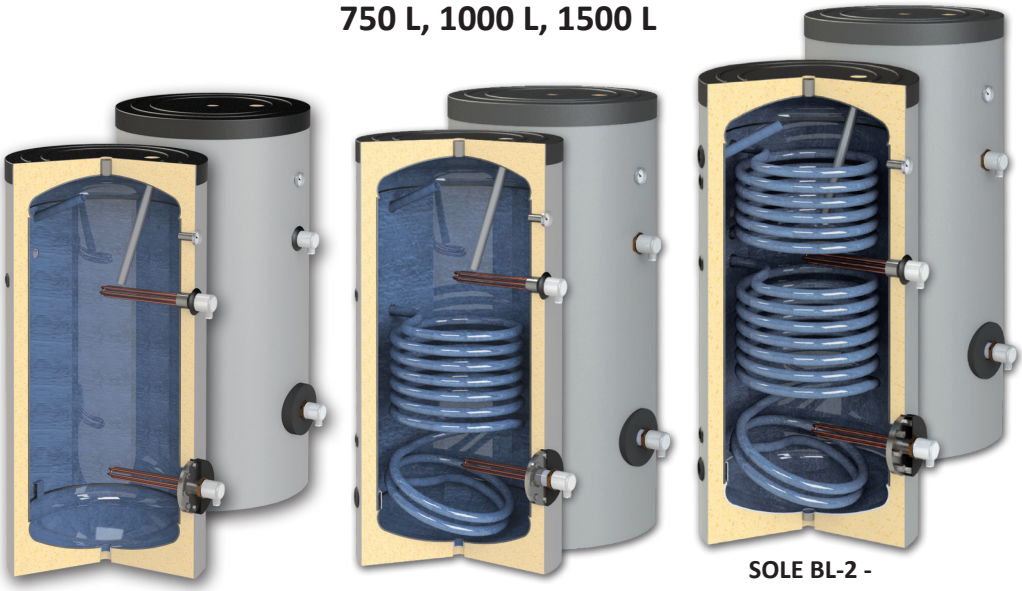
SOLE EUROSTAR

SOLAR WATER HEATERS

series SOLE BL

Vertical Modifications

150 L, 200 L, 300 L, 400 L, 500 L,
750 L, 1000 L, 1500 L



SOLE BL-0 -
without coil

SOLE BL-1 -
with one coil

SOLE BL-2 -
with two coils

INSTALLATION
and OPERATION MANUAL

Version 2.0

Table of contents

Dear Customers,

We strongly hope that the appliance you have bought from us will contribute to creating comfort at you homes and decreasing the energy expenditure.

This manual contains important information for the safe and correct installation, start-up and trouble-free operation and maintenance of the water heater.

The water heater can be used for producing of domestic hot water (DHW) only in the manner described in this manual.

The application and any other was the area of operation is not recommended by the manufacturer and is not responsible for the occurrence of defects or failures.

1. INSTRUCTION TO INSTALLER

⚠	**The preparation, installation and commissioning must be performed by an authorized installer / service.**

During installation and operation, the country specific requirements and regulations must be observed:

- local construction regulations on installation of water tank; weight of the boiler to comply with the stability of the floor of the room where it will be installed.
- regulations and norms concerning the fitting of theinstallation with safety devices.
- safety during installation - personal protective equipment

ⓘ	**Use only original parts**

1.1. Requirements to water tank installation room

When choosing a room for tank installation observe the following requirements:

- to have a drainage channel. Some maintenance procedures require draining of all water from the tank.
- Thermal insulation of the room. This provides efficiency of the appliance and prevents the water from freezing.

1.2. Requirements for installation

- The length of connecting pipes between the water tank and consumer must be as short as possible.
- Before connecting the boiler to the installation, check all screw connections (bolt inspection cover flange, plug and anode). In very rare cases - during transportation, loading and unloading operations - the screw connections may be loosen.
- The tightening torque for flanges is around 160-190 Nm.
- Before commissioning, check the installation for leaks
- Do not exceed the working pressure of 8 bar.
- If there is a risk of freezing of water in the tank - drain the tank completely or let the water heater works continuously.
- Pressure regulator. In case of pressure in the water supply network above 5 bar, it is desirable to install a pressure regulator at the inlet of cold water. We recommend that the controller be set to 4 bars, thus ensuring the correct operation of the product and its optimum service life.
- Expansion vessel. We recommend installing an expansion vessel to absorb water expansion when heated.

The volume and type are determined by a qualified designer in accordance with the technical data of the boiler, the system in place and the local and European safety

standards! Installation is carried out by a qualified technician in accordance with his operating instructions.

• Drain connection (hose) of safety valve. When the boiler is running, in some cases it is possible to release a small amount of water from the relief valve as a result of a linear expansion of the water. For this reason, it is necessary to build a diversionary connection, which is to be comply with local and European standards and safety provisions! It must be of sufficient inclination for water drainage. Both ends must be open to the atmosphere and be provided with anti-freeze. At pipe installation, take safety measures from valve firing burns.

1.3. Requirements for periodic maintenance.
Over time, limestone is deposited during the operation of the product under the influence of high temperature (so-called scale). Therefore, we recommend that the product be serviced by an authorized service center every two years. The prophylaxis must include inspection and cleaning of the anode protector, which is replaced with a new one if necessary. The performed prophylaxis is reflected in the warranty card of the product.

2. DESCRIPTION OF WATER TANK.

The water heaters S series are used for producing of domestic hot water (DHW).

SEL models, the heat source is an electric heater.

SN models have a built-in heat exchanger (coil type) designed to connect to a solar installation or boiler. Option for installation of an electric heating element.

SON models have two built-in heat exchanger (coil type) for connection to the solar system and boiler. Option for installation of an electric heating element.

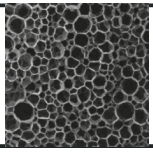
Product features:

• Floor standing
• Vertical or Horizontal modifications
• High efficiency insulation and outer casing of PVC
• Complex corrosion protection realized by means of titanium enamel and anode protection
• All threads are internal
• Convenient inspection opening
• Outlet / Outlets for installation of one or more electric heating elements
• The heat exchanger/s (SOLE BL-1 / SOLE BL-2) enables the tank to utilize an external
• sources of renewable energy, such as a solar system and a biomass boiler
• Easy installation

2.1. High efficiency insulation and outer casing

The quality of the insulation of a water heater is a key factor for its heat conservation capability and energy efficiency.
All water heaters S series have a high efficiency insulation (DIN 4753, part 8) and outer casing of PVC with RAL 9006

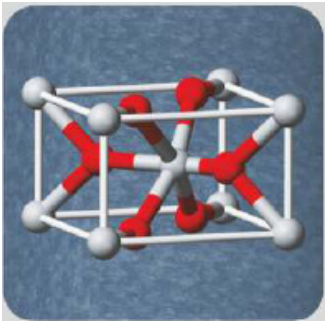
Water tank Capacity, L	Insulation type
150, 200, 250, 300, 400, 500,	rigid, PPU 50 mm
750, 1000, 1500, 2000	soft, PPU 100 mm removable



A microscopic view of hard polyurethane

2.2. Water tank.

Water tank is made of low-carbon steel S235JR, tightly covered with titanium enamel on the inside. It is then baked to produce a smooth and uniform deposition - free glazing. Thus the domestic hot water remains clean, and the water tank is protected against corrosion.
All threads are internal (see technical parameters).

