



THERMOMAX DF400

DIRECT FLOW VACUUM TUBE SOLAR COLLECTOR



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DF400 is a highly efficient Direct Flow collector, providing perfect solution when the ideal installation position or roof orientation is not available. It is a fully pumped 'Wet System' offering great flexibility in installation as it can be fitted horizontally and vertically, on sloping as well as flat roofs and facades.

The vacuum inside each tube provides perfect insulation and therefore protects the system from outside influences such as cold and windy weather or high humidity. This vacuum insulation also ensures that the energy collected from the sun is very efficiently and effectively transferred into usable heat.



THERMOMAX DF400

DESIGNED FOR YOU

The unique 'plug and play' design of Thermomax solar collectors makes installation quick and easy. There is no need for heavy lifting equipment as tubes can be carried onto the roof individually. The collector is fixed to the roof by easy-fit brackets, which are simply fixed to the rafter.

DF400 COLLECTORS ARE AVAILABLE IN 2 DIFFERENT SIZES

	2m ²	3m ²
NUMBER OF TUBES	20	30
DIMENSIONS		
Absorber Area (m ²)	2.009	3.021
Overall Dimensions (mm)	1954 x 1416 x 93	1954 x 2125 x 93
Width of Manifold (mm)	1416	2125
Length (tube and manifold) (mm)	1954	1954
Depth (mm)	93	93
Aperture Area (m ²)	2.157	3.23
Fluid Volume (ltr)	4.1	5.6
Inlet and Outlet Dimensions (mm)	22	22
Weight (empty) (kg)	53	78.4
MOUNTING		
Recommended Inclination (°)	0-90	0-90
PERFORMANCE DATA		
Efficiency	Based on Aperture	Based on Aperture
Eta 0	0.768	0.768
a1 (W/m ² K)	1.36	1.36
a2 (W/m ² K ²)	0.0053	0.0053
Solar Keymark Licence Numbers	011-7S1946R	011-7S1946R
OPERATING DATA		
Flow Rate (ltr/h)		
Rated	120	180
Minimum	80	120
Maximum	210	300
Maximum Operating Pressure	8 Bar	8 Bar
Stagnation Temperature (°C)	313	313
Heat Transfer Fluid	Propylene glycol solution	Propylene glycol solution
MATERIALS		
Absorber	Copper	Copper
Coating	Selective Coating	Selective Coating
Absorbance (%)	95	95
Emissivity (%)	5	5
Mounting Frame and Clips	Stainless Steel, Aluminium, EPDM	
Glass	Low Iron - Transm. 0.92	Low Iron - Transm. 0.92
Vacuum	<10 ⁻⁶ mbar	<10 ⁻⁶ mbar
Quality Certification/ Solar Keymark	Yes	Yes

FEATURES

- › 30% more effective than flat plate collectors.
- › Supplies up to 70% of your annual water needs.
- › Designed specifically for Northern European climates.
- › Provides heat even in cold, windy or humid conditions.
- › Fully pumped system - can be installed horizontally and vertically; on flat roofs and facades.
- › Reduces dependence on increasingly expensive fossil fuels.
- › 5-year standard warranty.
- › 20-year warranty with a Kingspan Accredited Installer.
- › Works from dawn until dusk and throughout the year.
- › Average 25-year lifespan.
- › MCS Approved.

INSTALLATION OPTIONS

Collector Positions

1. Ideal slope 40°
2. Roof kit angled 40°
3. Elevated 20°
4. Horizontal ideal slope
5. Horizontal façade
6. Flat
7. Vertical façade



KM 559829 BS EN 12975
Thermal solar systems and components

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