

Full plate Selective
Solar Thermal Collector

HELIONAL
Solar Systems

FPS 2.0

Ultrasonic welded



FPS SERIES

Solar Thermal Collector FPS 2.0

Technical Data

Collector

Weight: 42,5 kg
 Gross Dimensions: 2000X1000X100 mm
 Gross Area: 1,98 m²
 Aperture Area: 1,78 m²
 Absorber area: 1,81 m²
 Number of covers: 1
 Cover's Material: Mistlite tempered Glass
 Cover's Emmitance: 95%
 Cover's Thickness: 4 mm
 Cover's dimensions: 1960X960 mm
 Number of tubes: 12
 Header tubes diameter: Ø ext 22 mm
 Vertical tubes diameter: Ø ext 10 mm
 Distance between tubes: 93 mm
 Transferring heat fluid: Water
 and monoethylene glycol

Absorber

Material: High frequency Titanium
 Oxide Copper sheet
 Surface: Selective
 Thickness: 0,2 mm
 Area: 1,81 m²
 Emmitance: 5%
 Absorption: 95%
 Type of connection between tubes
 and absorber: Ultrasonic Welding

Casing

Material: Aluminium
 Back plate material: Galvalumin 0,5 mm
 Dimensions: 1992 x 996 x 98 mm
 Aperture dimensions: 1919 x 925 mm
 Sealing material: Double line EPDM

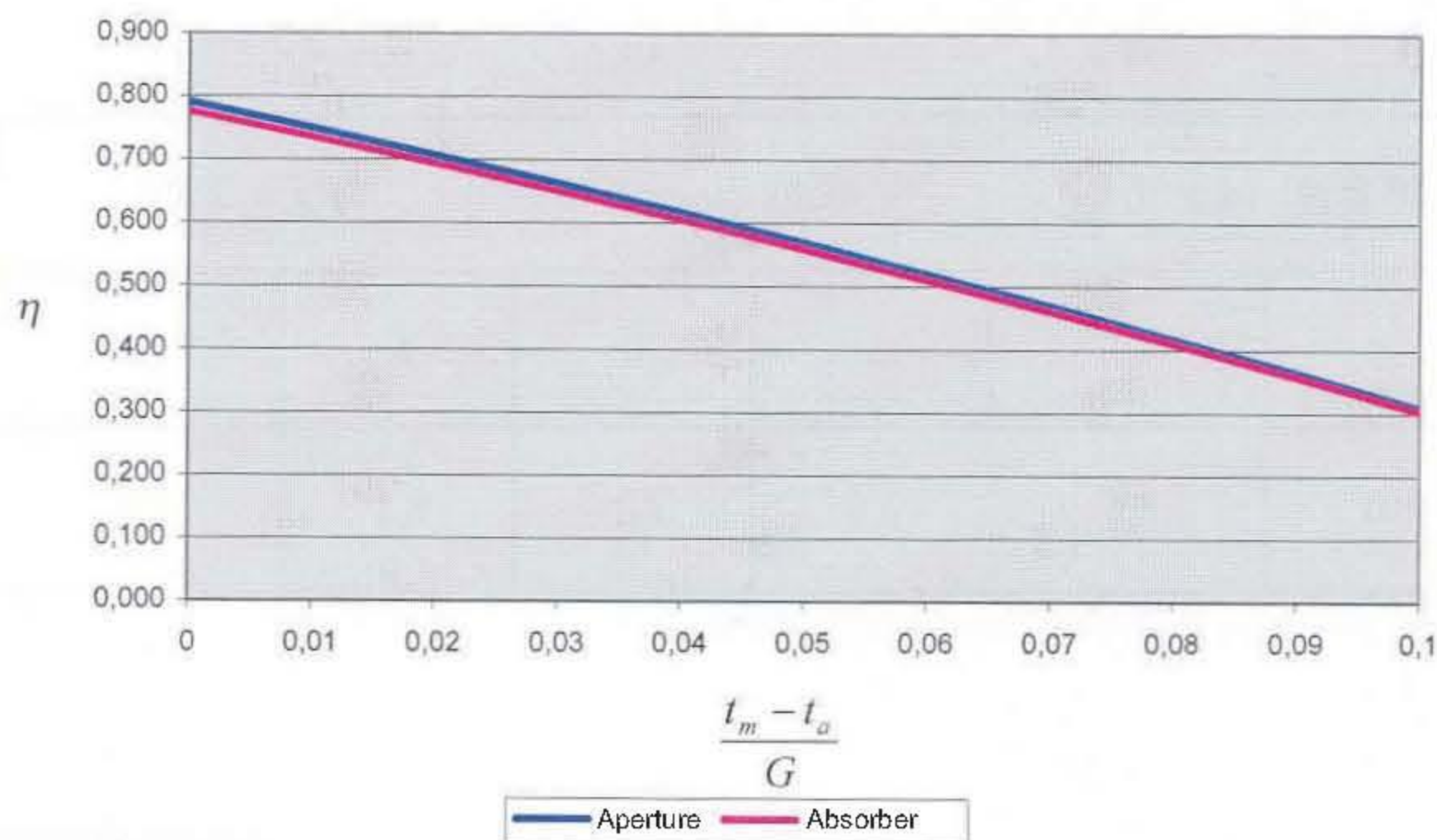
Insulation

Thermal conductivity: 0,03kcal /m h °C
 Material: Rockwool
 Thickness:
 Side: 30 mm
 Back: 40 mm

Limitations

Maximum temperature: 150 °C
 Maximum operation pressure: 8 atm
 Maximum and minimum angle of inclination:
 - Maximum: 90°
 - Minimum: 0°

Instantaneous efficiency curve (800W / m²)



Pressure drop.....0,020 kg/s m²

Collector's surface.....1,98 m²