

Tellimuse koodid:

 TS 300 klamberühendustega
 TS 300 vasktoru ühendustega
 TS 300H* klamberühendustega

S1542
S1543
S1564

Kollektori (päikesepaneeli) kirjeldus:

Sileplaat kollektor, mis ehitatud töötamiseks tsirkulatsioonipumba abil koos päikesekütte süsteemiga. Paigaldusasend vertikaalne. Kollektorite omavaheline ühendus paralleelne. Ühte ritta võib paigalda maksimaalselt 10 kollektorit.

- klamberühendustega kollektor

(ühendus kütteringiga $\varnothing 26$ mm kiirliideste abil),

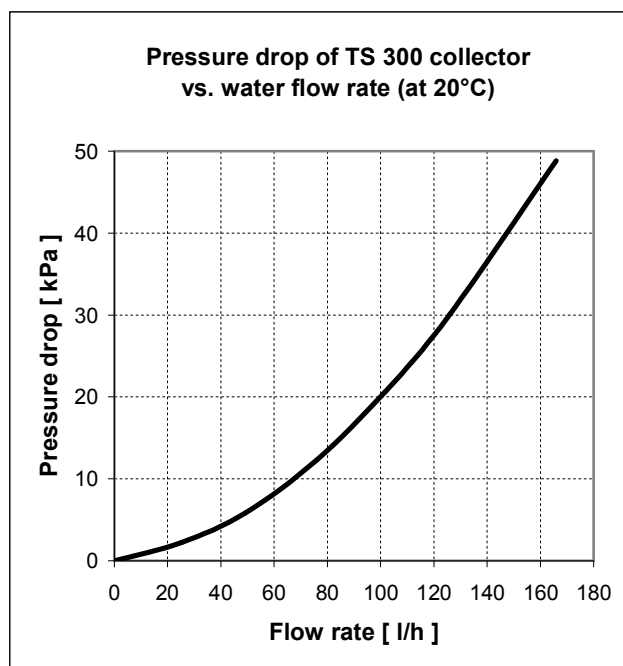
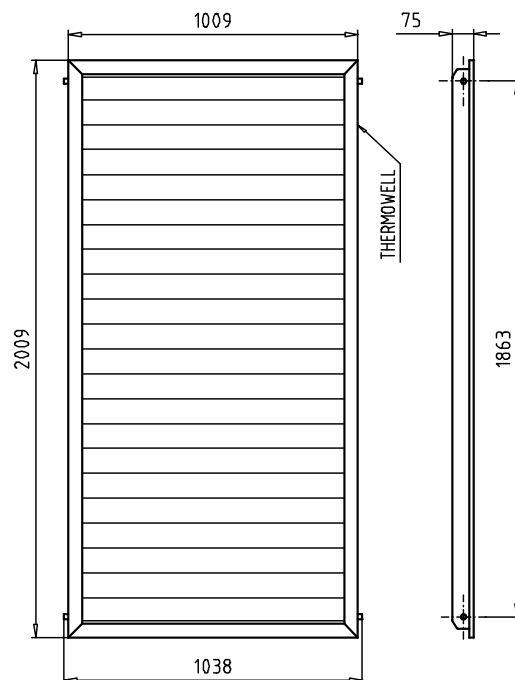
- vasktoru (Cu) ühendusega kollektor $\varnothing 18 \times 0,8$ mm (ühendus kütteringiga jootemeetodil).

Ehitus: kollektori korpus on stantsitud ühest Al-Mg lehest, millega "solar" ohutu klaas on ühendatud tihendite ja roostekindla alumiinium profiili abil.

Absorber: patenteeritud, erikujuline ühest alumiiniumlehest lahendus, mis kaetud selektiivse kattekihiga ja on pressitud ümber kollektori küttesiu, tagades efektiivseima ja soojusvahetuse.

Tehnilised andmed:

kogupindala	2,03 m ²
absorberi pindala	1,78 m ²
tööpindala	1,78 m ²
mõõdud paigaldatuna	1040x2040 mm
kaal	36,1 kg
soojuskandja (glükool) maht	1,57 l
glükooli maksimaalne töösurve	600 kPa
glükooli soovituslik läbijooksu maht	30-100 l/h (ühele kollektorile)
ühendus	<ul style="list-style-type: none"> • klamberühendus $\varnothing 26$ mm • Cu ühendus $\varnothing 18 \times 0,8$ mm
anduri pesa	andurile $\varnothing 6$ mm
katteklaas	4mm solar ohutu klaas
kollektori korpus	stantsitud, roostekindlast Al-Mg metall-lehest
soojustus	mineraalvatt
selektiivne absorberi kiht	TS300: ALOx (must) TS300H: Eta plus (sinine)*
päikese neelduvus $\alpha_{AM1.5}$	95 %
kiirgustegur $\varepsilon_{82^\circ\text{C}}$	13 % ALOx 5 % Eta plus
optiline efektiivsus	81%
soovituslik töötemperatuur	alla 100°C
koormuseta temperatuuritaluvus kiirgusel 1000W/m ² ja välistemperatuuril 30°C)	170°C
aastane min. tootlikkus 1m ² kohta vastavalt RAL UZ 73 meetodikale	525 kWh/m ²



