



PUMP STATIONS / LOAD UNITS FOR HEATING SYSTEMS



CONTENTS

	Single-line pump stations for unmixed heating circuits
4	CSE OTS, insulated
6	CS KK, uninsulated
	Single-line pump stations for mixed heating circuits
8	CSE MIX with actuator
9	CSE MIX-BP without actuator
	Twin-line pump stations for unmixed heating circuits
10	CSE2
	Twin-line pump stations for mixed heating circuits
11	CSE2 MIX with actuator
	CSE2 MIX-BP without actuator
	Load units for heating systems with solid fuel boiler
12	RegulusBIO
	Pump stations for large boiler rooms
16	CS2 OTS 5/4
17	CS2 MIX 5/4
18	Manifolds and pressure balancers
24	Circulation pumps
29	Actuators
30	Accessories to pump stations / load units

SINGLE-LINE PUMP STATIONS FOR UNMIXED HEATING CIRCUITS

CSE OTS G Pump Stations

Insulated single-line pump station with high efficiency Grundfos circulation pump, ball valves and thermometer.



TECHNICAL DATA

CONNECTIONS	1" F
FLUID WORKING TEMPERATURE	5 - 95 °C
DIMENSIONS	325 x 140 x 150 mm

COMPONENTS

- Grundfos circulation pump
- Power and signal cables
- Neat insulation for reduced heat loss
- 2 ball valves
- Check valve (codes 19088, 17922)
- Magnet Filterball (code 17922)
- Thermometer



MODELS	CSE OTS G60	CSE OTS ZV G60	CSE OTS MFB+ZV G75
PUMP	UPM3 FLEX AS 25-60	UPM3 FLEX AS 25-60	UPM3 FLEX AS 25-75
PUMP CONTROL	ON/OFF (I,II,II) or PWM-A	ON/OFF (I,II,II) or PWM-A	ON/OFF (I,II,II) or PWM-A
MAX. HEAD	6m	6m	7.5m
CODE	19085	19088	17922

SINGLE-LINE PUMP STATIONS FOR UNMIXED HEATING CIRCUITS

CSE OTS W Pump Stations

Insulated single-line pump station with high efficiency Wilo circulation pump, ball valves and thermometer.



TECHNICAL DATA

CONNECTIONS	1" F
FLUID WORKING TEMPERATURE	5 - 95 °C
DIMENSIONS	325 x 140 x 150 mm

COMPONENTS

- Wilo circulation pump
- Pump connection cable
- Neat insulation for reduced heat loss
- 2 ball valves
- Check valve (codes 17979, 17818, 18127)
- Magnet Filterball (code 17818)
- Thermometer



MODELS	CSE OTS W6	CSE OTS W8	CSE OTS ZV W8	CSE OTS MFB+ZV W8	CSE OTS ZV W-PWM
PUMP	PARA 25/6 SC	PARA 25/8 SC	PARA 25/8 SC	PARA 25/8 SC	PARA 25/8 iPWM1
PUMP CONTROL	ON/OFF (Δp -c / Δp -v / I,II,III)	ON/OFF (Δp -c / Δp -v / I,II,III)	ON/OFF (Δp -c / Δp -v / I,II,III)	ON/OFF (Δp -c / Δp -v / I,II,III)	ON/OFF (max. speed) or PWM
MAX. HEAD	6.7m	8.4m	8.4m	8.4m	8.4m
CODE	18611	19636	17979	17818	18127

SINGLE-LINE PUMP STATIONS FOR UNMIXED HEATING CIRCUITS

CS KK W6 Pump Stations

Uninsulated single-line pump station, with high efficiency Wilo circulation pump and 2 ball valves with unions.



TECHNICAL DATA

CONNECTIONS	1" F
FLUID WORKING TEMPERATURE	5 - 95 °C
DIMENSIONS	275 x 120 x 130 mm

COMPONENTS

- Wilo circulation pump
- Pump connection cable
- 2 ball valves with unions
- Thermometer (code 20115)

MODELS

MODELS	CS KK W6	CS KK W6 T
PUMP	PARA 25/6 SC	PARA 25/6 SC
PUMP CONTROL	ON/OFF (Δp -c / Δp -v / I,II,II)	ON/OFF (Δp -c / Δp -v / I,II,II)
MAX. HEAD	6.7m	6.7m
CODE	18563	20115



SINGLE-LINE PUMP STATIONS FOR MIXED HEATING CIRCUITS

CSE MIX G Pump Station with mixing

Insulated single-line pump station with a high efficiency Grundfos circulation pump designed to control temperature of a mixed circuit or of a return line to solid-fuel boiler through an external controller. The version designed for the right-hand pipe, possible to convert to a left-hand pipe version.



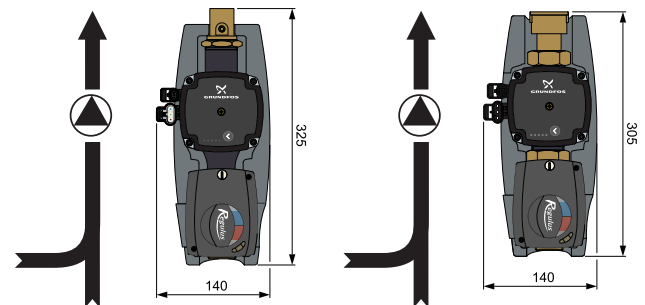
TECHNICAL DATA

FLUID WORKING TEMPERATURE	5 - 95 °C
MIXING VALVE ACTUATOR	3-point control, 120 s, 5 Nm
POWER SUPPLY	230 V, 50 Hz

COMPONENTS

- Grundfos circulation pump
- Power and signal cables
- Mixing valve
- Mixing valve actuator with cable
- Neat insulation for reduced heat loss

DIMENSIONS



MODELS

	CSE MIX G 1M	CSE MIX G 1F	CSE MIX G 5/4F
CONNECTIONS	1" (2x M, 1x F)*	1" (3x F)	5/4" (3x F)
PUMP	UPM3 AUTO 25-60	UPM3 AUTO 25-60	UPM3 FLEX AS 25-75
PUMP CONTROL	ON/OFF (Δp -c / Δp -v / I,II,III)	ON/OFF (Δp -c / Δp -v / I,II,III)	ON/OFF (I,II,III) or PWM-A
MAX. HEAD	6 m	6 m	7.5 m
KVS OF THE MIXING VALVE	6.3 m ³ /h	10 m ³ /h	16 m ³ /h
CODE	19110	19106	16402
CODE OF PUMP STATION WITHOUT ACTUATOR	-	19102	18753

* the inner thread is located at the outlet end of the pump

Kindly select actuators on page 25.

SINGLE-LINE PUMP STATIONS FOR MIXED HEATING CIRCUITS



CSE MIX W Pump Stations with mixing

Insulated single-line pump station with a high efficiency Wilo circulation pump designed to control temperature of a mixed circuit or of a return line to solid-fuel boiler through an external controller. The version designed for the right-hand pipe, possible to convert to a left-hand pipe version.

