ PUMPFIX | 1 2201 90 |
|  | 3 - point actuator | 1 7712 63 |
|  | Overflow valve | 1 4514 99 |
|  | T-piece for PUMPFIX MIX DN 25 | 1 4514 94 |
|  | Mixing valve DN25 kvs 4 | 1 4514 90 |
| | Mixing valve DN25 kvs 6,3 | 1 4514 91 |
| | Mixing valve DN25 kvs 10 | 1 4514 92 |
| | Mixing valve DN25 CONSTANT | 1 4514 93 |

HERZ PUMPFIX

Solar

Datasheet 1 4513 X2

☑ Dimensions



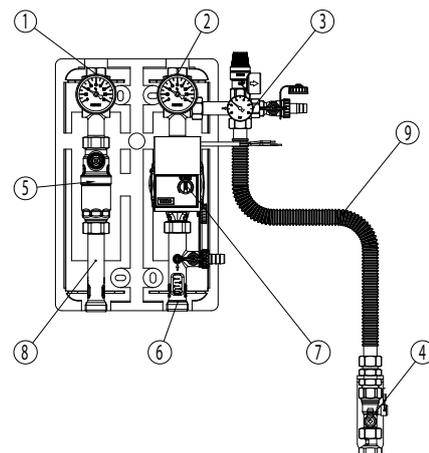
| Art. nr. | DN | Pump | L [mm] | H [mm] | L1 [mm] | L2 [mm] | L3 [mm] | G* [in] | L4 [mm] | L5 [mm] | G** [in] | L6 [mm] |
|-----------|----|---------------------------|-----------|-----------|------------|------------|------------|------------|------------|------------|-------------|------------|
| 1 4513 12 | 20 | Wilo Para STG 15-130/8-75 | 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) and check valve
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 |
| Ball: | forged brass acc. to EN 12165, hard chrome plated |
| Handle of ball valve with thermometer: | plastic, PA66 GF30 |
| Spacer with backflow preventer: | brass |
| 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 |
| 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: | PN10 |
| Pressure relief safety valve: | 6 bar |
| Max. operating temperature: | 110 °C |
| Short-term load: | 120 °C < 15 s |
| Min. operating temperature: | 0 °C (water 0,5 °C) |
| Opening pressure for check valve: | 200 mmWc |
| 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

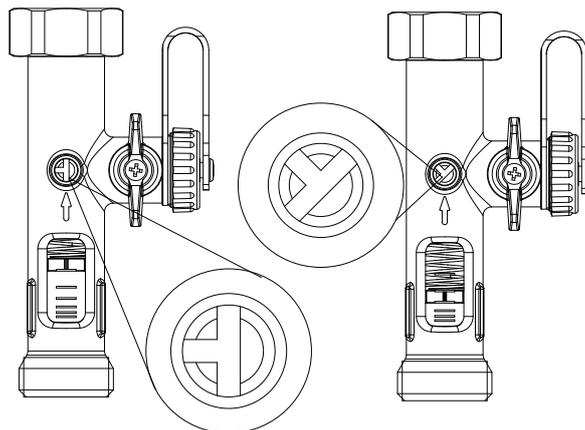
The pump stations are vertically assembled with a ball valve and the thermometer facing upwards. The pump group is part of the solar system for the preparation of sanitary warm water. The installation of the circulating pump of other manufacturers and designs is possible. The pump group is equipped with 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.

☑ Functions of components

SOLAR check valve: It is included into the ball valve. The ball valve is used as a shut-off valve, for example, for draining the system. Rotate the handle by 45° clockwise for deactivating the check valve (forced opening).

☑ 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.



☑ Maintenance instruction

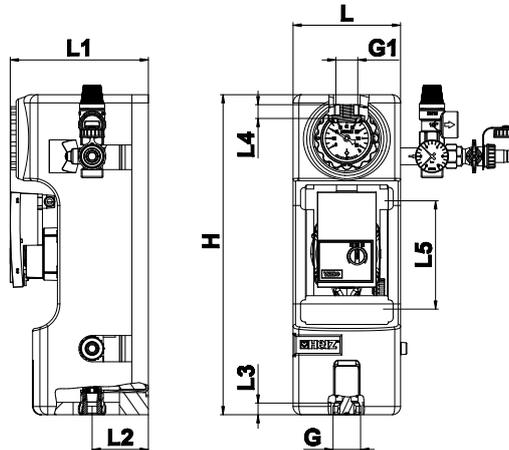
According to EN 806-5 (point 6. Operation) ball valves should always be in their fully opened or closed position and actuated at regular intervals to ensure they remain operational. Therefore HERZ ball valves should be closed and opened periodically (at least twice a year, every 6 months). This prevents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