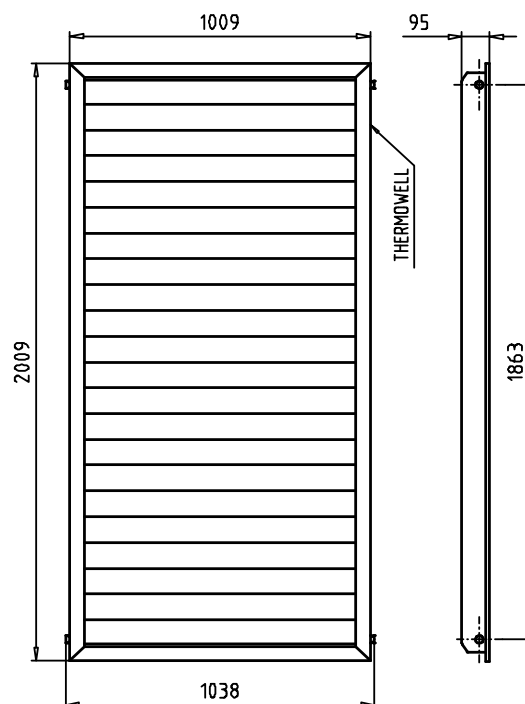
Kollektori kirjeldus:

Sileplaat kollektor, mis ehitatud töötamaks tsirkulatsioonipumba abil koos päikesekütte süsteemiga. Paigaldusasend vertikaalne. Kollektorite omavaheline ühendus paralleelne. Ühte ritta paigalda maksimaalselt 10 kollektorit.

Klamberühendus tsirkulatsioonitrassi ja teiste kollektoritega $\varnothing 26$ mm kiirliidestega.

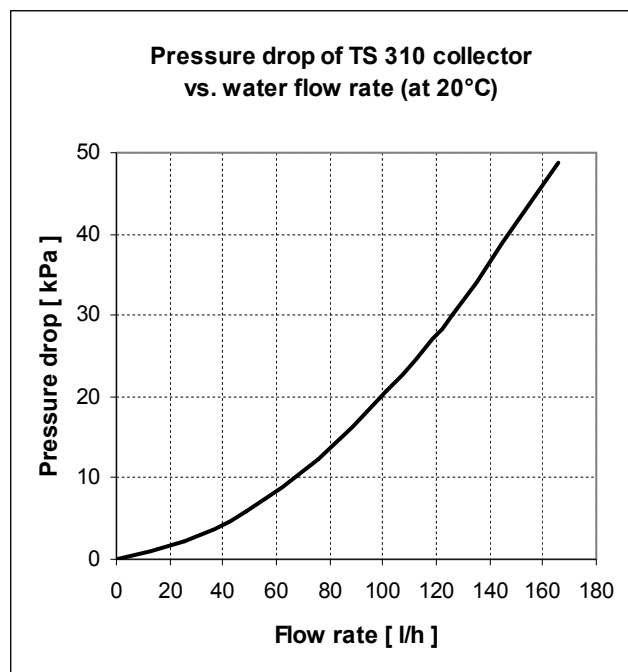
Ehitus: kollektori korpus on stantsitud ühest Al-Mg lehest, millega on "solar" ohutu klaas ühendatud tihendite ja roostekindla alumiinium profiili abil.

Absorber: patenteeritud, erikujuline ühest alumiiniumlehest lahendus, mis kaetud selektiivse kattekihiga ja on pressitud ümber kollektori küttesiu.



Technical specifications:

üldpindala	2,03 m ²
absorberi pindala	1,78 m ²
tööpindala	1,78 m ²
möödud paigaldatuna	1040x2040 mm
kaal	39 kg
glükooli kogus	1,57 l
glükooli maksimaalne töösurve	600 kPa
glükooli soovituslik läbijooksu maht	30-100 l/h per one collector
ühendus	klamberühendus $\varnothing 26$ mm
anduri pesa	andurile $\varnothing 6$ mm
Cover glass	4mm thick solar safety glass
Collector casing	stamping made of non-corrosive Al-Mg sheet
Thermal insulation	mineral felt
Selective absorber coating	Eta plus (blue)
Solar absorptivity $\alpha_{AM1.5}$	95 %
Thermal emissivity $\varepsilon_{82^\circ\text{C}}$	5 %
Optical efficiency	81%
Recommended operation temperature	below 120°C
No-load temperature (at radiation 1000W/m ² and ambient temperature 30°C)	190°C
Min. annual energy gain from 1m ² collector area according the RAL UZ 73 methodology	525 kWh/m ² year



Ordering numbers:

TS 330 with flanged pipe connections

S1548

TS 330 with copper pipe connections

S1549

Collector description:

Flat-plate collector with low hydraulic resistance, designed for solar systems with circulating pumps.

It is installed in horizontal position.

