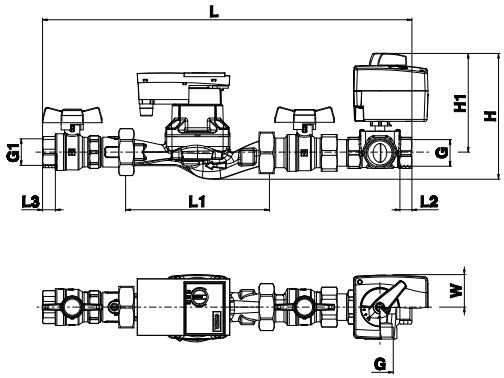
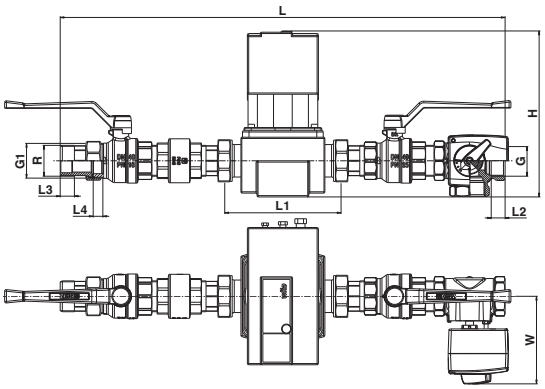
HERZ - Return temperature set

Datasheet **1 4500 XX** , Issue 1118

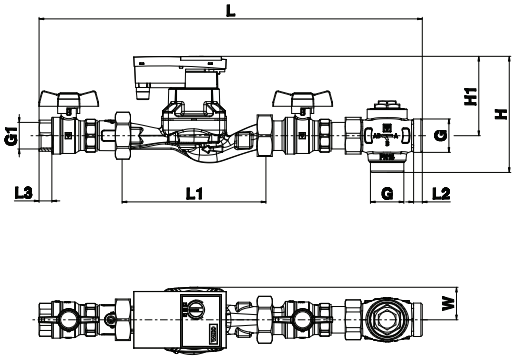
Dimensions



EUROMIX: 1 **4500** 92 (94)



EUROMIX: 1 **2671** 34 (35)



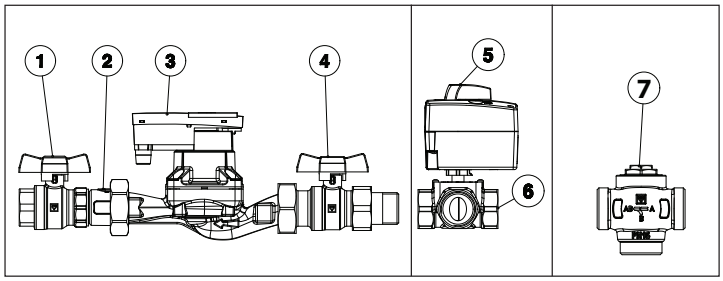
TEPLOMIX:1 **4500** 73 (74)

Order Nr.	DN	Pump	kW	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	G* [in]	G1* [in]	G2** [in]	R** [in]	H [mm]	H1 [mm]	W [mm]
1 **4500** 92	20	Wilo Yonos PARA RS 25/6 RKA 180	20	426	180	13	11	-	¾"	¾"	-	-	148	114	41
1 **4500** 93	25	Wilo Yonos PARA RS 25/6 RKA 180	35	465	180	15	16	-	1"	1"	-	-	158	124	41
1 **4500** 94	32	Wilo Yonos PARA RS 30/6 RKA 180	60	508	180	18,8	18	-	1¼"	1¼"	-	-	162	128	41
XXXXXXX	40	Wilo Stratos PARA 30/1-12	100	689	180	21,4	22	15	1½"	-	1¾"	1½"	257	201	136
1 **4500** 95	40	Wilo Stratos 40/1-12	150	754	230	21,4	22	15	1½"	-	1¾"	1½"	334	250	136
1 **4500** 73	25	Wilo Yonos PARA RS 25/6 RKA 180	35	474	180	11	16	-	1"	1¼"	-	-	145	99	41
1 **4500** 74	32	Wilo Yonos PARA RS 30/6 RKA 180	60	504	180	11	17	-	1¼"	1½"	-	-	145	99	41