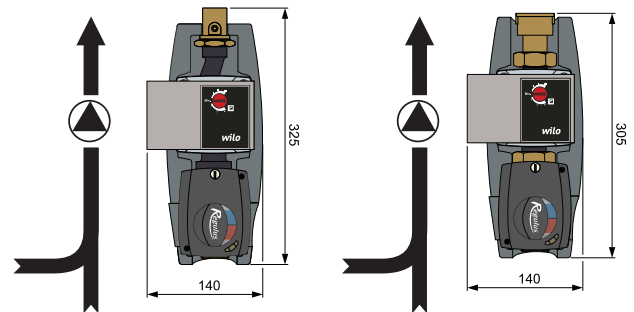
TECHNICAL DATA

FLUID WORKING TEMPERATURE	5 - 95 °C
MIXING VALVE ACTUATOR	3-point control, 120 s, 5 Nm
POWER SUPPLY	230 V, 50 Hz

COMPONENTS

- Wilo circulation pump
- Pump connection cable
- Mixing valve
- Mixing valve actuator with cable
- Neat insulation for reduced heat loss

DIMENSIONS



MODELS

MODELS	CSE MIX W6 1M	CSE MIX W6 1F	CSE MIX W8 1M	CSE MIX W8 5/4F	CSE MIX W-PWM 1F
CONNECTIONS	1" (2x M, 1x F)*	1" (3x F)	1" (2x M, 1x F)*	5/4" (3x F)	1" (3x F)
PUMP	PARA 25/6 SC	PARA 25/6 SC	PARA 25/8 SC	PARA 25/8 SC	PARA 25/8 iPWM1
PUMP CONTROL	ON/OFF (Δp -c / Δp -v / I,II,II)	ON/OFF (Δp -c / Δp -v / I,II,II)	ON/OFF (Δp -c / Δp -v / I,II,II)	ON/OFF (Δp -c / Δp -v / I,II,II)	ON/OFF (max. speed) or PWM1
MAX. HEAD	6.7 m	6.7 m	8.4 m	8.4 m	8.4 m
KVS OF THE MIXING VALVE	6.3 m ³ /h	10 m ³ /h	6.3 m ³ /h	16 m ³ /h	10 m ³ /h
CODE	18730	18317	17980	18524	18128
CODE OF PUMP STATION WITHOUT ACTUATOR	-	18731	-	18732	-
CODE WITH THERMOMETER	-	18553	-	-	-

* the inner thread is located at the outlet end of the pump

Kindly select actuators on page 25.

TWIN-LINE PUMP STATIONS FOR UNMIXED HEATING CIRCUITS

CSE2 F Pump Stations

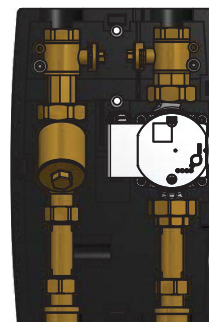
Twin-line pump station with a high-efficiency circulation pump and other well-arranged basic components set in a compact thermoinsulating case. It permits shutting off heating circuits, temperature control, placing controller temperature sensors and easy servicing. A filter with magnet is included which makes it suitable also for older systems with steel pipes. A version designed for the right-hand outlet, conversion not possible. They are intended for unmixed heating circuits, incl. circuits with thermostatic heads. Their installation is possible on a wall, thermal store or a manifold.

TECHNICAL DATA

CONNECTIONS	1" F
FLUID WORKING TEMPERATURE	5 - 95 °C
PIPE PITCH	125 mm
DIMENSIONS	360 x 133 x 245 mm



In order to clean the filter, close the ball valve above the filter, and the check valve located under the filter will close the outlet from the filter.



COMPONENTS

FLOW:

- 1" F connection fitting with 1" Fu union nut.
- High efficiency circulation pump.
- DN 20 ball valve with union nut and a sensor sheath.
- Thermometer 0-120 °C.

RETURN:

- 1" F connection fitting with 1" Fu union nut.
- Check valve
- Filter with a large strainer surface area and magnet.
- Ball valve with sheath for sensor.
- Thermometer 0-120 °C.

MODELS	CSE2 F G75 1F	CSE2 F G60 1F	CSE2 F W6	CSE2 F W8
PUMP	Grundfos UPM3 FLEX AS 25-75	Grundfos UPM3 AUTO 25-60	Wilo PARA 25/6 SC	Wilo PARA 25/8 SC
PUMP CONTROL	ON/OFF (I,II,II) or PWM-A	ON/OFF ($\Delta p-c / \Delta p-v / I,II,II$)	ON/OFF ($\Delta p-c / \Delta p-v / I,II,II$)	ON/OFF ($\Delta p-c / \Delta p-v / I,II,II$)
MAX. HEAD	7.5m	6 m	6.7m	8.4 m
CODE	17487	19107	18312	17936

TWIN-LINE PUMP STATIONS FOR MIXED HEATING CIRCUITS

CSE2 MIX F Pump Stations with Mixing

Twin-line pump station with a high-efficiency circulation pump, **mixing valve with (without) actuator** and with other well-arranged basic components set in a compact thermoinsulating case. It permits shutting off heating circuits, temperature control, placing controller temperature sensors and easy servicing. A filter with magnet is included for which makes it suitable also for older systems with steel pipes. A version designed for the right-hand outlet, conversion not possible. They are intended for mixed heating circuits. Their installation is possible on a wall, thermal store or a manifold.

COMPONENTS

FLOW:

- 1" F connection fitting with 1" Fu union nut.
- Mixing valve with / without electric actuator.
- High efficiency circulation pump.
- DN 20 ball valve with union nut and a sensor sheath.
- Thermometer 0-120 °C.

RETURN:

- 1" F connection fitting with 1" Fu union nut.
- Check valve
- Filter with a large strainer surface area and magnet.
- Ball valve with sheath for sensor.
- Thermometer 0-120 °C.

MODELS	CSE2 MIX F G75 1F	CSE2 MIX F G60 1F	CSE2 MIX F W6	CSE2 MIX F W8
PUMP	Grundfos UPM3 FLEX AS 25-75	Grundfos UPM3 AUTO 25-60	Wilo PARA 25/6 SC	Wilo PARA 25/8 SC
PUMP CONTROL	ON/OFF (I,II,II) or PWM-A	ON/OFF (Δp -c / Δp -v / I,II,II)	ON/OFF (Δp -c / Δp -v / I,II,II)	ON/OFF (Δp -c / Δp -v / I,II,II)
MAX. HEAD	7.5m	6m	6.7m	8.4m
KVS OF THE MIXING VALVE	6.3 m ³ /h	6.3 m ³ /h	6.3 m ³ /h	6.3 m ³ /h
CODE	17484	19103	18313	17937
CODE OF PUMP STATION WITHOUT ACTUATOR	18082	19111	18314	17917

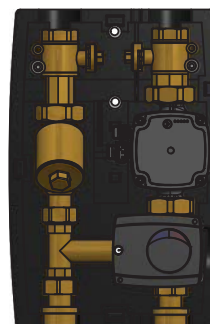
Actuators for mixing valves can be found on page 25.