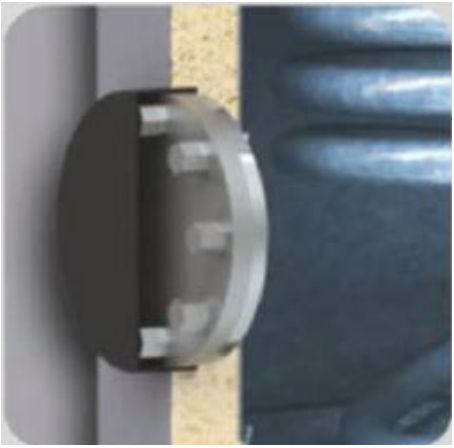


2.3. Cathodic Corrosion Protection of Enamelled Steel tanks for domestic hot water (DIN 4753, part 6)

Magnesium anode - connection size and length:

Water tank Capacity, L	Anode connection size, mm	Anode length, mm	Anode Pcs.
150	1 1/4"	230	1
200	1 1/4"	300	1
300	1 1/4"	400	1
400, 500	1 1/4"	600	1
750, 1000	1 1/4"	700	1
1500, 2000	1 1/4"	700	2

2.4. Inspection opening.



Water tank Capacity, L	Flange diameter, mm	Opening diamter, mm
150	180	110
200	180	110
300	180	110
400	180	110
500	180	110
750	280	200
1000	280	200
1500	280	200
2000	560	400

Large and convenient inspection opening located in the lower part of the tank gives access for maintenance and cleaning. The opening is closed by an enameled flange cover which may have a sleeve for fitting electric heater if necessary.

Do not reuse the gasket of flange. Replace the gasket at each inspection (opening).

2.5. Thermometer.

2.6. Electric heating element - (option).

Outlet connection of electric heating element 1 ½“ :

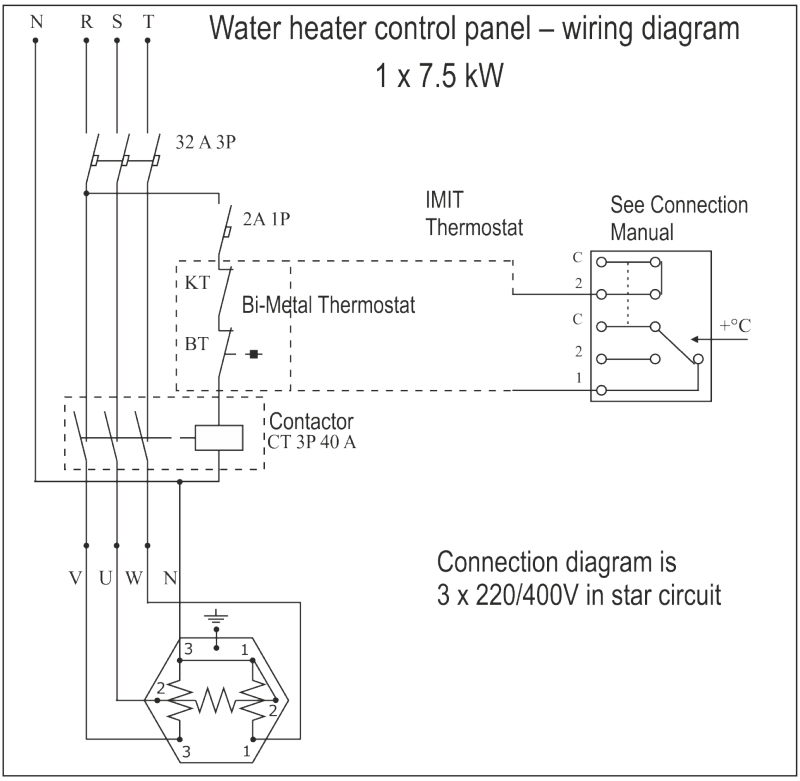
3000W/230V; 4500W/230V;
6000W/230V; 7500W/400V.

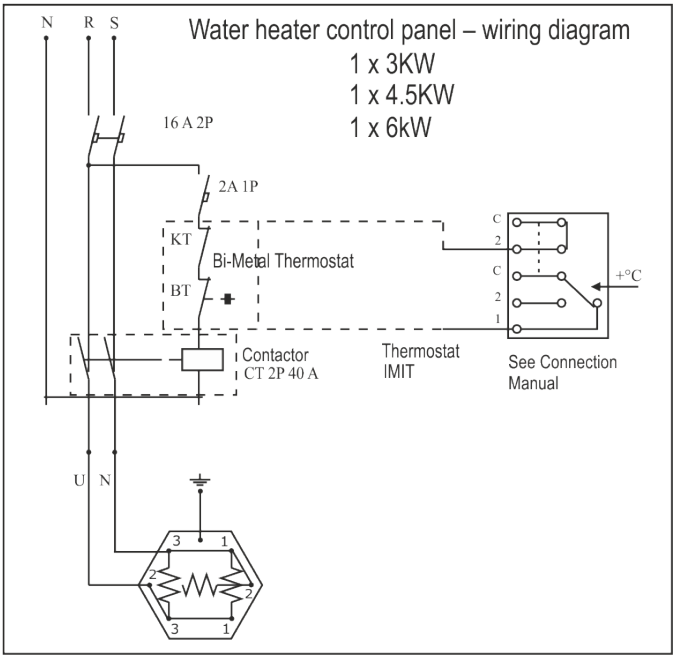
The connection of the electric heating element to the electric power supply must be done by a qualified electricians.
When connect the heating element to the electric network, make sure that it is properly grounded.

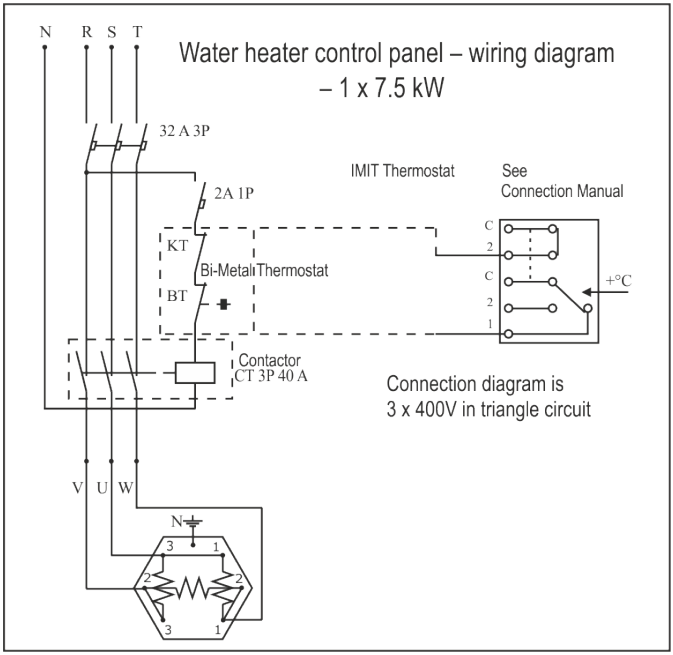
In the table of technical parameters is specified location for installation of electric heating element.

