

Schüco PS 2.2 LF-170 US

Large Area Heat Transfer Station



SCHÜCO

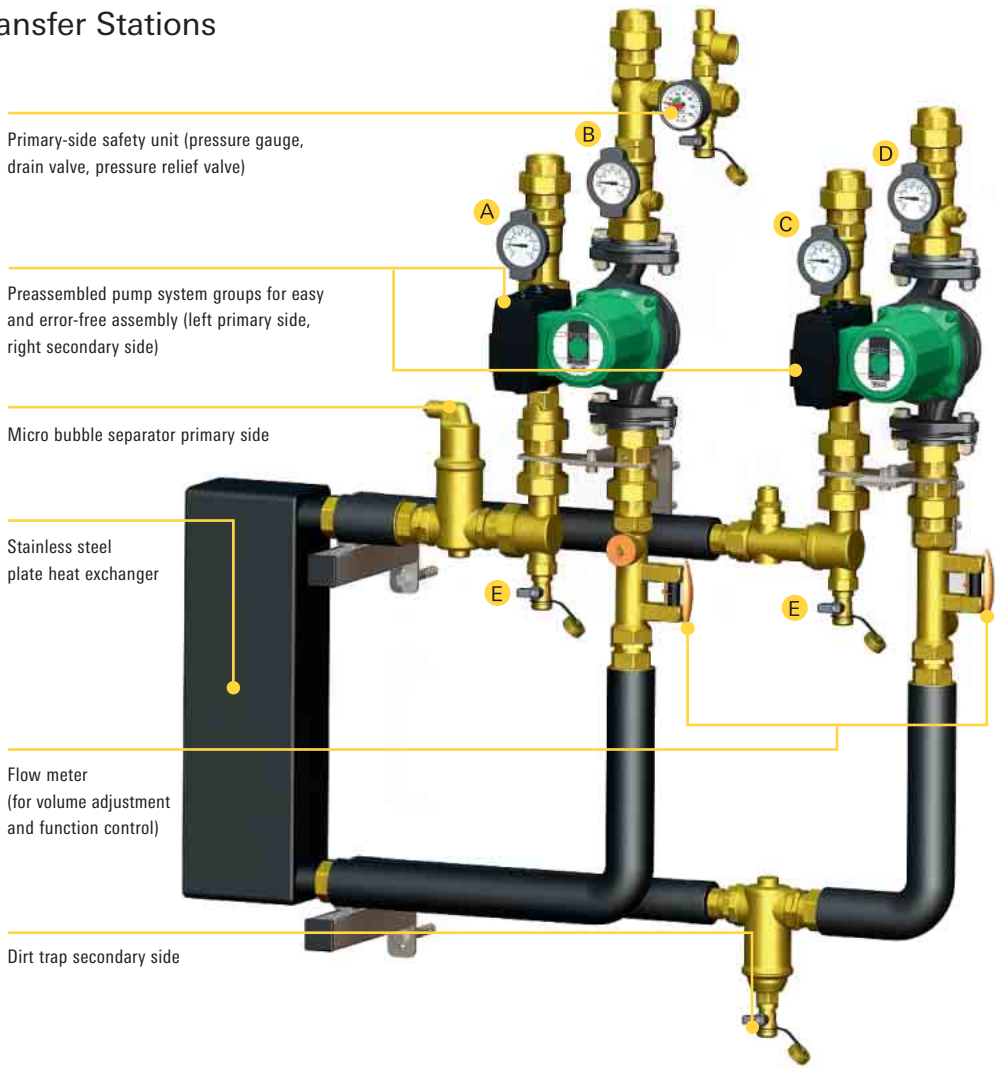
Schüco PS 2.2 LF-170 US Large Collector Area Heat Transfer Stations

The Schüco PS 2.2 Large Collector Area Heat Transfer Station is a modular system group for large solar installations or solar cooling.

The low-flow operation (15 l/m²h) of the LF-170 is suitable for large solar thermal installations with a collector area of up to 1,830 ft².

Key Benefits

- Modular construction with two pump units and a heat exchanger for quick assembly
- Heat exchanger using the reverse flow principle for maximum transfer output
- Frost protection is ensured by means of the control unit – no frost protection valve required
- Adapted to Schüco collector configuration



Primary-side safety unit (pressure gauge, drain valve, pressure relief valve)

Preassembled pump system groups for easy and error-free assembly (left primary side, right secondary side)