*internal thread **external thread

Components of HERZ Return temperature set

1. Ball valve
2. Check valve
3. Pump
4. Ball valve
5. 1 **7712** 63 3-Point actuator
6. 1 **2137** 0X 3-Way mixing valve
7. 1 **7766** 1X 3-Way mixing valve



EUROMIX TEPLOMIX

Material and construction

Ball valve:	forged brass acc. to EN 12165; CW 617N
Ball:	forged brass acc. to EN 12165, hard crome plated, CW617N
Spindle:	turned brass acc. to EN12164, CW614N
Spindle seals:	PTFE
Ball seals:	PTFE
Internal threaded connectors:	acc. to ISO 228-1
External threaded connectors:	acc. to ISO 7-1
Check valve:	forged brass acc. to EN 12165; CW 617N
Gaskets:	EPDM

Operating data

Operating pressure:	10 bar without pump, with pump see pump characteristics
Min. operating temperature:	0°C (water 0,5°C)
Max. operating temperature:	110°C
Max. short-term temperature load:	120°C

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.

Application

The HERZ- Return temperature set is used in heating systems in industrial and household areas. With connection of the boiler and the buffer tank, it is necessary to install the return temperature set for protection of the boiler protecting against too low back flow temperature entering the boiler.
Low temperature of boiler backflow should be avoided because of two reasons:

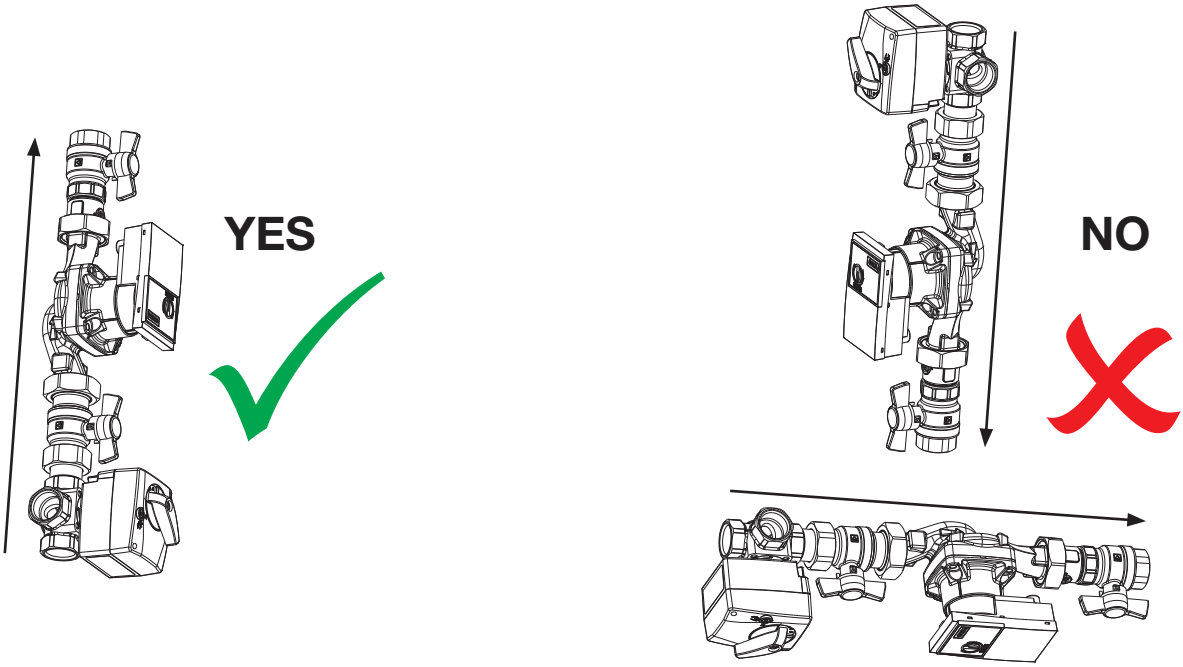
- It prevents condensation and prolongs boiler life because the return to the boiler has the correct temperature.
- Provides the necessary operating temperature of the boiler and thus the proper operation of the heating system and filling of the buffer tank

The advantage of using a standard solution return temperature set from HERZ is precise regulation and suitable adjustment of back flow to the boiler. The installation of circulation pumps of different manufacturers and types is possible.