Water tank Capacity, L	Connection	Length L, mm	Current, W	Voltage, V
150 ÷ 2000	1 1/2"	210	3000	230
300 ÷ 2000	1 1/2"	320	4500	230
400 ÷ 2000	1 1/2"	410	6000	230
500 ÷ 2000	1 1/2"	590	7500	230/400

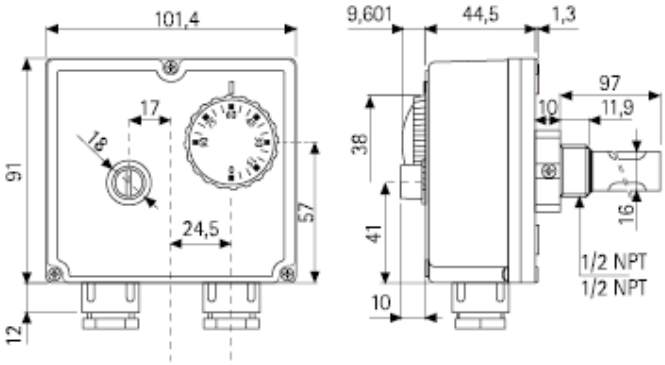
CONNECTIONS SCHEMES




Water heater control panel – wiring diagram
1 x 3KW
1 x 4.5KW
1 x 6kW
N R S
16 A 2P
2A 1P
KT
Bi-Metal Thermostat
BT
C
2
C
2
1
+°C
Contactor
CT 2P 40 A
Thermostat
IMIT
See Connection
Manual
U N
3 1
2 2
3 1


Water heater control panel – wiring diagram
– 1 x 7.5 kW
N R S T
32 A 3P
IMIT Thermostat
See
Connection Manual
2A 1P
KT
Bi-Metal Thermostat
BT
C
2
C
2
1
+°C
Contactor
CT 3P 40 A
Connection diagram is
3 x 400V in triangle circuit
V U W
N
3 1
2 2
3 1

2.7. Thermostat (option).



CONFORMITY TO STANDARDS
This product is in conformity with:
- EN 60730-1 and subsequent editions;
- EN 60730-2-9

CONFORMITY TO REGULATIONS
This product complies with:
- Low Voltage Directive 73/23 EEC
- Electromagnetic Compatibility Directive 89/336/EC

TECHNICAL CHARACTERISTICS
Temperature range – regulation- 0°C ÷ 90°C;
limit - 90°C ÷ 110°C;
Tolerance
Regulation ± 5k,
limit – 15 k; -6 k (depends on the type)

Temperature differential
Regulation 6 ± 2 k; 4 ± 1 k (depends on the type)
Limit 25 ± 8 k; 15 ± 8 k (depends on the type)

Automatic adjustment (TLSC/A) and manual adjustment (TLSC).
Degree of protection = IP 40
Insulation class = I
Temperature change rate = <1K/min.
Maximal temperature point: 80°C
Maximal temperature for electric lamp: 125°C
Accumulation temperature: 15°C ÷ 55°C
Maximum pressure of the cartridge: 10 bar
Constant time: < 1“

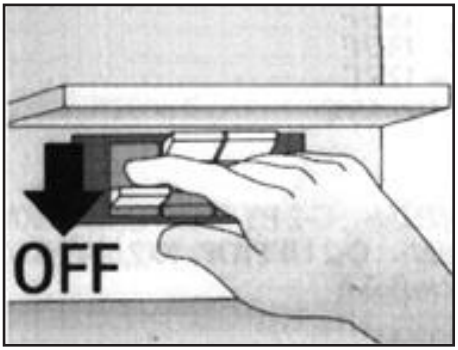
Electric connection:
C-1 ADJ.:10(2,5)A/250V°;
C-2 ADJ.:6(2,5)A/250V~;
C-1LIM.:0,5A/250V~;
C2LIM.:10(2,5)A/250V~;
Terminal – circuit breaker or switch-on contacts

Switch-on action – 2B
Place of installation – normal
Type of wire – M20 x 1.5

⚠	**WARNING !** **All installation operations, including manual adjustments, must be fulfilled by a qualified specialist following all safety conditions.**

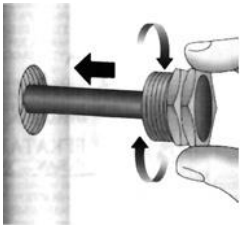
INSTALLATION AND CONNECTION .
Safety instructions:

Before connecting the thermostat, make sure that THE UNIT TO BE THERMALLY CONTROLLED (water heater, pump, etc.) IS NOT CONNECTED to the power supply network, and is in compliance with the instructions in Figure

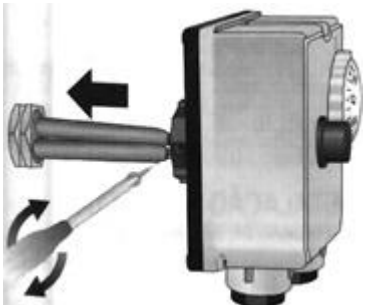


Scheme 2

a)) See scheme 3 and scheme 4.

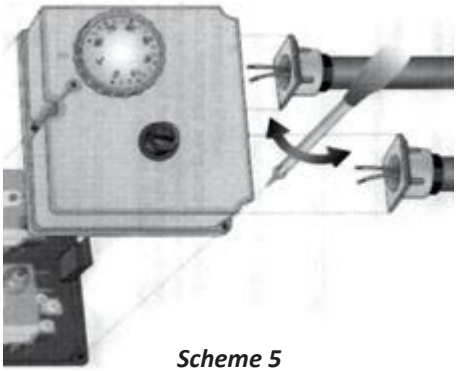


Scheme 3

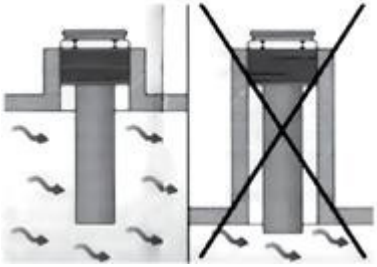


Scheme 4

b)Unscrew the three bolts and remove the front part of the thermostat. Unravel the power supply wires and connect them to the terminals of the thermostat (Figure 5) following the instructions.