Micro bubble separator primary side

Stainless steel plate heat exchanger

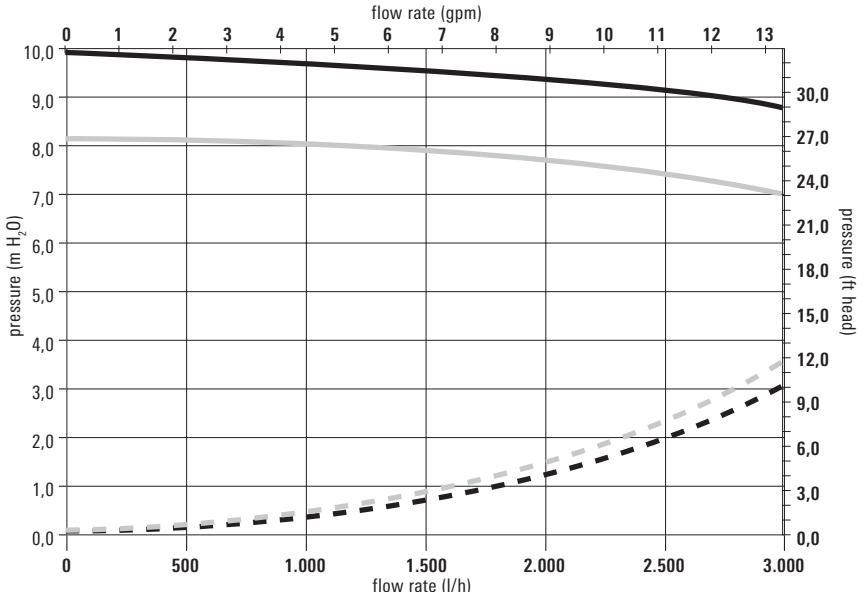
Flow meter (for volume adjustment and function control)

Dirt trap secondary side

Pressure drop/performance LF 170 US

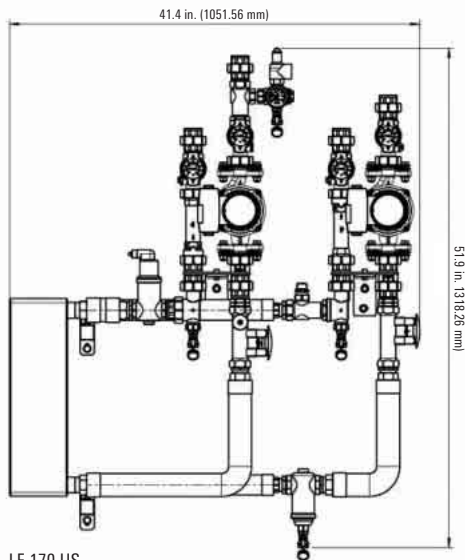
The diagrams and tables provide support for laying out and planning a pipe system.

- WILO TOP-S 1.25 × 35
- WILO TOP-S 1.25 × 25
- - secondary side of HEX
- - primary side of HEX



Technical Data

- A** Primary return flow from the collectors
- B** Primary supply flow to the collectors
- C** Secondary supply flow to storage
- D** Secondary return flow from storage
- E** Drain valve for rinsing and filling



LF-170 US
scale = 1:20

Application area	PS 2.2 LF-170 US (Art. 232 327)
Maximum collector area aperture area (in ft ²)	1,830
Pump system group	
Thermal insulation	Not integrated
Volume flow measurement	Flowcheck
Measuring range	5.3 – 18.5 USg / min (20 - 70 l / min)
Primary circuit pump	
Pump	WILO TOP-S 1.25 × 35
Delivery height	21.3 ft – 11.2 USg / min (6.5 m – 42.5 l / min)
Max. discharge flow	13.2 USg / min (50 l / min)
Max. operating pressure	145 psi (10 bar)
Max. current consumption	3.1 A (120 V)
Secondary circuit pump	
Pump	WILO TOP-S 1.25 × 25
Delivery height	18,8 ft – 10.6 USg / min (5.75 m – 40 l / min)
Max. discharge flow	11 USg / min (42 l / min)
Max. operating pressure	145 psi (10 bar)
Max. current consumption	2 A (120 V)
Heat exchanger	
Heat exchanger type	External flat plate
Material	Stainless steel
Valves and fittings/control unit	
Thermometer	32 – 248 °F (0 – 120 °C)
Manometer	0 – 145 psi (0 – 10 bar)
Safety valve SOL	145 psi (10 bar)
Connection dimensions	
Connection of collector array	NPT IT 1¼"
Connection of storage tank	NPT IT 1¼"
Connection for flushing/filling	GHT OT ¾"
Connection for expansion vessel	NPT IT ¾"
Secondary side minimum cross section with a pipeline length of 32 ft	1 1/4"
Parameters	
Max. temperature	248 °F (120 °C)
Max. permissible pressure	145 psi (10 bar)
Dimensions	
Height	52.4 inch (1,332 mm)
Width	43.0 inch (1,092 mm)
Weight	158.7 lb (72.0 kg)
Installation/Operating instructions	
Article number	232 330

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- Steel systems
- PVC-U systems
- Solar systems
- Schüco Design

Transfer Stations for All Large Solar Installations

The Schüco large installation transfer station is the hydraulic control unit for large solar installations or solar cooling. The type 2.2 solar transfer stations are built to a compact design with integrated heat

exchangers and pumps for the solar and buffer circuits. Type 2.2. stations are of modular construction for greater flexibility using a layout with two pump units and one heat exchanger.

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