Assembly

HERZ-Return temperature set must be assembled by trained specialist staff (licensed specialist companies – installers). All engineering standards and recognised regulations must be adhered to by these specialist staff. This set may only be used in accordance with return temperature set of the appropriate HERZ biomass boiler. Use the enclosed documentation for the actuator as well as the pump. Following assembly, the set must be checked for water-tightness by the installer. The correct installation position of the valve insert must be checked. The drawings correspond to a schematic representation and not to the installation situation!

Allowed mounting positions



Maintenance instructions

If the product is used properly, no special maintenance is required. The circulation pump can be isolated by closing the ball valves and may therefore be maintained without draining the system. Repairs on the device must be carried out by authorized persons only. It is recommended to close and open the ball valve at least twice a year.

Disposal instructions

The disposal of HERZ Return temperature set must not endanger the health or the enviroment. National legal regulations for proper disposal of the HERZ Back flow set have to been followed.

HERZ Backflow set

Actuators used in backflow sets

General information

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

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

Manual operation possible by lever:

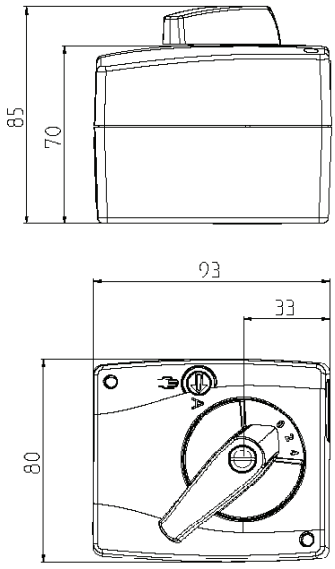
Press for temporary disengagement, permanent gearing disengagement by rotary switch on the housing to the manual position-

Safety note:

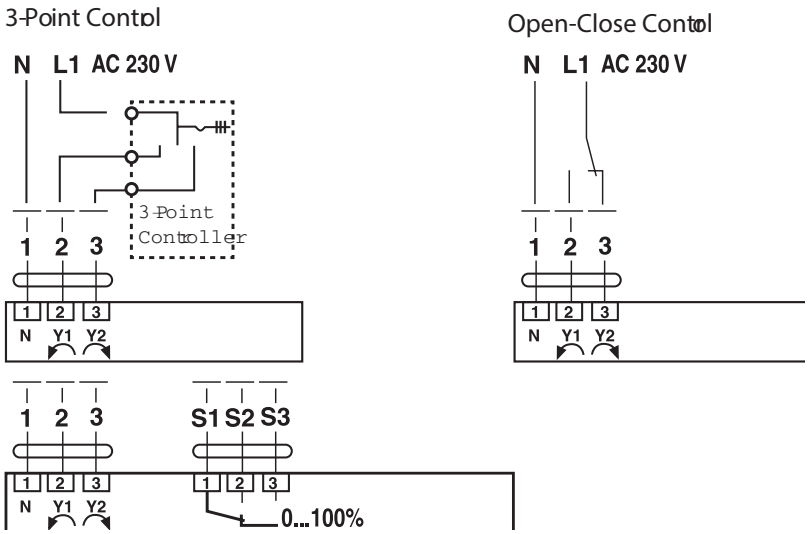
The actuator may only be opened at the factory. It contains no components which can be replaced or repaired by the user.