HERZ PUMPFIX

Solar Simple

Datasheet 1 4511 8X

☑ Dimensions



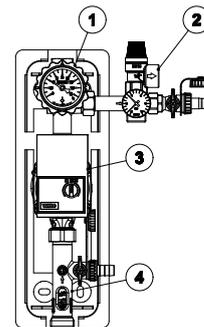
| Art. nr. | DN | Pump | H [mm] | L [mm] | L1 [mm] | L2 [mm] | L3 [mm] | L4 [mm] | G** [in] | G1* [in] |
|-----------|----|---------------------------|-----------|-----------|------------|------------|------------|------------|-------------|-------------|
| 1 4511 81 | 20 | Wilo Para STG 15-130/8-75 | 390 | 130 | 167 | 68 | 14 | 16 | 1" | 3/4" |
| 1 4511 82 | 20 | Without pump | 390 | 130 | 167 | 68 | 14 | 16 | 1" | 3/4" |
| 1 4511 83 | 20 | Wilo Para STG 15-130/8-75 | 390 | 130 | 167 | 68 | 14 | 16 | 1" | 1"(**) |

*internal thread

**external thread

☑ Components of HERZ PUMPFIX solar simple pump group

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



☑ Material and constructions

Heat insulation material of pump group:

EPP

Ball valve with thermometer and check valve:

forged brass EN 12420

Sealing:

FPM, Klingersil

Valve connection with thermometer:

int. thread ISO 7-1 (top side of PUMPFIX); G 1"

Pump group connection:

ext. thread ISO 228 (bottom side of PUMPFIX) G 3/4"

☑ Maintenance instruction

According to EN 806-5 (point 6. Operation) ball 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 should be closed and opened periodically (at least twice a year, every 6 months). This prevents the ball valve from blocking, reduces sediment deposition and reduces the possibility of corrosion inside the valve.

☑ **Operating data**

| | |
|---|---------------|
| Max. operating temperature: | 110 °C |
| Short-term load: | 120 °C < 15 s |
| Max. admissible pressure: | PN10 |
| Pressure relief valve: | 6 bar |
| Pressure gauge: | 0 - 10 bar |
| Opening pressure for check valve : | 200 mmWc |
| 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**

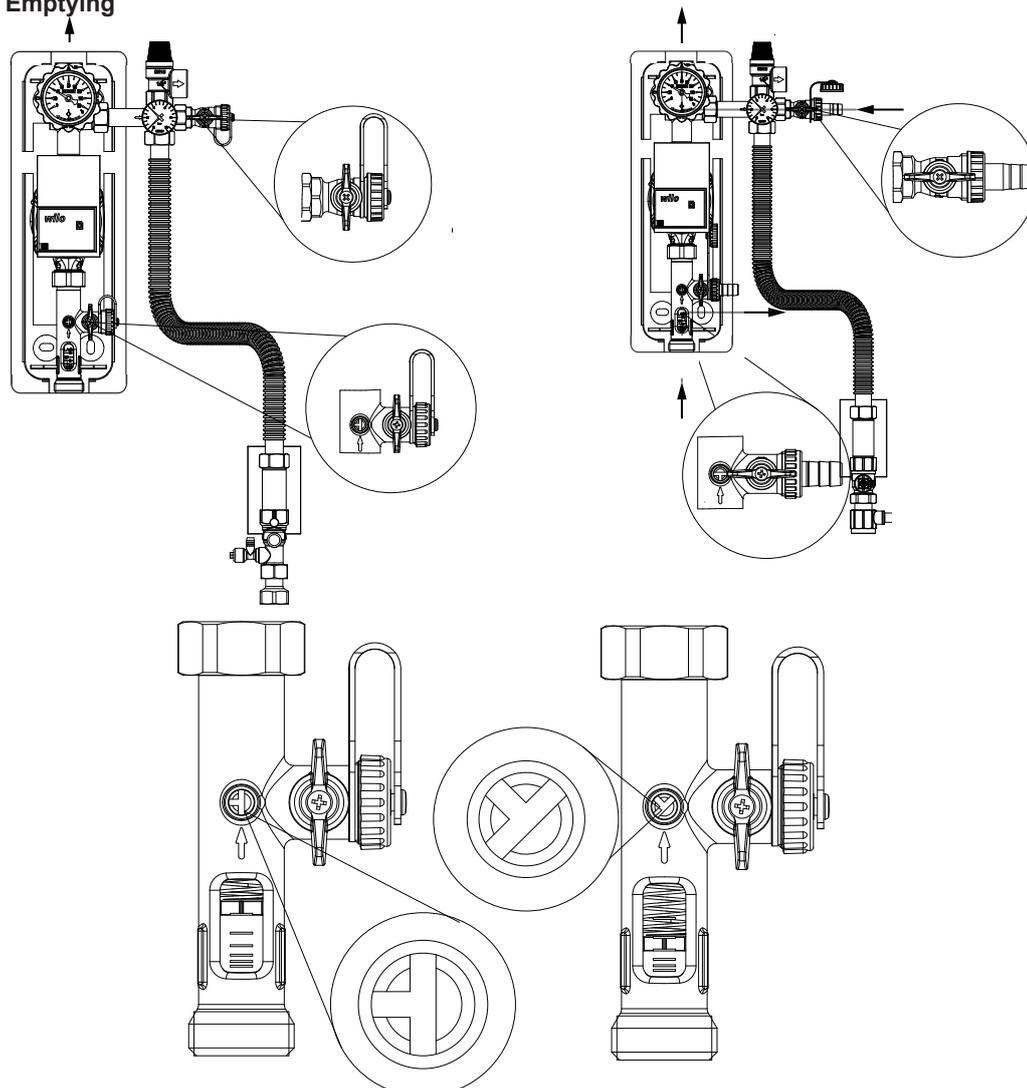
The pump stations are vertically assembled with a ball valve and the thermometer facing upwards. The pump group is part of the solar system for the preparation of sanitary warm water. The installation of the circulating pump of other manufacturers and designs is possible. The pump group is equipped with 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 valve.