TECHNICAL DATA

CONNECTIONS	1" F
FLUID WORKING TEMPERATURE	5 - 95 °C
PIPE PITCH	125 mm
DIMENSIONS	360 x 133 x 245 mm
AVC05 ACTUATOR	
SHIFT TIME	120 s
TORQUE	5 Nm
SUPPLY VOLTAGE	230 V 50 Hz



In order to clean the filter, close the ball valve above the filter, and the check valve located under the filter will close the outlet from the filter.



LOAD UNITS FOR HEATING SYSTEMS WITH A SOLID FUEL BOILER



RegulusBIO 55 MIX W-PWM 1F TRS6K Load Unit for heating systems with solid fuel (biomass) boiler, thermal store and integrated controller for entire system

RegulusBIO 55 MIX W-PWM 1F TRS6K Load Unit is designed for heating systems with a solid fuel boiler with a thermal store and possible DHW heating. Heating water is mixed by an electric actuated 3-way mixing valve, the return water temperature to the boiler is kept at the min. temperature of 55 °C by the load valve. The boiler heat surplus is stored into a thermal store and used later automatically after the boiler goes out. The integrated controller controls the operation of the whole system. The load unit is completely internally wired and equipped with a power cord. The system can be controlled by a room unit with a touch screen (to be ordered separately), or with a WiFi connection and Internet access via a mobile phone application.

TECHNICAL DATA

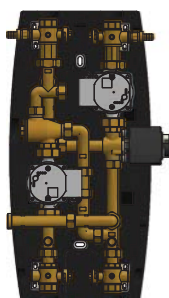
CONNECTIONS	1" F
FLUID WORKING TEMPERATURE	5 - 95 °C
NOMINAL BOILER INLET TEMPERATURE	55 °C
POWER SUPPLY	230 V, 50 Hz
PIPE PITCH	125 mm
DIMENSIONS	640 x 250 x 350 mm
PUMP	Wilco Para 25/8 iPWM1
PUMP CONTROL	PWM1 (heating) + flowrate info
MAX. HEAD	8.4 m
MAX. BOILER OUTPUT	40 kW
CODE	17499

Possible variants on order:

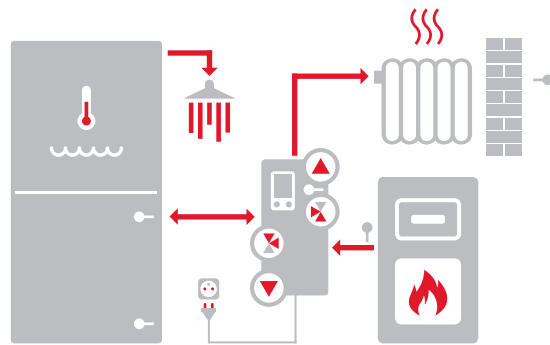
- connections 3/4", 5/4", Cu22, Cu28.
- return water temperature 45, 50, 60, 65 and 70 °C
- safety valve in the range of 1.5-6 bar

COMPONENTS

- Heating system pump
- Boiler pump
- TSV3B load valve
- Three-way mixing valve for heating system
- Mixing valve actuator
- TRS6 K controller
- Power cord and complete electrical wiring of the entire pump station
- 2 ball valves and 2 drain valves for shutting off and draining heating system
- 2 ball valves for shutting off connecting piping of thermal store (enclosed)
- 2 ball valves for isolating the boiler
- 4 thermometers



CONNECTION TO SYSTEM



ACCESSORIES

Room temperature sensor

Code: 16167

Ball valve w. filter and magnet
MAGNET FILTERBALL 1"

Code: 17405

Digital room unit w. touchscreen

Code: 17150

Digital room unit w. touchscreen and WiFi connection

Code: 18126

LOAD UNITS FOR HEATING SYSTEMS WITH A SOLID FUEL BOILER

RegulusBIO 55 MIX-BP G75 1F Load Unit for heating systems with solid fuel (biomass) boiler and thermal store



RegulusBIO 55 MIX-BP G75 1F Load Unit is designed for heating systems with a solid fuel boiler with a thermal store, with the possibility of DHW heating. Water to the heating system is mixed by a three-way mixing valve, the temperature of the return water to the boiler is kept at a minimum temperature of 55° C by a load valve.

Excess boiler output is stored in the thermal store. The heating output is controlled by an external controller by controlling the actuated mixing valve. The actuator and controller are not included in supply.

TECHNICAL DATA

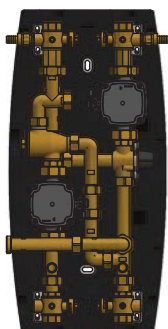
CONNECTIONS	1" F
FLUID WORKING TEMPERATURE	5 - 95 °C
NOMINAL BOILER INLET TEMPERATURE	55 °C
POWER SUPPLY	230 V, 50 Hz
PIPE PITCH	125 mm
DIMENSIONS	640 x 250 x 350 mm
PUMP	Grundfos UPM3 25-75
PUMP CONTROL	ON/OFF (I, II, III) or PWM-A (heating)
MAX. HEAD	7.5 m
MAX. BOILER OUTPUT	38 kW
CODE	17553

Possible variants on order:

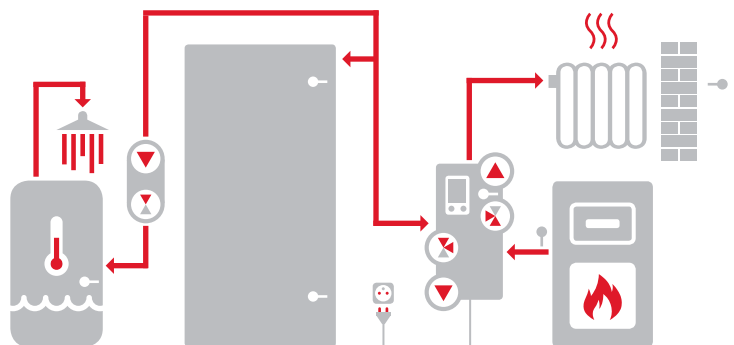
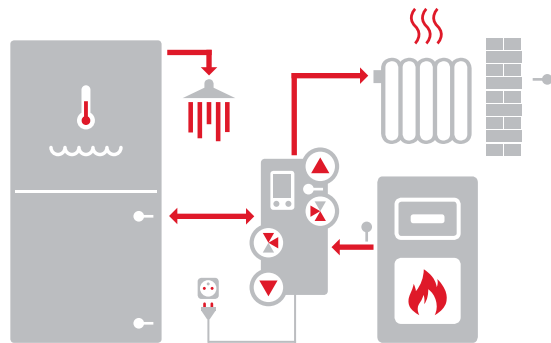
- connections 3/4", 5/4", Cu22, Cu28.
- return water temperature 45, 50, 60, 65 and 70 °C
- safety valve in the range of 1.5-6 bar
- mixing valve actuator, optionally adjustable to a constant temperature or with weather compensation control

