

## PRODUCT DESCRIPTION



### FS/1R – Solar fresh water tank with one coil

Simple combination tank made of steel (S 235 JR) for heating operation and domestic hot water preparation with a solar system. Solar charging is by a smooth pipe coil in the lower half of the tank. The tank has an integrated corrugated stainless steel pipe in which the water is heated using the hygienic continuous heating process. All necessary connections are at hand; includes 1x 2" sleeves for electric screw-in heating elements. The tank stands on a stand ring. The polyester fibre fleece insulation must be ordered separately (compare Accessories).

### Area of use

Water heating and heating operation with a solar system for single-family and semi-detached houses.

### Product benefits

- Simple, cost-effective utilisation of solar energy for hot water and heating
- Backup heating from all common systems possible; attention: heat pump with restrictions!
- Hygienic water heating due to a special corrugated stainless steel pipe<sup>1</sup> (DN 40, 1.4404)
- 6 temperature measuring points (contact sensor sleeves) on tank
- Option to install TiSUN solar station and expansion container on tank
- Prepared for use with 1 electric screw-in heating element

### Standards, guidelines and regulations

- "Pressure Equipment Directive" 97/23/EC
- "Directive on the quality of water intended for human consumption" 98/83/EC
- Sized according to guideline AD-2000
- Welding as per EN 287-1 and EN ISO 3834-2

## SPECIFICATIONS

Max. operating temperature	110°C
Max. tank operating pressure:	3 bar
Max. stainless steel pipe operating pressure:	6 bar
Max. operating pressure of smooth pipe coil	10 bar
Boiler/heating connections	Rp 6/4"
Domestic hot water connections	Rp 1"
Cylinder feed and drain cock connections	Rp 1/2"
Thermometer connection	Rp 1/2"

### Specifications

Type	FS 375/1R	FS 500/1R	FS 800/1R	FS 1000-S/1R
Item no.	1610603	1610303	1610304	1610305
Nominal volume [l]	342	514	744	930
Height without insulation [mm] <sup>2</sup>	1675	1790	1940	2150
Height with insulation [mm] <sup>2</sup>	1725	1860	2010	2220
Diameter without insulation [mm] <sup>2</sup>	550	650	750	790
Diameter with insulation [mm] <sup>2</sup>	710	850	950	990
Tilt height [mm] <sup>2</sup>	1695	1820	1975	2185
Weight [kg]	135	175	215	250

1) For problem free maintenance of the corrugated stainless steel pipe (e.g. decalcification), when installing the tank, TiSUN recommends installation of flush connections with isolation valves at the hot water connections of the tank. Also, to protect the corrugated stainless steel pipe from excessive calcification, we recommend measures to stabilise or soften the water at tank temperatures of over 60 °C and water hardness of over 2.5 millimoles calcium carbonate per litre (= 14 °dH) (compare DIN 1988-200).

2) All size specifications have a tolerance range of +/- 3%