☑ **Functions of components**

SOLAR check valve: it is included into the ball valve. The ball valve is used as a shut-off valve, for example, for draining the system. Rotate the handle by 45° clockwise for deactivating the check valve (forced opening).

☑ **Filling - Emptying**

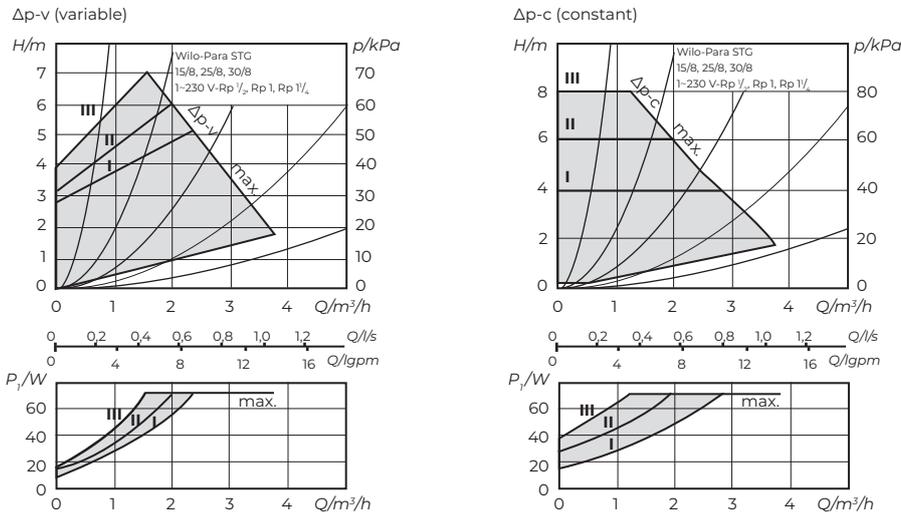


HERZ PUMPFIX

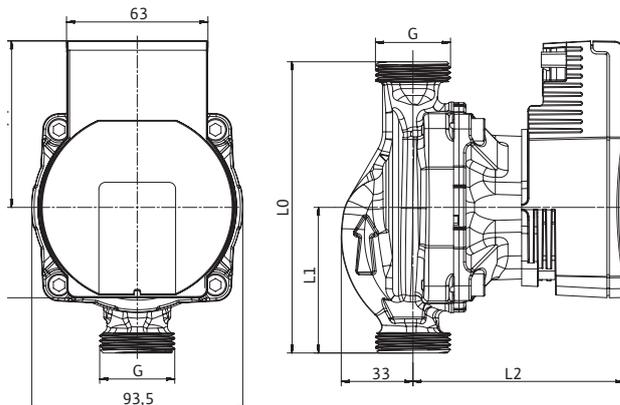
Circulation pumps Wilo - Para STG used in pump groups solar

General information

☑ Pump characteristic Wilo - Para STG 15-130/8-75



☑ Pump dimensions



| DN | G | L0 | L1 |
|----|----|-----|----|
| 20 | 1" | 130 | 65 |

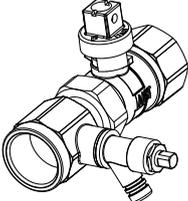
☑ Pump data

| | |
|--------------------------------|--|
| Type: | Wilo Para STG 15-130/8-75 |
| Thread: | G 1" |
| Overall length: | 130 mm |
| Energy Efficiency Index (EEI): | ≤ 0,21 |
| Max. delivery head: | 8.4 m |
| Max. volume flow: | 4 m ³ /h |
| Max. operating temperature: | 110 °C |
| Maxi. operating pressure: | 10 bar |
| Mains connection: | 1~230 V +10%/-15%, 50/60 Hz (IEC 60038 standard voltage) |
| Protection class: | IPx4D |
| Insulation class: | F |

