

Ordering numbers:	TS 300 - with flanged pipe connections	S1542
	TS 300 - with copper pipe connections	S1543

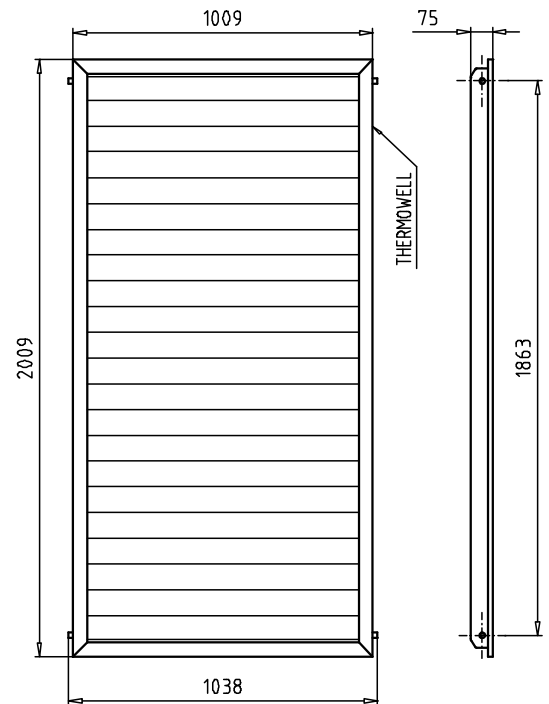
Collector description:

A flat-plate, vertically installed type of collector with flanged pipe connections or copper pipe connections, intended for solar systems with circulating pumps.

It consists of a compact pressed metal casing to which a safety solar glass is attached by a frame made of non-corrosive aluminium profiles. The absorber, made of a specially shaped Al-Mg metal sheet with high-selective conversion layer, spans the copper pipe meander.

The flanged connection pipes are connected to hydraulic circuit by $\varnothing 26$ quick couplers. The $\varnothing 18$ copper pipe connections are connected to hydraulic circuit by soldering.

The collectors are interconnected in parallel way. Maximum number of collectors connected in one row is 10 pieces.



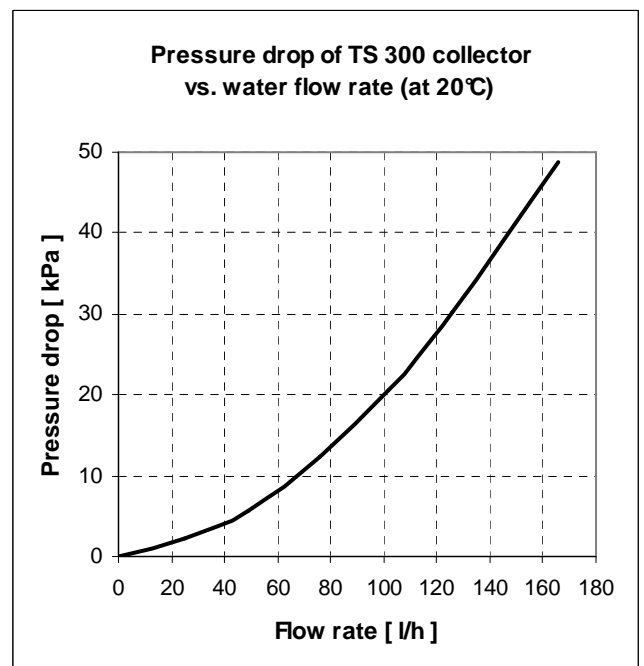
Technical specifications:

Technical specifications are based on the test certificates KTB No. 2003-17-a Fraunhofer Institut für Solare Energiesysteme and 2.04.00519.1.0-3-LT Arsenal Research. Tested according to EN 12975-1,2.