COMPONENTS

- Heating system pump incl. power and signal cables
- Boiler system pump incl. power cable
- TSV3B load valve
- Three-way mixing valve for heating system
- 2 ball valves and 2 drain valves for shutting off and draining heating system
- 2 ball valves for shutting off connecting piping of thermal store (enclosed)
- 2 ball valves for isolating the boiler
- 4 thermometers



CONNECTION TO SYSTEM



LOAD UNITS FOR HEATING SYSTEMS WITH A SOLID FUEL BOILER



RegulusBIO 55 G75 1F Load Unit for heating systems with solid fuel (biomass) boiler

RegulusBIO 55 G75 1F Load Unit is designed for solid fuel boilers without a thermal store, with the possibility of DHW heating. Water to the heating system is mixed to a temperature corresponding to the boiler output. The temperature of the return water to the boiler is kept at the minimum temperature of 55° C by the load valve. The heating output is controlled by controlling the boiler output – e.g. by switching a pellet fired boiler.

TECHNICAL DATA

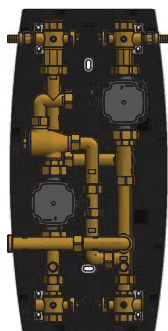
CONNECTIONS	1" F
FLUID WORKING TEMPERATURE	5 - 95 °C
NOMINAL BOILER INLET TEMPERATURE	55 °C
POWER SUPPLY	230 V, 50 Hz
PIPE PITCH	125 mm
DIMENSIONS	640 x 250 x 350 mm
PUMP	Grundfos UPM3 25-75
PUMP CONTROL	ON/OFF (I, II, III) or PWM-A (heating)
MAX. HEAD	7.5 m
MAX. BOILER OUTPUT	38 kW
CODE	17502

Possible variants on order:

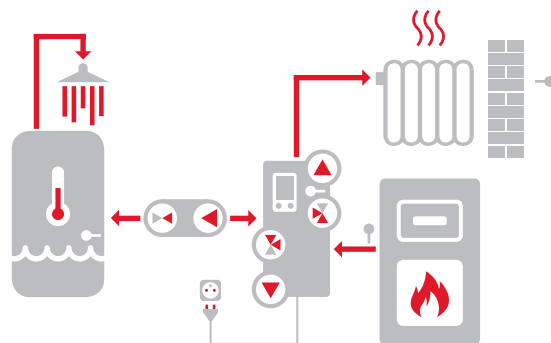
- connections 3/4", 5/4", Cu22, Cu28.
- return water temperature 45, 50, 60, 65 and 70 °C
- safety valve in the range of 1.5-6 bar

COMPONENTS

- Heating system pump incl. power and signal cables
- Boiler system pump incl. power cable
- TSV3B load valve
- 2 ball valves and 2 drain valves for shutting off and draining heating system
- 2 ball valves for shutting off connecting piping of thermal store (enclosed)
- 2 ball valves for isolating the boiler
- 4 thermometers



CONNECTION TO SYSTEM



Other load units for boilers and fireplaces, RegulusRGMAT types, can be found in the catalogue Protection and Control of Solid Fuel Boilers.

PUMP STATIONS FOR LARGE BOILER ROOMS

CS2 OTS MFB W10 5/4F Pump Stations

Pump station for larger boiler rooms with Wilo Yonos MAXO pump and ball valves. A ball valve with filter and magnet is fitted in the return piping. This pump station is suitable to be connected to HV 80 manifolds, for unmixed heating circuits with or without thermostatic valves.

CODE: 17820



TECHNICAL DATA

MAX. PRESSURE	10 bar
MAX. TEMPERATURE	110 °C
CONNECTIONS	5/4" F
DIMENSIONS	220 x 415 x 130 mm

COMPONENTS

FLOW:

- 5/4" connection fitting with union nut
- 5/4" ball valve
- Wilo Yonos MAXO 25/0.5-10 high efficiency circulation pump
- 5/4" ball valve

RETURN:

- 5/4" connection fitting with union nut
- 5/4" Magnet Filterball

PUMP STATIONS FOR LARGE BOILER ROOMS

CS2 MIX ZV W10 5/4F Pump Stations with mixing

Pump station for larger boiler rooms with Wilo Yonos MAXO circulation pump, mixing valve with 3-point control actuator, check valve and ball valves. to be used with HV 80 manifolds. This pump station is suitable to be connected to HV 80 manifolds, for mixed heating circuits.



TECHNICAL DATA

MAX. PRESSURE	10 bar
MAX. TEMPERATURE	110 °C
CONNECTIONS	5/4" F
PIPE PITCH	125 mm
DIMENSIONS	200 x 560 x 235 mm

POHON AVC05

SHIFT TIME	120 s
TORQUE	5 Nm
POWER SUPPLY	230 V 50 Hz
IP RATING	IP 42

COMPONENTS

FLOW:

- 5/4" connection fitting with union nut
- Mixing valve (Kvs=16 m³/h) with electric actuator
- Wilo Yonos MAXO 25/0.5-10 high efficiency circulation pump
- 5/4" ball valve

RETURN:

- 5/4" connection fitting with union nut
- Check valve
- 5/4" ball valve (17267) or 5/4" Magnet Filterball (17819)

TYPES



CS2 MIX ZV W10 5/4F
pump station
CODE: 17267



CS2 MIX MFB+ZV W10 5/4F
pump station
CODE: 17819

MANIFOLDS AND PRESSURE BALANCERS



HV 60/125 Manifolds / Collectors for 2-3 heating circuits

Insulated manifolds, to connect two or three 1" heating circuits.

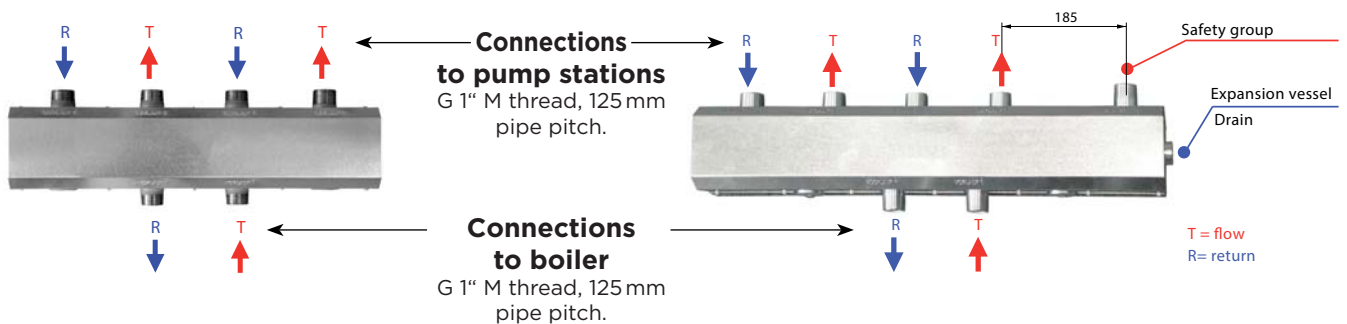
They permit fitting pump stations to heating circuits and connecting a heat source either directly or via a hydraulic pressure balancer. HV SG models are moreover equipped with a G 1" M top connection point for a safety group (see accessories) and a G 3/4" F side connection point for an expansion vessel and/or a drain valve.