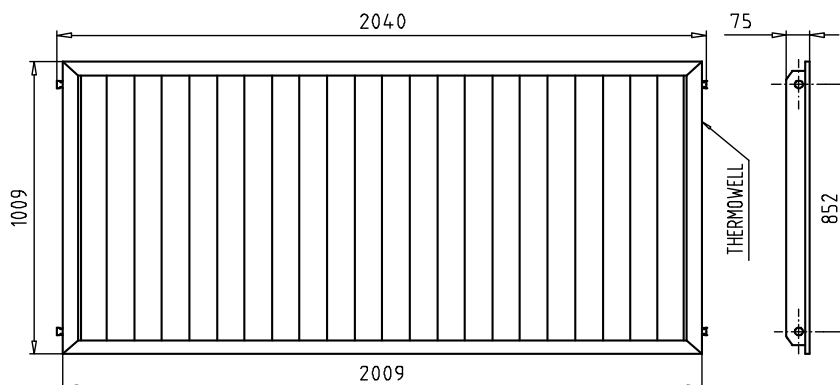
Collectors are connected parallelly to each other. Maximum 5 collectors can be connected in one row.

It is supplied with:

- flanged pipe connections
(connected to hydraulic circuit by $\varnothing 26$ mm quick couplers),
- copper pipe connections $\varnothing 18 \times 0,8$ mm (connected to hydraulic circuit by soldering).

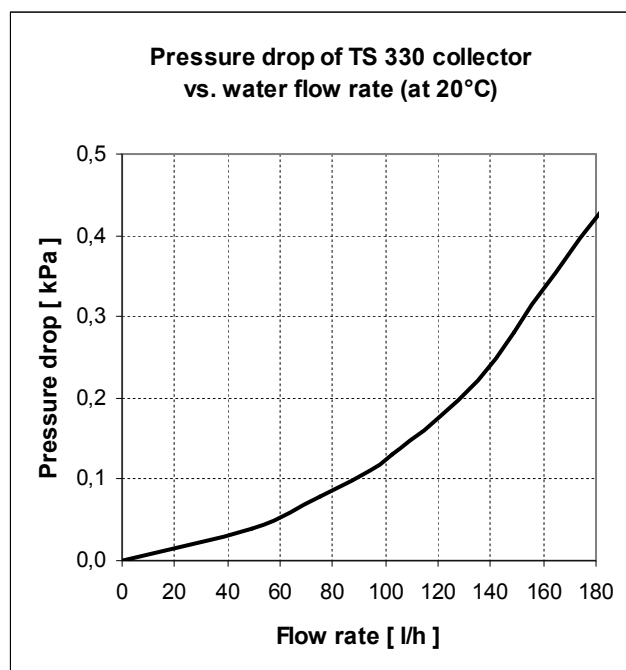
Construction: Compact pressed metal casing made of Al-Mg sheet, to which a solar safety glass is attached by a frame made of non-corrosive aluminium profiles.

Absorber: Specially shaped aluminium sheet with selective conversion layer spans a copper pipe lyre-shape register.



Technical specifications:

Gross area	2,03 m ²
Absorbing area	1,78 m ²
Aperture area	1,78 m ²
Linkage dimension	2040x1040 mm
Weight	37,0 kg
Liquid content	1,70 l
Max. operation pressure of heat transfer fluid	600 kPa
Recommended flow rate of heat transfer fluid	30-100 l/h per one collector
Connection	<ul style="list-style-type: none"> flanged pipes $\varnothing 26$ mm copper pipes $\varnothing 18 \times 0,8$ mm
Thermowell	for sensor $\varnothing 6$ mm
Cover glass	4mm thick solar safety glass
Collector casing	stamping made of non-corrosive Al-Mg sheet
Thermal insulation	mineral felt
Selective absorber coating	ALOX (black)
Solar absorptivity $\alpha_{AM1.5}$	95 %
Thermal emissivity $\varepsilon_{82^\circ\text{C}}$	13 %
Optical efficiency	81%
Recommended operation temperature	below 100°C
No-load temperature (at radiation 1000W/m ² and ambient temperature 30°C)	170°C
Min. annual energy gain from 1m ² collector area according the RAL UZ 73 methodology	525 kWh/m ² year



Ordering numbers:

TS 330 with flanged pipe connections	S1598
TS 330 with copper pipe connections	S1599

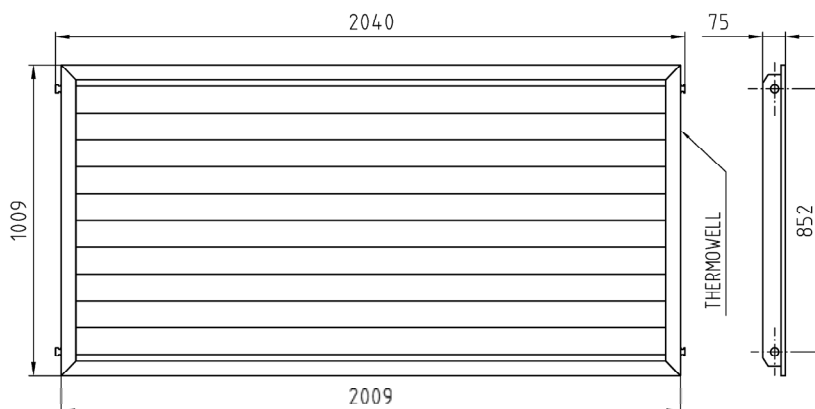
Collector description:

Flat-plate collector, designed for solar systems with circulating pumps.