Technical data

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



Wiring diagram

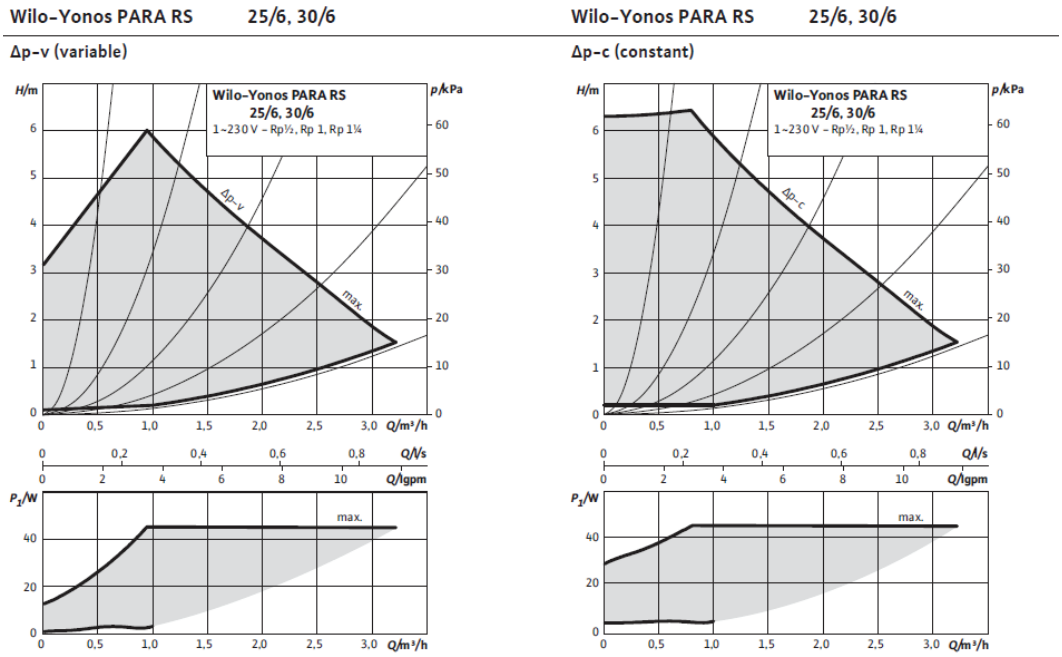


HERZ Backflow set

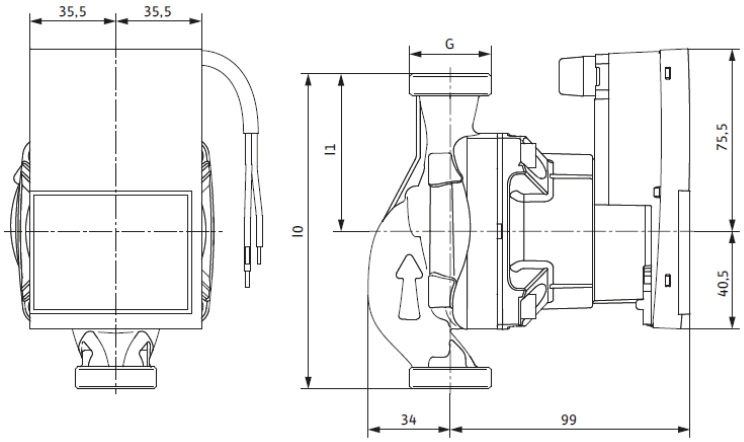
Circulation pumps used in backflow sets

General information

Pump characteristic Wilo Yonos PARA RS



Pump dimensions



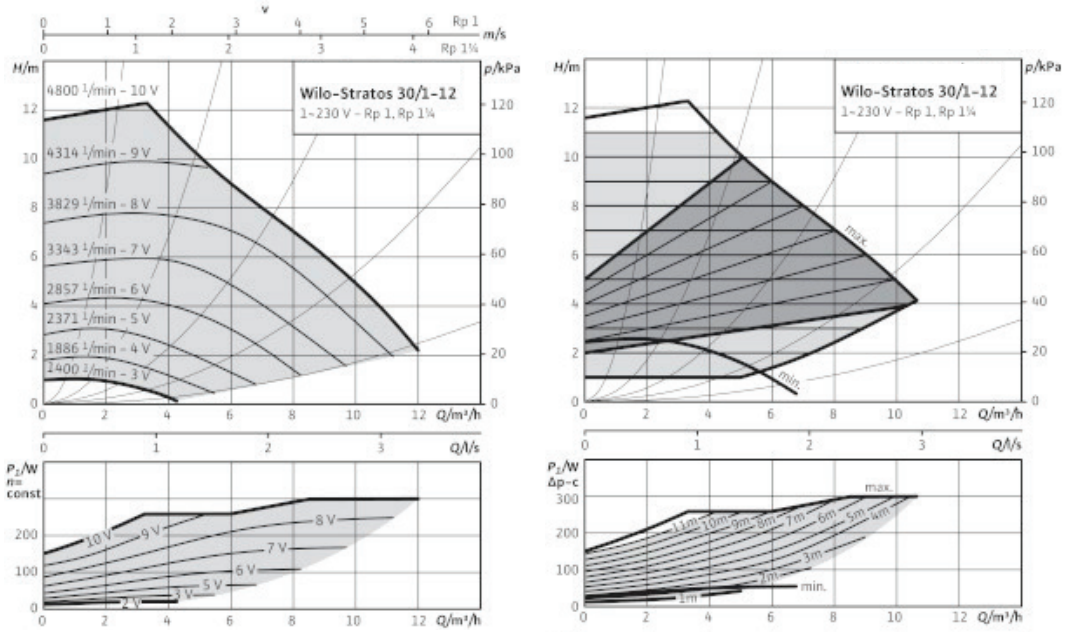
DN	G	l0	l1
25	1½“	180	90
32	2“	180	90

Pump data

