

CROSSOVER SOLAR PANEL (EVACUATED TUBE TYPE)

GENERAL SPECIFICATIONS FOR MODEL CO-SC16 (16 TUBES)

IT SHOULD BE NOTED THAT ALL METAL SURFACES ARE GALVANIZED AND POWDER PAINTED

FRAME MATERIAL	Structural Steel (Q235)
HEADER MATERIAL	Structural Steel (Q195)
BASE SUPPORT MATERIAL	Structural Steel (Q195)
HEADER PIPE MATERIAL	99.93% Pure Copper soldered with 45% Silver Solder
INSULATION IN HEADER	Compressed Polyurethane (PU)-K=0.027W/mk
OPTIMAL OPERATING PRESSURE	<80 PSIG
MAXIMUM OPERATING PRESSURE	160 PSIG
OPTIMAL FLOW RATE	4.54 to 7.57 L/Min or 1.2 to 2.0 G/Min
SEALS AND RINGS	HTV Grade Silicone Rubber
SEALING MATERIAL	UV Grade Silicone Sealer

SPECIFICATIONS FOR SOLAR PANEL MODEL CO-SC16

LENGTH OF PANEL (mm/inch)	2000 mm / 78.74 in
WIDTH OF PANEL (mm/inch)	1225 mm / 50.79 in not including plumbing connectors
DEPTH OF PANEL (mm/inch)	183 mm / 7.20 in
GROSS FRONTAL AREA (m² / ft²)	2.4 m ² / 25.85 ft ²
WEIGHT OF PANEL DRY	70 kg / 154.32 lb
WEIGHT OF PANEL WET	70.05 kg / 155.4 lb
HEADER PIPE OVERALL DIAMETER	3/4" Diameter Copper Header Pipe
ABSORBER AREA (m²)	1.6 m ²
FLUID CAPACITY	0.129 Gallon
NUMBER OF EVACUATED TUBES	16 Tubes
OUTER TUBE DIAMETER	58 mm
INNER TUBE DIAMETER	47 mm
GLASS THICKNESS	1.6 mm
TYPE OF GLASS IN TUBES	Borosilicate Glass 3.3
THERMAL EXPANSION	$3.3 \times 10^{-6} \text{ }^{\circ}\text{C}$
VACUUM	$P < 5 \times 10^{-3} \text{ Pa}$
STAGNATION TEMPERATURE	>200 ⁰ C but <300 ⁰ C
ABSORPTIVE COATING	AL-N/AL
ABSORPTANCE	>92% (AM1.5)
EMITTANCE	<8% (80 ⁰ C)
MAXIMUM STRENGTH	0.8MPa
HEAT LOSS	<0.8W / (m ² C)
K-FACTOR	Equal to or less than .027 W/M
NORMAL OPERATING TEMPERATURE	0 TO 100 DEGREES CENTIGRADE