

Pump Stations Mixing and Zone Valves



and other components
for heating systems



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manifolds, circulation pumps

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ball, return spring and gate models

RegulusTOP PUMP STATIONS FOR HEATING CIRCUITS



CS KK Pump + Fittings Kit

The kits consist of a Wilo Yonos PARA RS pump, power cable w. MOLEX terminal and two pipe couplers with ball valves. The CS KK VYP W model is moreover fitted with a power cable plug w. LED operation indicator and switch.

TYPICAL APPLICATION:
Heating and cooling systems

Technical Data

MAX. HESD	6.2 m
POWER INPUT (min./max.)	3/45 W
MAX. PRESSURE	6 bar
MAX. TEMPERATURE	100 °C
CONNECTIONS	1" F
DIMENSIONS	275 x 130 x 130 mm

Components

- Wilo Yonos Para RS25/6 high efficiency pump
- Power cable w. MOLEX terminal
- 2 pipe couplers with ball valves

Models



CS KK W Kit
Code: 15477

RegulusTOP PUMP STATIONS FOR HEATING CIRCUITS



CSE OTS G Single-Line Pump Station, Insulated

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

Technical Data

CONNECTIONS	1" F
FLUID WORKING TEMPERATURE	5 - 95 °C
DIMENSIONS	325x140x150 mm

Components

- Grundfos UPM3 FLEX AS 25-70 high-efficiency circulation pump
- Pump connection cable with connector
- Neat insulation for reduced heat loss
- 2 ball valves
- Non-return valve (codes 15042, 17922)
- Magnet Filterball (code: 17922)
- Thermometer



Models

	CSE OTS G	CSE OTS ZV G	CSE OTS MFB+ZV G
Pump	UPM3 FLEX AS 25-70	UPM3 FLEX AS 25-70	UPM3 FLEX AS 25-75
Pump speed control	manual or PWM	manual or PWM	manual or PWM
Max. head	7 m	7 m	7.5 m
Code	15325	15042	17922

RegulusTOP PUMP STATIONS FOR HEATING CIRCUITS



CSE OTS W Single-Line Pump Station, Insulated

Insulated single-line pump station with high-efficiency 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 high-efficiency circulation pump
- Pump connection cable with connector
- Neat insulation for reduced heat loss
- 2 ball valves
- Non-return valve (codes 15042, 17922)
- Magnet Filterball (code: 17922)
- Thermometer



Models

	CSE OTS W	CSE OTS ZV W	CSE OTS MFB+ZV W	CSE OTS ZV W-PWM
Pump	YP RS25/7.5	PARA 25/8 SC	PARA 25/8 SC	PARA 25/8 iPWM1
Pump speed control	manual	manual	manual	PWM + flow rate info
Max. head	7.6m	8.4m	8.4m	8.4m
Code	15782	15892	17818	18127

RegulusTOP PUMP STATIONS FOR HEATING CIRCUITS



CSE MIX G Pump Station with electric mixing actuator

Pump station intended to control temperature of a mixed circuit or of a return line to solid-fuel boiler through an external controller. A version designed for the right-hand pipe, possible to convert to a left-hand pipe version.

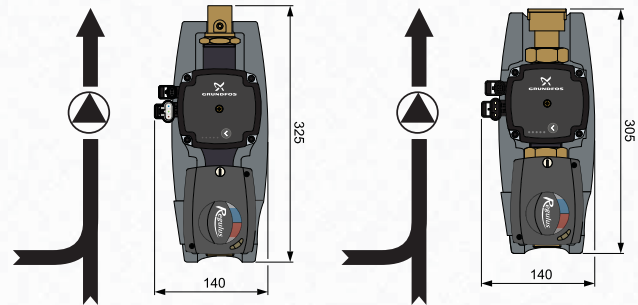
Technical Data

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 with power cable w. connector
- Mixing valve
- Mixing valve actuator w. cable
- Neat insulation for reduced heat loss

Dimensions







Models

	CSE MIX G 1M	CSE MIX G 5/4M	CSE MIX G 1F	CSE MIX G 5/4F
Connections	1" (2x M, 1x F)*	5/4" (2x M, 1x F) *	1" (3x F)	5/4" (3x F)
Pump Grundfos UPM3	FLEX AS 25-70	FLEX AS 25-75	FLEX AS 25-70	FLEX AS 25-75
Pump speed control	manual or PWM	manual or PWM	manual or PWM	manual or PWM
Max. head	7 m	7.5 m	7 m	7.5 m
K _{vs} of the mixing valve	6.3 m ³ /h	12 m ³ /h	10 m ³ /h	16 m ³ /h
Code	15208	16847	16401	16402

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

Accessories

Name	Application	Code
 CSE/HV Kit	2 threaded fittings, 1 T-piece, 1 ball valve for an easy connection to Regulus heating circuit manifolds	16922
 T-piece, 1" M/Fu/M, 90 mm	to connect a return line to a mixing valve	16660
 T-piece, 1" M/Fu/M, 125 mm	for an easy connection to Regulus heating circuit manifolds	16659
 1" Fu/F Fittings	union nut x F thread	15694

RegulusTOP PUMP STATIONS FOR HEATING CIRCUITS



CSE MIX W Pump Station with electric mixing actuator

Pump station intended to control temperature of a mixed circuit or of a return line to solid-fuel boiler through an external controller. A version designed for the right-hand pipe, possible to convert to a left-hand pipe version.

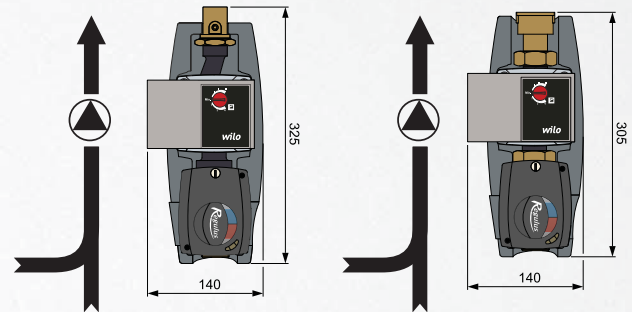
Technical Data

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 with power cable w. connector
- Mixing valve
- Mixing valve actuator w. cable
- Neat insulation for reduced heat loss

Dimensions


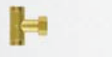
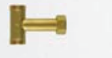



Models

	CSE MIX W -SC 1M	CSE MIX W 5/4M	CSE MIX W 1F	CSE MIX W-PWM 1F	CSE MIX W 5/4F	CSE MIX W-PWM 5/4F
Connections	1" (2x M, 1x F)*	5/4" (2x M, 1x F) *	1" (3x F)	1" (3x F)	5/4" (3x F)	1" (3x F)
Wilo Pump	PARA 25/8 SC	YP RS25/7.5	YP RS25/7.5	PARA 25/8 iPWM1	YP RS25/7.5	PARA 25/8 iPWM1
Pump speed control	manual	manual	manual	PWM + flow rate info	manual	PWM + flow rate info
Max. head	8.4 m	7.6 m	7.6 m	8.4 m	7.6 m	8.4 m
K _{vs} of the mixing valve	6.3 m ³ /h	12 m ³ /h	10 m ³ /h	10 m ³ /h	16 m ³ /h	16 m ³ /h
Code	17980	16848	16219	18128	16215	18130

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

Accessories

Name	Application	Code
 CSE/HV Kit	2 threaded fittings, 1 T-piece, 1 ball valve for an easy connection to Regulus heating circuit manifolds	16922
 T-piece, 1" M/Fu/M, 90 mm	to connect a return line to a mixing valve	16660
 T-piece, 1" M/Fu/M, 125 mm	for an easy connection to Regulus heating circuit manifolds	16659
 1" Fu/F Fittings	union nut x F thread	15694

RegulusTOP PUMP STATIONS FOR HEATING CIRCUITS



CSE MIX FIX G Pump Station with electronic-controlled mixing

Pump station intended to control the temperature of return water to boiler or output temperature of heating circuits mixed to a constant temperature that can be adjusted directly on the mixing valve actuator, 0-99°C. A version designed for the right-hand pipe, possible to convert to a left-hand pipe version.

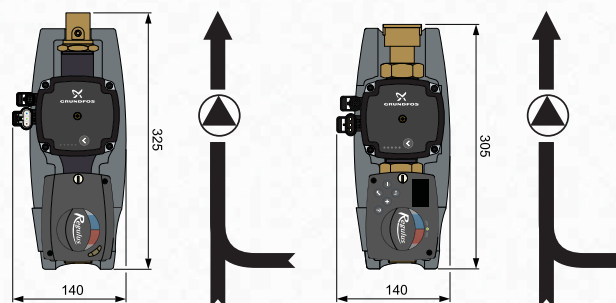
Technical Data

FLUID WORKING TEMPERATURE	5 - 95 °C
MIXING VALVE ACTUATOR	control to constant temperature, 120 s, 6 Nm
POWER SUPPLY	230 V, 50 Hz

Components

- Grundfos circulation pump with power cable w. connector
- Mixing valve
- Mixing valve actuator, electronic-controlled
- 2 Pt 1000 sensors
- Neat insulation for reduced heat loss

Dimensions







Models

	CSE MIX FIX G 1M	CSE MIX FIX G 5/4M	CSE MIX FIX G 1F	CSE MIX FIX G 5/4F
Connections	1" (2x M, 1x F)*	5/4" (2x M, 1x F)*	1" (3x F)	5/4" (3x F)
Pump Grundfos UPM3	FLEX AS 25-70	FLEX AS 25-75	FLEX AS 25-70	FLEX AS 25-75
Pump speed control	manual or PWM	manual or PWM	manual or PWM	manual or PWM
Max. head	7 m	7.5 m	7 m	7.5 m
K _{vs} of the mixing valve	6.3 m ³ /h	12 m ³ /h	10 m ³ /h	16 m ³ /h
Code	15333	16844	16403	16404

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

Accessories

Name	Application	Code
 CSE/HV Kit	2 threaded fittings, 1 T-piece, 1 ball valve for an easy connection to Regulus heating circuit manifolds	16922
 T-piece, 1" M/Fu/M, 90 mm	to connect a return line to a mixing valve	16660
 T-piece, 1" M/Fu/M, 125 mm	for an easy connection to Regulus heating circuit manifolds	16659
 1" Fu/F Fittings	union nut x F thread	15694

RegulusTOP PUMP STATIONS FOR HEATING CIRCUITS



CSE MIX FIX W Pump Station with electronic-controlled mixing

Pump station intended to control the temperature of return water to boiler or output temperature of heating circuits mixed to a constant temperature that can be adjusted directly on the mixing valve actuator, 0-99°C. A version designed for the right-hand pipe, possible to convert to a left-hand pipe version.

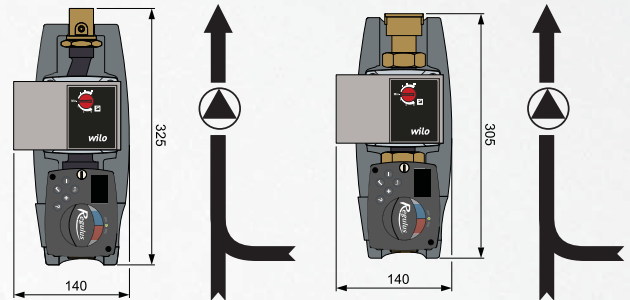
Technical Data

FLUID WORKING TEMPERATURE	5 - 95 °C
MIXING VALVE ACTUATOR	control to constant temperature, 120 s, 6 Nm
POWER SUPPLY	230 V, 50 Hz

Components

- Wilo circulation pump with power cable w. connector
- Mixing valve
- Mixing valve actuator, electronic-controlled
- 2 Pt 1000 sensors
- Neat insulation for reduced heat loss

Dimensions


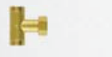
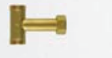



Models

	CSE MIX FIX W 1M	CSE MIX FIX W 5/4M	CSE MIX FIX W 1F	CSE MIX FIX W 5/4F
Connections	1" (2x M, 1x F)*	5/4" (2x M, 1x F)*	1" (3x F)	5/4" (3x F)
Pump Wilo Yonos Para	RS25/7.5	RS25/7.5	RS25/7.5	RS25/7.5
Pump speed control	manual	manual	manual	manual
Max. head	7.6 m	7.6 m	7.6 m	7.6 m
K _{vs} of the mixing valve	6.3 m ³ /h	12 m ³ /h	10 m ³ /h	16 m ³ /h
Code	16083	16846	16220	16216

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

Accessories

Name	Application	Code
 CSE/HV Kit	2 threaded fittings, 1 T-piece, 1 ball valve for an easy connection to Regulus heating circuit manifolds	16922
 T-piece, 1" M/Fu/M, 90 mm	to connect a return line to a mixing valve	16660
 T-piece, 1" M/Fu/M, 125 mm	for an easy connection to Regulus heating circuit manifolds	16659
 1" Fu/F Fittings	union nut x F thread	15694

RegulusTOP PUMP STATIONS FOR 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.

TYPICAL APPLICATION:

For unmixed heating circuits with/without thermostatic heads. Installation possible on a wall, thermal store or manifold.

Components

FLOW:

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

RETURN:

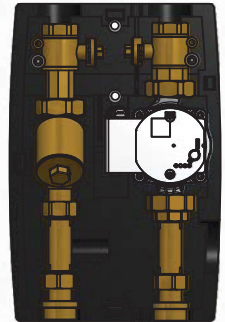
- 1" connection fitting with union nut.
- Non-return valve.
- Filter with a large strainer surface area and magnet.
- Ball valve w. sheath for sensor.
- Thermometer 0-120°C.

Technical Data

CONNECTION POINTS	1" F
FLUID WORKING TEMPERATURE	5 - 95 °C
PIPE DISTANCE	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.



Accessories



Ball Valve w. drain valve, Fu/F (the fitting 15695 is needed for connection with CSE2)

Code: 17415



1" Fu/M Fittings incl. gasket

Code: 15695



Half fittings 1"x5/4" Fu/F to connect CSE2 to 5/4" manifold

Code: 17920

Models

Pump	Grundfos UPM3 25-75	Wilo PARA 25/8 SC
Pump speed control	manual or PWM	manual
Max. head	7.5 m	8.4 m
Code	17487	17936

RegulusTOP PUMP STATIONS FOR HEATING CIRCUITS



CSE2 MIX F Pump Stations with Mixing

Twin-line pump station with a high-efficiency circulation pump, mixing valve, control, possibly also without actuator, and with other well-arranged basic components set in a compact thermoinsulating case. It permits shutting off a heating circuit, 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.

TYPICAL APPLICATION:

For mixed heating circuits. Installation possible on a wall, thermal store or manifold.

