

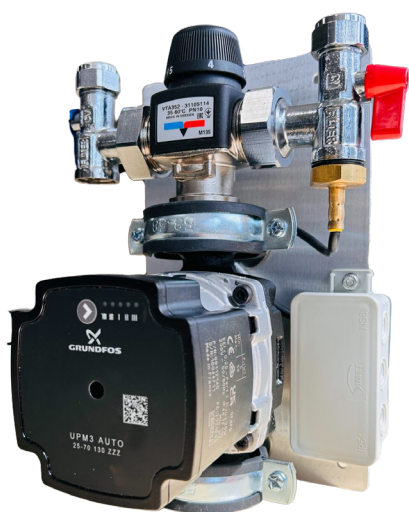
# ESBE SL Pump Control Set

Underfloor heating single loop (SL) control group with thermostatic mixing valve



## Overview

The ESBE SL Pump Control Set is designed for distribution and thermostatic control of water used in a single secondary space heating circuit. Primarily for underfloor heating systems and ideally suited for home extensions where an UFH circuit may be later added to an existing radiator circuit. The compact assembly features energy efficient ErP compliant circulation pump, ESBE 3-port thermostatic valve, and optional normally open temperature switch.



## Product Information

- Compact and space saving design, preassembled to wall mounting plate
- High flow capacity 1.6 Kvs self-acting ESBE thermostatic valve with 35-60°C temperature range
- Assembled in the UK: pressure tested, packaged and ready for instant installation
- Optional temperature switch (40°C standard)
- In-built primary isolation valves
- Class A ErP compliant circulation pump with air venting and locking features as standard
- 2 year warranty (Extended to 5 years with Taconova pump)

## Specification

- Kv: 1.6 (Up to 90sqm / 5kW)
- Adjustable temperature range
- Working temperature range: 0-80°C
- Maximum supply pressure: 10 Bar

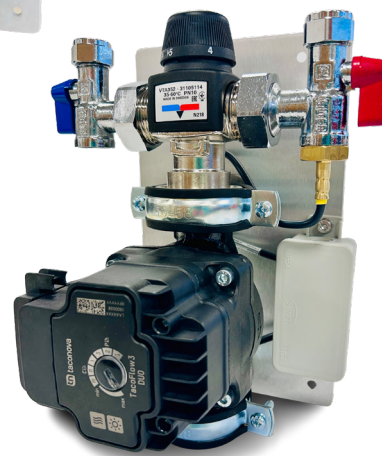
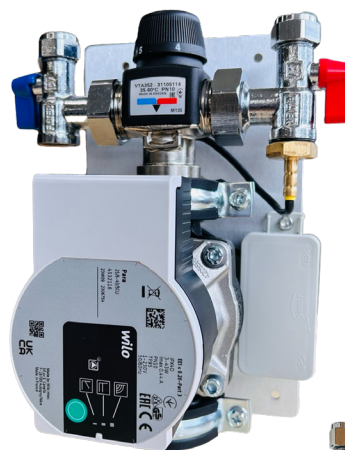
## Standard Assembly



- 140mm fixed center distance between primary flow and return pipework
- ½" F Secondary mixed outlet fitting supplied and fitted (unless requested otherwise)
- Configured to primary connections top entry, mixed secondary outlet bottom exit
- 6m head circulation pump

