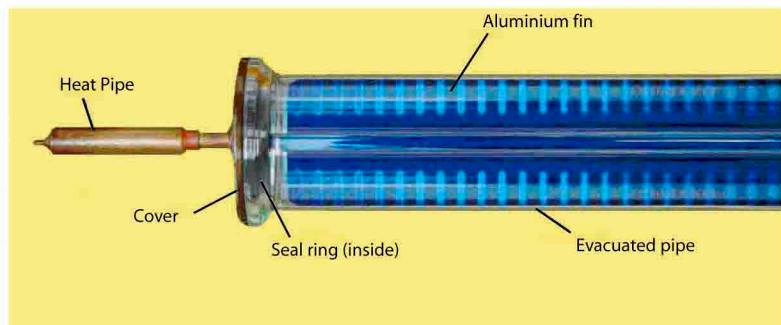


Evacuated Heat Pipe MPi70-1700-EH , MPi70-1900-EH

The evacuated heat pipe structure is a combination of features between all-glass evacuated tube and metal-glass evacuated tube, where its central heat pipe structure with a highly selective vacuum coating on its metal fin is a very high-performance product. Therefore, the collector's module mean heat transfer to the solar loop is extremely efficient.

Features MPi70-1700-EH , MPi70-1900-EH

- Suitable for frigid zones because there is no water in the tube
- Designed for pressurized system
- High solar-thermo conversion and low heat loss
- High output due to vacuum insulation
- High output due to advanced solar selective coatings:
 - metal-Aluminum nitride cermet (M-AIN) materials
- Borosilicate glass : high chemical and thermal shock resistance
- Simple maintenance-tubes can be replaced without having to empty solar loops
- High output even at lower outside temperature



Specifications

Model*	MPi70-1700-EH	MPi70-1900-EH
Name	evacuated heat pipe	
Tube structure	all glass coaxial double-layer tubes	
Solar tube diameter	Φ 70	
Outer tube thickness	2.0 ± 0.15mm	
Inner tube thickness	2.0 ± 0.15mm	
Tubes length	1700 mm	1900 mm
Hot water output**	7.89 L	8.51 L
Unit tube weight	2.21 ± 0.12kg	
Absorptive coating	AIN/AIN-SS/Cu	
Absorber material	aluminium	
Condenser size	14 x 75mm	
Absorptance (α)	0.94 ~ 0.96	
Emittance (ε)	0.04 ~ 0.06	
Tube material	evacuated tubes (borosilicate glass)	
Max. operating pressure	≤ 5×10 ⁻³ Pa	
Idle temperature	270 ~ 300 °C	
Heat-loss coefficient	≤ 10 W/m ² °C	
Bearing hailstone ability	hail stone diameter Φ25mm	
Pressure endurance	1MPa	
Freezing resistance	-35 °C	
Wind resistance	30mps	

*) A- copper, silicon rubber sealing plug

**) Data based on daily solar radiation 17MJ/m² (4.7Kwh/m²) and the water temperature up 35 °C

Typical section diagram of evacuated heat pipe