Components

FLOW:

- 1" connection fitting with 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" connection fitting with union nut.
- Non-return valve.
- Filter with a large strainer surface area and magnet.
- Ball valve with check valve (can be opened by service staff) and sensor sheath.
- Thermometer 0-120°C.

Models

	Grundfos UPM3 25-75	Wilo PARA 25/8 SC
Pump	Grundfos UPM3 25-75	Wilo PARA 25/8 SC
Pump speed control	manual or PWM	manual
Max. head	7.5 m	8.4 m
K_{vs} of the mixing valve	6.3 m ³ /h	6.3 m ³ /h
Code	17484	17937
Code for pump stations without actuator	18082	17917

For actuators for mixing valves see pages 30-31.

Technical Data

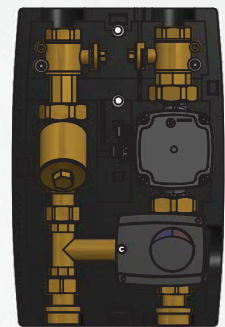
CONNECTION POINTS	1" F
FLUID WORKING TEMPERATURE	5 - 95 °C
PIPE DISTANCE	125 mm
DIMENSIONS	360 x 133 x 245 mm

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.



Accessories



Ball Valve w. drain valve, Fu/F (the fitting 15695 is needed for connection with CSE2)
Code: 17415



1" Fu/M Fittings incl. gasket
Code: 15695



Half fittings 1"x5/4" Fu/F to connect CSE2 to 5/4" manifold
Code: 17920

RegulusTOP PUMP STATIONS FOR HEATING CIRCUITS



CS2 OTS W 5/4F Pump Station

Pump station for bigger boiler rooms with Yonos MAXO circulation pump and ball valves. A ball valve with filter&magnet is fitted on the return pipe. It is suitable for connection to HV 80 Manifolds.

TYPICAL APPLICATION:

For unmixed heating circuits with/without thermostatic valves.

Technical Data

MAX. PRESSURE	10 bar
MAX. TEMPERATURE	110 °C
CONNECTIONS	5/4" F
PIPE DISTANCE	125 mm
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

Typy



CS2 OTS MFB W 5/4F
Pump Station
Code: 17820

RegulusTOP PUMP STATIONS FOR HEATING CIRCUITS



CS2 MIX ZV W 5/4F Pump Station with Mixing

Pump station for bigger boiler rooms with Yonos MAXO circulation pump, mixing valve with actuator and 3-point control, non-return valve and ball valves. It is suitable for connection to HV 80 Manifolds.

TYPICAL APPLICATION:
For mixed heating circuits.

Components

FLOW:

- 5/4" connection fitting with union nut
- Mixing valve ($K_{vs}=16 \text{ m}^3/\text{h}$) 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)

Technical Data

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

AVC05 ACTUATOR

SHIFT TIME	120 s
TORQUE	5 Nm
SUPPLY VOLTAGE	230 V 50 Hz
IP PROTECTION by EN 60529	IP 42

Typy



CS2 MIX ZV W 5/4F
Pump Station
Code: 17267



CS2 MIX MFB+ZV W 5/4F
Pump Station
Code: 17819

MANIFOLDS AND PRESSURE BALANCERS



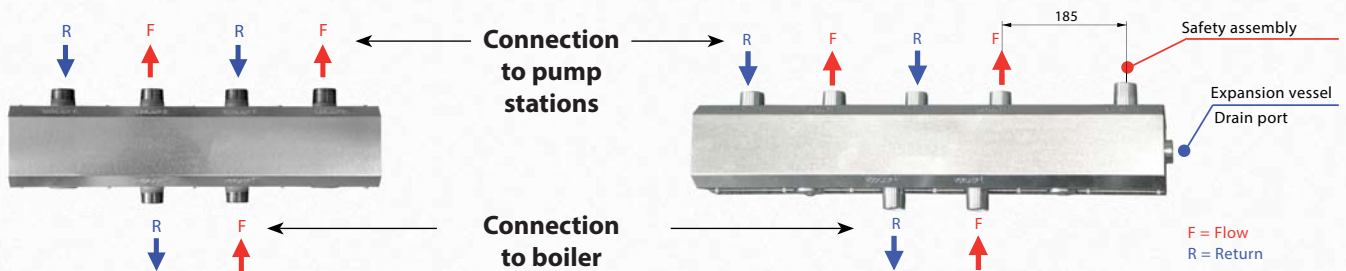
HV 60/125 Manifolds/Collectors for 2 and 3 heating circuits

Insulated manifolds, to connect 2 or 3 heating circuits. They permit fitting pump stations to heating circuits and connecting a heat source either directly or via a hydraulic pressure balancer. Some models also permit connecting an expansion vessel and safety assembly.

Technical Data

MAX. PRESSURE	6 bar
MAX. FLOW RATE	2 m ³ /h
CONNECTION	to pump stations: 1" M to boiler: 1" M
PIPE CENTER-TO-CENTER DISTANCE	125 mm
THERMOINSULATION CASE	110 × 110 mm

Models



Model	Application	Length	Code
HV 60/125-2	to connect 2 heating circuits	508 mm	9507
HV 60/125-3	to connect 3 heating circuits	758 mm	9508

Model	Application	Length	Code
HV 60/125 SG-2	to connect 2 heating circuits	670 mm	9186
HV 60/125 SG-3	to connect 3 heating circuits	920 mm	9187

Besides that, HV SG models are upgraded with a 1" M connection point for a safety assembly (see Accessories) and a G 3/4" F side connection point for an expansion vessel and/or drain valve.

Accessories



Wall support

Pair of wall-mount manifold supports.
Distance between wall and manifold centre: 100 mm.
Code: 9191

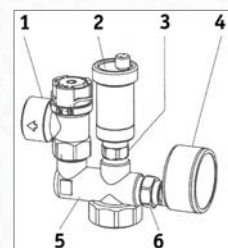


Safety assembly with 20mm EPS insulation. Forged brass housing, connection: 1" F.

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. Fitting support
6. Check valve

Code: 9797



MANIFOLDS AND PRESSURE BALANCERS



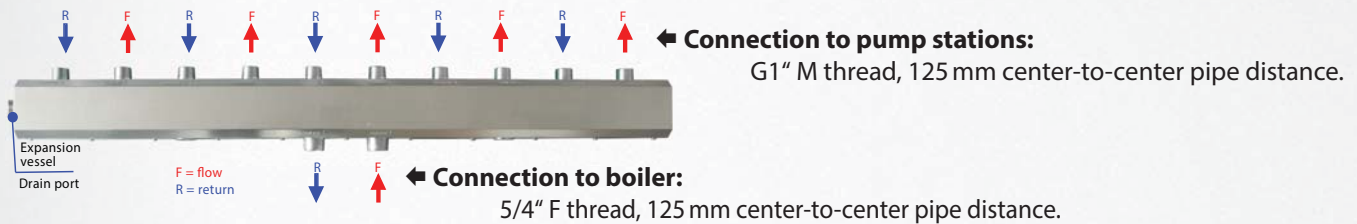
HV 70/125 Manifolds/Collectors for 4-6 heating circuits

Insulated manifolds, to connect 4 to 6 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. FLOW RATE	3 m ³ /h
CONNECTION	to pump stations: 1" M to boiler: 5/4" M
PIPE CENTER-TO-CENTER DISTANCE	125 mm
THERMOINSULATION CASE	110 x 110 mm

Models



↑ G 3/4" M connection point for an expansion vessel and/or drain valve.

Model	Application	Length	Code
HV 70/125-4	to connect 4 heating circuits	1008 mm	9509
HV 70/125-5	to connect 5 heating circuits	1258 mm	9510
HV 70/125-6	to connect 6 heating circuits	1508 mm	9511

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

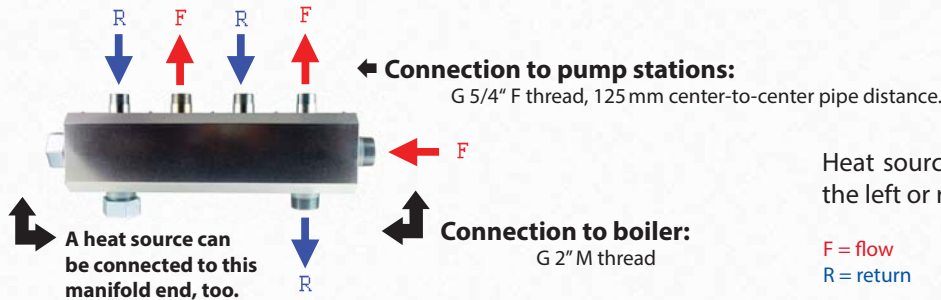
Insulated manifolds, to connect two or three 5/4" heating circuits.

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. FLOW RATE	7 m ³ /h
CONNECTION	to pump stations: 5/4" M to boiler: 2" M
PIPE DISTANCE	125 mm
THERMOINSULATION CASE	152 x 152 mm

Models



Model	Application	Length	Code
HV 80/125-2	to connect 3 heating circuits	625 mm	15857
HV 80/125-3	to connect 3 heating circuits	875 mm	17230

Accessories



Wall support

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

Code: 17599

Half-fitting

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

Code: 17920

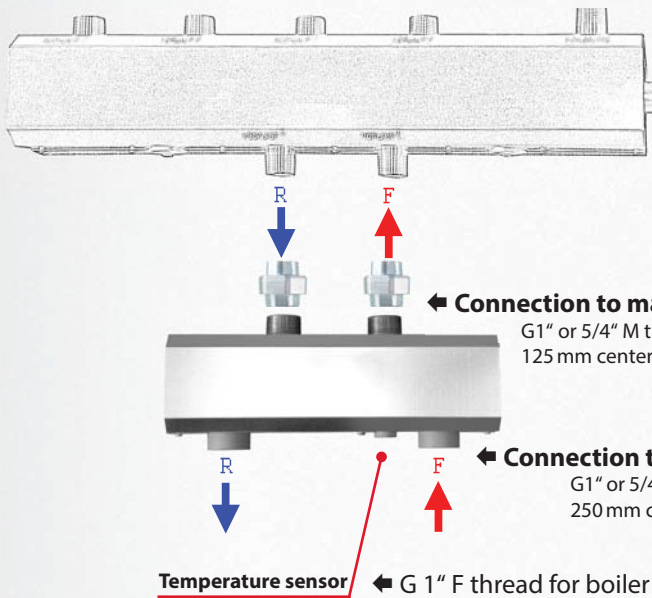
MANIFOLDS AND PRESSURE BALANCERS



HW 60/125 Hydraulic Pressure Balancers

Pressure balancer between a primary and secondary circuits. It facilitates balancing different flow rates through pump stations and boiler. Suitable for connecting a boiler with its own circulation pump to a manifold. Not suitable for connecting a manifold to a thermal store. Thermoinsulating case 110 × 110 mm.

Connection Dimensions and Models



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

F = flow
R = return

Model	Connection	Max. flow rate	Code
HW 60/125 G 1"	1" M	2 m ³ /h	9188
HW 60/125 G 5/4"	5/4" F	3 m ³ /h	9514

Accessories



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

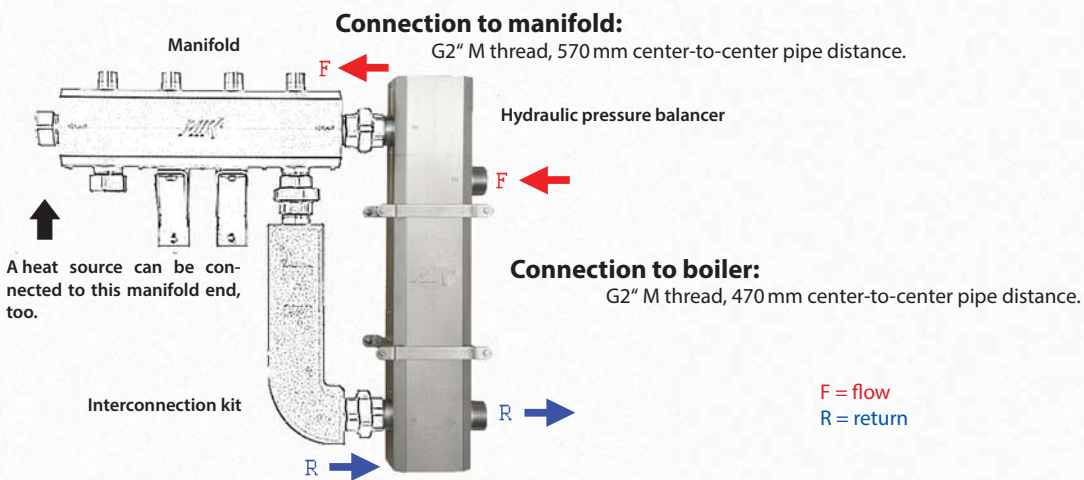
MANIFOLDS AND PRESSURE BALANCERS



HW 80/570 Hydraulic Pressure Balancers

Pressure balancer between a primary and secondary circuits.
 It facilitates balancing different flow rates through pump stations and boiler.
 Suitable for connecting a boiler with its own circulation pump to a manifold.
 Not suitable for connecting a manifold to a thermal store.
 Thermoinsulating case 150 × 150 mm.

Connection Dimensions and Models



Model	Connection	Max. flow rate	Code
HW 80/570 G 2"	2"	8 m ³ /h	17598

Accessories



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



Interconnection Kit for HV 80 Manifold/Collector and HW 80 Hydraulic Pressure Balancer
 Consist of a 2" connecting pipe (incl. polystyrene insulation) and fittings.
 Code: 17612

CIRCULATION PUMPS IN PUMP STATIONS



GRUNDFOS UPM3 High Efficiency Pump

Compact high-efficiency wet-running circulation pump intended for fluid circulation in heating systems with increased ambient temperature and limited space. It meets the Ecodesign requirements. It is designed for smaller heating systems.

