

# RESOL pump stations





Single-line pump station



FlowSol® B HE

Twin-line pump station



#### FlowSol® B HE

Twin-line pump station







# RESOL pump stations – simply more

- As a control technology specialist, we develop station and controller in perfect sync for an optimum outcome
- Available with different pumps and controllers
- All the vital electronic and hydraulic components for operating a solar thermal system contained in one pre-assembled station
- Award-winning functionality and design
- Broad range of accessories perfectly matched for controller and station
- Customised and OEM versions available also for small-batch series

www.resol.com

## FlowSol® S/S HE pump station



The FlowSol® S pump station is a single-line pump station and is used in the solar return. The station is available with a choice of controllers from the popular DeltaSol® BS series or DeltaSol® CS series.

The pump station is pre-assembled and contains all the vital hydraulic components for operating a solar thermal system and is particularly easy to install.

- Safety assembly with connection for the diaphragm-type expansion vessel, safety valve and pressure gauge
- Fill and drain valves

- Wall mounting bracket with fastening material
- Insulated design casing
- Integrated standard or high-efficiency pump

#### Technical data

Circulating pump:

FlowSol® S: Wilo ST 15/6 ECO or 15/7 ECO (surcharge); FlowSol® S HE: Wilo Yonos PARA ST15/7.0-PWM2

Safety valve: 6 bar

Pressure gauge: 0 ... 10 bar

Flowmeter: 1 ... 13 I/min Non-return valves:

opening pressure 40 mbar, openable

Connection to diaphragm-type expansion

vessel: 3/4" ET, flat sealing Outlet safety valve: 3/4" IT

Connections to the solar pipes: 3/4" IT

Maximum temperature: 95 °C

Maximum pressure: 6 bar

Medium: water with max. 50% glycol

Dimensions:

approx. 430 × 223 × 193 mm (with insulation) distance centres: 100 mm distance centre/wall: 67 mm

Material: fittings: brass seals: EPDM/AFM 34 insulation: EPP foam

Optionally available with a Grundfos pump!

For information on the power consumption of the pump and on the auxiliary current see data sheet.

Circulating pump: FlowSol® B: Wilo ST 15/6

ECO or 15/7 ECO (surcharge); FlowSol® B HE:

Connection to diaphragm-type expansion

## FlowSol® B/B HE pump station



The FlowSol® B is a pre-assembled twin-line pump station and contains all the vital hydraulic components for operating a solar thermal system and is particularly easy to install.

The pump station is available in many combinations with four different controller series and four different pump variants.

- Integrated controller
- Integrated standard or high-efficiency pump
- Fill and drain valves
- Safety assembly with connection for the diaphragm-type expansion vessel, safety valve and pressure gauge

Wall mounting bracket with mounting material

Air separator with manual air vent for the

solar thermal system

Maximum temperature flow/return:

Wilo Yonos PARA ST15/7.0-PWM2

opening pressure 20 mbar, openable

Safety valve: 6 bar Pressure gauge: 0 ... 10 bar Flowmeter: 1 ... 13 I/min Non-return valves:

120 °C/95 °C

Maximum pressure: 6 bar

vessel: 3/4" ET, flat sealing Outlet safety valve: 3/4" IT

Medium: water with max. 50% glycol

Connections to the solar pipes: 3/4" IT

**Dimensions:** 

approx. 481 × 320 × 190 mm (with insulation) distance centres: 100 mm

distance centre/wall: 67 mm

Material: fittings: brass seals: AFM 34 insulation: FPP foam

Optionally available with a Grundfos pump!

For information on the power consumption of the pump and on the auxiliary current see data sheet.

## FlowSol® B HE WMZ pump station



The FlowSol® B HE WMZ is a pre-assembled twin-line pump station with integrated heat quantity measurement via a VFS Grundfos Direct Sensor™. An external flowmeter is not required.