Floor space	2,03 m ²
Absorbing surface	1,78 m ²
Linkage dimension	1040x2040 mm
Cover glass	Safety, solar glass, 4 mm thick
Connection	$\varnothing 26$ mm flanges or $\varnothing 18$ mm copper pipes
Collector casing	non-corrosive Al-Mg metal sheet stamping
Sensor casing	for $\varnothing 6$ mm sensor
Thermal insulation	mineral felt
Total liquid capacity	1,57 l
Total weight	37 kg
Conversion layer	ALOX
Solar absorptivity $\alpha_{AM1.5}$	min 0,95
Thermal emissivity $\epsilon_{82^\circ C}$	max. 0,16
Optical efficiency	81%
Operating temperature	Below 100°C
No-load temperature at radiation 1000 W/m ² and ambient temperature 30 °C	170°C
Max. working overpressure of heat transfer fluid	600 kPa
Recommended flow of heat transfer fluid	30 –100 l/h per collector

Energy gain from collector up to 1 000 kWh/year

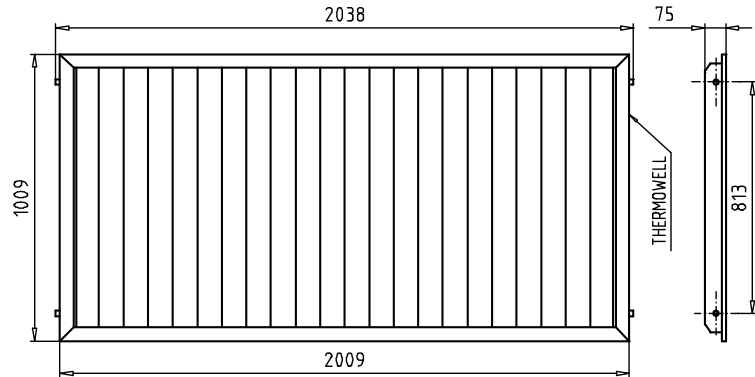
*the energy gain of the collector depends on the operating mode, geographic position, orientation and microclimatic conditions



Ordering numbers: TS 300 - with flanged pipe connections **S1548**
 TS 300 - with copper pipe connections **S1549**

Collector description:

A flat-plate, horizontally installed type of collector with flanged pipe connections or copper pipe connections, intended for solar systems with circulating pumps. It consists of a compact pressed metal casing to which a safety solar glass is attached by a frame made of non-corrosive aluminium profiles. The absorber, made of a specially shaped Al-Mg metal sheet with high-selective conversion layer, spans the copper pipe meander.



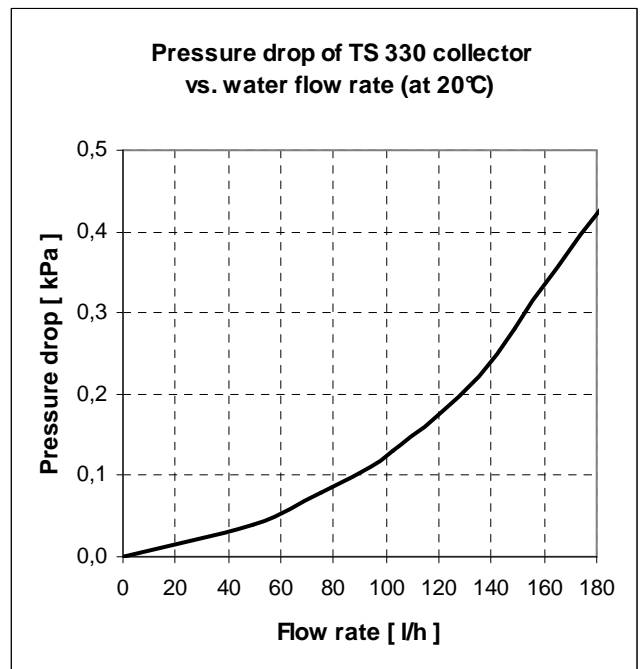
The flanged connection pipes are connected to hydraulic circuit by $\varnothing 26$ quick couplers. The $\varnothing 18$ copper pipe connections are connected to hydraulic circuit by soldering.

The collectors are interconnected in parallel way. Maximum number of collectors connected in one row is 5 pieces.