TECHNICAL DATA

MAX. PRESSURE	6 bar
MAX. FLOWRATE	2 m ³ /h
THERMOINSULATING CASE	110 × 110 mm

TYPES	HV 60/125-2	HV 60/125 SG-2	HV 60/125-3	HV 60/125 SG-3
APPLICATION	2 heating circuits	2 heating circuits	3 heating circuits	3 heating circuits
LENGTH	508 mm	670 mm	758 mm	920 mm
CODE	9507	9186	9508	9187

CONNECTIONS



ACCESSORIES



Wall support

Pair of wall-mount manifold supports.
Distance between wall and manifold centre: 100 mm.

Code: 9191

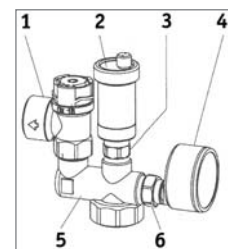


Safety group with 20mm EPS insulation. Forged brass housing, connection: 1" F.

Contents:

1. Safety valve, 3 bar, 1/2"
2. Air vent valve, 12 bar
3. Check valve
4. Pressure gauge, 63 mm diam., 0-4 bar
5. Housing
6. Check valve

Code: 9797



MANIFOLDS AND PRESSURE BALANCERS



HV 70/125 Manifolds / Collectors for 4-6 heating circuits

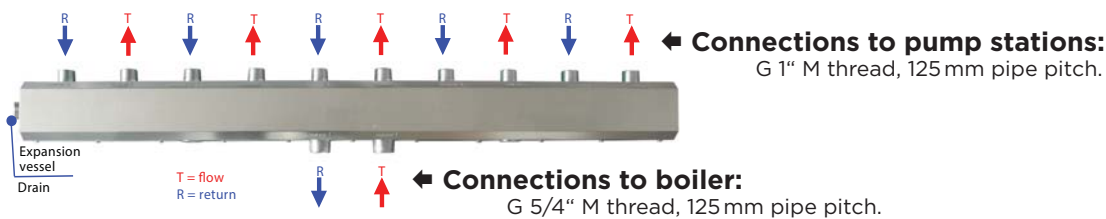
Insulated manifolds, to connect four to six 1" heating circuits. They permit fitting pump stations to heating circuits and connecting a heat source either directly or via a hydraulic pressure balancer. They also permit connecting an expansion vessel.

TECHNICAL DATA

MAX. PRESSURE	6 bar
MAX. FLOWRATE	3 m ³ /h
THERMOINSULATING CASE	110 × 110 mm

TYPES	HV 70/125-4	HV 70/125-5	HV 70/125-6
APPLICATION	4 heating circuits	5 heating circuits	6 heating circuits
LENGTH	1008 mm	1258 mm	1508 mm
CODE	9509	9510	9511

CONNECTIONS



↑ Connection point for an expansion vessel and/or a drain valve

ACCESSORIES



Wall support

Pair of wall-mount manifold supports.
 Distance between wall and manifold centre: 100 mm.

Code: 9191

MANIFOLDS AND PRESSURE BALANCERS



HV 80/125 Manifolds / Collectors for 2-3 heating circuits

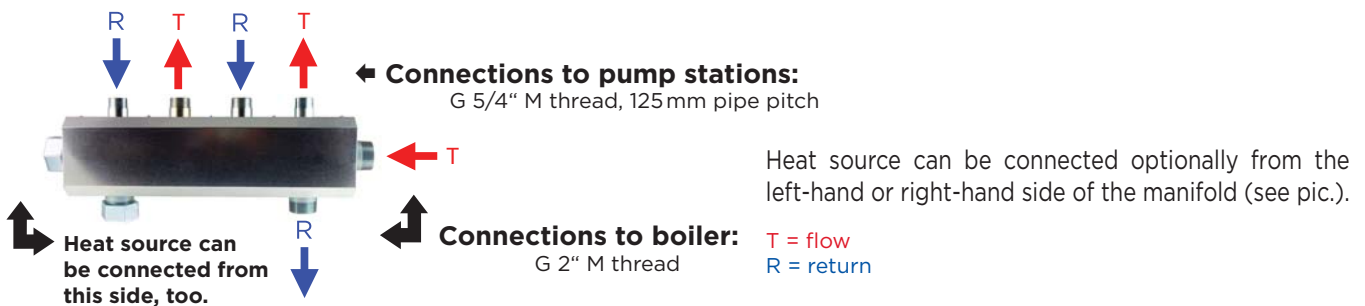
Insulated manifolds, to connect two or three 5/4" heating circuits. They permit fitting pump stations to heating circuits and connecting a heat source either directly or via a hydraulic pressure balancer.

TECHNICAL DATA

MAX. PRESSURE	6 bar
MAX. FLOWRATE	7 m ³ /h
THERMOINSULATING CASE	152 × 152 mm

TYPES	HV 80/125-2	HV 80/125-3
APPLICATION	2 heating circuits	3 heating circuits
LENGTH	625 mm	875 mm
CODE	15857	17230

CONNECTIONS



ACCESSORIES



Wall support

Pair of wall-mount manifold supports. Distance between wall and manifold centre: 160 mm.

Code: 17599



Union

1"x5/4" Fu/F to connect 1" pump stations

Code: 17920

MANIFOLDS AND PRESSURE BALANCERS



HW 60/125 Hydraulic Pressure Balancers

Pressure balancers between a primary and secondary circuits. They facilitate balancing different flow rates through pump stations and a boiler.

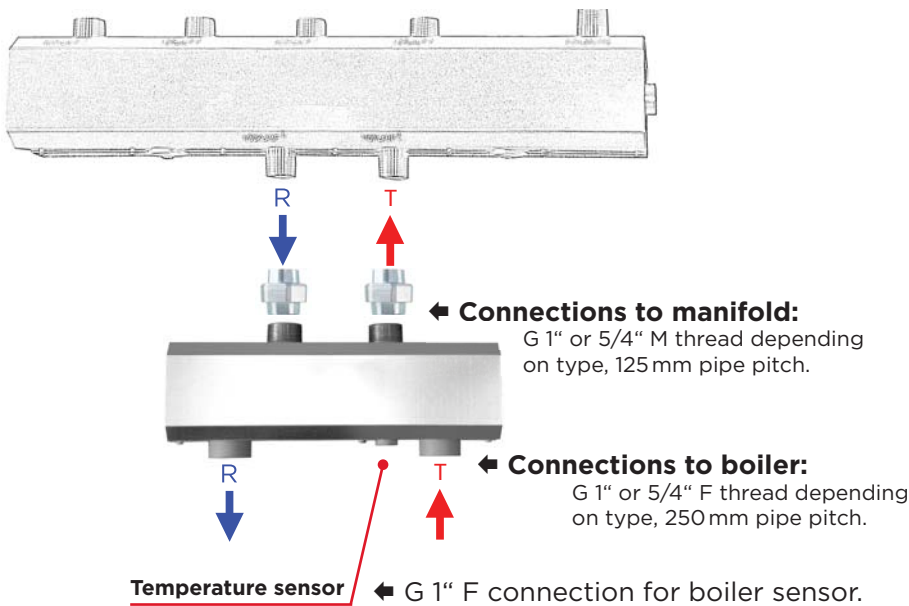
Suitable for connecting a boiler with its own circulation pump to a manifold. Not suitable for connecting a manifold to a thermal store.