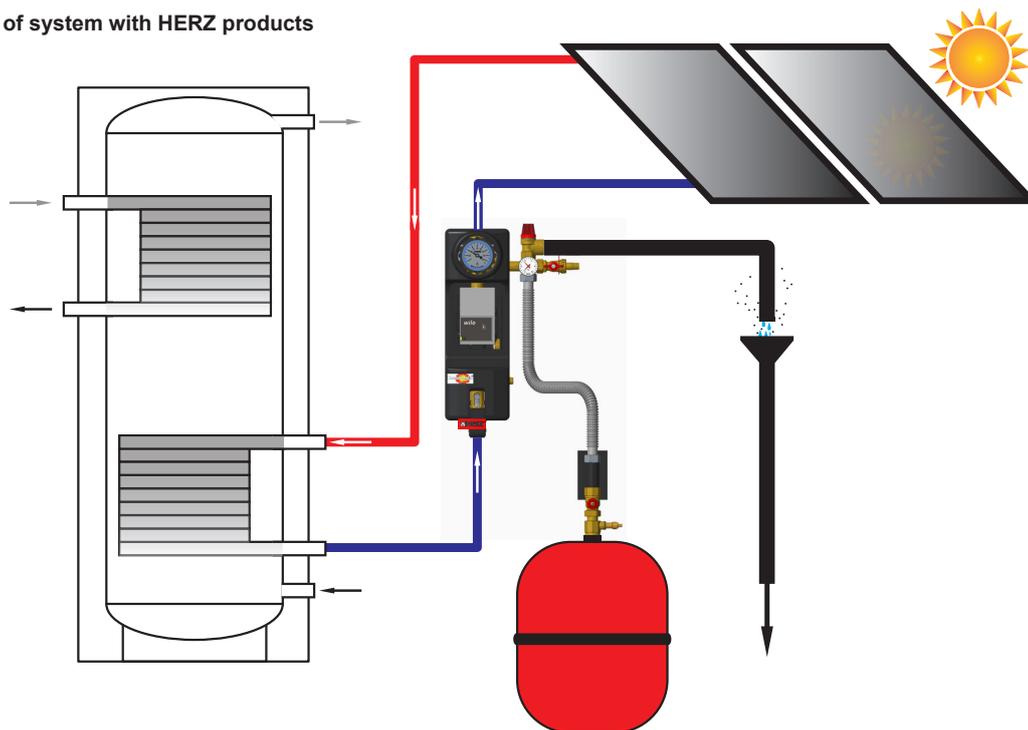
Minimum suction head at suction port to avoid cavitation at water pumping temperature
 Minimum suction head at 50/95/110 °C: 0.5 / 4.5 / 11 m

HERZ PUMPFIX

Solar accessories

| Illustration | Description | Item number |
|---|--|------------------|
|  | <p>Ball valve for expansion tank connection</p> | <p>1 2205 02</p> |
|  | <p>Connection set of flexible pipe and fastening clip for PUMPFIX SOLAR for the mounting of pressure expansion vessels up to 35 litres. Flexible pipe DN16, 500 mm, union nut 3/4" on both sides, flat sealing, console, wall pipe center 220 mm, 3/4" male thread on both sides, flat sealing connection possible. Console suitable for direct assembly of 1 2205 02, ball valve for expansion tank connection DN 20.</p> | <p>1 4513 30</p> |
|  | <p>Blue thermometer for HERZ PUMPFIX Solar</p> | <p>1 2201 92</p> |
|  | <p>Red thermometer for HERZ PUMPFIX Solar</p> | <p>1 2201 93</p> |

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.

HERZ PUMPFIX distributor 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 (DN25) can also be fitted to distributors with other dimension (DN32) with using adaptor (1 **4510 51**) connections.

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

Assembly

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

DN 40/50:

The set is equipped with mounting equipment (2 adjustable height 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 connected with boiler with the help of flanges DN80 and flat seals. The pump group and the distributor are connected with 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