Features

- Very high efficiency exceeding the EuP Directive requirements with $EEI < 0,20$
- Integrated motor protection – double safety de-blocking system
- Ceramic bearings and shaft for a long and trouble-free service life
- Active inrush current limiter
- Easy electric wiring thanks to frontal access to terminals

Technical Data

ENERGY EFFICIENCY INDEX (EEI)	<0.2
FLUID TEMPERATURE	2 °C to +110 °C
SUPPLY VOLTAGE	1~230 V, 50 Hz
PORT-TO-PORT LENGTH	180 mm
CONNECTION THREAD	G 6/4" M
MAX. WORKING PRESSURE	10 bar

Control modes:

External control by PWM signal
Without PWM signal – by selecting performance curve

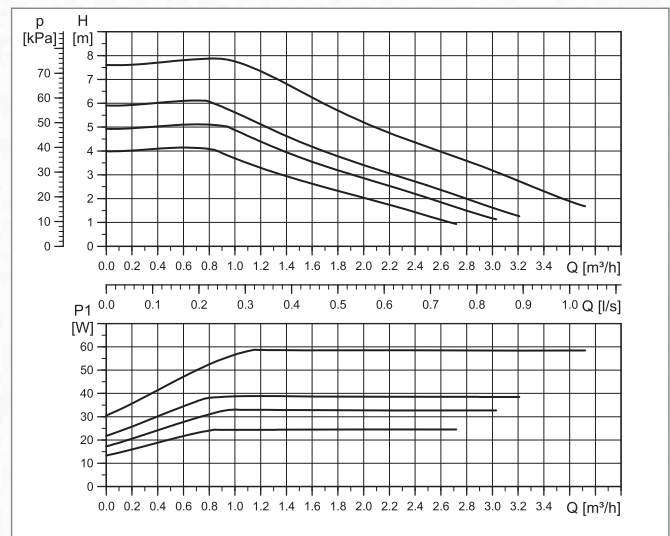
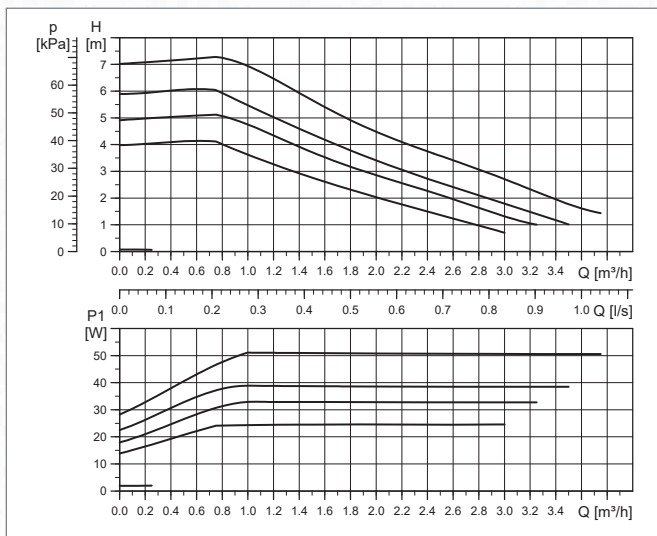
Models

Grundfos-UPM3 FLEX AS 25-70

POWER CONSUMPTION	2-52 W
MAX. HEAD	7m

Grundfos-UPM3 FLEX AS 25-75

POWER CONSUMPTION	2-60 W
MAX. HEAD	7.5m



CIRCULATION PUMPS IN PUMP STATIONS



WILO YONOS PARA High Efficiency Pump

High efficiency glandless circulation pump designed for liquid circulation in heating systems. It will save up to 90% energy compared to older pump models. It is intended for smaller heating systems of max. 6 m head.

Features

- Maximum efficiency thanks to ECM technology
- Only 3 watts minimum power consumption
- Integrated motor protection
- Blocking-current proof EC motor
- Flexible installation thanks to compact construction
- Very high starting torque for reliable starting
- Easy electrical connection with a two meter long power supply cable

Technical Data

ENERGY EFFICIENCY INDEX (EEI)	0.18
FLUID TEMPERATURE	-10 °C to +95 °C
SUPPLY VOLTAGE	1~230 V, 50 Hz
CONNECTION THREAD	G 6/4" M
MAX. WORKING PRESSURE	6 bar

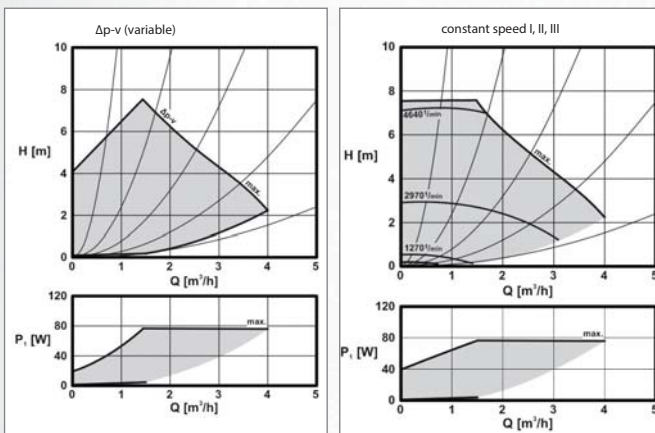
Control modes:

- Δp-v (variable differential pressure)
- Constant speed I, II, III

Models

Wilco-Yonos PARA RS25/7.5

POWER CONSUMPTION	4 - 75 W
MAX. HEAD	7.6 m



CIRCULATION PUMPS IN PUMP STATIONS



Wilo PARA SC High Efficiency Pump

The new generation of high-efficiency circulation pumps designed for liquid circulation in heating systems is characterized by maximum comfort during installation and commissioning thanks to its compact design and easy commissioning with predefined default settings. Various smart features are available, thanks to the green button technology and unique LED user interface.

Features

- Easy operation and commissioning thanks to the green button technology and unique user interface via LEDs
- Safe operation thanks to smart features such as manual venting, manual restart or factory reset function
- Easy replacement due to direct access to signal connector, pump data and motor mounting bolts
- On-line access to pump documentation using QR code

Technical Data

ENERGY EFFICIENCY INDEX (EEI)	<0.21
FLUID TEMPERATURE	0 to 100 °C
POWER SUPPLY	1~230 V, 50-60 Hz
PORT-TO-PORT LENGTH	130 mm
CONNECTIONS	G 6/4" M
MAX. WORKING PRESSURE	10 bar

Control modes:

Δp -v (variable pressure),
 Δp -c (constant pressure),
 constant speed

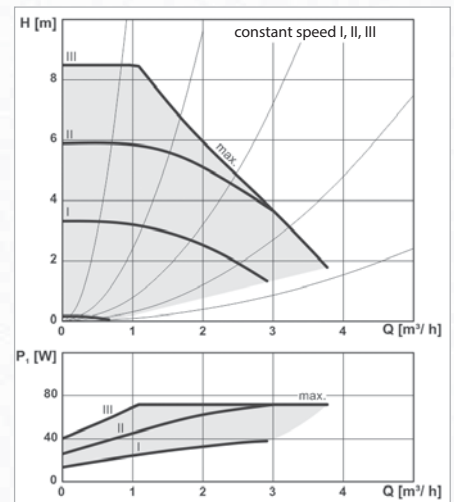
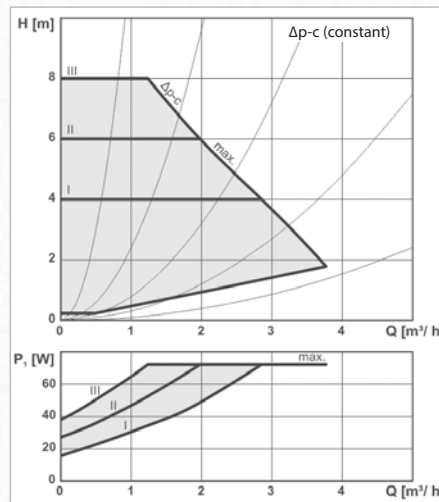
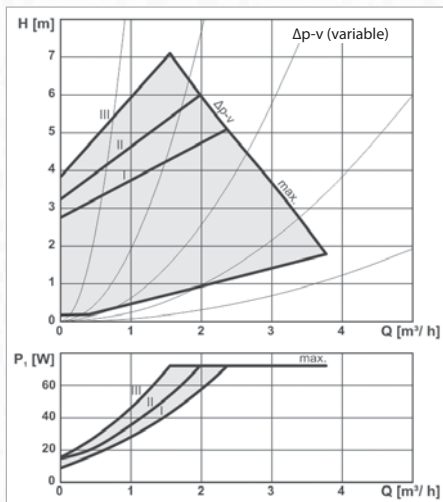
Pump Instruction Manual for download



Models

Wilo PARA 25/8 SC

POWER CONSUMPTION	2/75 W
MAX. HEAD	8.4 m



CIRCULATION PUMPS IN PUMP STATIONS



Wilo PARA iPWM1 High Efficiency Pump

Wilo Para 25/8 iPWM1 is a wet running circulation pump whose speed is controlled by a PWM signal. When the PWM signal is disconnected, the pump runs at its maximum speed. The operating status and possible faults of the pump are indicated by LEDs directly on the pump. The pump can send the current flowrate electronically to an external controller. The controller needs to be equipped with an iPWM read input and a flowrate calculation function.

Technical Data

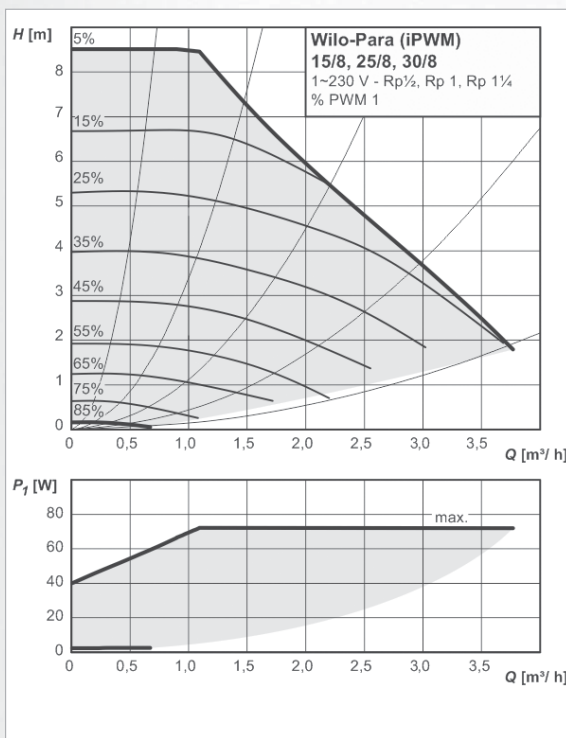
ENERGY EFFICIENCY INDEX (EEI)	<0.21
FLUID TEMPERATURE	0 °C to +95 °C
POWER SUPPLY	1~230 V, 50 Hz
PORT-TO-PORT LENGTH	130 mm
CONNECTIONS	G 6/4" M
MAX. WORKING PRESSURE	10 bar

Control modes:
external control by PWM signal

Models

Wilo PARA 25/8 iPWM1

POWER CONSUMPTION	2/75 W
MAX. HEAD	8.4 m



CIRCULATION PUMPS IN PUMP STATIONS



WILO YONOS MAXO High Efficiency Pump

Wet-running circulation pump, an EC motor w. automatic output adjustment, suitable for hydronic heating systems, A/C units, sealed cooling circuits, industrial circulation equipment.

Features

- Continuous output adjustment depending on the mode
- De-blocking function
- Soft start
- Integrated full motor protection
- Fault indicating LED
- Segmented LED indicator showing head and error codes
- Display of the set speed

Technical Data

ENERGY EFFICIENCY INDEX (EEI)	≤ 0.20
FLUID TEMPERATURE	-10 °C to +110 °C
POWER SUPPLY	1~230 V, 50 Hz
PORT-TO-PORT LENGTH	180 mm
CONNECTIONS	G 6/4" M
MAX. WORKING PRESSURE	10 bar

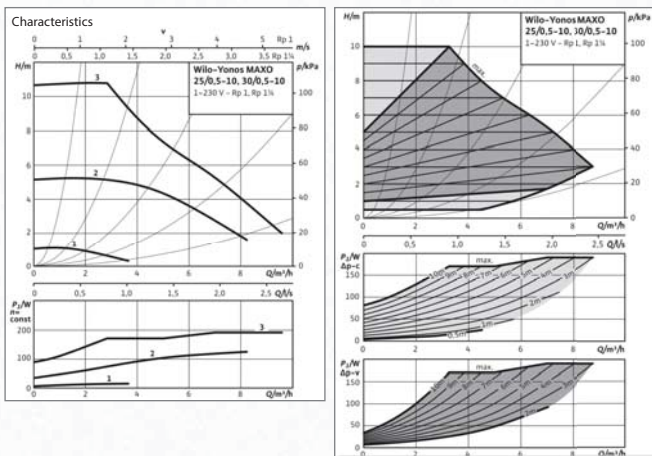
Control modes:

- Δp-c (constant differential pressure)
- Δp-v (variable differential pressure)
- Constant speed I, II, III

Models

Wilo-Yonos MAXO 25/0.5-10

POWER CONSUMPTION	5 - 190 W
MAX. HEAD	10.8 m
CODE	16818



MIXING VALVES & ACTUATORS

MIXING VALVE DATA TABLE

Model line	Number of ways	Application	Threaded connection	DN [mm]	Kvs [m ³ /h]	Working temperature [°C]	Max. pressure [bar]	Max. pressure difference [bar]	Other
LK840	3-way valve	valve for heating systems	M	20 - 50	2.5 - 24	5 - 110 ¹⁾	10	5 - 10 (new generation 2.0)	manual control possible
			F	15 - 50	1.6 - 40	5 - 110 ¹⁾			
LK841	4-way valve	valve for heating systems	M	20 - 40	2.5 - 15	5 - 110 ¹⁾	10	5 - 10 (new generation 2.0)	manual control possible
			F	15 - 50	2.5 - 40	5 - 110 ¹⁾			

1) working fluid max. temperature in short term is 120°C

ACTUATOR DATA TABLE

Model line	Control	Power supply [V]	Torque [Nm]	Shift time [s]	Max. power input [W]	IP rating	Auxiliary switch	Other
AVC0531	3-point control	230	5	60	2.5	IP42	-	manual control possible
AVC0532	3-point control	230	5	120	2.5	IP42	-	manual control possible
AVC0534	3-point control	230	5	240	2.5	IP42	-	manual control possible
AVC0532	3-point control	24	5	120	2.5	IP42	-	manual control possible
AVC05C2M	3-point control	230	5	120	2.5	IP42	adjustable	manual control possible
AVC05Y1M	0-10V control	24	5	60 - 120	5	IP42	-	manual control possible
AVC10Y1M	0-10V control	24	10	60 - 120	5	IP42	-	manual control possible
ACC 30	control to constant temperature	230	6	120	3.5	IP42	-	manual control possible
ACC 40	control to constant temperature	230	6	120	3.5	IP42	-	manual control possible
AHC 40	weather compensation control	230	6	120	3.5	IP42	-	manual control possible

MIXING VALVES & ACTUATORS



LK840 Three-way Mixing Valve

Mixing valves with a rotating inner segment intended for heating or solar thermal systems with water or antifreeze fluid.

They have a linear flow rate characteristic in the range between 30° and 60° of the segment rotation.