Technical specifications:

Floor space	2,03 m ²
Absorbing surface	1,78 m ²
Linkage dimension	1040x2040 mm
Cover glass	Safety, solar glass, 4 mm thick
Connection	$\varnothing 26$ mm flanges or $\varnothing 18$ mm copper pipes
Collector casing	non-corrosive Al-Mg metal sheet stamping
Sensor casing	for $\varnothing 6$ mm sensor
Thermal insulation	mineral felt
Total liquid capacity	1,7 l
Total weight	35 kg
Conversion layer	ALOX
Solar absorbtivity $\alpha_{AM1.5}$	min 0,95
Thermal emisivity $\epsilon_{82^\circ C}$	max. 0,15
Optical efficiency	81%
Operating temperature	Below 100°C
No-load temperature at radiation 1000 W/m ² and ambient temperature 30 °C	170°C
Max. working overpressure of heat transfer fluid	600 kPa
Recommended flow of heat transfer fluid	30 –100 l/h per collector
Energy gain from collector*	up to 1 000 kWh/year

the energy gain of the collector depends on the operating mode, geographic position, orientation and microclimatic conditions



Ordering numbers:

TS 400 with absorber ALOx and standard safety solar glass

S1550

TS 400H with dark blue absorber and safety solar glass with high solar transmissivity

S1554

Collector description:

A flat-plate vacuum collector for vertical installation, with flanged connections, intended for solar systems with circulating pumps.

It consists of a compact pressed metal casing to which a safety solar glass is attached by a frame made of non-corrosive aluminium profiles. The absorber, made of a specially shaped Al-Mg metal sheet with high-selective conversion layer, spans the copper pipe meander.

The flanged connection pipes are connected to hydraulic circuit by $\varnothing 40$ quick couplers.

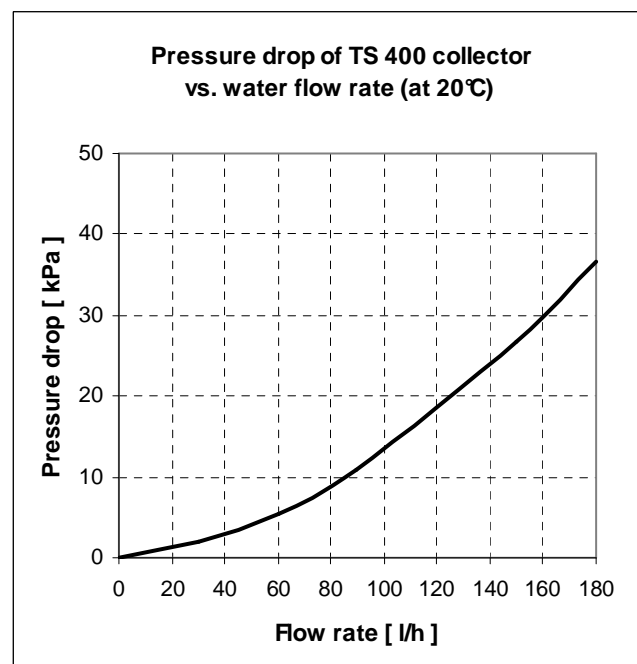
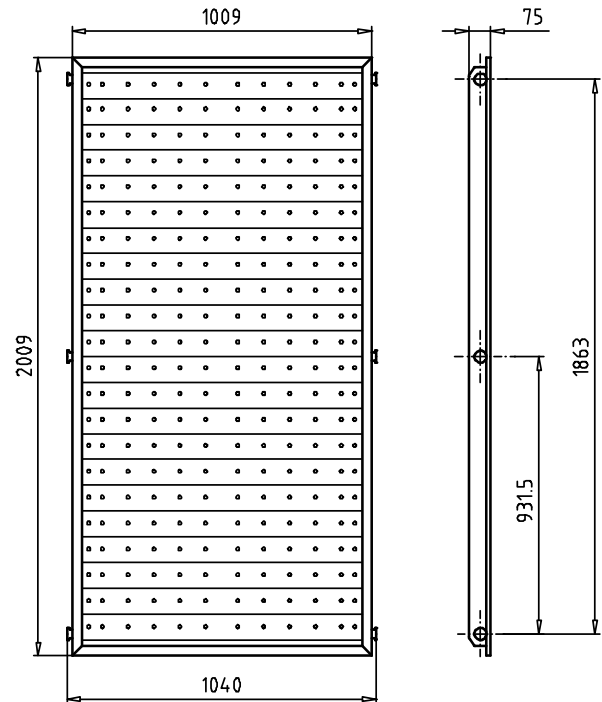
The collectors are interconnected in parallel way. Maximum number of collectors connected in one row is 10 pieces.