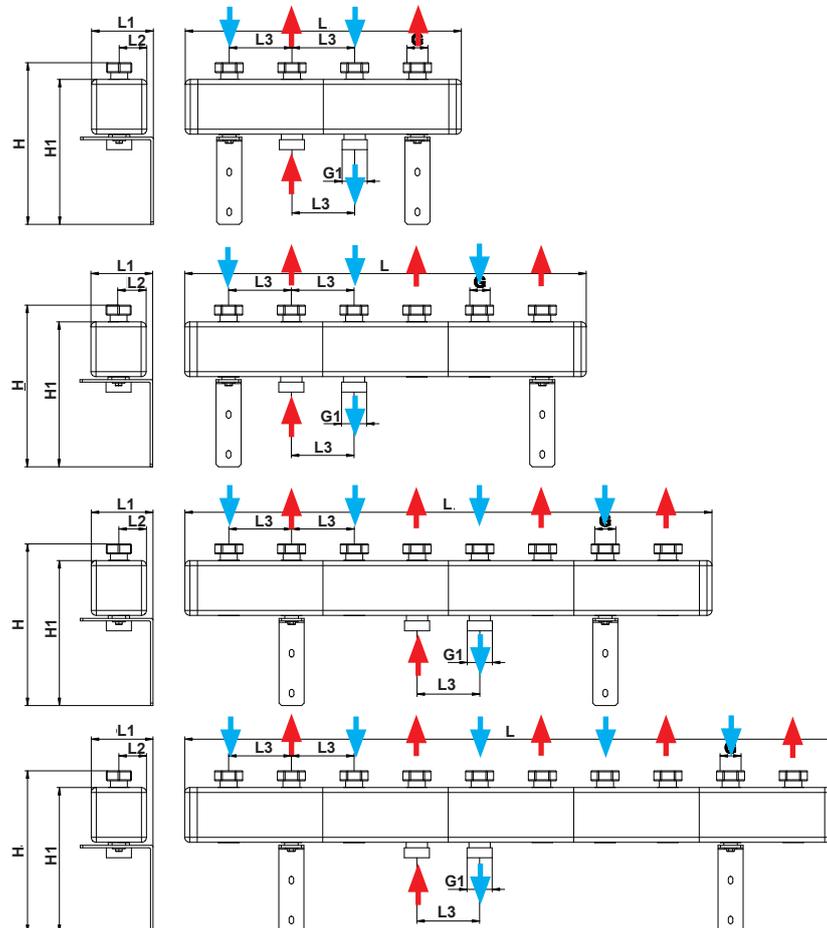
The disposal of the HERZ PUMPFIX distributors must not endanger health or environment. Users have to follow the national legal regulations for proper disposal of the HERZ PUMPFIX distributors.

HERZ PUMPFIX

Distributor made from sheet metal DN 25 and DN 32

Datasheet 1 4501 XX

☑ Dimensions



| Order Nr. | DN | No 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" |

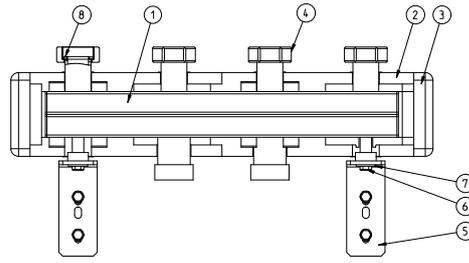
*internal thread (free turning nut)

**external thread

☑ **Components of HERZ PUMPFIX distributor**

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-400-5, DIN EN 1562

EPDM

EPP

Galvanized steel

Powder coated steel (black)

☑ **Operating data**

Max. operating temperature:

110 °C

Max. admissible pressure:

4 bar

Max flow (DN 25):

3 m³/h

Max flow (DN 32):

7 m³/h

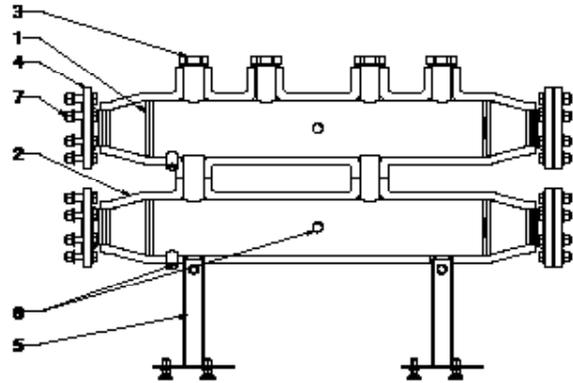
Wheelbase between the connections (boiler and heating circuit): 125 mm

☑ **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.

☑ 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, washers)



☑ Material and construction

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

☑ Operating data

| | |
|---|--------|
| Max. operating temperature: | 110 °C |
| Max. admissible pressure: | 6 bar |
| Wheelbase between the connections (boiler and heating circuit): | 180 mm |

☑ 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.

☑ Application

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

HERZ PUMPFIX

Pressure-free distributor DN 25

General information

☑ Description of HERZ PUMPFIX Pressure-free distributor

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

Pressure-free 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 savings of costs, of time, of space and can achieve system efficiency when installing PUMPFIX system to the boiler and piping system.

☑ Application

Herz Pressure-free distributor is used in heating and cooling systems, if there are several heating circuits in the system and a feed pump for the distributor is available.

That the inlet pressure of the feed pump does not affect the heating circuits, the distributor is pressure less via a connection between the flow and return.

☑ Assembly

Herz Pressure-free distributor is mounted horizontally. 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 pressure-free distributor on the wall. Pump groups and the pressure-free distributor are connected with the help of pipe fittings and EPDM seals. The supply and return flow of the Pressure-free distributor are connected with male thread that have been 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 copper 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 to by these specialist staff.

An immersion sleeve for a temperature sensor can be fitted to the G1/2" connection.

☑ Maintenance instructions

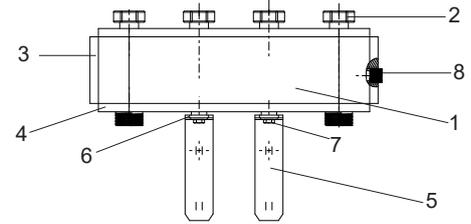
If the product is used properly, no special maintenance is required. Repairs on the device must be carried out by authorized persons only.

