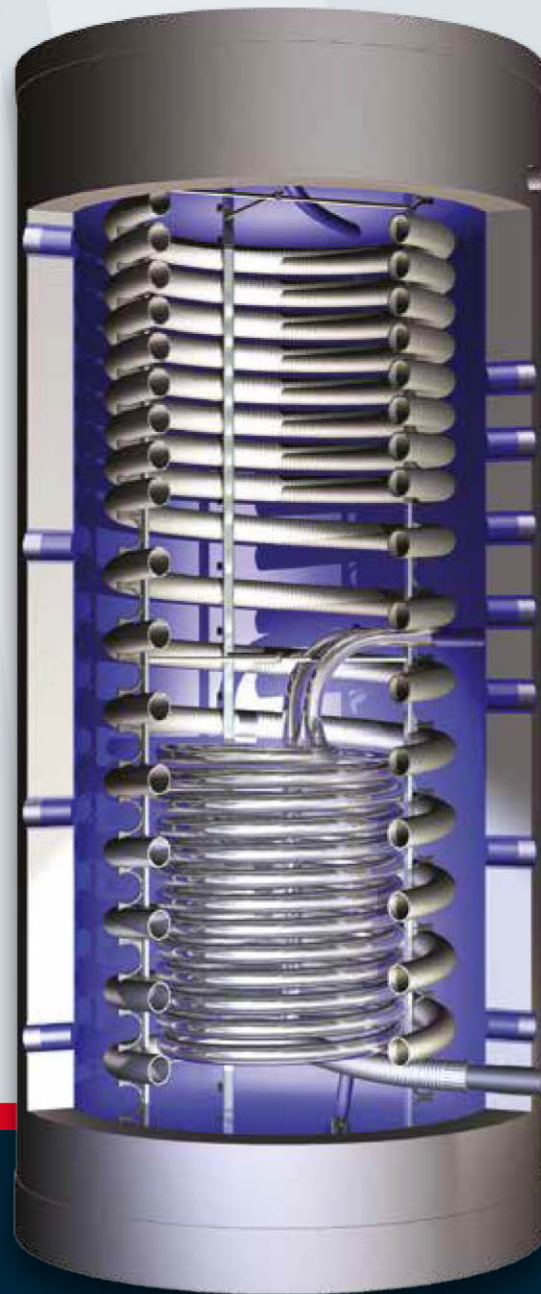


FRESH WATER *TANK*

TiSUN®

FS/1R FRESH WATER TANK



FRESH WATER AROUND THE CLOCK

The TiSUN® freshwater tank ensures hot, clean water and augments the heating system. The water passes through its corrugated stainless steel pipe by way of the continuous flow principle (continuous flow heating process) whereby it is quickly renewed again and again, rather than spending hours collected in a feeder tank. Heat loss is reduced to a minimum thanks to the innovative non-woven insulation of the tank.

Hygienic domestic hot water heating

Depending on requirements, freshly prepared domestic hot water is extracted from the corrugated pipe into which new water then flows.

Robust insulation

Made from Polyester fibre fleece, the tank has the best insulation qualities and is 100% recyclable.

Compact design with integrated solar heat exchanger.

Powerful two-zone charging for improved efficiency.

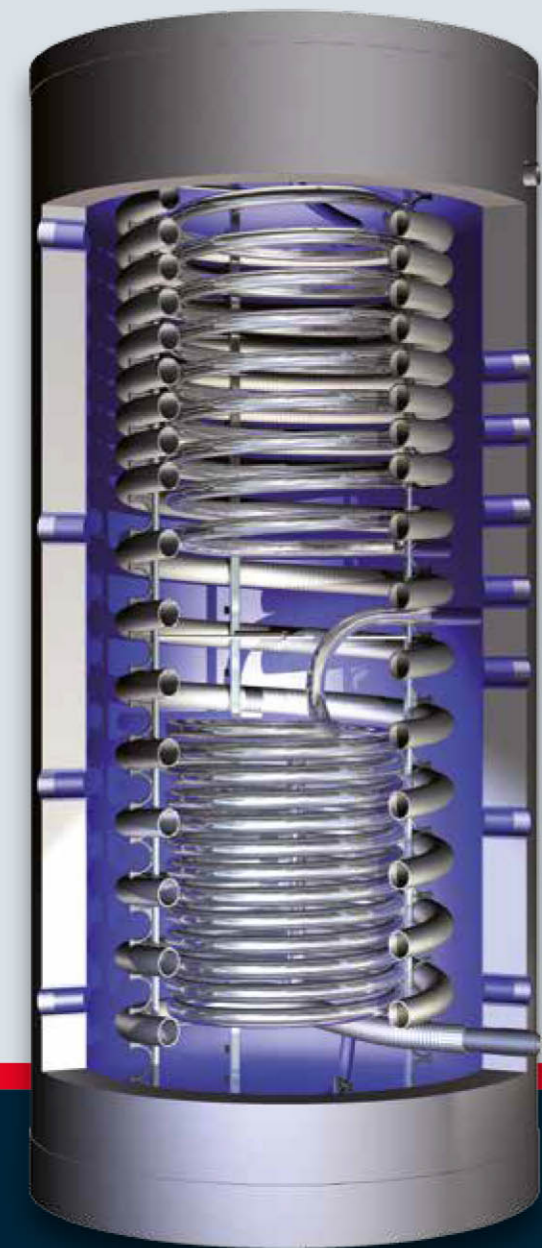
Auxiliary heating

Ideally gas / oil, biomass in conjunction with a solar system.