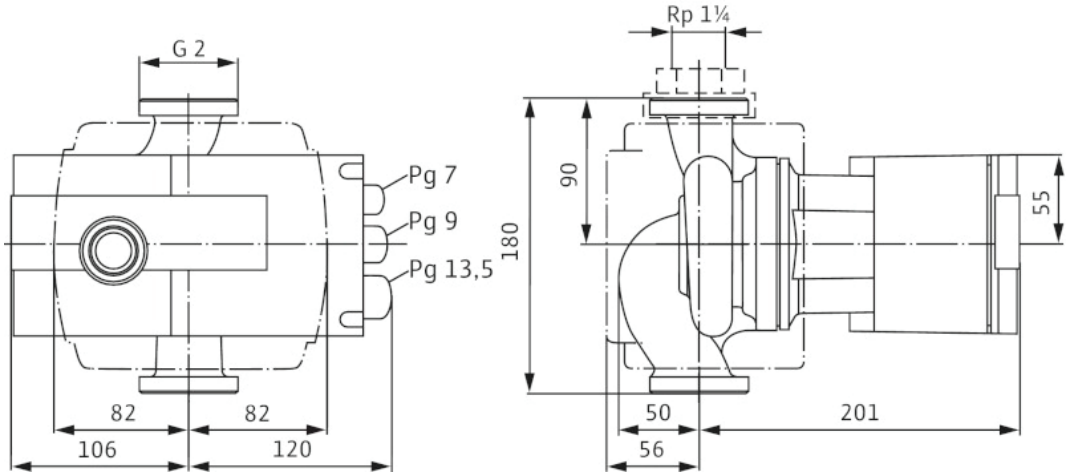
Type:	DN 25: Wilo Yonos PARA RS 25/6 RKA 180 DN 32: Wilo Yonos PARA RS 30/6 RKA 180
Energy Efficiency Index (EEI):	≤ 0,20
Max. delivery head:	6.2 m
Max. volume flow:	3.3 m3/h
Max. operating temperature:	110°C
Max. static pressure:	6 bar
Mains connection:	1~230 V +10%/-15%, 50/60 Hz (IEC 60038 standard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