It is installed in horizontal position.

Collectors are connected parallelly to each other. Maximum 5 collectors can be connected in one row. It is supplied with:

- flanged pipe connections
(connected to hydraulic circuit by $\varnothing 26$ mm quick couplers),
- copper pipe connections $\varnothing 18 \times 0,8$ mm
(connected to hydraulic circuit by soldering).

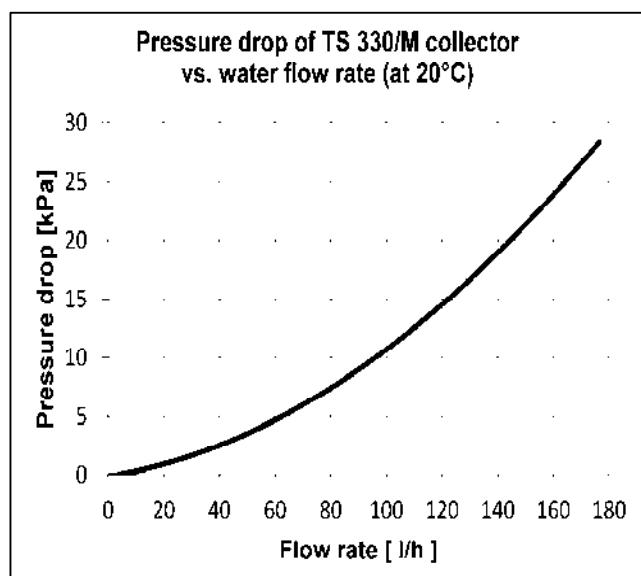


Construction: Compact pressed metal casing made of Al-Mg sheet, to which a solar safety glass is attached by a frame made of non-corrosive aluminium profiles.

Absorber: Specially shaped aluminium sheet with selective conversion layer spans a copper pipe meander.

Technical specifications:

Gross area	2,03 m ²
Absorbing area	1,78 m ²
Aperture area	1,78 m ²
Linkage dimension	2040x1040 mm
Weight	36,5 kg
Liquid content	1,5 l
Max. operation pressure of heat transfer fluid	600 kPa
Recommended flow rate of heat transfer fluid	30-100 l/h per one collector
Connection	<ul style="list-style-type: none"> • flanged pipes $\varnothing 26$ mm • copper pipes $\varnothing 18 \times 0,8$ mm
Thermowell	for sensor $\varnothing 6$ mm
Cover glass	4mm thick solar safety glass
Collector casing	stamping made of non-corrosive Al-Mg sheet
Thermal insulation	mineral felt
Selective absorber coating	ALOX (black)
Solar absorptivity $\alpha_{AM1,5}$	95 %
Thermal emissivity $\varepsilon_{82^\circ C}$	13 %
Optical efficiency	81%
Recommended operation temperature	below 100°C
No-load temperature (at radiation 1000W/m ² and ambient temperature 30°C)	189°C
Min. annual energy gain from 1m ² collector area according the RAL UZ 73 methodology	525 kWh/m ² year



Ordering numbers:

TS 400 with ALOx absorber and standard solar safety glass

TS 400H with eta plus (BlueTec) absorber and high-transmissivity solar safety glass

S1550

S1554

Collector description:

Flat-plate vacuum collector designed for solar systems with circulating pumps.

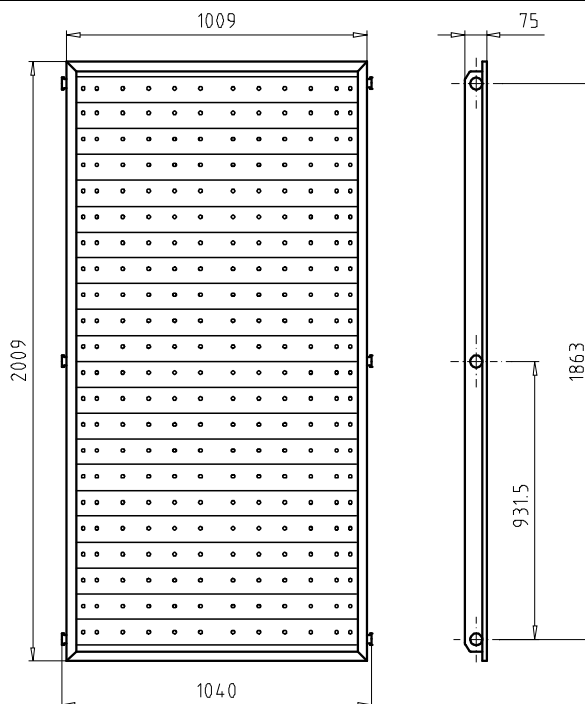
It is installed in vertical position. Collectors are connected parallelly to each other. Maximum 10 collectors can be connected in one row.

