



Due to their excellent absorptance rate of 95% flat-plate collectors **SUNSYSTEM PK Select CL** are the ultimate choice for domestic hot water supply and central heating support throughout the year.

The collector absorbs solar heat and emits it to the heat carrier circulating in the pipe harp.

Available in modifications, m²:

Portrait orientation: **2.15 / 2.7**

Landscape orientation: **2.15 / 2.7**

Connections:

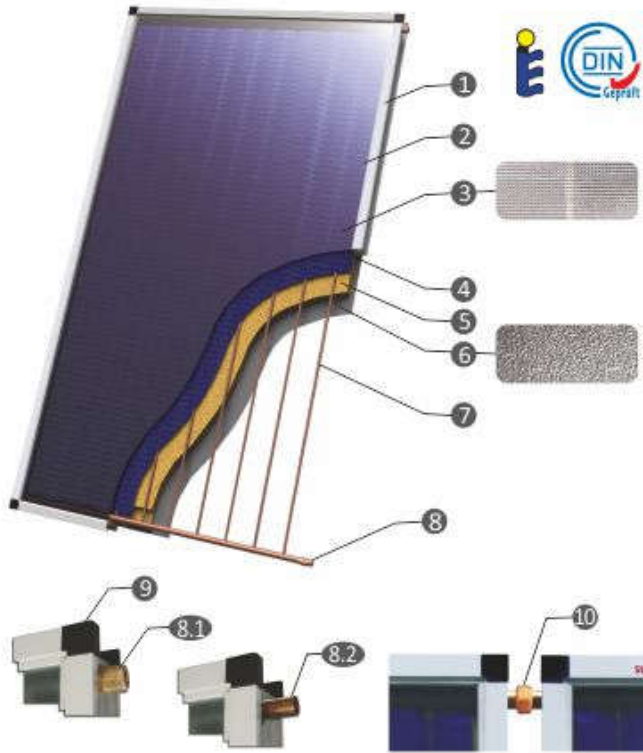
Thread R¹/₂" / „New Line“ Cu Ø22

Mounting options:

Inclined roof / Flat roof

Product features:

- State-of-the-art **selective coating** boosts efficiency and protects the absorber from wear.
- **Weatherproof aluminum frame**; installable in multiple positions.
- **Rock-wool insulation** keeps heat from escaping the collector case.
- **Absorber harp of copper fins** welded by ultrasonic technology.
- **Ultrasonic welding provides** for even and solid seam between the piping and the fins which withstands mechanical and thermal deformation.
- **Pipe harp with low flow resistance.** 100% tested for liquid tightness.
- **Protective solar glass:**
 - Prismatic surface patterned.
 - Low ferrous content (FeO ≤0.02 %).
 - Heat-tempered.
 - Weatherproof – withstands severe wind, snow and hail.
- UV-proof silicone seal.
- Certificate: EN 12975:2006-06; **CEN -Keymark**
011 -7S381 F.



- 1. Aluminum casing
- 2. Silicon seal
- 3. Protective solar glass
- 4. Copper absorber with selective coating
- 5. High efficiency insulation
- 6. Bottom of the collector
- 7. Copper absorber pipe harp
- 8. Inlet/Outlet sleeve
 - 8.1. Connection thread R 1/2" (model PK SL CL)
 - 8.2. Connection „New Line“ Cu ø 22 (model PK SL CL NL)
- 9. Corner protector
- 10. Connection of 2 x PK Select CL
PK Select CL - Hollander joints at 1/2"

PK Select CL NL - adapter nipples for copper pipe ø22

Technical characteristics:

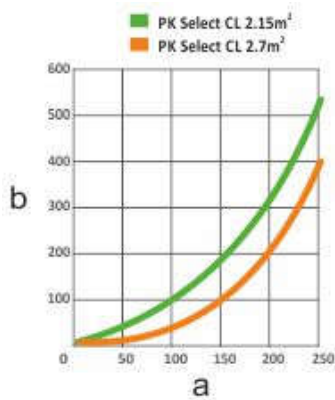
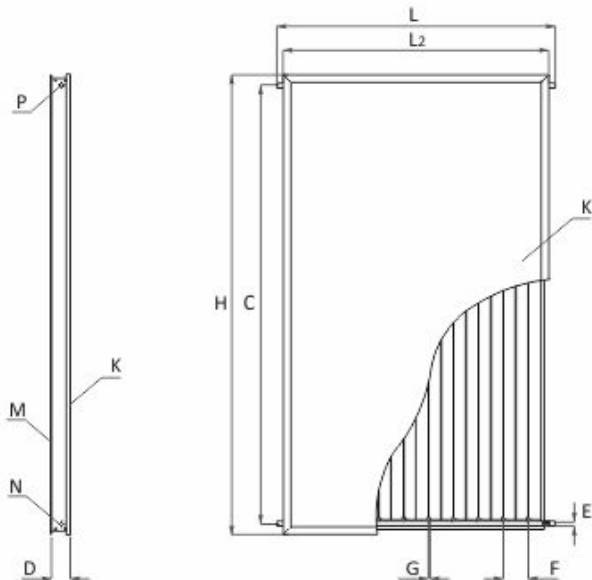