TECHNICAL DATA

MAX. PRESSURE	6 bar
THERMOINSULATING CASE	110 × 110 mm

TYPES	HW 60/125G 1F	HW 60/125 G 5/4F
CONNECTIONS	1" F	5/4" F
MAX. FLOWRATE	2 m ³ /h	3 m ³ /h
CODE	9188	9514

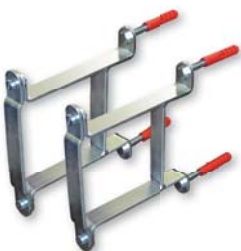
CONNECTIONS



Supplied incl. F/F fittings for an easy connection to a manifold.

T = flow
R = return

ACCESSORIES



Wall support for HW Hydraulic Pressure Balancer
 Pair of wall-mount hydraulic balancer supports.
 Distance between wall and balancer centre: 100mm.
Code: 9190

MANIFOLDS AND PRESSURE BALANCERS



HW 80/570 Hydraulic Pressure Balancers

Pressure balancers between a primary and secondary circuits. They facilitate balancing different flow rates through pump stations and a boiler. Suitable for connecting a boiler with its own circulation pump to a manifold. Not suitable for connecting a manifold to a thermal store.

CODE: 17598

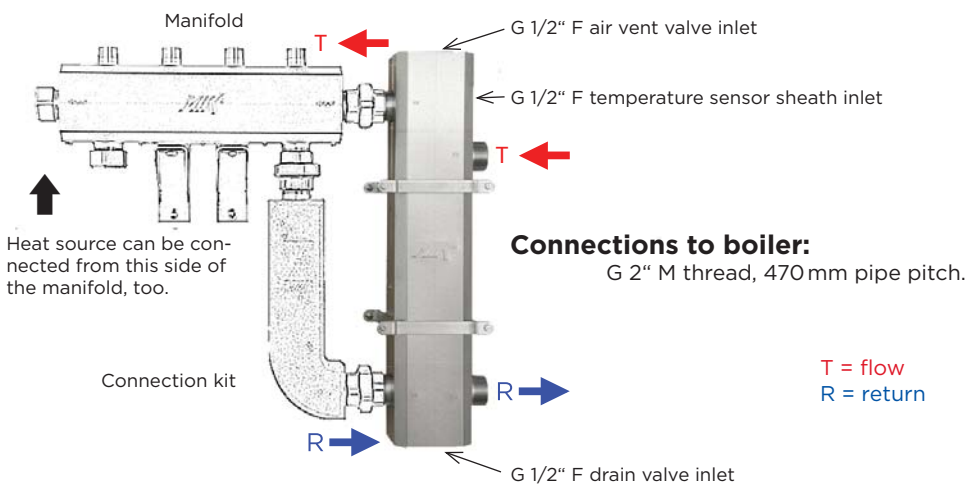
TECHNICAL DATA

MAX. PRESSURE	6 bar
MAX. FLOWRATE	8 m ³ /h
THERMOINSULATING CASE	150 × 150 mm

CONNECTIONS

Connections to manifold:

G 2" M thread, 570mm pipe pitch.



ACCESSORIES



Wall support for HW Hydraulic Pressure Balancer
 Pair of wall-mount hydraulic balancer supports.
 Distance between wall and balancer centre: 160mm
Code: 16133



Interconnection Kit for HV 80 Manifold/Collector and HW 80 hydraulic pressure balancer
 Consists of a 2" connecting pipe (w. polystyrene insulation) and 3 fittings.
Code: 17612

CIRCULATION PUMPS

GRUNDFOS UPM3 FLEX AS High Efficiency Circulation Pump

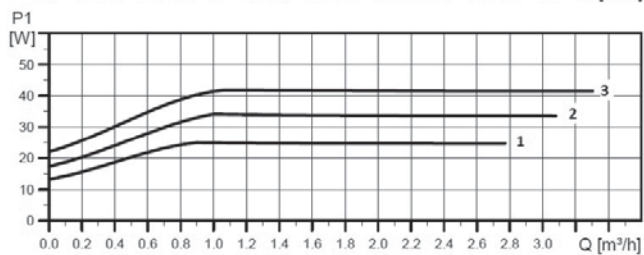
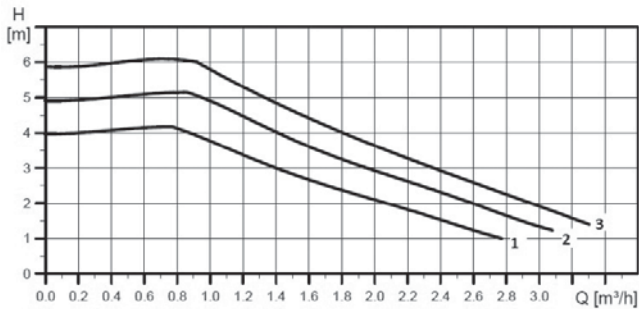


Grundfos UPM3 FLEX AS is a wet-running circulation pump with PWM or ON/OFF control. With PWM signal the pump runs from zero to max. speed according to the selected performance curve. In the ON/OFF mode or when PWM signal is disconnected, the pump runs at max. speed according to the selected performance curve. The performance curve is selected using the control push button. The operating status and possible malfunctions of the pump are displayed by LED signalling directly on the pump.