It is supplied with flanged pipe connections, which are connected to hydraulic circuit by $\varnothing 40$ mm quick couplers.

Construction: Compact pressed metal casing made of Al-Mg sheet, to which a solar safety glass is attached by a frame made of non-corrosive aluminium profiles.

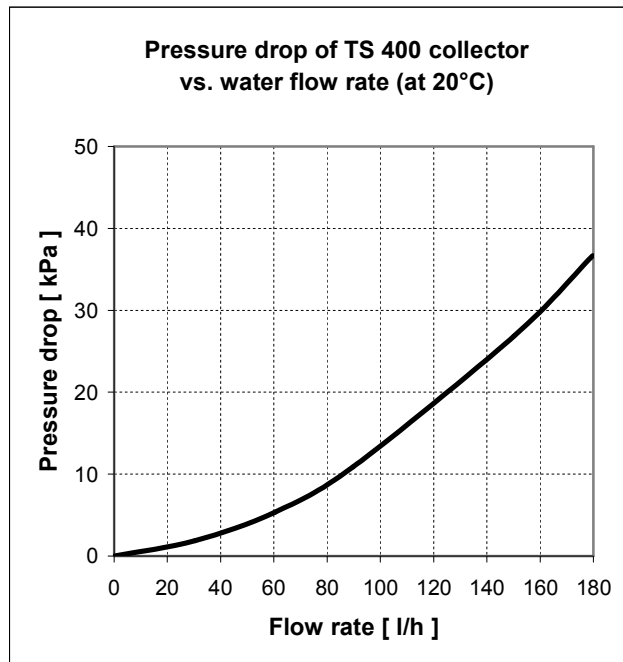
Absorber: Specially shaped aluminium sheet with selective conversion layer spans a copper pipe meander.

Residual gas (air) inside the collector may be replaced by krypton.



Technical specifications:

Gross area	2,03 m ²
Absorbing area	1,70 m ²
Aperture area	1,84 m ²
Linkage dimension	1040x2040 mm
Weight	45,3 kg
Liquid content	1,60 l
Max. operation pressure of heat transfer fluid	600 kPa
Recommended flow rate of heat transfer fluid	30-100 l/h per one collector
Connection	flanged pipes $\varnothing 40$ mm
Thermowell	for sensor $\varnothing 6$ mm
Cover glass	4mm thick solar safety glass
Collector casing	stamping made of non-corrosive Al-Mg sheet
Thermal insulation	vacuum (100 Pa)
Selective absorber coating	TS 400: ALOx (black) TS 400H: Eta plus (blue)
Solar absorptivity $\alpha_{AM1.5}$	95 %
Thermal emissivity $\varepsilon_{82^\circ\text{C}}$	13 % ALOx 5 % Eta plus
Optical efficiency	81%
Recommended operation temperature	over 100°C
No-load temperature (at radiation 1000W/m ² and ambient temperature 30°C)	224°C
Min. annual energy gain from 1m ² collector area according the RAL UZ 73 methodology	525 kWh/m ² year



Ordering numbers:

TS 350 - without sensor thermowell
TS 350 - with sensor thermowell

S1582
S1588

Collector description:

Flat-plate collector with low hydraulic resistance, designed for solar systems with circulating pumps or with natural circulation (thermosiphon).

It is installed in vertical position. Collectors are connected parallelly to each other. Maximum 10 collectors can be connected in one row.

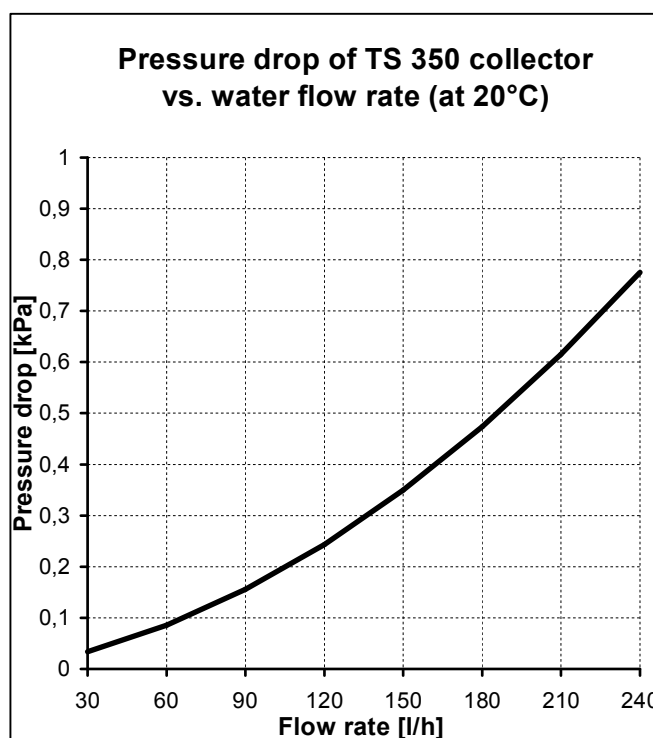
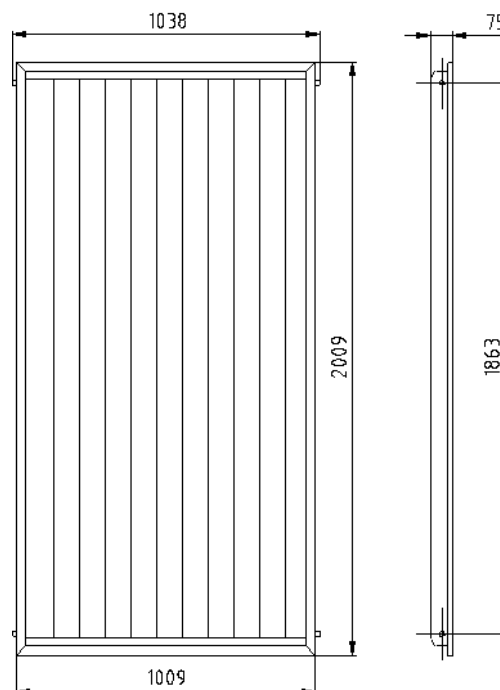
Flanged pipe connections are connected to hydraulic circuit by union nuts.