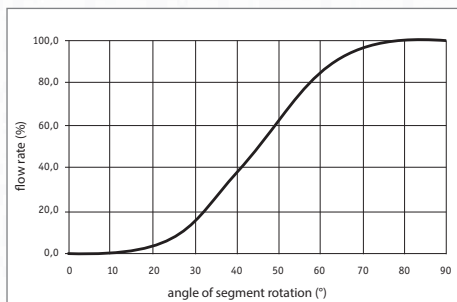
The valves can be fitted with any actuator supplied by Regulus.

These valves can be easily converted between a left or right hand version for use in different positions in a heating system.

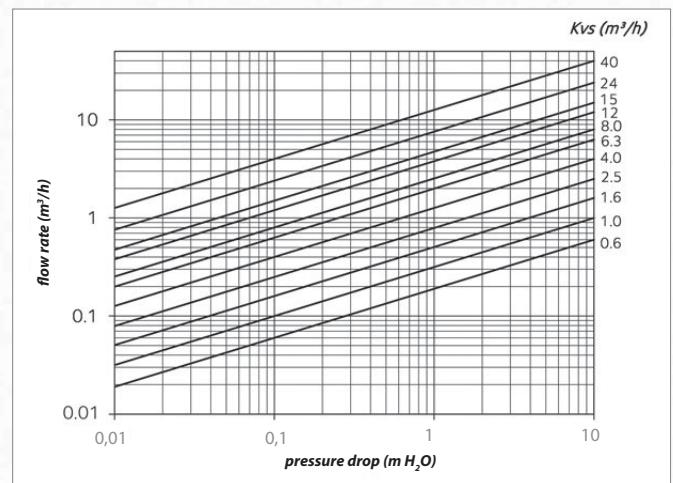
Technical Data

MAX. WORKING PRESSURE	10 bar
FLUID WORKING TEMPERATURE	5 to 110 °C
MATERIALS	
VALVE BODY	brass
VALVE SPINDLE	brass
ROTATING SEGMENT	brass

Flow rate characteristic

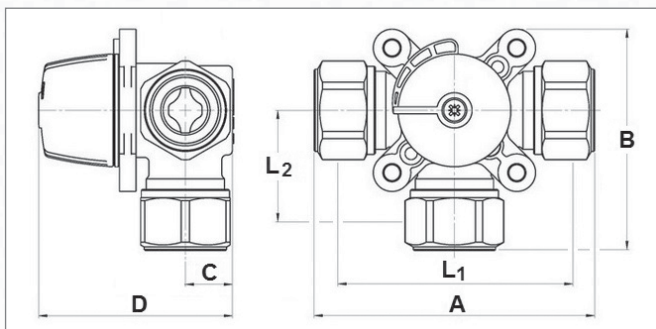


Pressure drop



Dimensions and Models

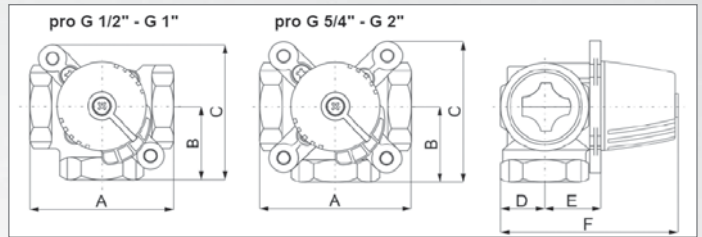
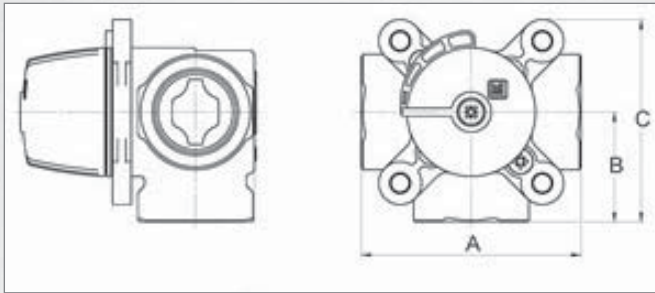
LK840 with copper connection



CONNECTION	mm	15	18	22	22	28	28
A	mm	114	114	114	87	120	120
B	mm	92	92	92	78	95	95
C	mm	20	20	20	20	20	20
D	mm	82	82	82	82	82	82
L ₁	mm	80	80	80	72	80	82
L ₂	mm	38	38	38	35	41	41
WEIGHT	kg	0.8	0.8	0.8	0.8	0.8	0.8
Kvs	m³/h	2.5	2.5	2.5	6.3	4.0	6.3
CODE	--	15771	15772	15773	15774	15775	15776

Dimensions and Models

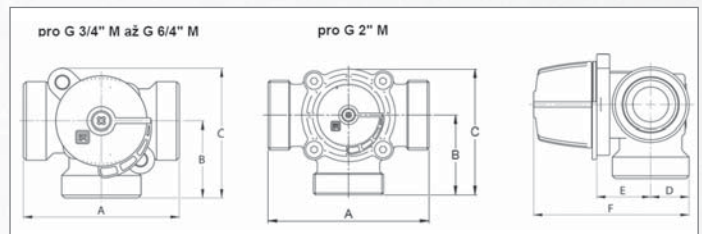
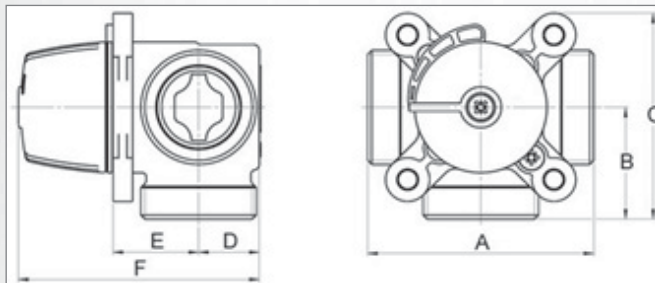
LK840 with inner thread



Dimensions of the new generation valves 2.0 (codes 16xxx).

CONNECTION	--	1/2" F	1/2" F	3/4" F	3/4" F	1" F	1" F	5/4" F	6/4" F	2" F
A	mm	80	80	70	70	70	70	84	106	106
B	mm	40	40	35	35	35	35	42	53	53
C	mm	75	75	63	63	63	63	77	88	88
WEIGHT	kg	0.7	0.7	0.5	0.5	0.5	0.5	0.8	1.4	1.6
MAX. PRESSURE DIFFERENCE IN EITHER DIRECTION	m H ₂ O	5	5	5	5	5	5	5	5	5
Kvs	m³/h	1.6	2.5	4.0	6.3	6.3	10.0	16.0	25.0	40.0
CODE	--	13998	11489	16760	16698	16758	16700	16693	16762	16697

LK840 with outer thread



Dimensions of the new generation valves 2.0 (codes 16xxx)

CONNECTION	--	3/4" M	1" M	1" M	5/4" M	6/4" M	2" M
A	mm	80	80	80	82	84	124
B	mm	40	40	40	41	42	62
C	mm	75	68	68	76	77	98
D	mm	20	18	18	22	24	30
E	mm	28	29	29	31	32	36
F	mm	82	81	81	87	90	100
WEIGHT	kg	0.7	0.6	0.6	0.8	0.9	2.1
MAX. PRESSURE DIFFERENCE IN EITHER DIRECTION	m H ₂ O	5	5	5	5	5	5
Kvs	m³/h	2.5	4.0	6.3	12.0	15.0	24.0
CODE	--	14822	16768	16695	14826	14827	14828

MIXING VALVES & ACTUATORS



LK841 Four-way Mixing Valve

Mixing valves with a rotating inner segment intended for solar and heating systems with water or with antifreeze fluid for heating and solar thermal systems and heat pumps.

They have a linear flow rate characteristic in the range between 30° and 60° of the segment rotation.

The valves can be fitted with any actuator supplied by Regulus.

These valves can be easily converted between a left or right hand version for use in different positions in a heating system.

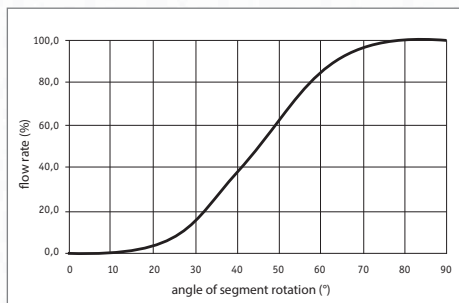
Technical Data

MAX. WORKING PRESSURE	10 bar
FLUID WORKING TEMPERATURE	-10 to 110 °C

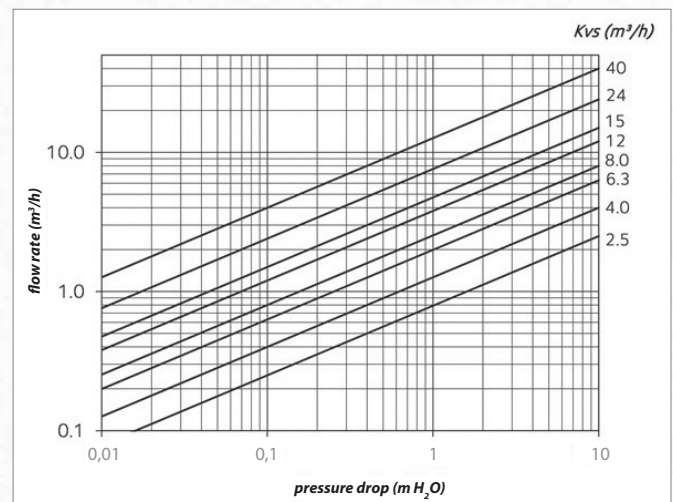
MATERIALS

VALVE BODY	brass
VALVE SPINDLE	brass
ROTATING SEGMENT	brass

Flow rate characteristic

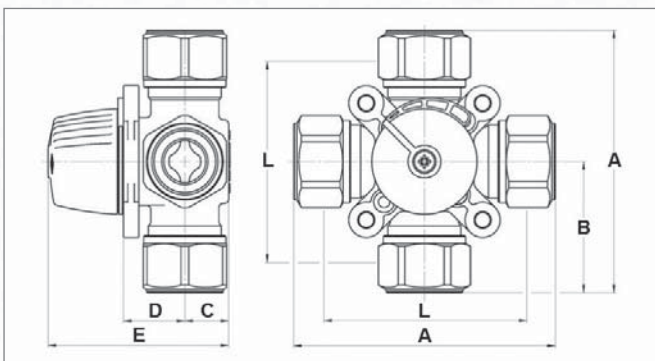


Pressure drop



Dimensions and Models

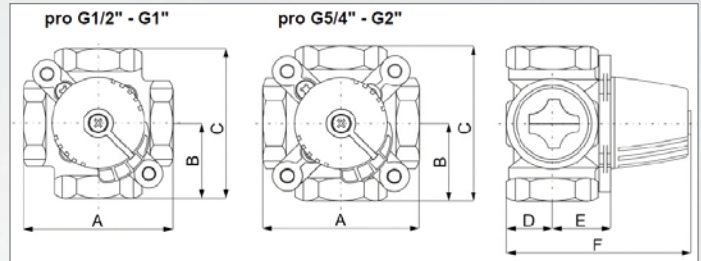
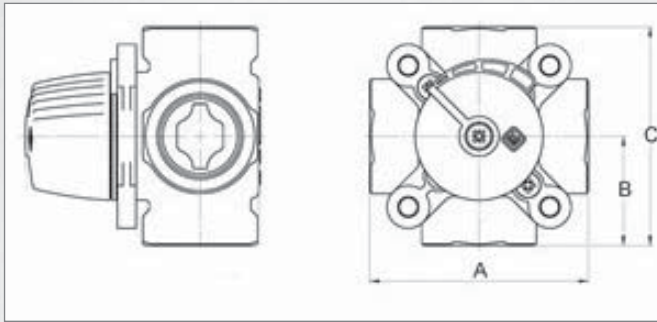
LK841 with copper connection



CONNECTION	mm	15	18	22	28	28
A	mm	114	114	114	120	120
B	mm	57	57	57	60	60
C	mm	20	20	20	20	18
D	mm	28	28	28	28	29
E	mm	82	82	82	82	81
L	mm	80	80	80	80	80
WEIGHT	kg	1.0	1.2	1.0	1.0	0.8
Kvs	m³/h	2.5	2.5	2.5	4.0	6.3
CODE	--	15777	15778	15779	15780	16789

Dimensions and Models

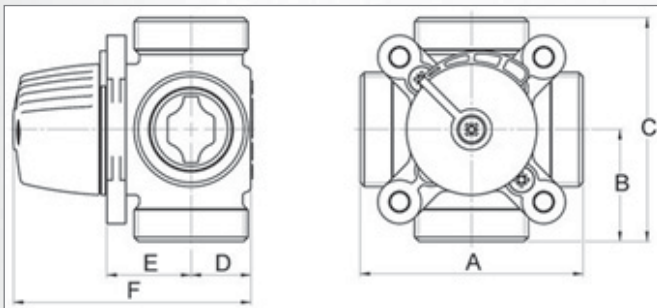
LK841 with inner thread



Dimensions of the new generation valves 2.0 (codes 16xxx).

CONNECTION	--	1/2" F	3/4" F	3/4" F	1" F	5/4" F	6/4" F	2" F
A	mm	80	80	70	70	84	118	127
B	mm	40	40	35	35	42	59	63.5
C	mm	80	80	70	70	84	118	127
WEIGHT	kg	0.7	0.7	0.5	0.5	0.8	2.3	2.7
MAX. PRESSURE DIFFERENCE IN EITHER DIRECTION	m H ₂ O	5	5	5	5	5	5	5
Kvs	m³/h	2.5	4.0	6.3	10.0	16.0	24.0	40.0
CODE	--	14859	14864	16780	16694	16699	12664	12665

LK841 with outer thread



CONNECTION	--	3/4" M	1" M	1" M	5/4" M	5/4" M	6/4" M
A	mm	80	80	80	82	82	84
B	mm	40	40	40	41	41	42
C	mm	80	80	80	82	82	84
D	mm	20	20	18	22	22	24
E	mm	28	28	29	31	31	32
F	mm	82	82	81	87	87	90
WEIGHT	kg	0.7	0.7	0.5	0.8	0.8	0.9
MAX. PRESSURE DIFFERENCE IN EITHER DIRECTION	m H ₂ O	5	5	5	5	5	5
Kvs	m³/h	2.5	4.0	6.3	8.0	12.0	15.0
CODE	--	14829	14830	16777	14832	14833	14834

MIXING VALVES & ACTUATORS



AVC and ACC Actuators for Mixing Valves

Actuators designed to control mixing valves.

The valve position is indicated by a LED, simple and quick installation, quiet operation. A special design prevents damage if the valve gets blocked.