Scheme 5



Scheme 6

NOTE: See Scheme 6.
To close the front part, the cartridge opening must align with the coupling of the adjustment knob.

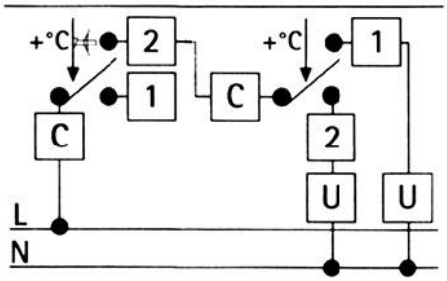
CONNECTION
(Scheme 7)

LIMITATION

TERMINAL 2 – opens the circuit when the temperature
rises.
TERMINAL C – common contact.

THERMOSTAT

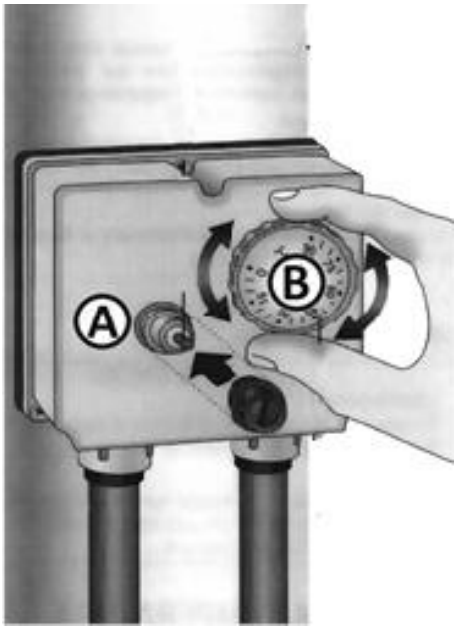
TERMINAL 1 – opens the circuit when the temperature rises.
TERMINAL 2 – closes the circuit when the temperature rises
TERMINAL C – common contact



Scheme 7

TEMPERATURE ADJUSTMENT
(see Scheme 8)

A – Reset button (only for TLSC)
B – Knob for temperature adjustmentct

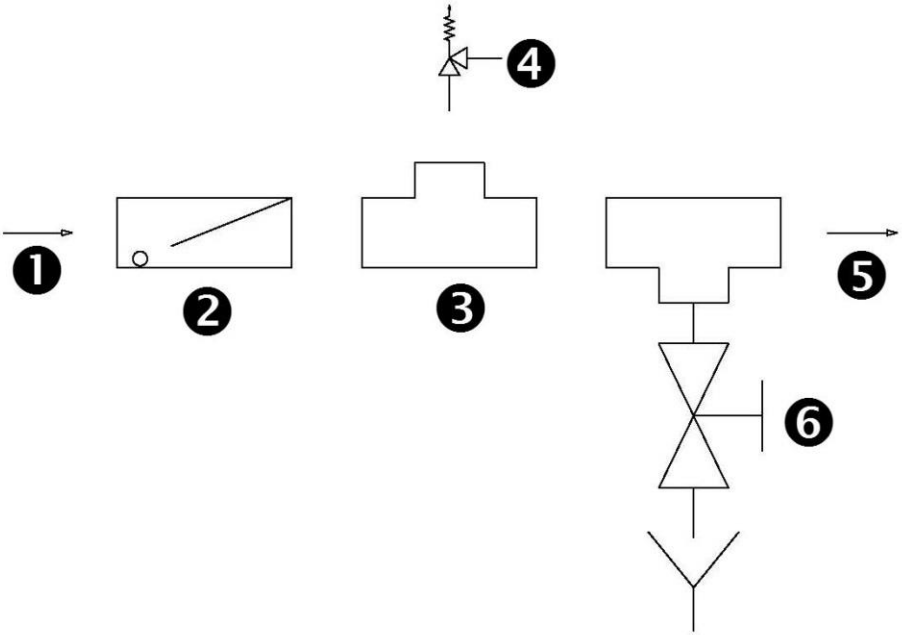


scheme 8

2.8. Screws with rubber head

Screws with rubber heads are mounted at the bottom of the vertical water tank / 150 to 500 l / - use to level the tank.

3. CONNECTING OF SAFETY RELIEF VALVE TO WATER TANK



Legend:

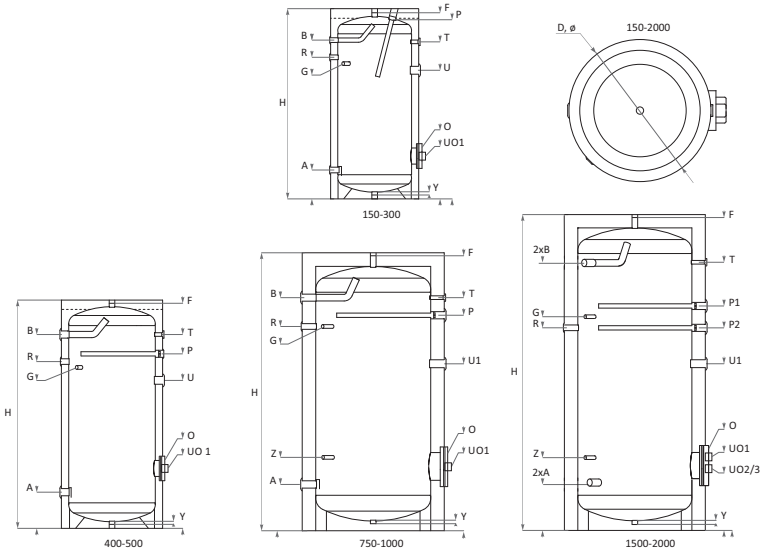
1. Cold water inlet-water supply
2. Check (return) valve
3. Tee
4. Safety (relief) pressure valve
5. Cold water inlet - water tank
6. Stopcock (drainag

⚠	Stop (Shut-off) valves should never be installed between a safety (relief) valve and the tank. It is recommended once a year to check the operation of the safety valve.

4. TECHNICAL PARAMETERS - VERTICAL MODIFICATIONS

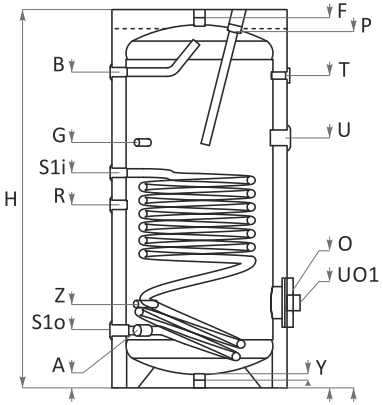
4.1.SOLE BL-0 - withhout coil.