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

Pump characteristic Wilo Stratos 30/1-12



Pump dimensions

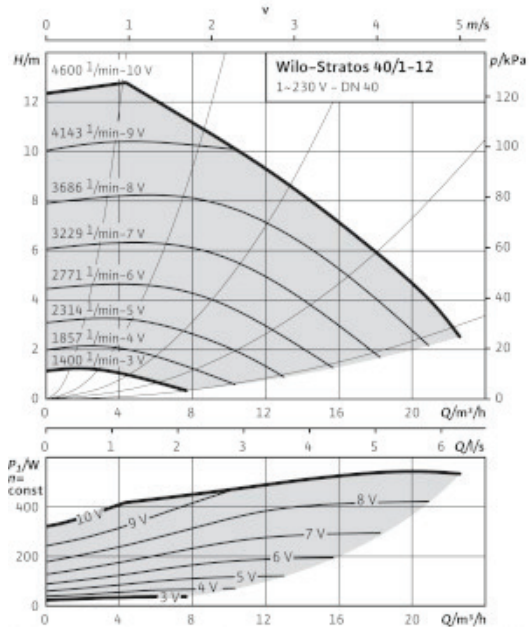


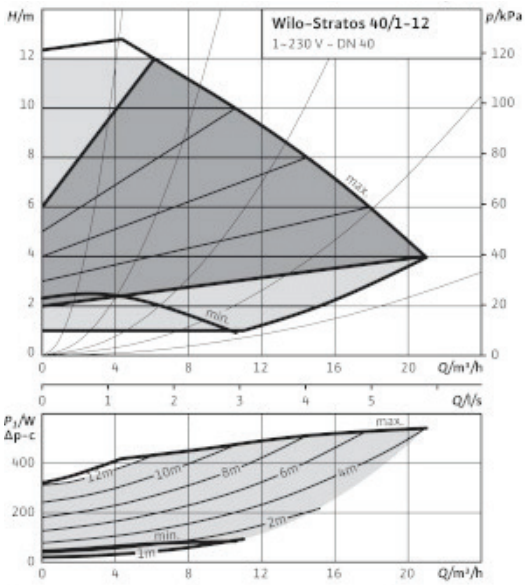
Pump data

Type:	Wilo-Stratos 30/1-12
Energy Efficiency Index (EEI):	≤ 0,20
Max. delivery head:	12 m
Max. volume flow:	12 m3/h
Max. operating temperature:	110°C
Max. static pressure:	10 bar
Mains connection:	1~230 V, 50/60 Hz
Protection class:	IPx4D
Insulation class:	F

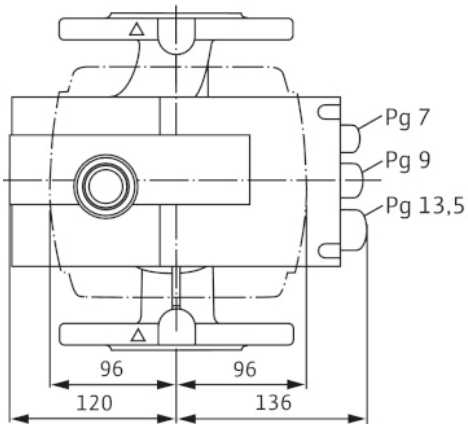
Minimum suction head at suction port to avoid cavitation at water pumping temperature
Minimum suction head at 50/95/110°C: 3/10/16 m

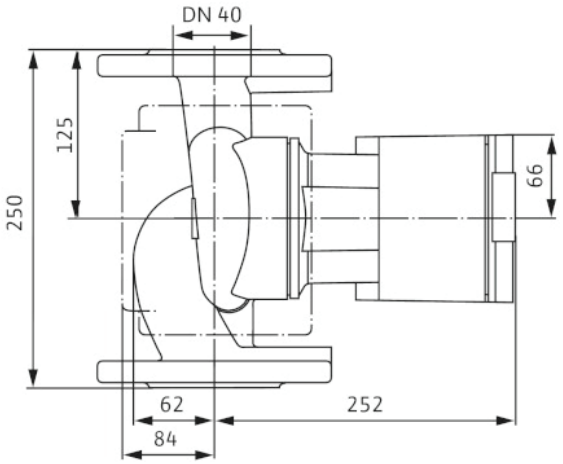
Pump characteristic Wilo Stratos 40/1-12