Technical Data

DIMENSIONS	84 x 101 x 85 mm
MATERIALS	
ACTUATOR COVER	Polycarbonate
POWER CABLE	PVC

Models

Control	3-point					Proportional 0-10 V		Own controller to constant temperature	
	10875	9193	10876	11118	10878	10873	14682	16101	16102
TORQUE	5 Nm	5 Nm	5 Nm	5 Nm	5 Nm	10 Nm	5 Nm	6 Nm	6 Nm
SHIFT TIME	60 s	120 s	240 s	120 s	240 s	60 - 120 s	60 - 120 s	120 s	120 s
AUXILIARY SWITCH	no	no	no	no	yes	no	no	no	no
POWER SUPPLY	230V 50Hz	230V 50Hz	230V 50Hz	24V 50Hz	230V 50Hz	24V 50Hz	24V 50Hz	230V 50Hz	230V 50Hz
POWER INPUT	2.5 VA	2.5 VA	2.5 VA	2.5 VA	2.5 VA	5 VA	5 VA	3.5 VA	3.5 VA
IP/PROT. CLASS	IP42/II	IP42/II	IP42/II	IP42/II	IP42/II	IP42/II	IP42/II	IP42/I	IP42/I
AMBIENT TEMPERATURE	0 to 40 °C	0 to 40 °C	0 to 40 °C	0 to 40 °C	0 to 40 °C	0 to 40 °C	0 to 40 °C	0 to 60 °C	0 to 60 °C
SENSOR	--	--	--	--	--	--	--	Pt1000 1 pc	Pt1000 2 pc
CODE	10875	9193	10876	11118	10878	10873	14682	16101	16102

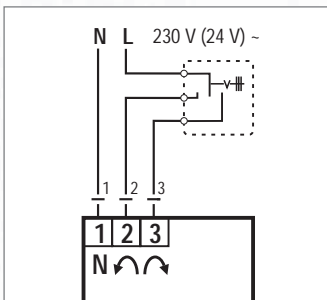
POWER CABLE

CROSS SECTION	3x0.5 mm ²	3x0.5 mm ²	3x0.5 mm ²	3x0.5 mm ²	5x0.5 mm ²	4x0.5 mm ²	4x0.5 mm ²	3x0.5 mm ²	3x0.5 mm ²
LENGTH	2 m	2 m	2 m	2 m	2 m	2 m	2 m	2 m	2 m

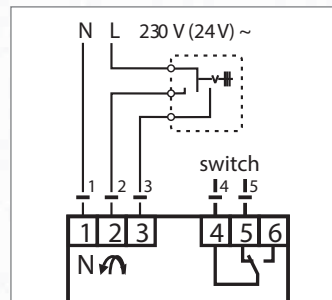
The actuator with 2 Pt1000 sensors, code 120853, is equipped with a differential thermostat suitable to control constant return temperature in solid fuel boilers and to switch off a circulation pump when the boiler goes out.

El. wiring

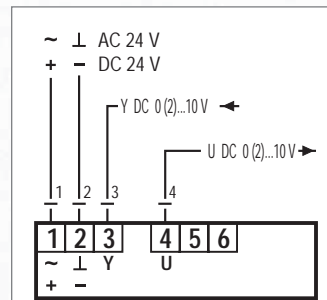
3-point control
10 875, 9 193, 10 876, 11 118



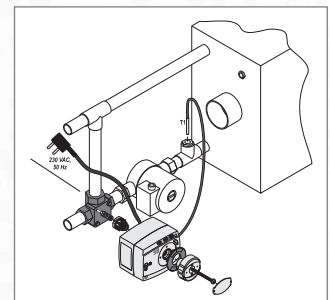
3-point control with auxiliary switch
10 878



0-10V proportional control
10 873, 14 682



Control to constant temperature
12 852, 12 853



MIXING VALVES & ACTUATORS



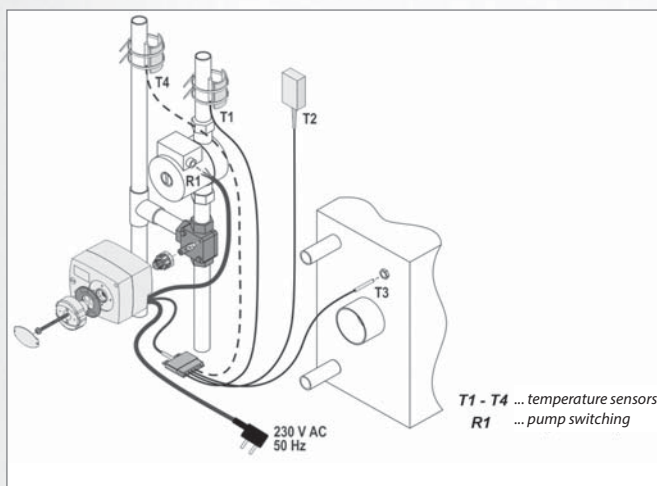
AHC Actuators with Weather Compensation Controllers for Mixing Valves

Actuators designed to control mixing valves. The actuator w. weather compensated controller combines a mixing valve control with a heating system control based on weather compensated heating curve. A set of adapters permitting connection to mixing valves by various manufacturers is included in supply.

Models

Control	weather compensated
TORQUE	6 Nm
SHIFT TIME	120 s
AUXILIARY SWITCH	no
POWER SUPPLY	230V 50Hz
POWER INPUT	<3.5 VA
IP/PROT. CLASS	IP42/I
AMBIENT TEMPERATURE	5 to 40 °C
SENSOR	Pt1000 3 pcs
CODE	16253

Wiring



Accessories

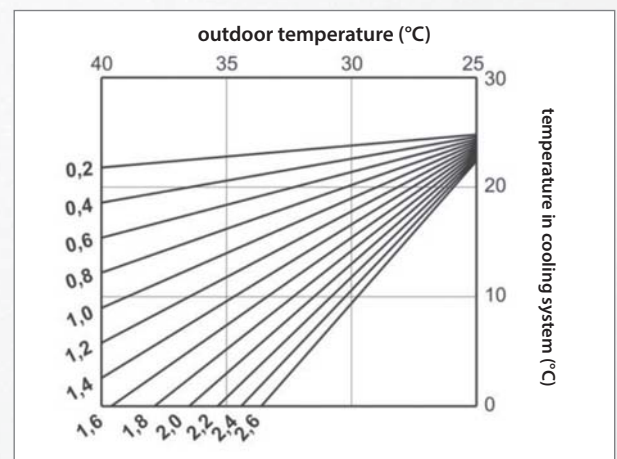
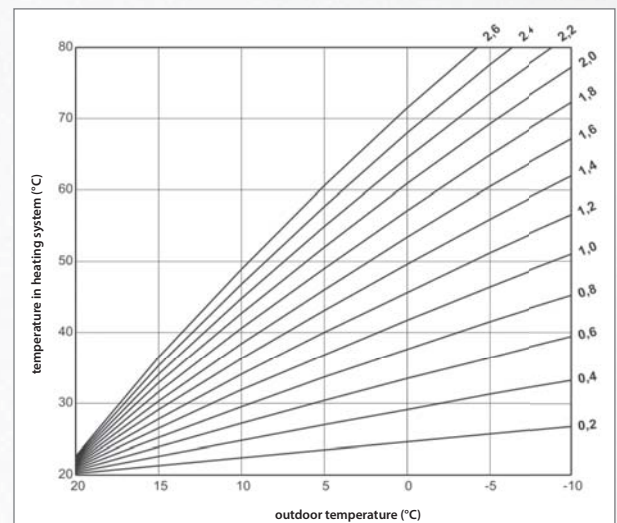
RCD2 Room Unit
Code: 16973



Technical Data

DIMENSIONS	84 x 101 x 85 mm
MATERIALS	
ACTUATOR COVER	Polycarbonate
POWER CABLE	PVC
POWER CABLE	
CROSS SECTION	3x 0.75 mm ²
LENGTH	2 m

Heating and cooling curves



TWO-WAY ZONE VALVES & ACTUATORS

DATA TABLE

Model line	VZK	VZP	LK 525	EV 251B
Specification	ball valve	valve with return spring	gate valve	solenoid valve
Application	solar thermal systems, heating systems, drinking water systems	solar thermal systems, heating systems	solar thermal systems, heating systems	heating systems
DN [mm]	15 - 25	15 - 25	25 - 32	10 - 25
K_{vs} [m³/h]	8.5 - 30	2.2 - 4.6	11	1.5 - 3.5
Working temperature [°C]	5 - 110	5 - 95 ¹⁾	-15 - 120 ²⁾	-10 - 90
Max. pressure [bar]	16	16	10	25
Max. pressure diff. [bar]	10	1.5 - 2	1	10
Control	single-pole with permanent live	single-pole with return spring	single-pole with permanent live	single-pole
Power supply [V]	230	230	230	230
Torque [Nm]	8	-	-	-
Shift time [s]	30	10	12	0.2
Max. power input [W]	7	7	7	10
IP rating	IP44	IP20	IP40	IP65
Auxiliary switch	-	end switch	-	-
Other	manual control, removable actuator, valve tight when closed, anti-block function	manual control, removable actuator, valve tight when closed	removable actuator	removable actuator (coil), valve tight when closed

1) for up to 1 hour the max. fluid working temperature is 120°C

2) the temperature range shown is valid for a valve with adapter, a short-term max. temperature is 160°C; working temperature without adapter is 5 to 80°C (90°C in short term)

ZONE BALL VALVES



VZK Two-way Zone Valve

Zone ball valves intended for heating or solar thermal systems with water or antifreeze fluid and for systems with drinking water.

The valve is equipped with a **single-pole control** actuator. The actuator can be removed without removing the valve. The valve shall not be installed with the actuator downwards.

The valve requires Neutral, Permanent Live and Switched Live. The valve is closed without Switched Live, as soon as Switched Live is present, the valve opens fully within 30 sec.

The valve can be adjusted manually by turning the actuator. First the staple shall be removed and the actuator lifted a bit, then it can be turned manually.

The valve is equipped with an anti-block function – if the ball gets jammed during closing, e.g. due to impurities inside the valve, the actuator changes the sense of rotation and closes the valve in the opposite direction.

Technical Data

MAX. WORKING PRESSURE	16 bar
FLUID WORKING TEMPERATURE	up to 110 °C

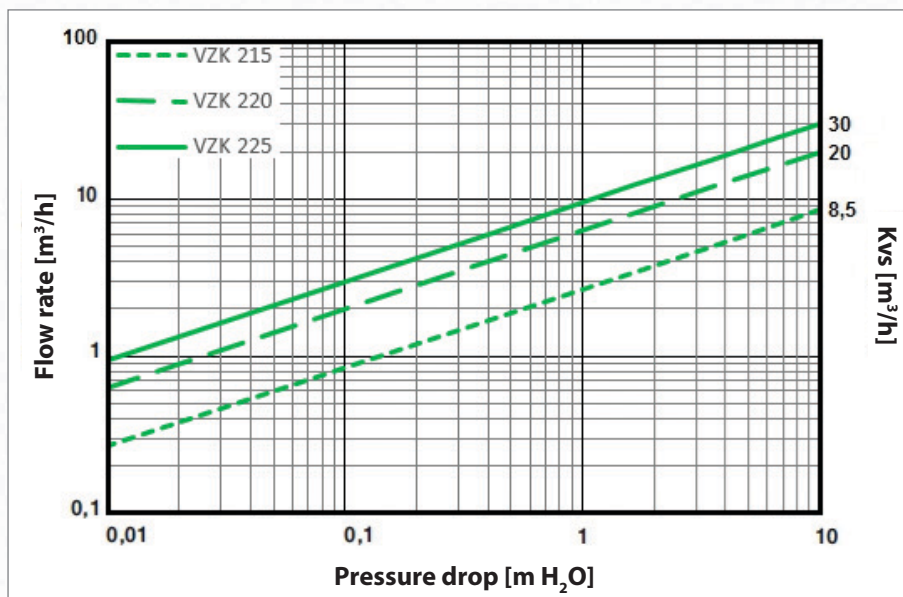
MATERIALS

VALVE BODY	forged brass, nickel plated
VALVE SPINDLE	chrome plated brass
VALVE BALL	chrome plated brass
O-RING	FPM
POWER CABLE	PVC

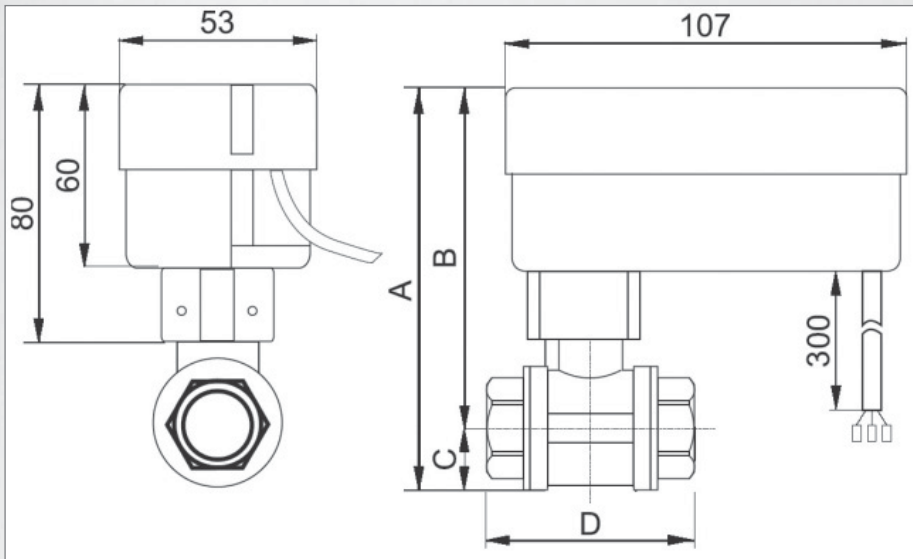
ACTUATOR

VOLTAGE	230 V 50 Hz
POWER INPUT	7 W
CURRENT	30 mA
IP RATING	IP 44
PROTECTION CLASS BY EN 61140 ed.2	II

Pressure drop

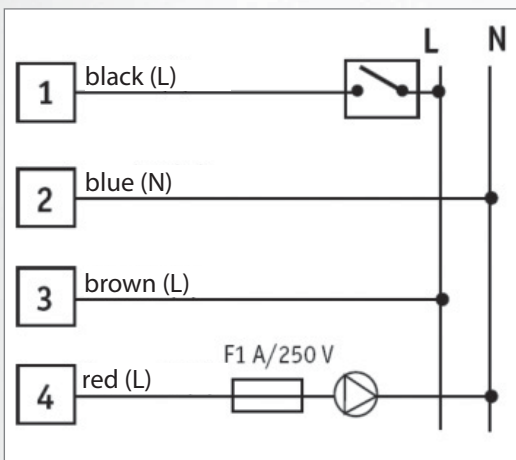


Dimensions and Models



		VZK 215-230-1P	VZK 220-230-1P	VZK 225-230-1P
CONNECTION	--	1/2" F	3/4" F	1" F
A	mm	126.0	129.0	137.0
B	mm	108.5	109.5	113.5
C	mm	17.5	19.5	23.5
D	mm	63	57	68
WEIGHT	kg	0.68	0.65	0.81
MAX. PRESSURE DIFFERENCE IN EITHER DIRECTION	bar	10	10	10
Kvs	m ³ /h	8.5	20.0	30.0
CODE	--	11288	10344	11289

Electric wiring



POWER CABLE

CROSS SECTION	4 × 0.5 mm ²
LENGTH	0.3 m



ZONE VALVES WITH RETURN SPRING



VZP Two-Way Zone Valve

Zone valves with return spring intended for heating or solar systems with water or antifreeze fluid.