		SOLE BL-0 150	SOLE BL-0 200	SOLE BL-0 300	SOLE BL-0 400	SOLE BL-0 500
Capacity	L	150	200	300	400	500
Height / Min. vertical clearance	H, mm	1070/1210	1340/1460	1420/1580	1490/1670	1720/1890
Diameter	D, mm	Ø 560	Ø 560	Ø 660	Ø 750	Ø 750
Insulation		50 mm rigid PPU				
Oper. pressure / max. temperature	bar/°C	8/95	8/95	8/95	8/95	8/95
Test pressure of tank	bar	13	13	13	13	13
Electric heating element (optional)	kW	2 x (3÷6)	2 x (3÷6)	2 x (3÷6)	2 x (3÷7.5)	1 x (3÷7.5)
Weight	kg	50	68	86	123	140
Cold water inlet	A, mm	Rp1"/202	Rp1"/202	Rp1"/215	Rp1$^{1/4"}$/270	Rp1$^{1/2"}$/270
Hot water outlet	B, mm	Rp1"/895	Rp1"/1112	Rp"/1182	Rp1$^{1/4"}$/1204	Rp1$^{1/2"}$/1453
Recirculation	R, mm	Rp$^{3/4"}$/788	Rp$^{3/4"}$/987	Rp$^{3/4"}$/1055	Rp1"/1005	Rp1"/1250
Sensor sleeve for thermostat	G, mm, Rp$^{1/2"}$	788	900	1008	950	1208
Air vent sleeve	F, mm, Rp"	1070	1340	1410	1480	1710
Inspection opening/Flange	O, mm, Ø, mm	180/309 Ø 110	180/309 Ø 110	180/320 Ø 110	180/450 Ø 110	180/450 Ø 110
Drain sleeve	Y, mm, Rp"	20	20	20	20	20
Thermometer	T, mm, Rp$^{1/2"}$	895	1138	1170	1204	1453
Anode	P, mm, Rp$^{1/4"}$	1070	1340	1410	1079	1340
Sleeve for Electric element on water tank body	U, mm,	Rp$^{1/2"}$/630	Rp$^{1/2"}$/750	Rp$^{1/2"}$/850	Rp$^{1/2"}$/900	Rp$^{1/2"}$/1010
Sleeve for Electric element on inspection opening flange	Uo, mm,	Rp$^{1/2"}$/309	Rp$^{1/2"}$/309	Rp$^{1/2"}$/320	Rp$^{1/2"}$/450	Rp$^{1/2"}$/450
Additional sensor sleeve	Z, mm	-	-	-	-	-

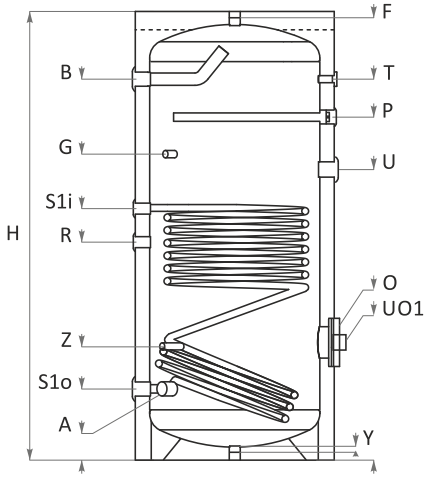


		SOLE BL-0 750	SOLE BL-0 1000	SOLE BL-0 1500	SOLE BL-0 2000
Capacity	L	750	1000	1500	2000
Height / Min. vertical clearance	H, mm	2000/2030	2050/2080	2310/2370	2310/2370
Diameter	D, mm	Ø 950	Ø 1050	Ø 1050	Ø 1350
Insulation		100 mm soft PPU, removable			
Oper. pressure / max. temperature	bar/°C	8/95	8/95	8/95	8/95
Test pressure of tank	bar	13	13	13	13
Electric heating element (optional)	kW	2 x (3÷7.5)	3 x (3÷7.5)	4 x (3÷7.5)	5 x (3÷7.5)
Weight	kg	210	245	342	645
Cold water inlet	A, mm	Rp1$^{1/2"}$/300	Rp1$^{1/2"}$/320	2 x Rp1$^{1/2"}$/320	2 x Rp1$^{1/2"}$/385
Hot water outlet	B, mm	Rp1$^{1/2"}$/1630	Rp1$^{1/2"}$/1700	2 x Rp1$^{1/2"}$/1975	2 x Rp1$^{1/2"}$/1885
Recirculation	R, mm	Rp1"/1405	Rp1"/1487	Rp1"/1487	Rp1"/1635
Sensor sleeve for thermostat	G, mm, Rp$^{1/2"}$	1435	1570	1487	1685
Air vent sleeve	F, mm, Rp1"	1945	2020	2320	2311
Inspection opening/Flange	O, mm Ø, mm	280/450 Ø 200	280/460 Ø 200	280/460 Ø 200	560/555 Ø 400
Drain sleeve	Y, mm, Rp1"	20	40	40	30
Thermometer	T, mm, Rp$^{1/2"}$	1630	1700	1975	1835
Anode	P, mm, Rp1$^{1/4"}$	1435	1570	2 x 1570/1650	2 x 1625/1705
Sleeve for Electric element on water tank body	U, mm,	Rp1$^{1/2"}$ /1040	Rp1$^{1/2"}$/1140	Rp1$^{1/2"}$ /1220	2 x Rp1$^{1/2"}$ /1330
Sleeve for Electric element on inspection opening flange	Uo, mm,	Rp1$^{1/2"}$ /450	2 x Rp1$^{1/2"}$ /460	3 x Rp1$^{1/2"}$/460	3 x Rp1$^{1/2"}$ /555
Additional sensor sleeve	Z, mm, Rp$^{1/2"}$	535	520	520	745