☑ Disposal instructions

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

☑ Components of HERZ PUMPFIX Pressure-free distributor

1. Distributor body
2. Nut G1 1-4"
3. Insulation cap
4. Side insulation
5. Mounting bracket
6. Washer
7. Screw M10
8. Connection for temperature sensor G1/2"



Brackets, wall inserts, wall screws, screws M10, washers and spacer gears for assembly of the pressure-free 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 m ³ /h |
| Heat capacity: | up to 70 kW |

☑ Medium

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

HERZ PUMPFIX

Hydraulic separator DN 25

General information

Description of HERZ hydraulic separator

HERZ PUMPFIX hydraulic separator is high 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 separator DN25 is installed horizontally direct under the PUMPFIX distributor DN25.

Furthermore, a PUMPFIX pump group DN32 can be mounted directly or a PUMPFIX pump group DN25 can be mounted with adapter 1 **4510** 51 on the hydraulic separator DN25.

Maintenance instructions

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

Disposal instructions

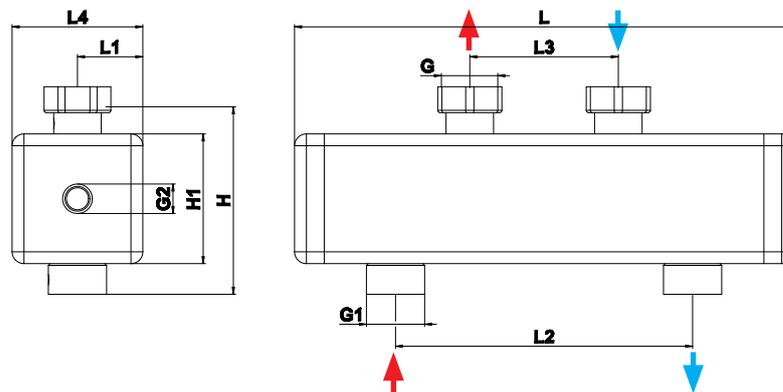
The disposal of the HERZ PUMPFIX hydraulic separators must not endanger health or environment. Users have to follow the national legal regulations for proper disposal of the HERZ PUMPFIX distributors.

HERZ PUMPFIX

Hydraulic separator DN 25

Datasheet 1 4513 53

☑ Dimensions



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

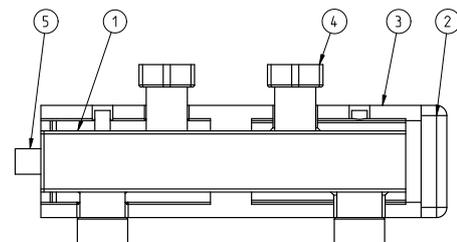
*Internal thread (free turning nut)

**external thread

***Internal thread

☑ Components of HERZ PUMPFIX Hydraulic separator

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



☑ Material and construction

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

☑ Operating data

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

☑ Medium

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

HERZ PUMPFIX

Hydraulic separator DN 32

General information

Description of HERZ hydraulic separator

HERZ PUMPFIX hydraulic separator is high 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 thread connections G1/2" for drain valve and sensor.

Application

HERZ hydraulic separator is a compensation chamber that allows independent operation of individual heating circuits. It is used in cases where the primary circulation pumps affect one or more secondary circuits. This solves the problems related to the flows and pressures of individual circuits. The hydraulic separator DN32 is installed vertically before the PUMPFIX distributor.

Maintenance instructions

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

Disposal instructions

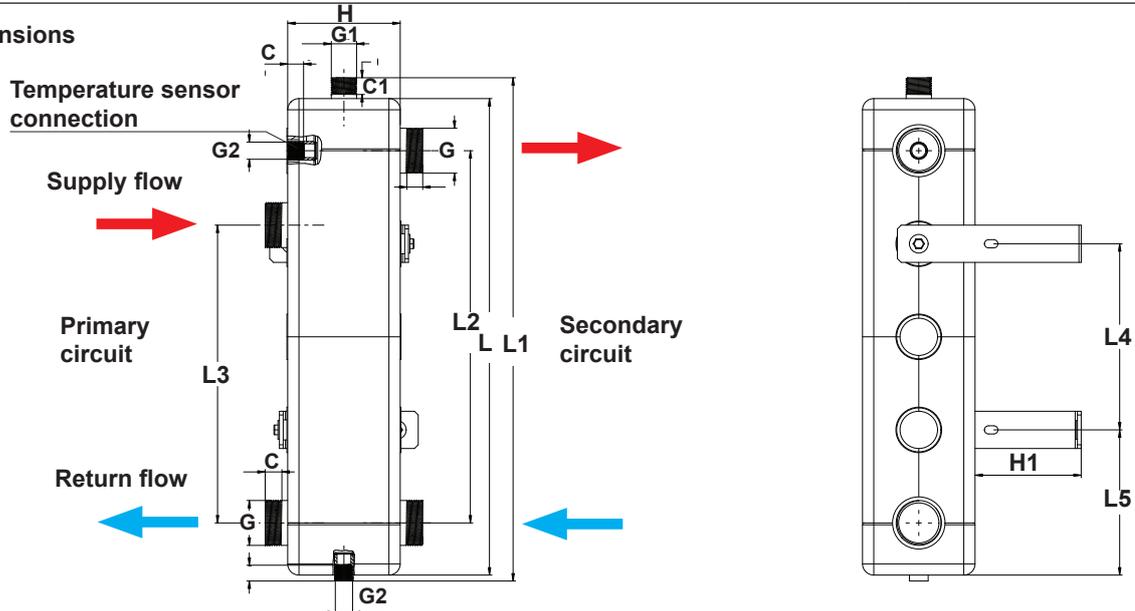
The disposal of the HERZ PUMPFIX hydraulic separator must not endanger health or environment. Users have to follow the national legal regulations for proper disposal of the HERZ PUMPFIX hydraulic separator.