The valve resists overpressure from current circulation pumps in either direction.

The valve is equipped with an actuator that can be removed on pressing a blocking key without the need to dismount the valve. It comes with a 5-core power cable, 1 m long.

The valve closes by means of the return spring, it is closed without power and opens in 10 sec. when energized. It can be manually opened using a handle (the valve will be partially open).

Technical Data

MAX. WORKING PRESSURE	1.6 bar
FLUID WORKING TEMPERATURE	5 – 95 °C (permanent) 120 °C (short term - 1 hour max.)

MATERIALS

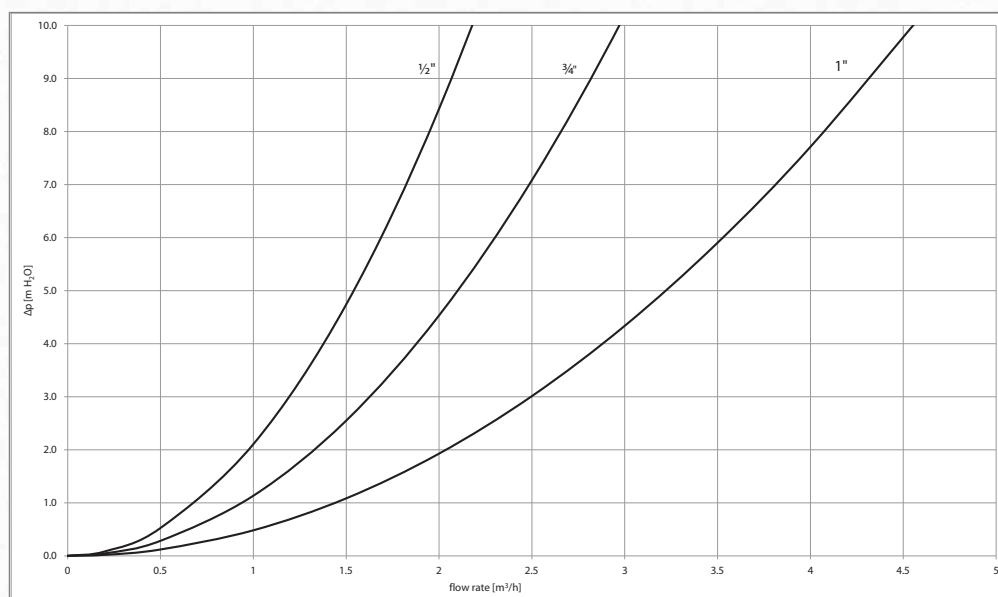
VALVE BODY	forged brass
VALVE SPINDLE	stainless steel
ACTUATOR LID	stainless steel
ACTUATOR SPRING	stainless steel
POWER CABLE	PVC

ACTUATOR

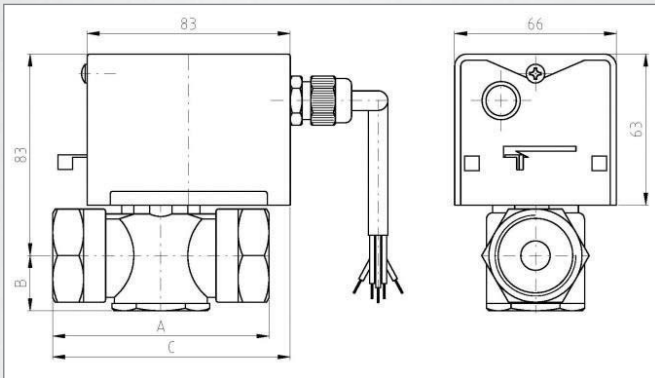
VOLTAGE	230 V 50 Hz
POWER INPUT	7 W
CURRENT	35 mA
IP RATING	IP 20
PROTECTION CLASS BY EN 61140 ed. 2	II

Each valve is fitted with an end microswitch with a potential-free contact.

Pressure drop

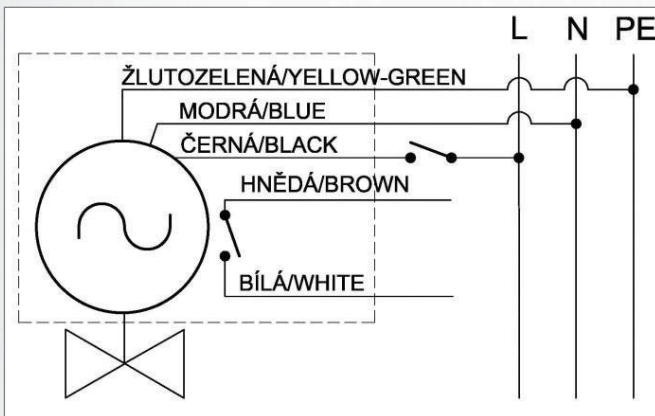


Dimensions and models



MODEL		VZP 215-230-1P	VZP 220-230-1P	VZP 225-230-1P
CONNECTION	--	G 1/2"	G 3/4"	G 1"
A	mm	72	78	88
B	mm	22	22	23
C	mm	90	90	95
WEIGHT	kg	0.8	0.8	1.0
MAX. PRESSURE DIFFERENCE IN EITHER DIRECTION	m H ₂ O	20	18	15
Kvs	m ³ /h	2.2	3.0	4.6
CODE	--	12856	12857	12858

Electric wiring



POWER CABLE

CROSS SECTION AREA	5× 0.75 mm ²
LENGHT	1 m
GROMMET	Pg9



GATE ZONE VALVES



LK525 Two-way Zone Valve

Gate zone valves intended for heating or solar thermal systems with water or antifreeze fluid.

The valve is equipped with a **single-pole control** actuator. It comes with 1m long 3-core power supply cable. The valve shall not be installed with the actuator downwards.

The valve requires Neutral, Permanent Live and Switched Live. The valve is closed without Switched Live, as soon as Switched Live is present, the valve **opens fully within 12 sec.**

This is a slow closing/opening valve which means that there is no water hammer effect even under a bigger pressure difference.

Technical Data

MAX. WORKING PRESSURE	10 bar
FLUID WORKING TEMPERATURE	5 to 80°C, short term 90°C; with adapter (code 11278)

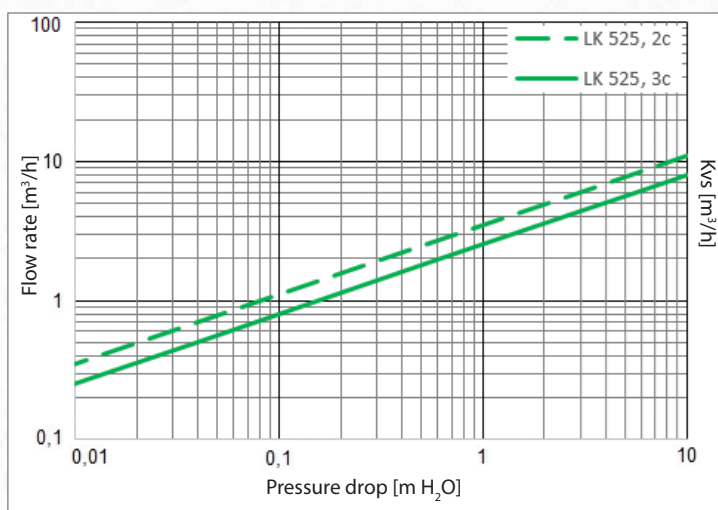
MATERIALS

VALVE BODY	forged brass
CLOSING ELEMENT	PPS composite
VALVE SPINDLE	PPS composite
POWER CABLE	PVC

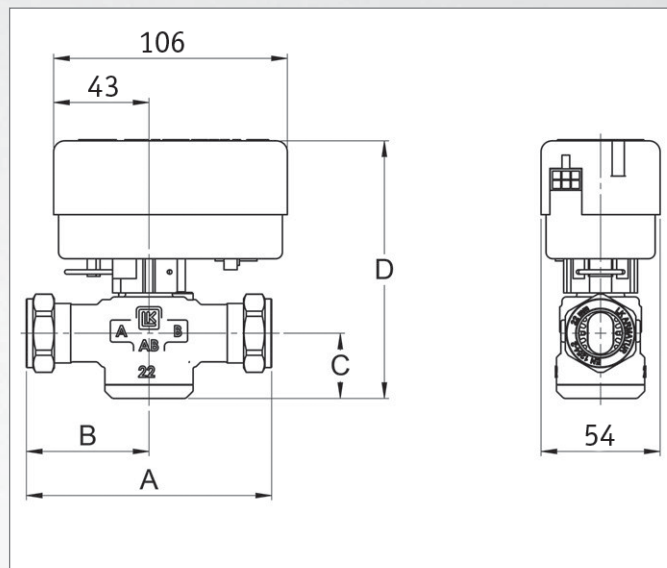
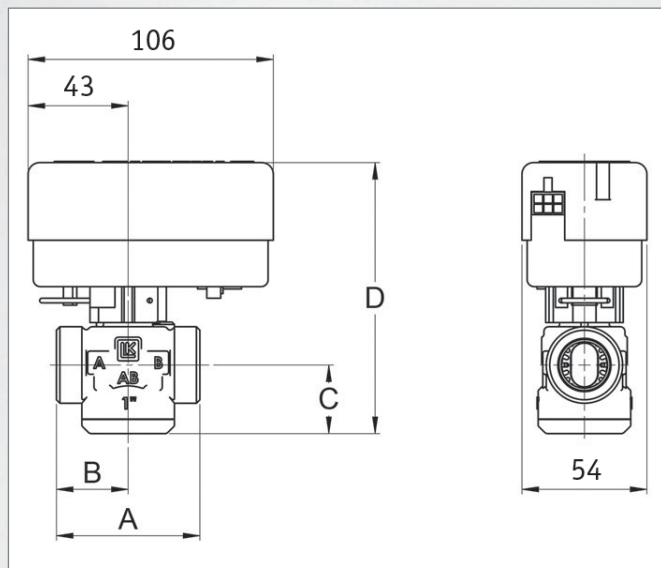
ACTUATOR

VOLTAGE	230 V 50 Hz
POWER INPUT	7 W
CURRENT	35 mA
IP RATING	IP 40
PROTECTION CLASS BY EN 61140 ed.2	II

Pressure drop

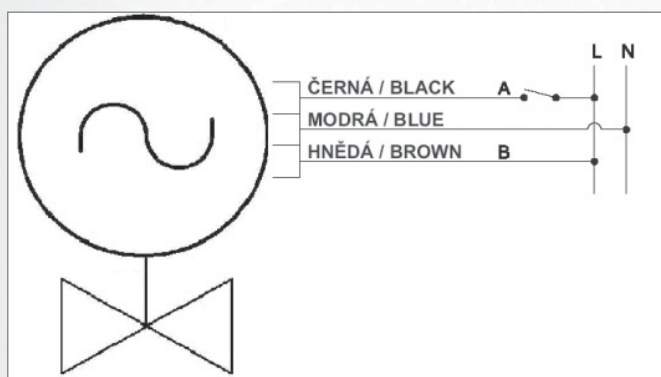


Dimensions and Models



CONNECTION	--	1" M	5/4" M	Cu22	Cu28
A	mm	62	74	110	110
B	mm	31	37	55	55
C	mm	30	30	30	30
WEIGHT	kg	0.6	0.6	0.4	0.6
MAX. PRESSURE DIFFERENCE IN EITHER DIRECTION	m H ₂ O	10	10	10	10
Kvs	m ³ /h	11.0	11.0	11.0	11.0
CODE	--	12874	12875	14896	14897

Electric wiring



POWER CABLE

CROSS SECTION	3× 0.75 mm ²
LENGTH	1 m



THREE-WAY ZONE VALVES & ACTUATORS

DATA TABLE

Model line	VZK	VZK R	VZK-S ¹⁾	VZP	LK 525
Specification	ball valve	ball valve	ball valve	valve with return spring	gate valve
Actuator axis	in the plane of inlets	perpendicular to plane of inlets	perpendicular to plane of inlets	in the plane of inlets	in the plane of inlets
Application	solar thermal systems, heating systems, drinking water systems	solar thermal systems, heating systems, drinking water systems	solar thermal systems, heating systems, drinking water systems	solar thermal systems, heating systems	solar thermal systems, heating systems
DN [mm]	20 - 25	15 - 25	15 - 25	15 - 25	25 - 32
K_{vs} [m³/h]	7 - 11	10,5 - 14	10,5 - 14	2,2 - 4,6	8
Working temperature [°C]	5 - 110	5 - 110	5 - 110	5 - 95 ²⁾	-15 - 120 ³⁾
Max. pressure [bar]	16	16	16	16	10
Max. pressure diff. [bar]	10	10	10	1,5 - 2	1
Control	single-pole with permanent live	single-pole with permanent live	two-pole	single-pole with return spring	single-pole with permanent live
Power supply [V]	230	230	230	230	230
Torque [Nm]	15	15	15	-	-
Shift time [s]	64	60	48	10	8
Max. power input [W]	9	4	6	7	7
IP rating	IP44	IP42	IP44	IP20	IP40
Auxiliary switch	-	-	end-type	end-type	-
Other	manual control, removable actuator, valve tight when closed	manual control, removable actuator, valve tight when closed	manual control, removable actuator, valve tight when closed	manual control, removable actuator, valve tight when closed	removable actuator

1) VZK-S valves permit also mixing function

2) for up to 1 hour the max. fluid working temperature is 120°C

3) the temperature range shown is valid for a valve with adapter, a short-term max. temperature is 160°C; working temperature without adapter is 5 to 80°C (90°C in short term)

ZONE BALL VALVES



VZK Three-way Zone Valve

Zone ball valves intended for heating or solar thermal systems with water or antifreeze fluid and for systems with drinking water.

The valve is equipped with a **single-pole control** actuator. The actuator can be removed without removing the valve. The valve shall not be installed with the actuator downwards.