Krypton can be used as a replacement of the residual gas (air) inside the collector.

Technical specifications

Floor space	2,03 m ²
Absorbing surface	1,75 m ²
Linkage dimension	1040x2040 mm
Cover glass	safety solar glass 4 mm thick
Connection	$\varnothing 40$ mm flanges
Thermal insulation	vacuum 100 Pa
Total liquid capacity	1,3 l
Total weight	46 kg
Conversion layer	ALOX or Mirotherm
Collector casing	non-corrosive Al-Mg metal sheet stamping
Solar absorptivity $\alpha_{M1.5}$	min. 0,95 (ALOX), min. 0,95 (Mirotherm)
Thermal emissivity ε_{820C}	max. 0,16 (ALOX), max. 0,05 (Mirotherm)
Optical efficiency	81%
Operating temperature	above 100°C
No-load temperature at radiation 1000 W/m ² and ambient temperature 30°C	224°C
Max. working overpressure of heat transfer fluid	600 kPa
Recommended flow of heat transfer fluid	30-100 l/h per collector
Energy gain from collector*	up to 1200 kWh/year

*the energy gain of the collector depends on the operating mode, geographic position, orientation and microclimatic conditions



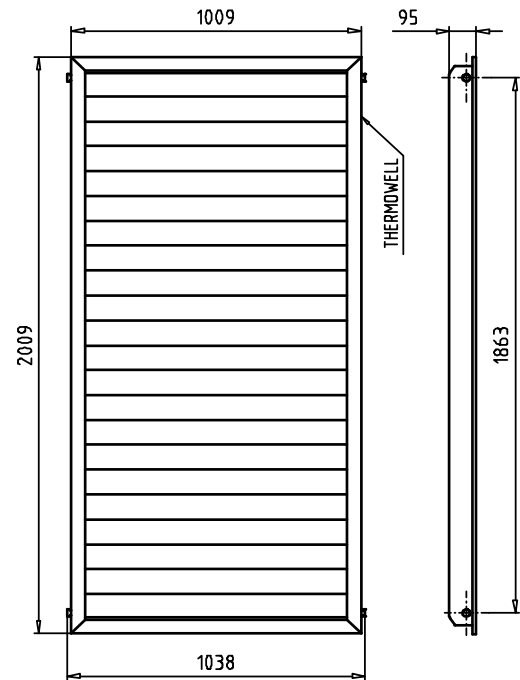
Collector description:

A flat-plate, vertically installed type of collector with flanged pipe connections, intended for solar systems with circulating pumps.

It consists of a compact pressed metal casing to which a safety solar glass is attached by a frame made of non-corrosive aluminium profiles. The absorber, made of a specially shaped Al-Mg metal sheet with high-selective conversion layer, spans the copper pipe meander.

The flanged connection pipes are connected to hydraulic circuit by $\varnothing 26$ quick couplers.

The collectors are interconnected in parallel way. Maximum number of collectors connected in one row is 10 pieces.



Technical specifications:

Technical specifications are based on the test certificates 41-06021, Department of Environmental Engineering, Czech Technical University in Prague and KTB Nr. 2006-42 Fraunhofer Institut für Solare Energiesysteme ISE.

Tested according to EN 12975-1,2.

Floor space	2,03 m ²
Absorbing surface	1,78 m ²
Linkage dimension	1040x2040 mm
Cover glass	safety solar glass 4 mm thick
Connection	$\varnothing 26$ mm flanges
Collector casing	non-corrosive Al-Mg metal sheet stamping
Sensor casing	for $\varnothing 6$ mm sensor
Thermal insulation	mineral felt
Total liquid capacity	1,65 l
Total weight	38 kg
Conversion layer	Mirotherm
Solar absorptivity $\alpha_{AM1,5}$	0,95
Thermal emissivity $\epsilon_{82^\circ C}$	0,05
Optical efficiency	81%
Operating temperature	below 120°C
No-load temperature at radiation 1000W/m ² and ambient temperature 25°C	190°C
Max. working pressure of heat transfer fluid	600 kPa
Recommended flow of heat transfer fluid	30 –100l/h per each collector

Energy gain from collector* up to 1 000 kWh/year

the energy gain of the collector depends on the operating mode, geographic position, orientation and microclimatic conditions