Construction: Compact pressed metal casing made of Al-Mg sheet, to which a solar safety glass is attached by a frame made of non-corrosive aluminium profiles.

Absorber: Specially shaped aluminium sheet with selective conversion layer spans a copper pipe lyre-shape register.

Technical specifications:

Gross area	2,03 m ²
Absorbing area	1,708 m ²
Aperture area	1,78 m ²
Linkage dimension	1060x2040 mm
Weight	36,8 kg
Liquid content	1,7 l
Max. operation pressure of heat transfer fluid	600 kPa
Recommended flow rate of heat transfer fluid	50-200 l/h per one collector
Connection	flanged with union nut
Thermowell	S1582: without thermowell S1588: thermowell for sensor ø6 mm
Cover glass	4mm thick solar safety glass
Collector casing	stamping made of non-corrosive Al-Mg sheet
Thermal insulation	mineral felt
Selective absorber coating	ALOX (black)
Solar absorptivity $\alpha_{AM1.5}$	95 %
Thermal emissivity $\varepsilon_{82^\circ\text{C}}$	13 %
Optical efficiency	80,2 %
Recommended operation temperature	below 100 °C
No-load temperature (at radiation 1000W/m ² and ambient temperature 30°C)	175,6 °C
Min. annual energy gain from 1m ² collector area according the RAL UZ 73 methodology	525 kWh/m ² year



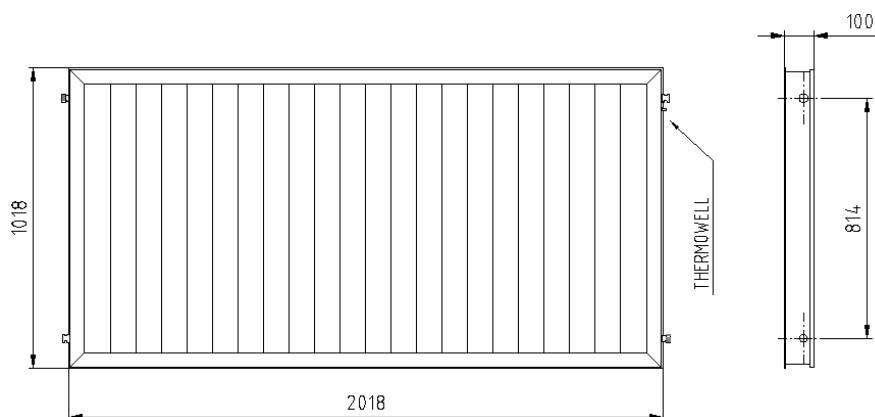
Ordering number:

TS 131M with flanged pipe connections with union nuts **S1540**

Collector description:

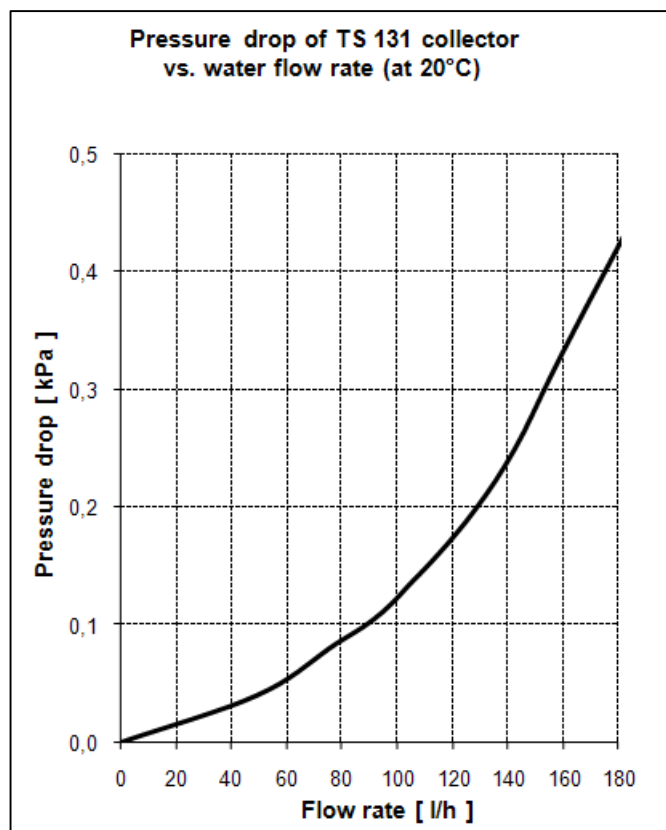
Flat-plate collector with low hydraulic resistance, designed for solar systems with circulating pumps. It is installed in horizontal position. Collectors are connected in parallel way to each other. Maximum 5 collectors can be connected in one row. Construction: Frame casing made of glued aluminium profiles. Back side is cover with aluminium sheet. Front side is cover with solar safety glass. The glass is attached to casing by aluminium profiles. Absorber: Specially shaped aluminium sheet with highly selective conversion layer spans a copper pipe lyre-shape register.