- With integrated heat quantity measurement via VFS Grundfos Direct Sensor™
- Pre-assembled twin-line pump station
- Integrated DeltaSol® BX W controller
- Design insulation casing
- Innovative hinged controller panel for quick and easy access to the hydraulic components
- Safety assembly with connection for the diaphragm-type expansion vessel, safety valve and pressure gauge
- Fill and drain valves
- Wall mounting bracket with mounting material
- Air separator with manual air vent for the solar thermal system

#### Technical data

Circulating pump: Wilo Yonos Para 15/1-7 PWM2

Safety valve: 6 bar

Pressure gauge: 0 ... 10 bar

Grundfos Direct Sensor™: VFS 1-12,VFS 2-40

Non-return valves:

opening pressure 20 mbar, openable

Connection to diaphragm-type expansion vessel: 3/4" ET, flat sealing

vessel: 74 E1, flat sealing

Outlet safety valve: 3/4" IT

Connections to the solar pipes: 3/4" IT, at the VFS: 3/4" ET

Maximum temperature flow/return: 120 °C/95 °C

Maximum pressure: 6 bar

Medium: water with max. 50% glycol

**Dimensions:** 

approx.  $481 \times 320 \times 190$  mm (with insulation) distance centres: 100 mm distance centre/wall: 67 mm

Material:

fittings: brass seals: AFM 34 insulation: EPP foam

For information on the power consumption of the pump and on the auxiliary current see data sheet.

# FlowSol® XL pump station



For collector fields of up to 100 m<sup>2</sup>



The FlowSol® XL is a pre-assembled twin-line pump station especially developed for systems with high flow rates. Equipment and nominal width are designed to meet the demands of large collector fields.

- Integrated DeltaSol® BX Plus controller
- Integrated energy-saving high-efficiency pump
- Safety assembly with connection for the diaphragm-type expansion vessel, safety valve and pressure gauge
- Ball valves with non-return valves in flow and return
- Flowmeter
- Air separator with manual air vent for the solar thermal system
- Fill and drain valves

Circulating pump: Wilo Stratos PARA 15/1-9

Safety valve: 6 bar

Pressure gauge: 0 ... 10 bar

Flowmeter: 5 ... 35 l/min

Ball valves in flow and return with nonreturn valves and thermometer handles:

non-return valves:

opening pressure 20 mbar, openable

thermometer: 0 ... 160 °C

Connection to diaphragm-type expansion vessel: 1" ET, flat sealing

Outlet safety valve: 1" IT

Connections to the solar pipes: 1" IT

Maximum temperature flow/return:

120 °C/95 °C

Maximum pressure: 6 bar

Medium: water with max. 50% glycol

Dimensions:

approx. 470  $\times$  380  $\times$  220 mm (with insulation)

distance centres: 125 mm distance centre/wall: 73 mm

Material: fittings: brass seals: AFM 34 o-ring: FKM

insulation: EPP foam

For information on the power consumption of the pump and on the auxiliary current see data sheet.

# Survey of pump stations













FlowSol® S FlowSol® S HE FlowSol® B FlowSol® B HE WMZ FlowSol® XL

Wilo ST15/6 ECO	✓		✓			
Wilo ST15/7 ECO	✓		✓			
Wilo Yonos PARA ST 15/7.0-PWM2		✓		✓	✓	
Wilo Stratos PARA 15/1-9						✓
Air separator			✓	✓	✓	✓
Flowmeter	1 13 l/min	1 13 l/min	1 13 l/min	1 13 l/min		5 35 l/min
Grundfos Direct Sensor™					✓	
DeltaSol® BS/2, BS/4, BS Plus	✓		✓			
DeltaSol® BX, BX L, BX Plus			✓	✓		✓ (BX Plus)
DeltaSol® BX W					✓	
DeltaSol® CS/2, CS/4, CS Plus	✓	✓	✓	✓		
DeltaSol® SL, SLL, SLT			✓	✓		
Metric thread/230 V~ pump	✓	✓	✓	✓	✓	✓
NPT thread/115 V~ pump	✓	✓	✓	✓	✓	

Further combinations of pumps and threads are available on request!

## Accessories









#### Wall mounting for expansion vessel

Wall mounting for expansion vessel with screws and wall plugs, high grade steel corrugated tube and connection thread <sup>3</sup>/<sub>4</sub>". Including quick release valve coupling enabling removal of expansion without draining down of the system.





## SBS 2000 filling and flushing station

The SBS 2000 has been especially designed for professionally filling and flushing solar thermal and heating systems. Its many thought-out details facilitate transport, operation and cleaning, the attractive design makes it the ideal companion for a professional performance.

## ALS15 discharge hose

1.5 m hose for connection to the safety valve of the RESOL pump station.

Article no.: 280 004 92