Pump dimensions



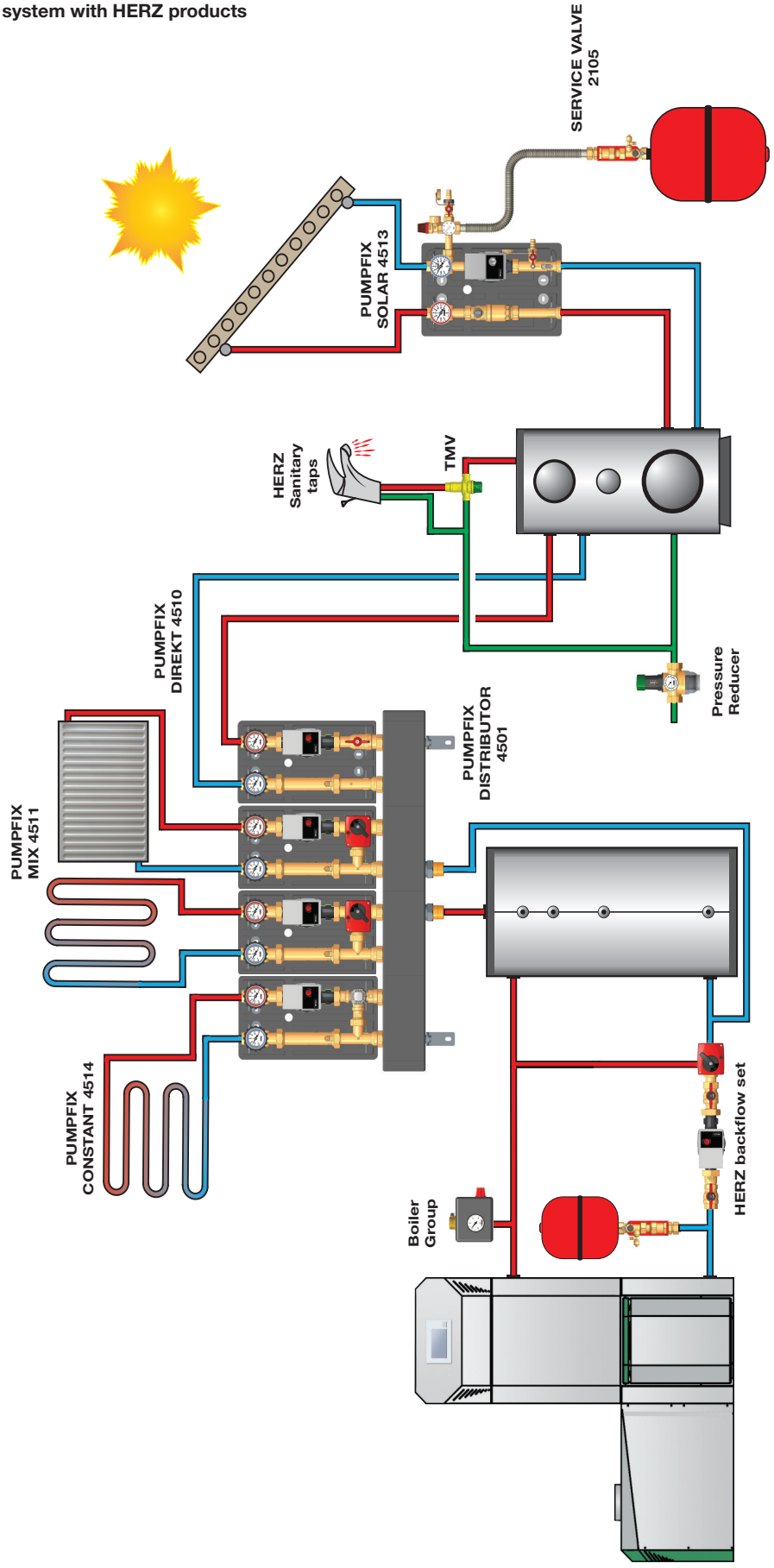


Pump data

Type:	Wilo-Stratos 40/1-12
Energy Efficiency Index (EEI):	≤ 0,20
Max. delivery head:	13 m
Max. volume flow:	23 m3/h
Max. operating temperature:	110°C
Max. static pressure:	6/10 bar
Mains connection:	1~230 V, 50/60 Hz
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: 5/12/18 m

Example of system with HERZ products



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