Flanged pipe connections are connected to hydraulic circuit by union nuts.



Technical specifications:

Gross area	2,05 m ²
Absorbing area	1,78 m ²
Aperture area	1,78 m ²
Linkage dimension	2060 mm
Weight	42,5 kg
Liquid content	1,70 l
Max. operation pressure of heat transfer fluid	600 kPa
Recommended flow rate of heat transfer fluid	30-100 l/h per one collector
Connection	flanged with union nut
Thermowell	for sensor ø6 mm
Cover glass	4mm thick solar safety glass
Collector casing	frame casing made of glued aluminium profiles
Thermal insulation	mineral felt
Selective absorber coating	ALOX (black)
Solar absorptivity $\alpha_{AM1.5}$	95 %
Thermal emissivity $\varepsilon_{82^\circ C}$	13 %
Optical efficiency	80%
Recommended operation temperature	below 100 °C
No-load temperature (at radiation 1000W/m ² and ambient temperature 30°C)	170,5 °C
Min. annual energy gain from 1m ² collector area according the RAL UZ 73 methodology	525 kWh/m ² year



Tellimuse koodid:

TS 500 klamberühendusega

S1587

TS 500H* klamberühendusega

S1603

Kollektori kirjeldus:

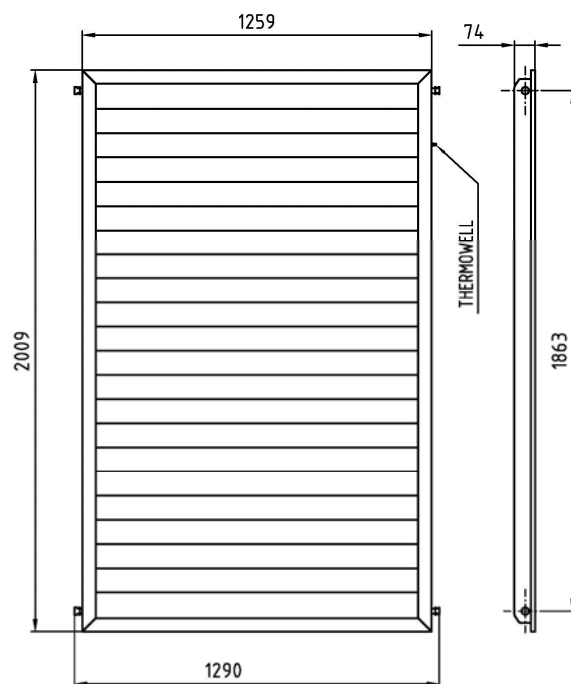
Sileplaat kollektor, mis mõeldud töötamiseks tsirkulatsioonipumba abil.

Vertikaalasetusega kollektor, millised ühendatakse omavahel paralleelselt. Maksimaalselt võib paigaldada kuni 8 paneeli ühte ritta.

Kollektor on varustatud $\varnothing 26$ mm kiirühendusklambritega.

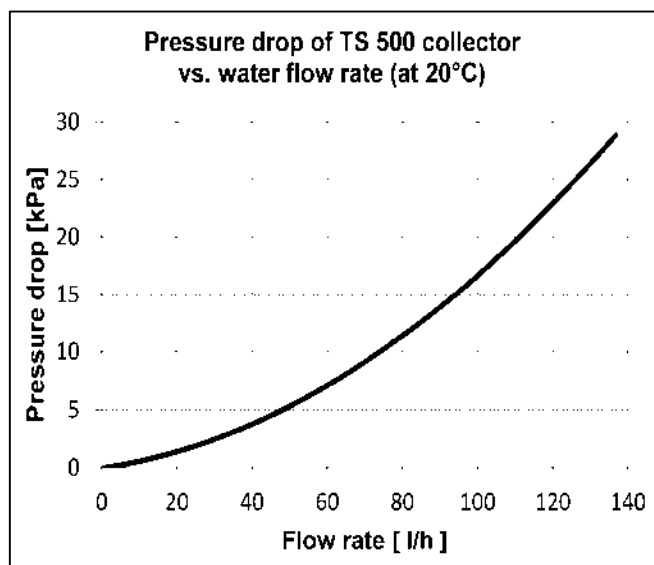
Ehitus: kollektori korpus on stantsitud ühest Al-Mg lehest, millega "solar" ohutu klaas on ühendatud tihendite ja roostekindla alumiinium profiili abil.