Diagram Pressure drop in PK Select CL- type solar collectors
 a) Pressure drop (Pa)
 b) Flowrate (liters / hour)



| | | PK SL CL 2,15 | PK SL CL NL 2,15 | PK SL CL 2,7 | PK SL CL NL 2,7 |
|---|---------------------------------|--|---------------------|--|--------------------|
| Overall surface | m ² | 2,141 | 2,141 | 2,619 | 2,619 |
| Absorber surface | m ² | 1,94 | 1,94 | 2,41 | 2,41 |
| Aperture surface | m ² | 1,897 | 1,897 | 2,39 | 2,39 |
| Overall size: | | | | | |
| Height H | mm | 2125 | 2125 | 2125 | 2125 |
| Width L / Thickness D | mm | 1020 / 90 | 1020 / 90 | 1248 / 90 | 1248 / 90 |
| Heat carrier fluid | | PG 50% (freezing point: -34°C) | | PG 50% (freezing point: -34°C) | |
| Volume of heat carrier | L | 1,6 | 1,6 | 2,1 | 2,1 |
| Flow rate of heat carrier | L/m ² h | 20 ÷ 50 | 20 ÷ 50 | 20 ÷ 50 | 20 ÷ 50 |
| Insulation | | rock wool $\lambda = 0,0374$ W/m.K (DIN 18165); g = 30 kg/m ³ ; $\delta = 40$ mm | | rock wool $\lambda = 0,0374$ W/m.K (DIN 18165); g = 30 kg/m ³ ; $\delta = 40$ mm | |
| Solar glass | | heat tempered prismatic glass | | heat tempered prismatic glass | |
| Collector case | | powder coated Aluminum (RAL 9006) | | powder coated Aluminum (RAL 9006) | |
| Collector bottom | | embossed aluminum sheet | | embossed aluminum sheet | |
| Absorber material / Absorber surface | | Copper (Cu) / Selective coating | | Copper (Cu) / Selective coating | |
| Welding method | | ultrasonic welding | | ultrasonic welding | |
| Efficiency η_a in relation to aperture | % | 76,4 | 76,4 | 77 | 77 |
| Thermal loss coefficient K_1 | W/m ² K | 3,83 | 3,83 | 4,23 | 4,23 |
| Thermal loss coefficient K_2 | W/m ² K ² | 0,0080 | 0,0080 | 0,0035 | 0,0035 |
| Stagnation temperature | °C | 200 | 200 | 200 | 200 |
| Test pressure / Operating pressure | bar | 25/6 | 25/6 | 25/6 | 25/6 |
| Weight | kg | 38 | 38 | 47 | 47 |
| Collector case dimensions: | | | | | |
| Height | H, mm | 2125 | 2125 | 2125 | 2125 |
| Width / Thickness | L2 / D, mm | 1020 / 90 | 1020 / 90 | 1248 / 90 | 1248 / 90 |
| Distance between collecting pipes | C, mm | 2025 | 2025 | 2025 | 2025 |
| Collecting pipes | E, ϕ mm | $\phi 22$ | $\phi 22$ | $\phi 22$ | $\phi 22$ |
| Number of collecting pipes | pcs. | 2 | 2 | 2 | 2 |
| Distance between absorber pipes | F, mm | 114 | 114 | 114 | 114 |
| Absorber pipes | G, ϕ mm | $\phi 10$ | $\phi 10$ | $\phi 10$ | $\phi 10$ |
| Number of absorber pipes | pcs. | 8 | 8 | 10 | 10 |
| Thickness of solar glass | K, mm | 4,2 | 4,2 | 4,2 | 4,2 |
| Thickness of collector bottom | M, mm | 0,6 | 0,6 | 0,6 | 0,6 |
| Heat carrier inlet | N, mm | R 1/2" | $\phi 22$ | R 1/2" | $\phi 22$ |
| Heat carrier outlet | P, mm | R 1/2" | $\phi 22$ | R 1/2" | $\phi 22$ |
| Number of sleeves | pcs. | 4 | 4 | 4 | 4 |
| Maximum number of collectors in one array (20 m ² absorber surface) | pcs. | 10 | 10 | 8 | 8 |