TYPES

Grundfos UPM3 FLEX AS 25-60

POWER CONSUMPTION	2-42 W
PORT-TO-PORT LENGTH	180 mm
MAX. HEAD	6 m
CODE	19412



TECHNICAL DATA

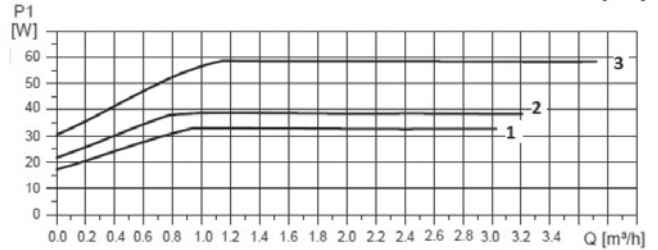
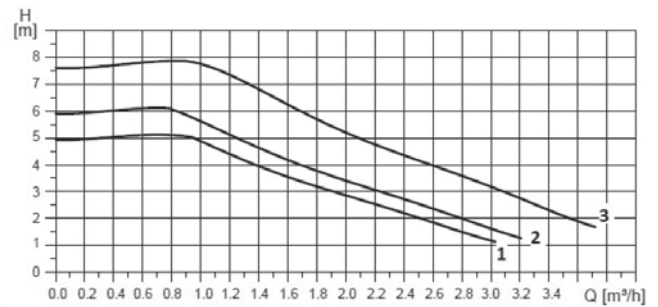
ENERGY EFFICIENCY INDEX (EEI)	<0.2
FLUID TEMPERATURE	2 °C to +110 °C
POWER SUPPLY	1-230 V, 50 Hz
CONNECTIONS	G 6/4" M
MAX. WORKING PRESSURE	10 bar

CONTROL MODES:

- External control by PWM signal
- No PWM signal - by selecting pump performance curve

Grundfos UPM3 FLEX AS 25-75

POWER CONSUMPTION	2-60 W
PORT-TO-PORT LENGTH	130 mm
MAX. HEAD	7.5 m
CODE	19404



INSTRUCTION MANUAL



CIRCULATION PUMPS



GRUNDFOS UPM3 AUTO High Efficiency Circulation Pump

Grundfos UPM3 AUTO is a wet-running circulation pump with ON/OFF control. It can work in three operating modes - proportional pressure ($\Delta p-v$ - suitable for heating systems with radiators fitted with thermostatic heads), constant pressure ($\Delta p-c$ - suitable for heat sources, under-floor heating, hot water storage tanks etc.) and constant speed (suitable for systems where the more efficient mode $\Delta p-c$ is not suitable). In each of the modes, the pump runs according to the selected performance curve. The pump operating status and performance curve are selected using the control push button. The operating status and possible malfunctions of the pump are displayed by LED signalling directly on the pump.

TECHNICAL DATA

ENERGY EFFICIENCY INDEX (EEI)	<0.2
FLUID TEMPERATURE	2 °C to +110 °C
POWER SUPPLY	1-230 V, 50 Hz
CONNECTIONS	G 6/4" M
MAX. WORKING PRESSURE	10 bar

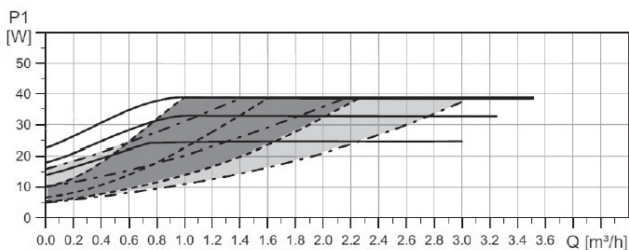
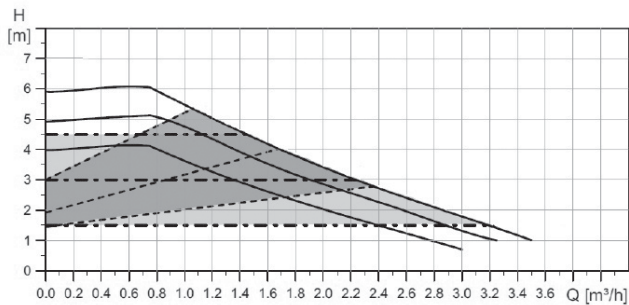
CONTROL MODES:

- $\Delta p-v$ (proportional pressure)
- $\Delta p-c$ (constant pressure)
- constant speed

TYPES

Grundfos UPM3 AUTO 25-60

POWER CONSUMPTION	2-39 W
PORT-TO-PORT LENGTH	130 mm
MAX. HEAD	6 m
CODE	19406



Line	Mode
—	Constant speed
- - - - -	Proportional pressure
- · - · - ·	Constant pressure

INSTRUCTION MANUAL



CIRCULATION PUMPS



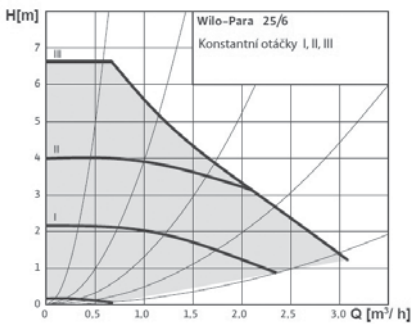
Wilo PARA SC High Efficiency Circulation Pump

Wilo Para SC is a wet-running circulation pump with ON/OFF control. It can work in three operating modes - proportional pressure (Δp -v - suitable for heating systems with radiators fitted with thermostatic heads), constant pressure (Δp -c - suitable for heat sources, underfloor heating, hot water storage tanks etc.) and constant speed (suitable for systems where the more efficient mode Δp -c is not suitable). In each of the modes, the pump runs according to the selected performance curve. The pump operating mode and performance curve are selected using the control push button. The operating status and possible malfunctions of the pump are displayed by LED signalling directly on the pump.

TYPES

Wilo PARA 25/6 SC

POWER CONSUMPTION	3/43 W
PORT-TO-PORT LENGTH	130 mm
MAX. HEAD	6.7 m
CODE	19407



TECHNICAL DATA

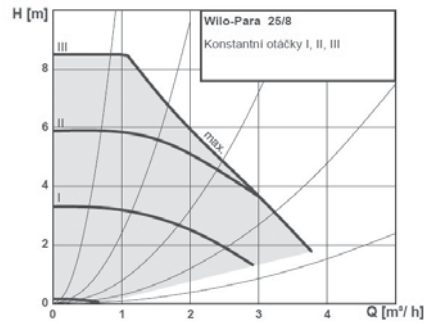
ENERGY EFFICIENCY INDEX (EEI)	<0.21
FLUID TEMPERATURE	0 °C to 100 °C
POWER SUPPLY	1-230 V, 50 Hz
CONNECTIONS	G 6/4" M
MAX. WORKING PRESSURE	10 bar

CONTROL MODES:

- Δp -v (proportional pressure)
- Δp -c (constant pressure)
- constant speed

Wilo PARA 25/8 SC

POWER CONSUMPTION	2/75 W
PORT-TO-PORT LENGTH	180 mm
MAX. HEAD	8.4 m
CODE	19409



Performance curves for other control modes can be found in the instruction manual.

INSTRUCTION MANUAL



CIRCULATION PUMPS

Wilo PARA iPWM1 High Efficiency Circulation Pump



Wilo Para iPWM1 is a wet-running circulation pump with PWM signal control. When PWM signal is absent or disconnected, the pump runs at max. speed. The operating status and possible malfunctions of the pump are displayed by LED signalling directly on the pump. The pump can send the current flowrate value electronically to an external controller. The controller must be equipped with an iPWM input and a flowrate calculation function.