Absorber: patenteeritud, erikujuline ühest alumiiniumlehest lahendus, mis kaetud selektiivse kattekihiga ja on pressitud ümber kollektori küttesiu, tagades efektiivseima ja soojusvahetuse.



Tehnilised andmed:

üldpindala	2,53 m ²
absorberplaadi pindala	2,26 m ²
tööpindala	2,26 m ²
vajalik paigalduslaius	1300 mm
kaal	44,6kg
vedeliku maht	1,72 l
maksimaalne töö rõhk	600 kPa
soovituslik glükooli läbijooksu maht	30-100l/h ühe kollektori kohta
ühendus	klamber kiirühendus
anduri pesa	$\varnothing 6$ mm
katteklaas	4mm solar ohutu klaas
korpus	stantsitud, roostevaba Al-Mg metallehest
isolatsioon	mineraalvill
absorberi selektiivne kate	TS500: ALOx (must) TS500H: Eta plus (sinine)*
päikese neelduvus $\alpha_{AM1.5}$	95 %
kiirgustegur $\varepsilon_{82^\circ C}$	13 % ALOx 5 % Eta plus
optiline efektiivsus	81%
soovituslik töötemperatuur	alla 100°C
koormuseta temperatuuritaluvus kiirgusel 1000W/m ² ja välistemperatuuril 30°C)	196°C
min. aastane 1m ² tootlikkus vastavalt RAL UZ 73 meetodile	525 kWh/m ² aastas



Ordering number:

TS 510 with flanged pipe connections

S1592

TS 510H* with flanged pipe connections

S1604

Collector description:

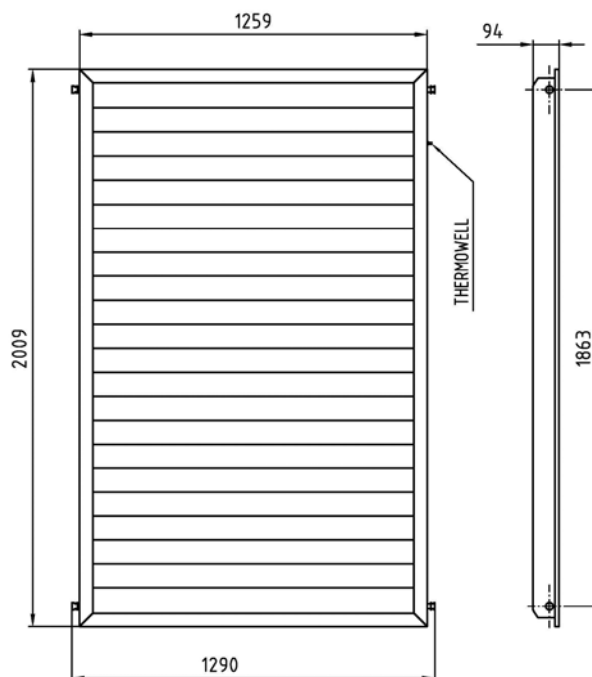
Flat-plate collector designed for solar systems with circulating pumps.

It is installed in vertical position. Collectors are connected parallelly to each other. Maximum 8 collectors can be connected in one row.

It is supplied with flanged pipe connections, which are connected to hydraulic circuit by $\varnothing 26$ mm quick couplers, or with flanged pipe connections, which are connected to hydraulic circuit by union nuts.

Construction: Compact pressed metal casing made of Al-Mg sheet, to which a solar safety glass is attached by a frame made of non-corrosive aluminium profiles.

Absorber: Specially shaped aluminium sheet with selective conversion layer spans a copper pipe meander.



Technical specifications:

Gross area	2,53 m ²
Absorbing area	2,26 m ²
Aperture area	2,26 m ²
Linkage dimension	1290 mm
Weight	47,5kg
Liquid content	1,72 l
Max. operation pressure of heat transfer fluid	600 kPa
Recommended flow rate of heat transfer fluid	30-100 l/h per one collector
Connection	flanged pipes
Thermowell	for sensor $\varnothing 6$ mm
Cover glass	4mm thick solar safety glass
Collector casing	stamping made of non-corrosive Al-Mg sheet
Thermal insulation	mineral felt
Selective absorber coating	TS510: ALOx (black) TS510H: Eta plus (blue)*
Solar absorptivity $\alpha_{AM1.5}$	95 %
Thermal emissivity $\varepsilon_{82^\circ\text{C}}$	13 % ALOx 5 % Eta plus
Optical efficiency	81%
Recommended operation temperature	below 100°C
No-load temperature (at radiation 1000W/m ² and ambient temperature 30°C)	202°C
Min. annual energy gain from 1m ² collector area according the RAL UZ 73 methodology	525 kWh/m ² year