HERZ PUMPFIX

Hydraulic separator DN 32

Datasheet 1 4513 54

☑ Dimensions



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

*Internal thread
**external thread

☑ Components of HERZ PUMPFIX Hydraulic separator

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

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

☑ Material and construction

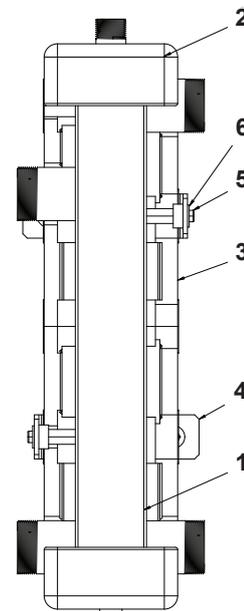
| | |
|-------------------|-----------------------------|
| Housing | Powder coated steel (black) |
| Insulation | EPP |
| Flat sealing | EPDM |
| Mounting brackets | Galvanized steel |

☑ Operating data

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

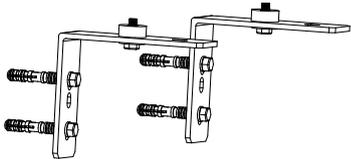
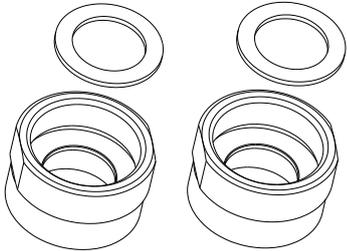
☑ Medium

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



HERZ PUMPFIX

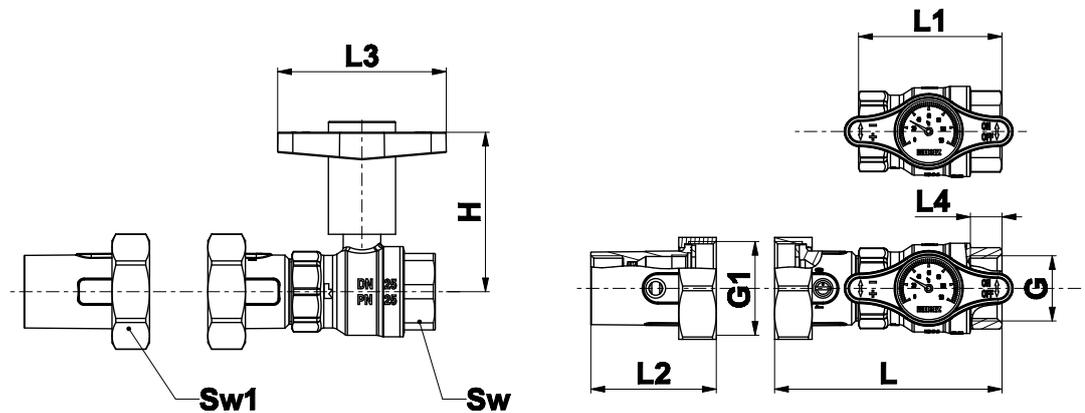
Distributor accessories

| Illustration | Description | Item number |
|---|---|---|
|  | <p style="text-align: center;">Wall fixing set</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 style="text-align: center;">DN25 1 4513 93</p> <p style="text-align: center;">DN32 1 4513 94</p> |
|  | <p style="text-align: center;">Adapter connection set</p> <p>Set allows mounting of pump group DN25 on distributor DN32 or on hydraulic separator DN25. Set contains two flat seals.</p> <p style="text-align: center;">Adapter: Material: turned brass acc. to EN12164 Upper internal thread: 1-1/4" acc. to ISO 228 Lower external thread: 1-1/2" acc. to ISO 228</p> <p style="text-align: center;">Flat seal: Material: EPDM</p> | <p style="text-align: center;">1 4510 51</p> |
|  | <p style="text-align: center;">Flat seals set for PUMPFIX system DN25</p> <p>Set is equipped with two flat seals for sealing between distributor DN25 and pump group DN25</p> <p style="text-align: center;">Material: EPDM</p> | <p style="text-align: center;">1 4510 52</p> |
|  | <p style="text-align: center;">Flat seals set for PUMPFIX system DN32</p> <p>Set is equipped with two flat seals for sealing between distributor DN32 and pump group DN32</p> <p style="text-align: center;">Material: EPDM</p> | <p style="text-align: center;">1 4510 53</p> |

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 |
| Connectors: | threads acc. to ISO 228 |
| Ball: | forged brass acc. to EN 12165, hard chrome plated |
| Spindle: | turned brass acc. to EN 12164 |
| 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: | 200 mm 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.

