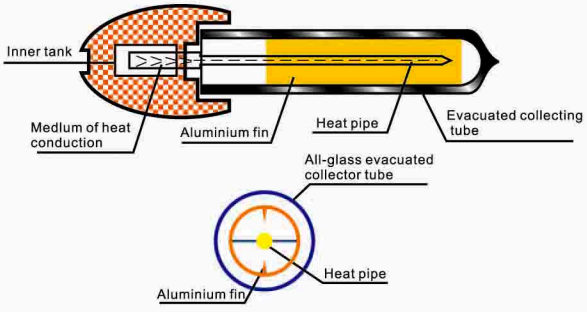
Heat Transition Pipe Collector MPi58-1800-10-HT , MPi58-1800-22-HT

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 MPi58-1800-10-HT, MPi58-1800-22-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-AlN) 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



Wind resistance	30mps
Housing material	304-2B grade stainless steel or aluminum alloy
Material of frame	stainless steel
Fastener	stainless steel bolt
Sealing ring	macromolecular silicon rubber
Heat insulation	rock wool
Feet holder	nylon 66

*) A- copper, silicon gel sealing plug B- cork sealing plug
**) Data based on daily solar radiation 17MJ/m² (4.7Kwh/m²) and the water temperature up 35 °C

ME : Water in/outlet - left and right sides of manifold
MR : Water in/outlet - backside of manifold

Specifications

Model*	MPi58-1800-10-HT	MPi58-1800-22-HT
Name	heat transition pipe	
Collector type	evacuated tube collector	
Installation type	roof-mounted, in-roof	
Tube structure	all glass coaxial double-layer tubes	
Solar tube diameter	Φ 58	
Outer tube thickness	1.6 ± 0.15mm	
Inner tube thickness	1.6 ± 0.15mm	
Tubes length	1.8m	
No. of tubes	10	22
Hot water output**	75L	165L
Heat collection area	0.8m²	1.76m²
	ME-Model :	
Width	960mm	1920mm
Height	2000mm	2000mm
	MR-Model :	
Width	885mm	1845mm
Height	2040mm	2040mm
Collector capacity	1.5L	3.4L
Size of pipe for water input and output	Φ 22mm	
Absorber coating	Al/N/Al or other highly-selective vacuum coating	
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	
Transmittance of outer tube	0.91	
Idle temperature	220 °C	
Heat-loss coefficient	≤ 10 W/m² °C	
Bearing hailstone ability	hail stone diameter Φ25mm	
Pressure endurability	1MPa	
Freezing resistance	-35 °C	

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www.mansell.com.hk

Mansell Products International Limited
Tel: +852 3667 9083 Fax: +852 3003 8618
info@mansell.com.hk