

Heat Transition Pipe Collector MPi58-1700-20-HT

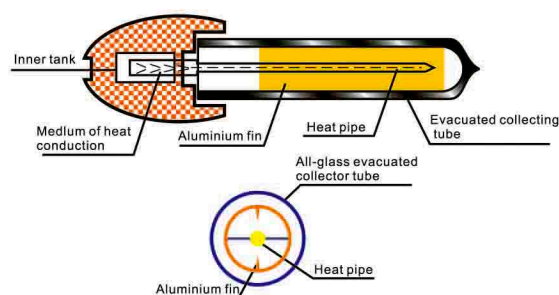
The heat transition pipe collectors are always connected with existing heating supply device in any situation, whether on a flat roof, in a backyard garden, or on a building facade. The heat pipe collector structure with its full surface cylindrical absorber and its highly selective vacuum coating, and with a high-quality insulation make it one of the highest-performance collectors of its type.

Features of MPi58-1700-20-HT

- 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
- Very simple assembly process - low assembly costs
- Could be installed using parallel or series connection



Typical section diagram



Pressure endurance	1MPa
Housing	304-2B grade stainless steel or aluminum alloy
Sealing ring	macromolecular silicon rubber
Heat insulation	polyurethane and glass wool
Heat insulation thickness	20mm (average)
Feet holder	nylon 66
Freezing resistance	-35 °C
Wind resistance	30mps

*) copper, silicon rubber sealing plug

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

Specifications MPi58-1700-20-HT

Model*	MPi58-1700-20-HT
Collector type	evacuated tube collector
Tube type	transition heat pipe
Installation type	roof-mounted, in-roof
Tube structure	all glass coaxial double-layer tubes (copper pipes in evacuated tubes)
Solar tube diameter	Φ 58
Outer tube thickness	1.8 ± 0.15mm
Inner tube thickness	1.8 ± 0.15mm
Tubes length	1700mm
No. of tubes	20
Gross surface area	2.32m ²
Open surface area	1.13m ²
Absorber surface area	0.97m ²
Width	1164mm
Height	1990mm
Empty weight	47.5kg
Collector capacity	1.37L
Absorber coating	Graded AlN/SS-AlN/Cu or other highly-selective vacuum coating
Absorptance (α)	0.94 ~ 0.96
Emittance (ε)	0.04 ~ 0.06
Collector glazing	evacuated tubes (borosilicate glass)
Heat transfer medium	water-glycol
Heat pipe	copper
Max. operating pressure	6 bar
Idle temperature	250 °C
Absorption coefficient	> 92%
Bearing hailstone ability	hail stone diameter Φ25mm