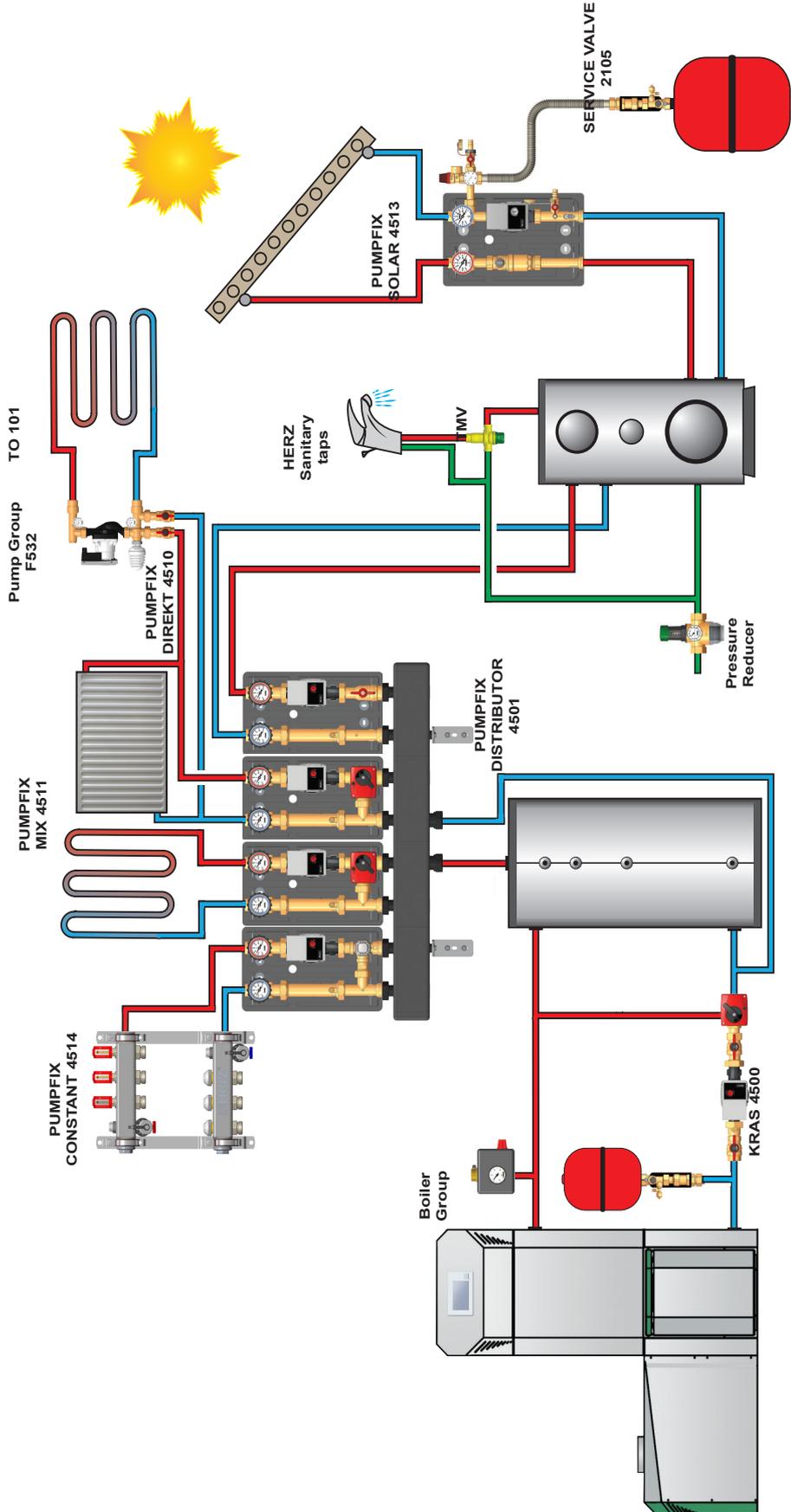
☑ Assembly instructions

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

According to EN 806-5 (point 6. Operation) ball 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 should be closed and opened periodically (at least twice a year, every 6 months). This prevents the ball valve from blocking, reduces sediment deposition and reduces the possibility of corrosion inside the valve.

☑ Example of system with HERZ products



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