TECHNICAL DATA

ENERGY EFFICIENCY INDEX (EEI)	<0.21
FLUID TEMPERATURE	0 °C to +95 °C
POWER SUPPLY	1-230 V, 50 Hz
CONNECTIONS	G 6/4" M
MAX. WORKING PRESSURE	10 bar

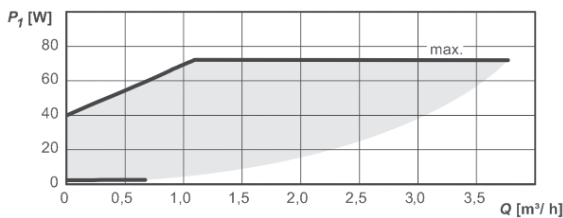
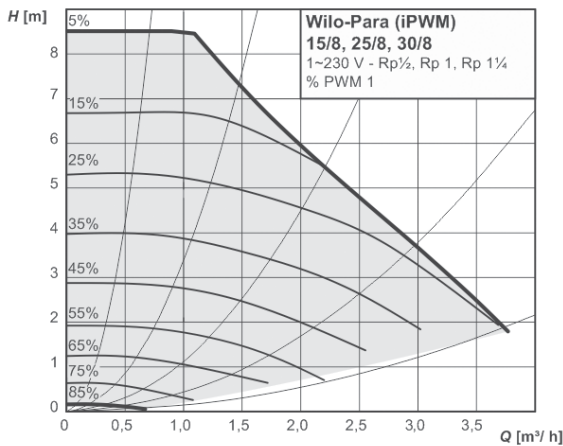
TYPES

Wilo PARA 25/8 iPWM1

POWER CONSUMPTION	2/75 W
PORT-TO-PORT LENGTH	130 mm
MAX. HEAD	8.4 m
CODE	19411

CONTROL MODES:

External control by PWM signal



INSTRUCTION MANUAL



CIRCULATION PUMPS



WILO YONOS MAXO High Efficiency Circulation Pump

Wilo Yonos Maxo is a wet-running circulation pump with ON/OFF control. It can work in three operating modes - proportional pressure ($\Delta p-v$ - suitable for heating systems with radiators fitted with thermostatic heads), constant pressure ($\Delta p-c$ - suitable for heat sources, underfloor heating, hot water storage tanks etc.) and constant speed (suitable for systems where the more efficient mode $\Delta p-c$ is not suitable). In each of the modes, the pump runs according to the selected performance curve. The pump operating mode and performance curve are selected using the control push button. The operating status and possible malfunctions of the pump are displayed by LED signalling directly on the pump.

TECHNICAL DATA

ENERGY EFFICIENCY INDEX (EEI)	<0.20
FLUID TEMPERATURE	-10 °C to +110 °C
POWER SUPPLY	1-230 V, 50 Hz
CONNECTIONS	G 6/4" M
MAX. WORKING PRESSURE	10 bar

CONTROL MODES:

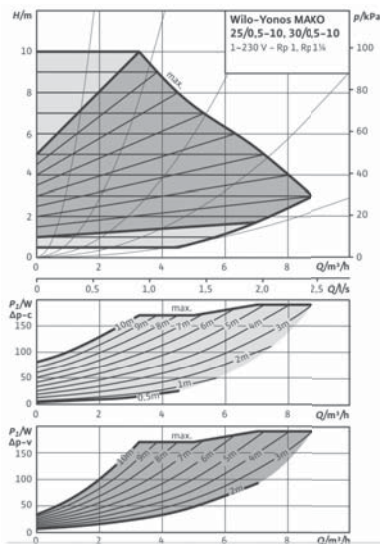
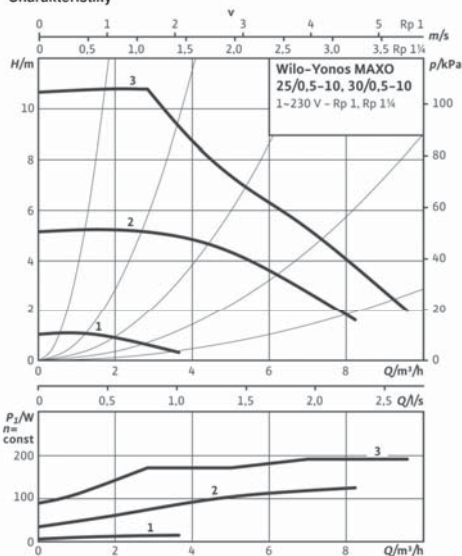
- $\Delta p-v$ (proportional pressure)
- $\Delta p-c$ (constant pressure)
- constant speed I, II, III

TYPES

Wilo Yonos MAXO 25/0.5-10

POWER CONSUMPTION	3/43 W
PORT-TO-PORT LENGTH	180 mm
MAX. HEAD	6.7 m
CODE	16818

Charakteristiky



INSTRUCTION MANUAL



ACTUATORS

Model line	Control	Power supply [V]	Torque [Nm]	Shift time [s]	Max. power input [VA]	Code
AVC	3-point	230	5	60	2.5	10875
AVC	3-point	230	5	120	2.5	9193
AVC	3-point	230	5	240	2.5	10876
AVC	3-point	24	5	120	2.5	11118
AVC	3-point	230	5	120	2.5	10878*
AVC	0-10 V	24	5	60 - 120	5	14682
AVC	0-10 V	24	10	60 - 120	5	10873
ACC	to constant temperature	230	6	120	3.5	16101
ACC	to constant temperature	230	6	120	3.5	16102
AHC	OTC	230	6	120	3.5	16253

* this item is equipped with an extra auxiliary switch



AVC actuator with 3-point control














ACC actuator, control to constant temperature, with one Pt1000 sensor



AHC actuator, with OTC, with three Pt1000 sensors

ACCESSORIES TO PUMP STATIONS / LOAD UNITS

	Name	Code
	Ball Valve w. drain valve, 1" Fu/F (1" Fu/M union 15695 is needed for connection with CSE2)	17415
	Set of a T-piece, 2 fittings, a ball valve - for an easy connection of CSE MIX 1" M pump stations to Regulus heating circuit manifolds	16922
	Set of a T-piece, 2 fittings, a ball valve w. filter and magnet with fitting - for an easy connection of CSE MIX 1" M pump stations to Regulus heating circuit manifolds	18330
	T-piece 1" M/Fu/M - 125 mm pitch, incl. gasket - for an easy connection of CSE MIX 1" M pump stations to Regulus heating circuit manifolds	16659
	T-piece 1" M/Fu/M - 90 mm pitch, incl. gasket - for a connection of return line to mixing valve in CSE MIX 1" M pump station	16660
	1" Fu/M union incl. gasket	15695
	1" Fu/F union incl. gasket	15694
	1"x5/4" Fu/F union, incl. gasket - for a connection of CSE MIX 1" M to 5/4" manifold	17920
	1" Fu/F union, extended with check valve, incl. gasket (for a CSE2 pump station return line)	18653
	1" Fu/F union, extended, incl. gasket (for a CSE2 pump station flow line, to be used together with 18653)	18797
	Filter replacement section for CSE2	19017