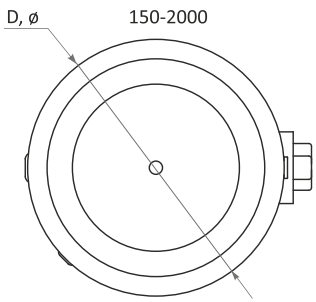
4.2. SOLE BL-1 - with one coil



150-300



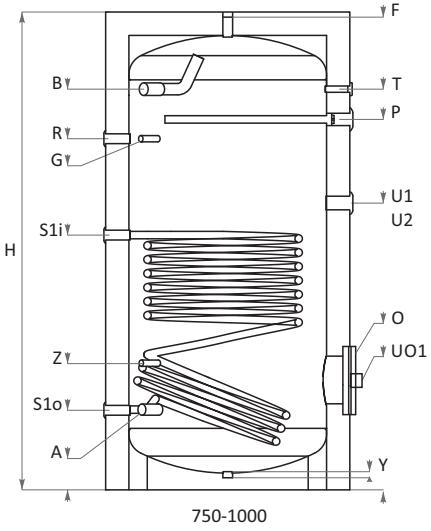
400-500

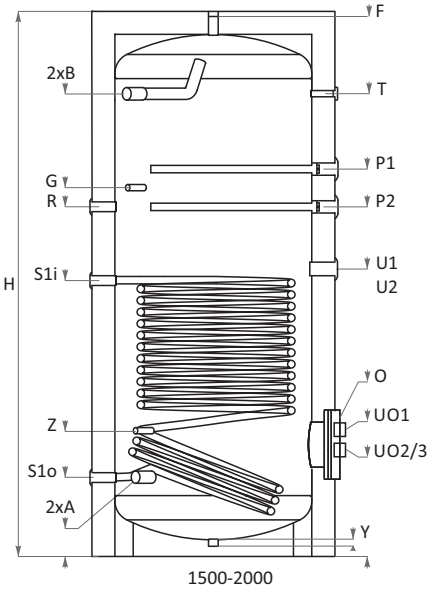


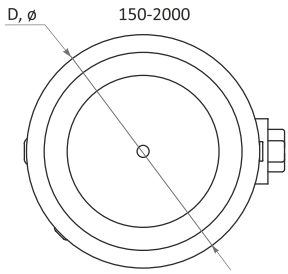
SOLE EUROSTAR

		SOLE BL-1 150	SOLE BL-1 200	SOLE BL-1 300	SOLE BL-1 400	SOLE BL-1 500
Capacity	L	150	200	300	400	500
Height / Min. vertical clearance	H, mm	1070/1210	1340/1460	1420/1580	1490/1670	1720/1890
Diameter	D, mm	Ø 560	Ø 560	Ø 660	Ø 750	Ø 750
Insulation		50 mm rigid PPU				
Oper. pressure / max. temperature	bar/°C	8/95	8/95	8/95	8/95	8/95
Test pressure of tank	bar	13	13	13	13	13
Electric heating element (optional)	kW	2 x (3÷6)	2 x (3÷6)	2 x (3÷6)	2 x (3÷7.5)	2 x (3÷7.5)
Weight	kg	59	73	104	145	167
Cold water inlet	A, mm	Rp1"/202	Rp1"/202	Rp1"/215	Rp1¼"/270	Rp1½"/270
Hot water outlet	B, mm	Rp1"/868	Rp1"/1140	Rp1"/1170	Rp1¼"/1204	Rp1½"/1453
Recirculation	R, mm	Rp¾"/450	Rp¾"/500	Rp¾"/663	Rp1"/673	Rp1"/831
Oper. pressure / max. Coil temp.S1	bar/°C	16/110	16/110	16/110	16/110	16/110
Test pressure S1	bar	25	25	25	25	25
Coil capacity S1	L	4.56	5.55	7.40	9.25	11.10
Heat exchange surface S1	m²	0.74	0.9	1.2	1.5	1.8
Coil inlet	S1i, mm, Rp1"	592	692	805	850	960
Coil outlet	S1o, mm, Rp1"	202	202	215	270	270
Prolonged power acc. to DIN 4708; 80°C/60°C/45°C, S1	kW (m3/h)	25(0.61)	29(0.71)	53(1.30)	62(1.52)	72(1.77)
NL – power coefficient at 60°C, S1	NL 60°C	2.5	4.5	11	13	18
Pressure drop Δp, S1	Δp, mbar	65	75	120	180	210
Sensor sleeve for thermostat	G, mm, Rp½"	738	892	995	950	1168
Air vent sleeve	F, mm, Rp1"	1070	1340	1410	1480	1710
Inspection opening/Flange	O, mm, Ø, mm	180/309 Ø 110	180/309 Ø 110	180/320 Ø 110	180/450 Ø 110	180/450 Ø 110
Drain sleeve	Y, mm, Rp1"	20	20	20	20	20
Thermometer	T, mm, Rp½"	868	1138	1170	1204	1453
Anode	P, mm, Rp1¼"	1070	1340	1410	1079	1340
Sleeve for Electric element on water tank body	U, mm,	Rp1½" /680	Rp1½"/850	Rp1½" /850	Rp1½"/900	Rp1½" /1130
Sleeve for Electric element on inspection opening flange	Uo, mm,	Rp1½" /309	Rp1½"/309	Rp1½" /320	Rp1½"/ 450	Rp1½" /450

