

(MS)= Sunfield Manufacturer Specification**1, Collector**

Material of the cover tube:	Borosilicate glass (MS)
Transmission of the cover tube:	90%
Outer diameter of the cover tube:	58 mm (MS)
Thickness of the cover tube:	1.6 mm (MS)
Outer diameter of the inner tube:	47 mm (MS)
Thickness of the inner tube:	1.6 mm (MS)
Length of the tubes:	1800 mm (MS)
Distance from tube to tube:	80 mm (HA)
Number of tubes:	12, 18, 20,22, 24, 30
Volume of the fluid:	2.1 L (MS)
Heat transfer fluid:	Water-Copper Powder (MS)
Reflector construction:	no reflector

2, Antifreeze Data

No	Test Item		Standard Value
1.	Corruption of glass service, Mass Change (Mg/Sheet), Dimension of the tests sheet 50x25x2 There is a hole (d=7mm) in the center of sheet	Sheet red cooper	i 10
		Sheet brass	i 10
		Sheet steel	i 10
	Corruption of glass service Mass change (mg/sheet) Dimension of the test sheet 50x25x3.5 There is a hole (d=7mm) in the center of sheet	Sheet solder	i 10
		Sheet cast iron	i 10
		Sheet cast aluminum	i 30
2.	Shape smell		No color Transparent No smell
3.	Freezing point (°C)		≤-35
4.	Boiling point (°C)		≥107.0
5.	PH Value		7.5~11.0
6.	Density, 20°C (kg/m ³)		1064-1085
7.	Bubble volume (ml)		≤150
8.	Bubble lasting time (s)		≤5

3, Technical Data

Number of covers	1
Cover of materials	Borosilicate glass
Cover of thickness	1.6 mm
Tube diameters or channel dimensions	58 mm
Tube or channel pitch	80 mm
Heat transfer medium	Water-Copper Powder
Maximum operation temperature	250
Maximum operation pressure	6 bar
Absorber Materials	Glass
Absorber Surface treatment	Graded AlN/SS-AlN/Cu on glass
Construction type	Evacuated double glass tube
Absorber diameter	47 mm
Thermal insulation thickness	Average 55 mm
Insulation material	Rock-Wool
Sealing material	Silicon rubber

Model	SF-1800/58-15-AC	
Overall Height	18	cm
Overall Length	135	cm
Overall width	200	cm
Absorber area	2.1	m ²
Support material type	SUS201 Stainless Steel 1.2mm thickness with baking paint for sloping roof	
Weight (empty)	52.75	Kg
Weight (full operating)	53.3	Kg
Outer manifold material type	aluminium alloy with baking paint	
Outer manifold thickness	2	mm
Header pipe material	copper	
Header pipe diameter	35	mm
Header pipe thickness	1	mm
Sealing material	silicon gel	
Inlet pipe diameter	22	mm
Outlet pipe diameter	22	mm
Tube type	Copper Heat Pipe	
Number of heat pipes	15	tubes
Outer vacuum tube diameter	58	mm
Inner tube diameter	47	mm
Tube length	180	cm
Coat material type	Three High (Al-N-Al + CU/SS Coating)	
Absorptivity coefficient of coat	≥92%	
Emissivity coefficient of coat	≤7%	
Vacuum tube material	Borosilicate glass 3.3	
Condenser pipe length	55	mm
Condenser wall thickness	1	mm
Condenser pipe diameter	14	mm
Riser pipe length	1645	mm
Riser wall thickness	0.6	mm
Riser pipe diameter	8	mm
Insulation material type	rock wool	
Insulation thickness	50	mm
Working pressure	≤ 6 bar	
Quantity per 20 feet container	105	units
Quantity per 40 feet container	210	units
Quantity per 40 high feet container	257	units