The valve requires Neutral, Permanent Live and Switched Live. The port B is open without Switched Live, as soon as Switched Live is present, the port A opens. The shift time is 64 s. The valve can be adjusted manually by turning the handle (after disconnecting the motor).

Technical Data

MAX. WORKING PRESSURE	16 bar
FLUID WORKING TEMPERATURE	up to 110 °C

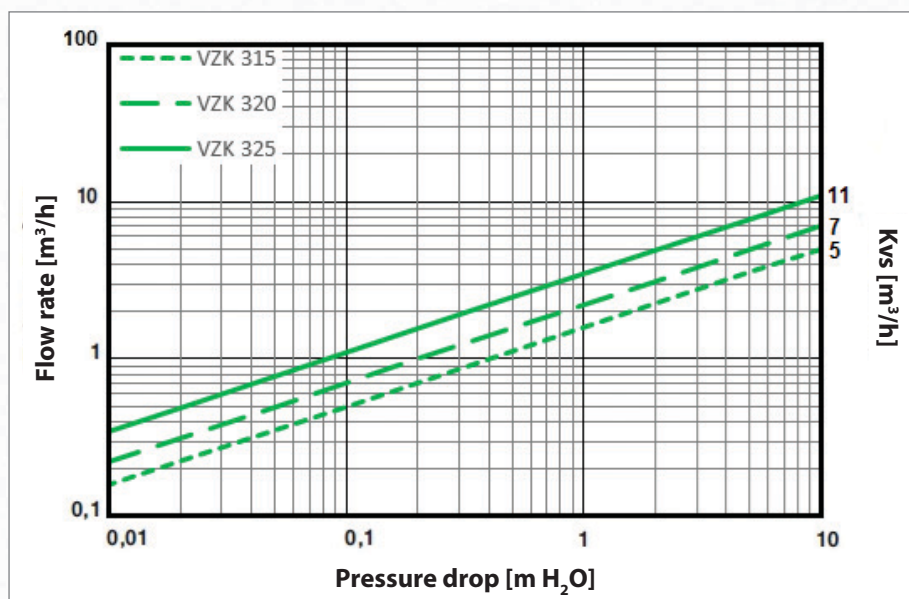
MATERIALS

VALVE BODY	forged brass, nickel plated
VALVE SPINDLE	chrome plated brass
VALVE BALL	chrome plated brass
O-RING	FPM
POWER CABLE	PVC

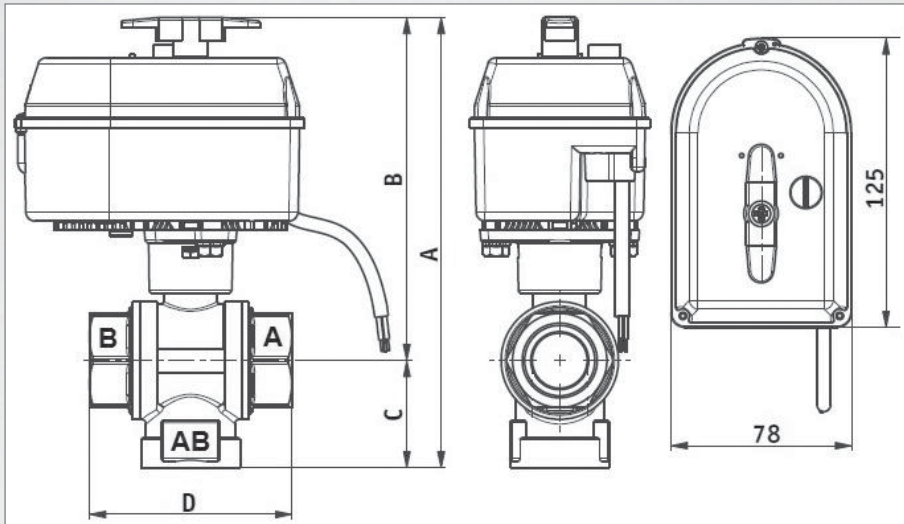
ACTUATOR

VOLTAGE	230 V 50 Hz
POWER INPUT	9 W
CURRENT	40 mA
IP RATING	IP 44
PROTECTION CLASS BY EN 61140 ed.2	II

Pressure drop

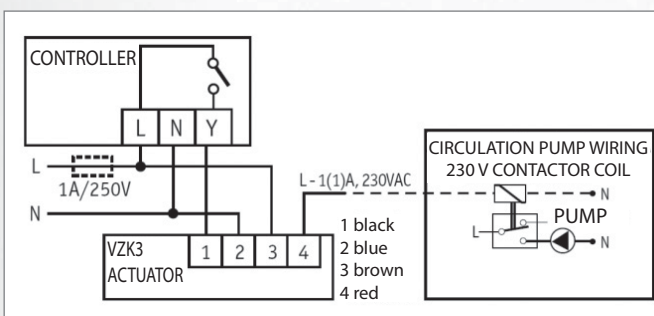


Dimensions and Models



		VZK 315 -230-1P	VZK 320 -230-1P	VZK 325 -230-1P
CONNECTION	--	1/2" F	3/4" F	1" F
A	mm	183	183	194
B	mm	144	144	148
C	mm	39	39	46
D	mm	74	74	88
WEIGHT	kg	1.02	1.25	1.53
MAX. PRESSURE DIFFERENCE IN EITHER DIRECTION	bar	10	10	10
Kvs	m ³ /h	5.0	7.0	11.0
CODE	--	11292	11293	11294

Electric wiring



POWER CABLE

CROSS SECTION	4× 0.5 mm ²
LENGTH	2 m



ZONE BALL VALVES



VZK R Three-way Zone Valve

Zone ball valves intended for heating or solar thermal systems with water or antifreeze fluid and for systems with drinking water.

The valve is equipped with a **single-pole control** actuator. The actuator can be removed without removing the valve. The valve shall not be installed with the actuator downwards.

The valve requires Neutral, Permanent Live and Switched Live. The port B is open without Switched Live, as soon as Switched Live is present, the port A opens. The shift time is 60 s. The valve can be adjusted manually by turning the knob (after disconnecting the motor).

Technical Data

MAX. WORKING PRESSURE	16 bar
FLUID WORKING TEMPERATURE	up to 110 °C

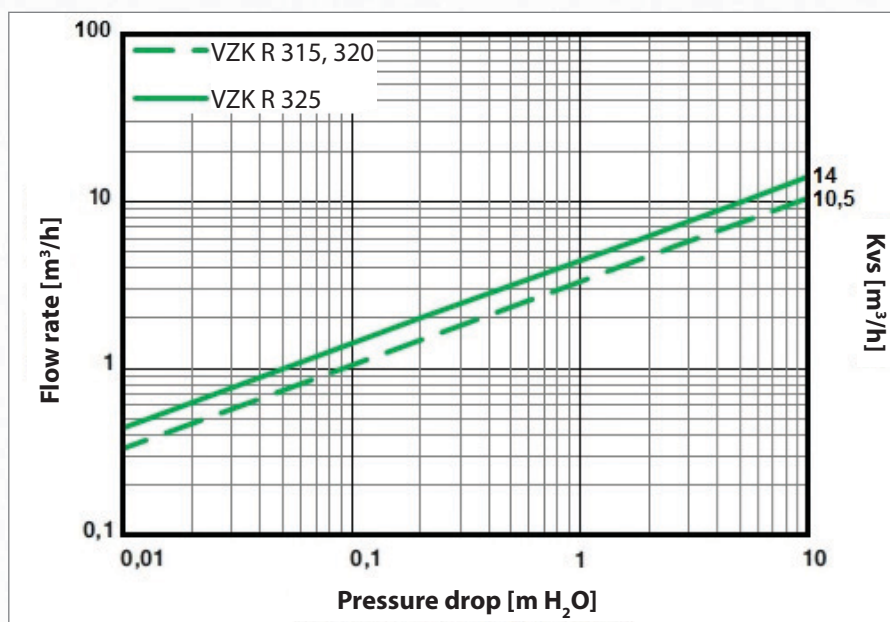
MATERIALS

VALVE BODY	forged brass, nickel plated
VALVE SPINDLE	chrome plated brass
VALVE BALL	chrome plated brass
O-RING	FPM
POWER CABLE	PVC

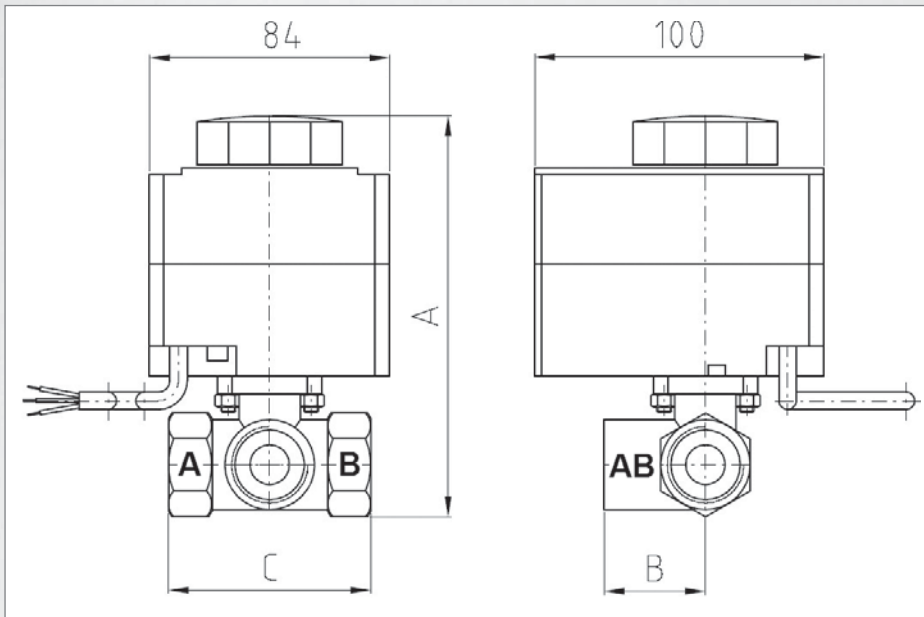
ACTUATOR

VOLTAGE	230 V 50 Hz
POWER INPUT	4 W
CURRENT	17 mA
IP RATING	IP 42
PROTECTION CLASS BY EN 61140 ed.2	II

Pressure drop

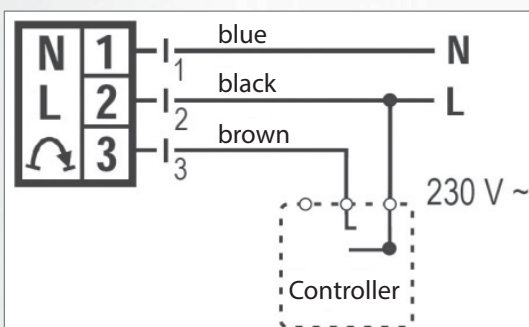


Dimensions and Models



		VZK R 315 -230-1P	VZK R 320 -230-1P	VZK R 325 -230-1P
CONNECTION	--	1/2" F	3/4" F	1" F
A	mm	145.0	145.0	156.0
B	mm	48.5	50.5	60.0
C	mm	67.0	69.5	82.0
WEIGHT	kg	1.03	0.94	1.17
MAX. PRESSURE DIFFERENCE IN EITHER DIRECTION	bar	10	10	10
Kvs	m ³ /h	10.5	10.5	14.0
CODE	--	13602	13603	13604

Electric wiring



POWER CABLE

CROSS SECTION	3× 0.5 mm ²
LENGTH	2 m



ZONE BALL VALVES



VZK S Three-way Zone Valve

Zone ball valves intended for heating or solar thermal systems with water or antifreeze fluid and for systems with drinking water.

The valve is equipped with a **two-pole control actuator**, **permitting mixing**. The actuator can be removed without removing the valve. The valve shall not be installed with the actuator downwards.

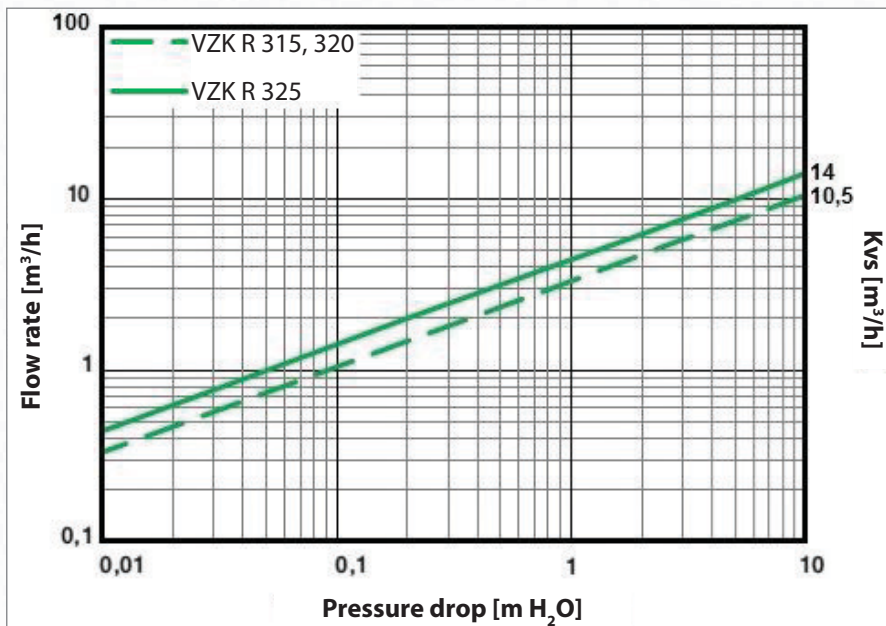
When the brown wire is energized, **the actuator turns clockwise (the path A-AB opens)**, when the black wire is energized, **the actuator turns anti-clockwise (the path B-AB opens)**, when de-energized, the actuator remains in its position. The shift time is 48 s. The valve can be adjusted manually by turning the handle (after disconnecting the motor).

Each valve is equipped with an end switch with potential-free contact.

