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# SOLAR FILLING & MANTENAINCE STATION

#### Flushing, venting and filling heat transfer fluid into solar systems in one procedure

The solar station has been specially designed for the needs of installers and maintainers of solar thermal energy systems. It allows a fast and clean filling of the solar circuits with the heat transfer fluid. The compact unit composed of cart, tank, hoses and pump is available in two equipment variants:

#### Impeller pump UNISTAR 2000

- Dry self-priming.
- Special impeller in Perbunan, glycol resistant.
- It can carry air in the fluid, which is important in the fillings and flushings of solar systems.
- It is almost entirely emptied, so that any fluid could be spilled during transport.
- It can be widely used in many others applications with different fluids.

# Side channel centrifugal pump P80

- Dry self-priming.
- Economic.

#### Rugged cart

Easy to move with two large pneumatic tires, also over rough ground construction sites.

Telescopic handle with rubber surface for better grip and easier transport.

### Temperature and glycol resistant hoses

UNISTAR: -40 to 170°C. P80: -40 to 60°C.

Functional hoses holder.

Well-fitting interlocking connector prevents leakage of fluid during transport.

#### 30 liters tank

Stop valve in shockproof position.
Easy remove for cleaning.
Large opening to fill in the fluid conveniently.
Tank replacement is available separately.



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## Fine filter with inspection window

The filter at the pump inlet filters out impurities during solar loop flush (chips, solders and weld residues).

A large clear plastic panel in the filter enclosure enables detection of air bubbles and debris in the tube.

#### Ventilation valve

After use, filling hose can be emptied through the ventilation valve at the exit of the pump and then easily unscrew from the filling parts (only model with UNISTAR pump).

## **Technical specifications:**

Pump	Pump UNISTAR 2000	Centrifugal Pump P-80
Characteristics	Dry self-priming, Perbunan impeller (max time in dry running 1 min.)	Self-priming (max time in dry running 1 min.)
Case	Aluminium	Cast iron
Flow rate	30 litre/min	31 litre/min
Pressure	5 bar	5,9 bar
Motor	230 V with switch and thermal motor protection. 2 m cable with plug	230 V with switch. 1,7 m cable with plug
Diameter hose	1/2" (DN13)	1/2" (DN13)
Temperature	90°C max	60°C max
Power	0,37 KW	0,75 KW
Ventilation valve	Yes	No

Cart	Pump UNISTAR 2000	Centrifugal Pump P-80
Total weigh	21,6 Kg.	22,7 Kg.
Measures (without hoses)	HxWxL: 985x495x555 mm	
Tank	UV resistant polyethylene 30 litres canister	

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