* optional positioning of an electric heater


F
B
T
P
R
G
U1
U2
S1i
H
O
UO1
Z
S1o
A
Y
750-1000

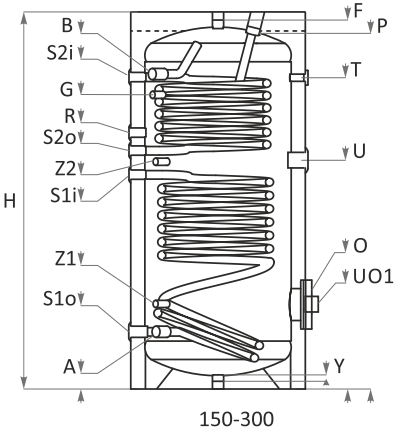

F
2xB
T
P1
G
R
P2
U1
U2
S1i
H
O
UO1
UO2/3
Z
S1o
2xA
Y
1500-2000

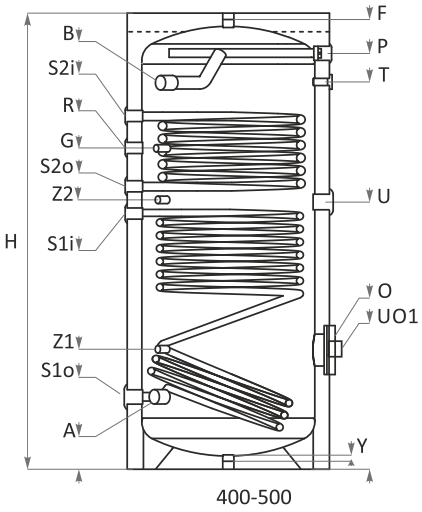

D, ø
150-2000

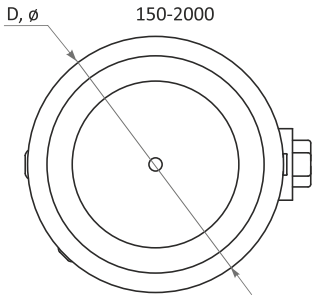
		SOLE BL-1 750	SOLE BL-1 1000	SOLE BL-1 1500	SOLE BL-1 2000
Capacity	L	750	1000	1500	2000
Height / Min. vertical clearance	H, mm	2000/2030	2050/2080	2310/2370	2310/2370
Diameter	D, mm	Ø 950	Ø 1050	Ø 1050	Ø 1350
Insulation		100 mm soft PPU, removable			
Oper. pressure / max. temperature	bar/°C	8/95	8/95	8/95	8/95
Test pressure of tank	bar	13	13	13	13
Electric heating element (optional)	kW	2 x (3÷7.5)	4 x (3÷7.5)	5 x (3÷7.5)	5 x (3÷7.5)
Weight	kg	242	286	392	712
Cold water inlet	A, mm	Rp1$^{1/2"}$/300	Rp1$^{1/2"}$/320	2 x Rp1$^{1/2"}$/320	2 x Rp1$^{1/2"}$/385
Hot water outlet	B, mm	Rp1$^{1/2"}$/1630	Rp1$^{1/2"}$/1700	2 x Rp1$^{1/2"}$/1975	2 x Rp1$^{1/2"}$/1885
Recirculation	R, mm	Rp1"/1405	Rp1"/1487	Rp1"/1487	Rp1"/1635
Oper. pressure / max. Coil temp.S1	bar/°C	16/110	16/110	16/110	16/110
Test pressure S1	bar	25	25	25	25
Coil capacity S1	L	12.95	16.65	18.50	25.28
Heat exchange surface S1	m²	2.1	2.7	3	4.1
Coil inlet	S1i, mm, Rp1"	970	1070	1170	1265
Coil outlet	S1o, mm, Rp1"	300	320	320	385
Prolonged power acc. to DIN 4708; 80°C/60°C/45°C, S1	kW (m3/h)	80(1.97)	105(2.58)	131(3.22)	180(4.42)
NL – power coefficient at 60°C, S1	NL 60°C	32	42	64	80
Pressure drop Δp, S1	Δp, mbar	210	260	310	420
Sensor sleeve for thermostat	G, mm, Rp$^{1/2"}$	1435	1487	1487	1685
Air vent sleeve	F, mm, Rp1"	1950	2020	2320	2311
Inspection opening/Flange	O, mm, Ø, mm	280/450 Ø 200	280/460 Ø 200	280/460 Ø 200	560/555 Ø 400
Drain sleeve	Y, mm, Rp1"	20	40	40	30
Thermometer	T, mm, Rp$^{1/2"}$	1630	1700	1975	1835
Anode	P, mm, Rp1$^{1/4"}$	1435	1570	2 x 1570/1650	2 x 1625/1705
Sleeve for Electric element on water tank body	U, mm,	Rp1$^{1/2"}$/1040	2 x Rp1$^{1/2"}$/1145	2 x Rp1$^{1/2"}$/1220	2 x Rp1$^{1/2"}$/1330
Sleeve for Electric element on inspection opening flange	Uo, mm,	Rp1$^{1/2"}$/450	2 x Rp1$^{1/2"}$/460	3 x Rp1$^{1/2"}$/460	3 x Rp1$^{1/2"}$/555
Additional sensor sleeve	Z, mm, Rp$^{1/2"}$	535	520	520	745

* optional positioning of an electric heater

4.3. SOLE BL-2 - with two coils.



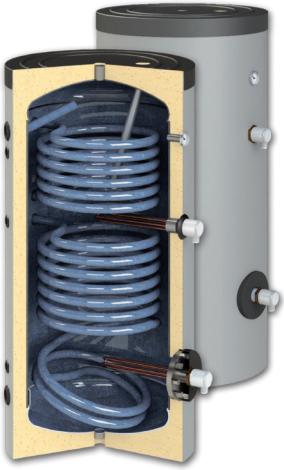


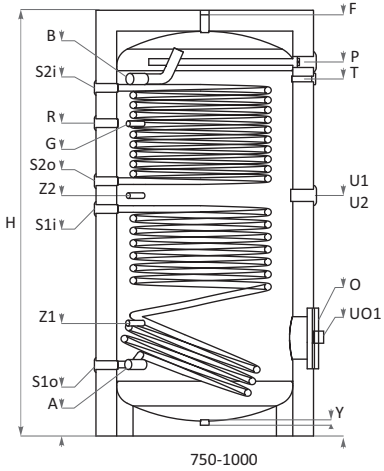


SOLE EUROSTAR

		SOLE BL-2 150	SOLE BL-2 200	SOLE BL-2 300	SOLE BL-2 400	SOLE BL-2 500
Capacity	L	150	200	300	400	500
Height / Min. vertical clearance	H, mm	1070/1210	1340/1460	1420/1580	1470/1670	1720/1890
Diameter	D, mm	Ø 560	Ø 560	Ø 660	Ø 750	Ø 750
Insulation		50 mm rigid PPU				
Oper. pressure / max. temperature	bar/^{0}C	8/95	8/95	8/95	8/95	8/95
Test pressure of tank	bar	13	13	13	13	13
Electric heating element (optional)	kW	2 x (3÷6)	2x (3÷6)	2 x (3÷6)	2 x (3÷7.5)	2 x (3÷7.5)
Weight	kg	65	82	118	160	185
Cold water inlet	A, mm	Rp1”/202	Rp1”/202	Rp1”/215	Rp$^{1/4”}$/270	Rp$^{1/2”}$/270
Hot water outlet	B, mm	Rp1”/1070	Rp1”/1168	Rp1”/1182	Rp$^{1/4”}$/1240	Rp$^{1/2”}$/1453
Recirculation	R, mm	Rp$^{3/4”}$/788	Rp$^{3/4”}$/987	Rp$^{3/4”}$/957	Rp1”/1105	Rp1”/1206
Operating pressure / Max.Coils temp. S1/S2	bar/^{0}C	16/110	16/110	16/110	16/110	16/110
Test pressure S1/S2	bar	25	25	25	25	25
Coil capacity S1/S2	L	4.56/2.47	5.55/3.70	7.40/5.55	9.25/6.17	11.10/7.40
THeat exchange surface S1/S2	m²	0.74/0.4	0.9/0.6	1.2/0.9	1.5/1	1.8/1.2
Lower coil inlet S1	S1i, mm, Rp1”	592	692	805	850	960
Lower coil outlet S1	S1o, mm, Rp1”	202	202	215	270	270
Upper coil inlet S2	S2i, mm, Rp1”	874	1112	1170	1210	1350
Upper coil outlet S2	S2o, mm, Rp1”	674	812	894	952	1062
Prolonged power acc. to DIN 4708; 80°C/60°C/45°C S1	kW (m3/h)	25(0.61)	29(0.71)	53(1.30)	62(1.52)	72(1.77)
Prolonged power acc. to DIN 4708; 80°C/60°C/45°C, S2	kW (m3/h)	15(0.37)	18(0.44)	21(0.52)	27(0.66)	34(0.84)
NL – power coefficient at 60°C, S1/S2	NL 60°C	2.5/1	4.5/1.5	11/2	13/2.2	18/2.8
Pressure drop Δp, S1/S2	Δp, mbar	65/48	75/55	120/70	180/80	210/90
Sensor sleeve for thermostat	G, mm, Rp$^{1/2”}$	788	1037	1104	1054	1206
Air vent sleeve	F, mm, Rp1”	1070	1340	1410	1480	1710
Inspection opening/Flange	O, mm, Ø, mm	180/309 Ø 110	180/309 Ø 110	180/320 Ø 110	180/450 Ø 110	180/450 Ø 110
Drain sleeve	Y, mm, Rp1”	30	30	30	30	30
Thermometer	T, mm, Rp$^{1/2”}$	892	1138	1170	1152	1453
Anode	P, mm, Rp$^{1/4”}$	1070	1340	1410	1337	1568
Sleeve for Electric element on water tank body	U, mm,	Rp$^{1/2”}$/752	Rp$^{1/2”}$/645	Rp$^{1/2”}$/852	Rp$^{1/2”}$/901	Rp$^{1/2”}$/1111
Sleeve for Electric element on inspection opening flange	Uo, mm,	Rp$^{1/2”}$/309	Rp$^{1/2”}$/309	Rp$^{1/2”}$/320	Rp$^{1/2”}$/450	Rp$^{1/2”}$/450
Additional sensor sleeve	Z, mm, Rp$^{1/2”}$	352/631	302/752	320/852	450/901	450/1011