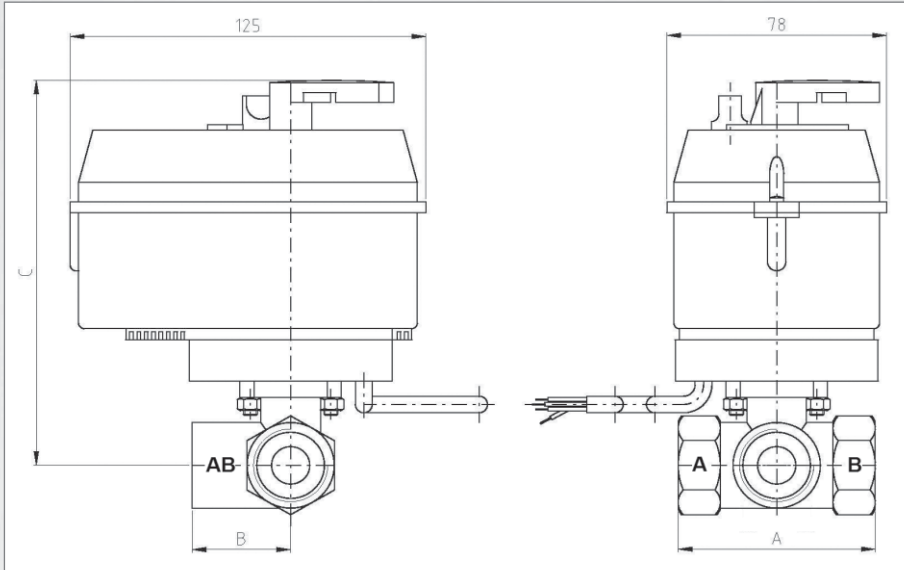
Technical Data

MAX. WORKING PRESSURE	16 bar
FLUID WORKING TEMPERATURE	up to 110 °C
MATERIALS	
VALVE BODY	forged brass, nickel plated
VALVE SPINDLE	chrome plated brass
VALVE BALL	chrome plated brass
O-RING	FPM
POWER CABLE	PVC
ACTUATOR	
VOLTAGE	230 V 50 Hz
POWER INPUT	6 W
CURRENT	30 mA
IP RATING	IP 44
PROTECTION CLASS BY EN 61140 ed.2	II

Pressure drop

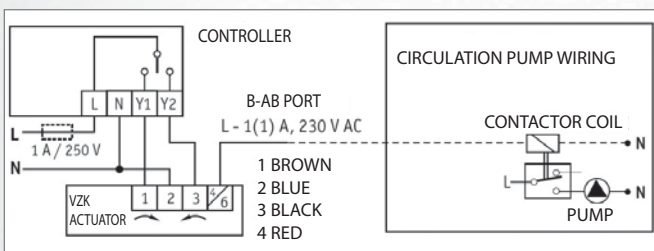


Dimensions and Models



		VZK-S 315 -230-2P	VZK-S 320 -230-2P	VZK-S 325 -230-2P
CONNECTION	--	1/2" F	3/4" F	1" F
A	mm	67.0	69.5	82.0
B	mm	33.5	31.8	42.0
C	mm	137.0	137.0	145.0
WEIGHT	kg	1.11	1.04	1.25
MAX. PRESSURE DIFFERENCE IN EITHER DIRECTION	bar	10	10	10
Kvs	m ³ /h	10.5	10.5	14.0
CODE	--	13589	11286	11287

Electric wiring



POWER CABLE

CROSS SECTION	4× 0.5 mm ²
LENGTH	2 m



ZONE VALVES WITH RETURN SPRING



VZP Three-way Zone Valve

Zone valves with return spring intended for heating or solar systems with water or antifreeze fluid.

The valve resists overpressure from current circulation pumps in either direction.

The valve is equipped with an actuator that can be removed on pressing a blocking key without the need to dismount the valve. It comes with a 5-core power cable, 1 m long.

The valve closes by means of the return spring, it is closed without power and opens in 10 sec. when energized. It can be manually opened using a handle (the valve will be partially open).

Technical Data

MAX. WORKING PRESSURE	1.6 bar
FLUID WORKING TEMPERATURE	5 – 95 °C (permanent) 120 °C (short term - 1 hour max.)

MATERIALS

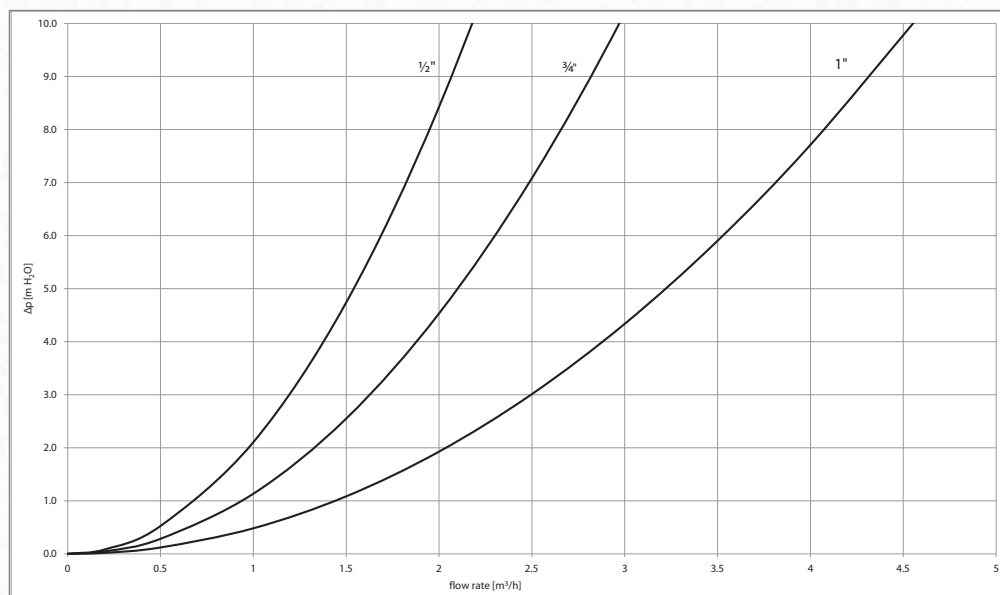
VALVE BODY	forged brass
VALVE SPINDLE	stainless steel
ACTUATOR LID	stainless steel
ACTUATOR SPRING	stainless steel
POWER CABLE	PVC

ACTUATOR

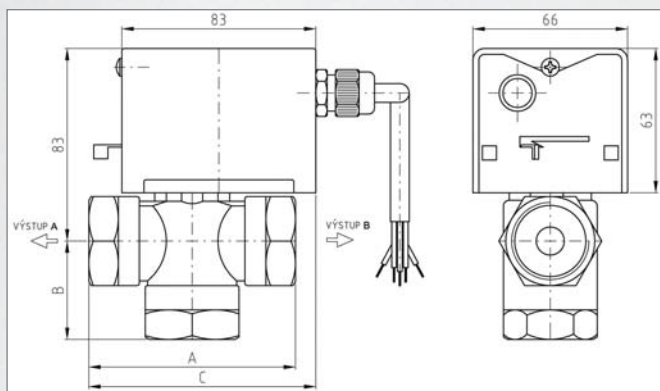
VOLTAGE	230 V 50 Hz
POWER INPUT	7 W
CURRENT	35 mA
IP RATING	IP 20
PROTECTION CLASS BY EN 61140 ed. 2	II

Each valve is fitted with an end microswitch with a potential-free contact.

Pressure drop

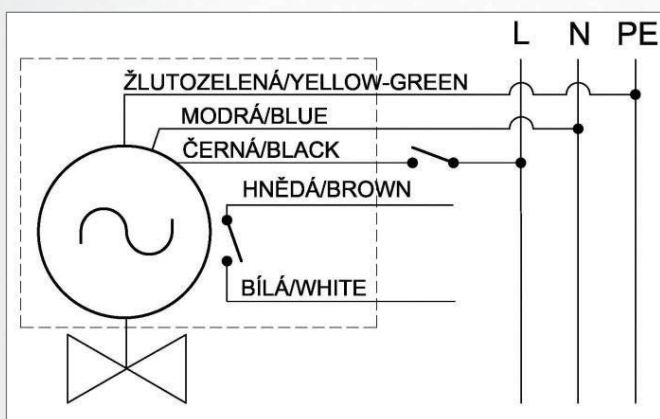


Dimensions and models



MODEL		VZP 215-230-1P	VZP 220-230-1P	VZP 225-230-1P
CONNECTION	--	G 1/2"F	G 3/4"F	G 1"F
A	mm	72	78	88
B	mm	28	33	42
C	mm	86	90	95
WEIGHT	kg	0.8	0.8	1.0
MAX. PRESSURE DIFFERENCE IN EITHER DIRECTION	m H ₂ O	20	18	15
Kvs	m ³ /h	2.2	3.0	4.6
CODE	--	12854	12855	9658

Electric wiring



POWER CABLE

CROSS SECTION AREA	5x 0.75 mm ²
LENGHT	1 m
GROMMET	Pg9



GATE ZONE VALVES



LK525 Three-way Zone Valve

Gate zone valves intended for heating or solar thermal systems with water or antifreeze fluid.

The valve is equipped with a **single-pole control** actuator. It comes with 1m long 3-core power supply cable. The valve shall not be installed with the actuator downwards.

The valve requires Neutral, Permanent Live and Switched Live. The valve is closed without Switched Live, as soon as Switched Live is present, the valve **opens fully within 12 sec.**

This is a slow closing/opening valve which means that there is no water hammer effect even under a bigger pressure difference.

Technical Data

MAX. WORKING PRESSURE	16 bar
FLUID WORKING TEMPERATURE	5 to 80°C, short term 90°C; with adapter (code 11278)

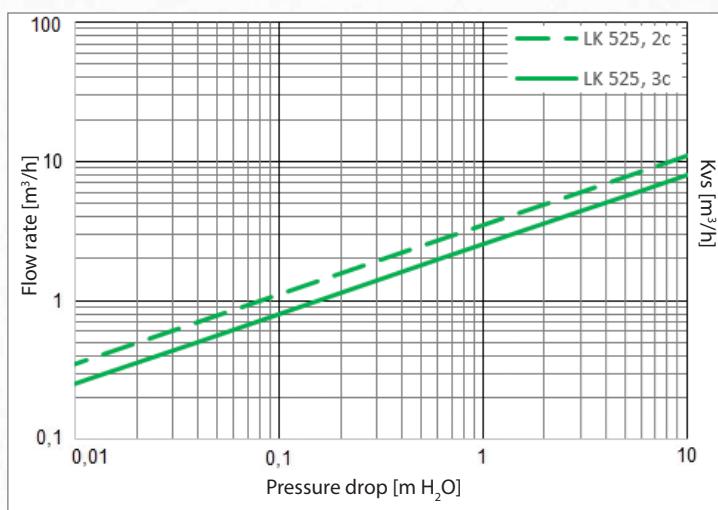
MATERIALS

VALVE BODY	forged brass
CLOSING ELEMENT	PPS composite
VALVE SPINDLE	PPS composite
POWER CABLE	PVC

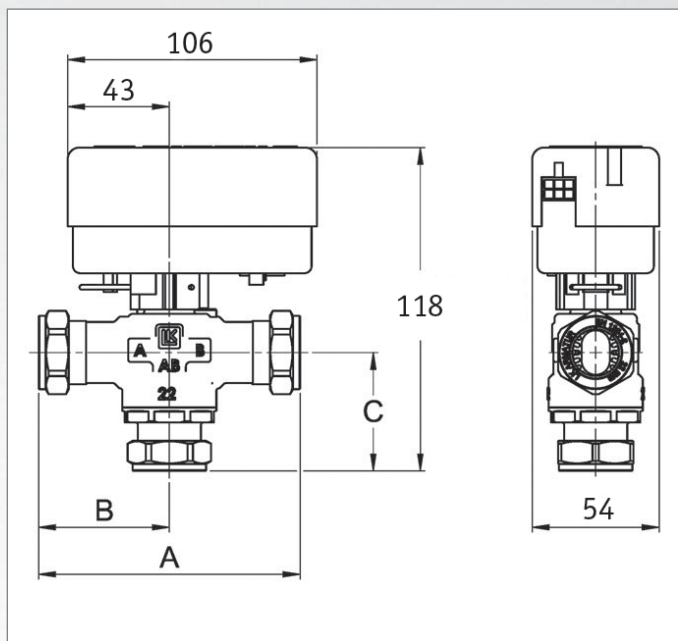
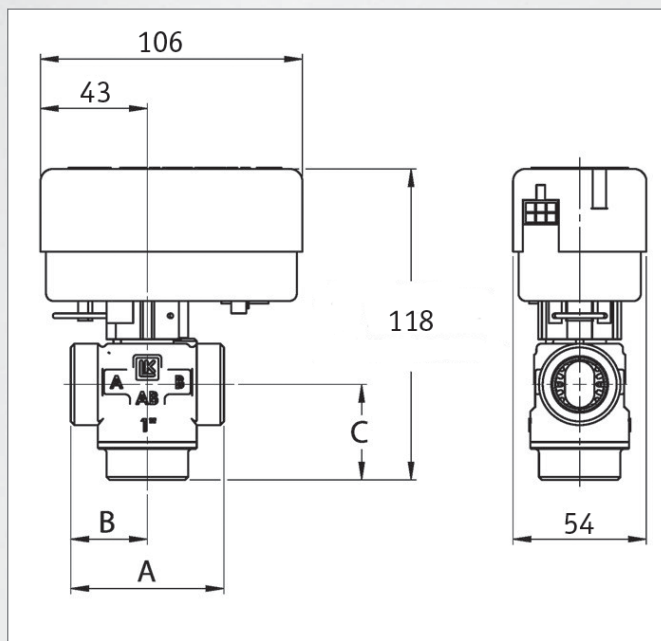
ACTUATOR

VOLTAGE	230 V 50 Hz
POWER INPUT	7 W
CURRENT	30 mA
IP RATING	IP 40
PROTECTION CLASS BY EN 61140 ed.2	II

Pressure drop

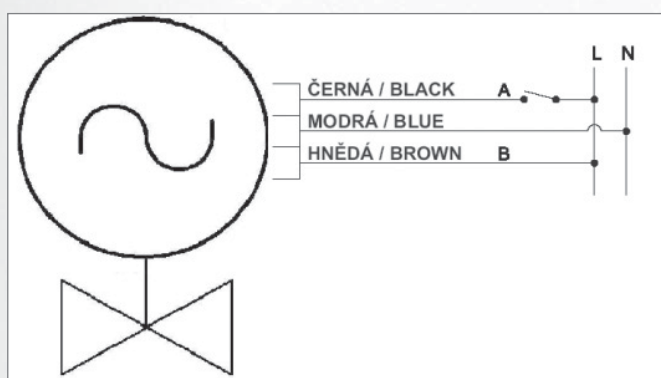


Dimensions and Models



CONNECTION	--	1" M	5/4" M	Cu22	Cu28
A	mm	62	74	110	110
B	mm	31	37	55	55
C	mm	39	40	50	54
D	mm	127	128	138	142
WEIGHT	kg	0.6	0.6	0.4	0.6
MAX. PRESSURE DIFFERENCE IN EITHER DIRECTION	m H ₂ O	10	10	10	10
Kvs	m ³ /h	8.0	8.0	8.0	8.0
CODE	--	11284	11285	14883	14884

Electric wiring



POWER CABLE

CROSS SECTION	3× 0.75 mm ²
LENGTH	1 m