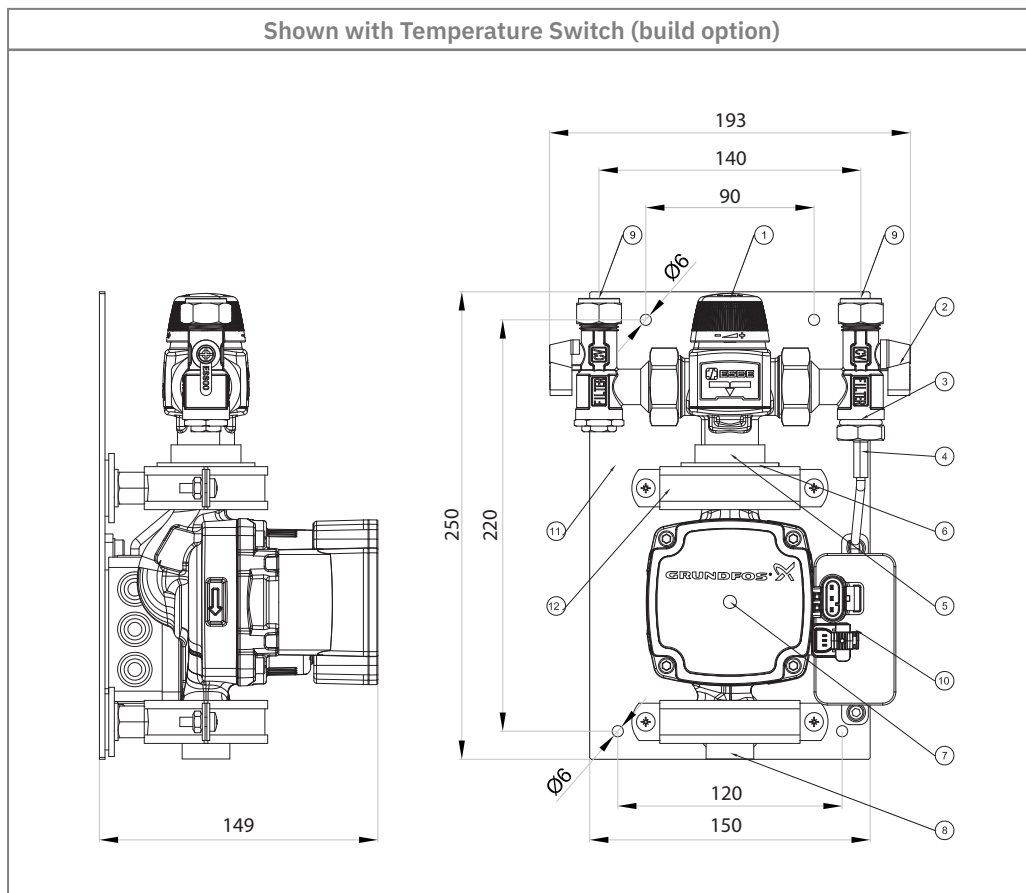
## Optional

- Normally open flow temperature switch fitted to initiate the pump when flow temperature meets or exceeds its 40deg setpoint
- Larger head options for circulation pumps to suit larger projects

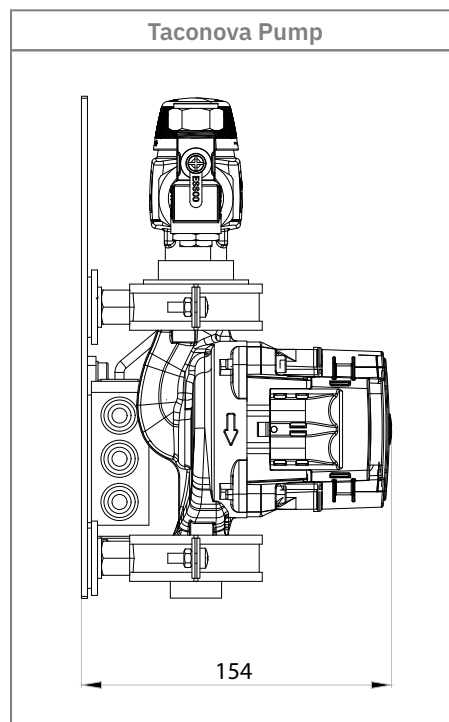
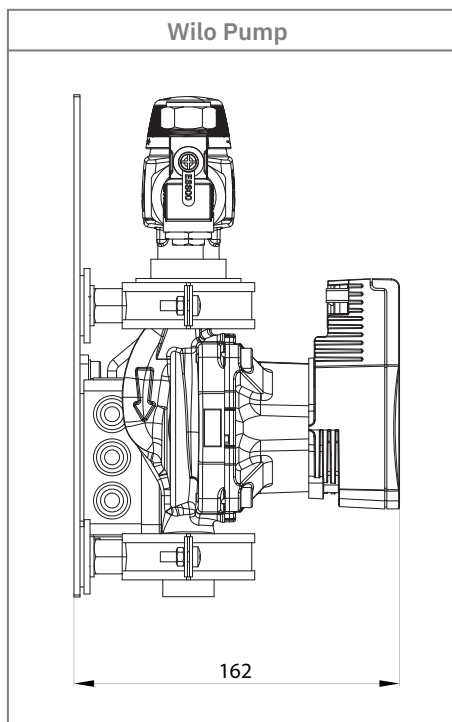


# Dimensions

## Dimensions - Grundfos Circulation Pump



## Dimensions - Alternative Pump Options



# Technical Information

## Materials

Component			Material	Grade
1	ESBE 3-Port thermostatic mixing valve	Setting knob	Plastic	PA6
		Lid	DZR brass	CW625N
		Wax element	Copper, stainless steel, wax	-
		Regulating cone	Plastic	PES
		Spring	Steel	EN 10270-3
		Valve body	Nickel plated DZR brass	CW625N
2	15mm compression angled isolation valves (pair, red/blue)		Chrome plated brass	HPB583
3	O-Ring		Plastic	EPDM
4	1/2" M Normally open bimetal temperature switch. 40°C fixed. Brass body, flying lead (build option)		Brass	
5	1" F x 1 1/2" x 15mm Pump flange		Nickel plated brass	HPB583
6	53mm nut for 1 1/2" Pump flange		Nickel plated brass	HPB583
7	WILO 25/6-SCU pump	Body	Cast iron	GG-20
		Impeller	Reinforced plastic	PP-GF40
		Shaft	Stainless steel	AISI 1.4122
		Bearing	Carbon	W02/T
8	1/2" F x 1 1/2" Pump flange outlet		Nickel plated brass	HPB583
9	Compression fittings		Nickel plated brass	HPB583
10	IP54-Rated Junction box 75mm x 40mm x 37mm (LWH)		Plastic	PE
11	3mm Wall mounted fixing plate		Aluminium	
12	Rubber lined pipe bracket / clamp 54mm		Zinc plated mild steel	