*optional positioning of an electric heater




F
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S2i
P
T
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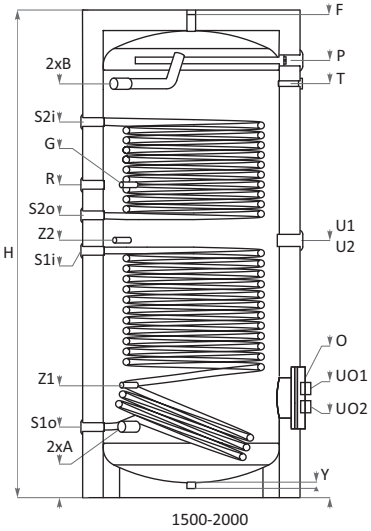
Z2
U1
U2
H
S1i
O
Z1
UO1
S1o
A
Y
750-1000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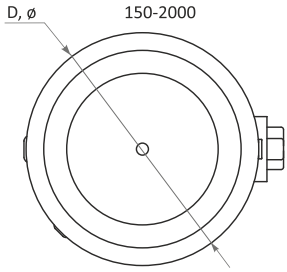
Z1
UO1
UO2
S1o
2xA
Y
1500-2000


D, ø
150-2000

SOLE EUROSTAR

		SOLE BL-2 750	SOLE BL-2 1000	SOLE BL-2 1500	SOLE BL-2 2000
Capacity	L	750	1000	1500	2000
Height / Min. vertical clearance	H, mm	2000/2030	2050/2080	2310/2370	2310/2370
Diameter	D, mm	Ø 950	Ø 1050	Ø 1050	Ø 1350
Insulation		100 mm soft PPU, removable			
Oper. pressure / max. temperature	bar/°C	8/95	8/95	8/95	8/95
Test pressure of tank	bar	13	13	13	13
Electric heating element (optional)	kW	2 x (3÷7.5)	2 x (3÷7.5)	3 x (3÷7.5)	4 x (3÷7.5)
Weight	kg	263	315	423	761
Cold water inlet	A, mm	Rp1$^{1/2"}$/300	Rp1$^{1/2"}$/320	2x Rp1$^{1/2"}$/320	2x Rp1$^{1/2"}$/385
Hot water outlet	B, mm	Rp1$^{1/2"}$/1630	Rp1$^{1/2"}$/1700	2xRp1$^{1/2"}$/1975	2x Rp1$^{1/2"}$/1885
Recirculation	R, mm	Rp1"/1405	Rp1"/1487	Rp1"/1487	Rp1"/1265
Operating pressure / Max.Coils temp. S1/S2	bar/°C	16/110	16/110	16/110	16/110
Test pressure S1/S2	bar	25	25	25	25
Coil capacity S1/S2	L	12.95/8.63	16.65/11.72	18.50/15.42	25.28/18.50
THeat exchange surface S1/S2	m²	2.1/1.4	2.7/1.9	3/2.5	4.1/3
Lower coil inlet S1	S1i, mm, Rp1"	970	1080	1180	1635
Lower coil outlet S1	S1o, mm, Rp1"	300	320	320	385
Upper coil inlet S2	S2i, mm, Rp1"	1560	1660	1790	1885
Upper coil outlet S2	S2o, mm, Rp1"	1160	1220	1350	1420
Prolonged power acc. to DIN 4708; 80°C/60°C/45°C, S1	kW (m3/h)	80(1.97)	105(2.58)	131(3.22)	180(4.42)
Prolonged power acc. to DIN 4708; 80°C/60°C/45°C, S2	kW (m3/h)	50(1.23)	62(1.52)	74(1.82)	110(2.70)
NL – power coefficient at 60°C, S1/S2	NL 60°C	32/10	42/28	64/34	80/55
Pressure drop Δp, S1/S2	Δp, mbar	210/150	260/110	310/260	420/300
Sensor sleeve for thermostat	G, mm, Rp$^{1/2"}$	1435	1487	1487	1685
Air vent sleeve	F, mm, Rp1"	1950	2020	2320	2311
Inspection opening/Flange	O, mm, Ø, mm	280/450 Ø 200	280/460 Ø 200	280/460 Ø 200	560/484 Ø 400
Drain sleeve	Y, mm, Rp1"	30	30	30	30
Thermometer	T, mm, Rp$^{1/2"}$	1630	1700	2089	1835
Anode	P, mm, Rp1$^{1/4"}$	1728	1798	2 x 2090	2 x 2003
Sleeve for Electric element on water tank body	U, mm,	Rp1$^{1/2"}$/1040	Rp1$^{1/2"}$/1140	2 x Rp1$^{1/2"}$/1220	2 x Rp1$^{1/2"}$/1340
Sleeve for Electric element on inspection opening flange	Uo, mm,	Rp1$^{1/2"}$/450	Rp1$^{1/2"}$/460	Rp1$^{1/2"}$/460	2 x Rp1$^{1/2"}$/484
Additional sensor sleeve	Z, mm, Rp$^{1/2"}$	535/1040	520/1140	520/1220	745/1340

* optional positioning of an electric heater

5. TRANSPORT AND PACKAGING

We recommend to transport the water tank to the installation site in its packaging placed on the pallet, and stretch foil.
During transport and installation, depending on the weight, appropriate safety equipment must be used in accordance with Directive 2006/42/EC.
When transporting items weighing more than 30 kg, the use of pallet jack, fork truck or other hoisting devices is a must**.**

6. RECYCLING AND WASTE DISPOSAL

Submit all packaging material for recycling according to the local regulations and requirements.
At the end of life cycle of each product its components are due to be disposed of in conformity with regulatory prescriptions.
According to Directive 2002/96/EC regarding electrical and electronic equipment waste, disposal thereof is required separately from the normal flow of solid household waste. Obsolete equipment shall be collected separately from other recyclable waste containing materials with adverse effect on health and environment.
Expired appliances must be collected separately from other recyclable waste containing substances hazardous to health and environment.
Both metal and non-metal parts are sold out to licensed organizations for recyclable metal or non-metal waste collection. In any case they should not be treated as household waste.

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