## Technical

Assembly Specification	
Medium	Heating water to VDI 2035, glycol solutions
Max. percentage of glycol	< 50%
Max. working pressure	PN10
Max. differential pressure	3 bar
Min. recommended pressure	4 kPa
Working temperature range	0 - 80°C
Adjustable temperature range	35 - 60°C
Factory preset temperature	60°C
Temperature stability	± 2%
Minimum flow rate for stability	4 l/m (0.067 l/s)
Recommended range of temperature differential	10°C
Secondary side connections for manifold	½"F
Primary side TMV connections	15mm Compression

## Pump Comparison

Option	Grundfos UPM3	Wilo Para	Taconova TF3 Duo Hybrid
Head (m)*	7m	6m	8.5m
Heating & cooling?	☒	✓	☒
Anti-blocking	✓	✓	✓
Venting program	☒	✓	✓
Key lock	✓	✓	☒
PWM option	✓	✓	✓
Temperature range	2 - 110°C	-10 - 95°C	2 - 110°C
Pressure rating	PN10	PN10	PN10
IP rating	IP44	IPX4D (IP44)	IP44
EEI	GOE 6m < 0.20	GOE 6m < 0.20	GOE 8.5m < 0.20
Warranty	2 years	18 months	5 years

\*Standard option stated. Other options are available on request.  
Pump curves can be found in installation and operations manual (IOM).

# Technical Information

Due to the number of possible variations of pre-assembled SL pump packs available, a full list of product codes is available on request. Information on how assembly build codes are generated is below for reference.

## SL Order Codes

Handing	Standard
Spacing	140mm
Pump	Excluded
	Wilo 7m
	Grundfos
	Grundfos Trade
	Taconova 8.5m
Pocket	Blank
	c/w Temp switch
Mixed Outlet	Standard ½"F
	Customer free-issued part for fitting
Branding	Customer branding
	Branded

SL

0

0

1

2

5

6

0

1

0

1

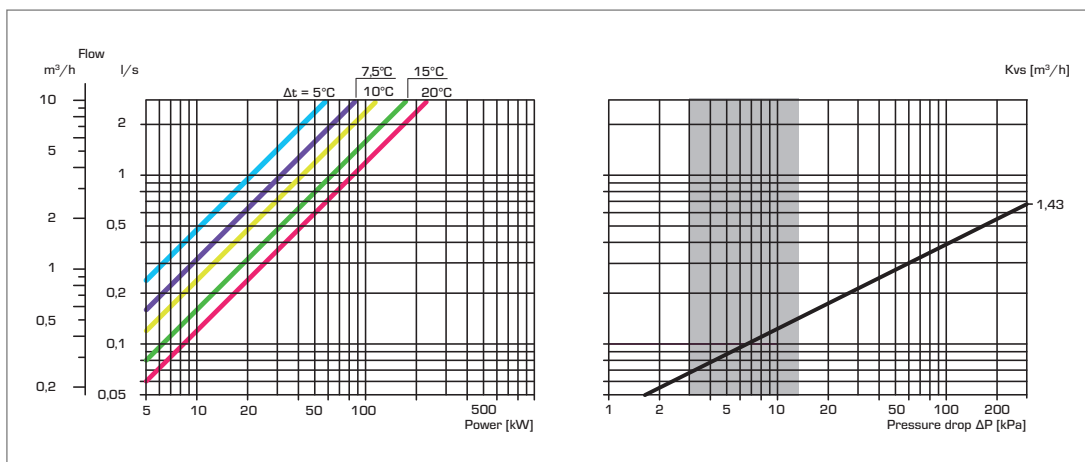
### FULL ASSEMBLY CODE: (SL-02100)

S	L	-	0	2	1	0	0
PACK	HANDING	Spacing	PUMP	Pocket	Mixed Outlet	Branding	

#### Description:

SL (140mm) Grundfos Pump pack, H/L, IV, branding

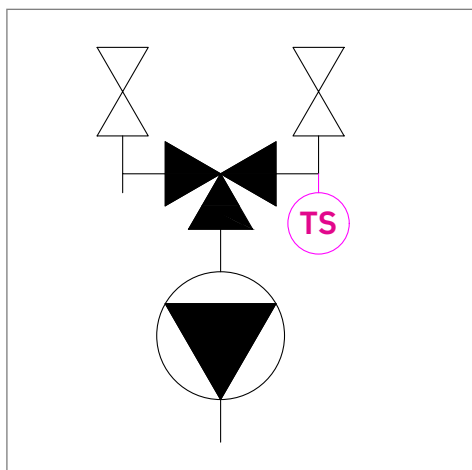
## Pressure Loss Graphs



Kv (m³/h)

1.43

## Hydraulic Schematic



### Schematic Key

Isolation valve



Temperature switch (normally open)



Pump



3-Port thermostatic mixing valve