THE BIG BROTHER WITH 2 SOLAR COILS

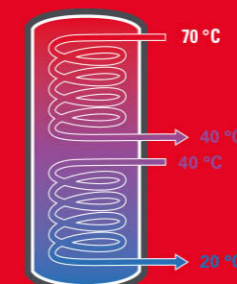
The two smooth-tube coils in the tank enable two-zone charging, which helps to substantially increase efficiency. The integrated priority solar circuit heats the upper part of the storage tank and therefore enables faster heating and withdrawal of the domestic water.

FS/2R FRESH WATER TANK



BENEFITS

- + Heat can be used at any time through single or two-zone charging
- + Hygienic domestic hot water due to special corrugated stainless steel pipe
- + Improved economic efficiency for every heating system (solar, biomass, heat pump)
- + Constant, particularly quick hot water supply
- + Simple functional concept without complicated technology (natural principle)
- + Space-saving design
- + Five-year guarantee, patented system
- + Long service life



Heat can be used at any time due to efficient two-zone charging

FRESH WATER *TANK*

TiSUN®

FS/1R FRESH WATER TANK

Specifications FS/1R Solar fresh water tank with one coil

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] *	1675	1790	1940	2150
Height with insulation [mm] *	1725	1860	2010	2220
Diameter without insulation [mm] *	550	650	750	790
Diameter with insulation [mm] *	710	850	950	990
Tilt height [mm] *	1695	1820	1975	2185
Weight [kg]	135	175	215	250

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

Discharge capacity and hot water tap output (+/- 5% deviation)

Discharge capacity / tap output	Unit	FS 375/1R	FS 500/1R	FS 800/1R	FS 1000-S/1R
Single discharge capacity (hot water 38°C) when the back-up tank is loaded at 60°C	litres	270	380	540	700
Single discharge capacity (hot water 38°C) when the back-up tank is loaded at 55°C	litres	216	304	432	560
Single discharge capacity (hot water 38°C) when the back-up tank is loaded at 50°C	litres	186	262	372	483
Temperature difference between a semi-charged back-up tank and hot water with an HW tap quantity of 30 l/min	°C	7	6	5	
40 l/min	°C	9	8	7	
50 l/min	°C	16	14	12	

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"

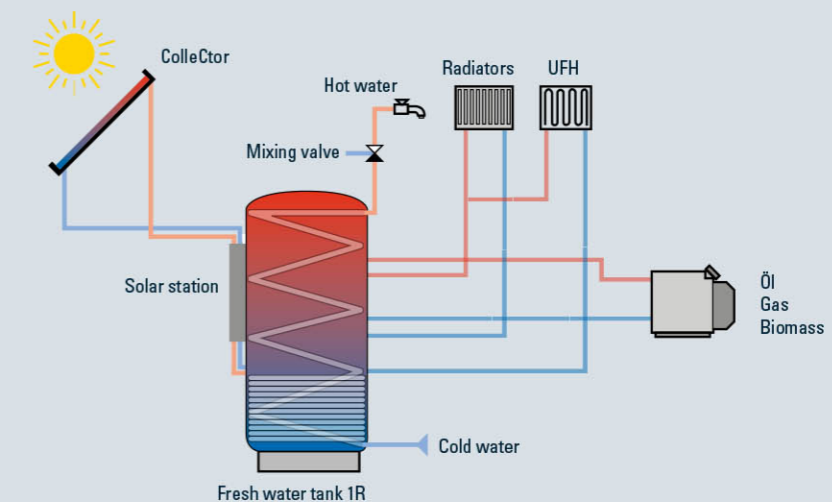
Corrugated pipe

Type	FS 375/1R	FS 500/1R	FS 800 1.000/1R
Material	Corrugated stainless steel hose DIN 1.4404 (AISI 316L, V4A)		
Max. operating pressure	6 bar		
Length	15 m	19 m	24 m
Surface area (corrugated hose = 0.258 m ² /m)	3.87 m ²	4.90 m ²	6.19 m ²
Content	26 l	35 l	45 l

Figures quoted with a tolerance of 5%

Solar register

Type	FS 375/1R	FS 500/1R	FS 800/1R	FS 1000-S/1R
Material	Steel			
Outer diameter	33.7 mm			
Inner diameter	29.1 mm			
Wall thickness	2.3 mm			
Length	15 m	17 m	21 m	27 m
Surface area (smooth pipe)	1.5 m ²	1.8 m ²	2.2 m ²	2.8 m ²
Content	10.0 l	11.3 l	14.0 l	18.0 l
Max. collector area	10 m ²	10.5 m ²	13 m ²	15.5 m ²



FRESH WATER TANK

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FS/2R FRESH WATER TANK

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 Fresh water tank 2R

Type	FS 500/2R	FS 800/2R	FS 1000S/2R	FS 1250/2R	FS 1500/2R	FS 2000/2R
Item no.	1610692	1610288	1610289	1610783	1610784	1610785
Nominal volume [l]	514	744	930	1246	1496	1889
Height without insulation [mm] *	1760	1940	2120	2200	2190	2280
Height with insulation [mm] *	1860	2040	2220	2300	2290	2380
Diameter without insulation [mm] *	650	750	790	900	1000	1100
Diameter with insulation [mm] *	850	950	990	1100	1200	1300
Tilt height [mm] *	1820	1975	2185	2270	2275	2380
Weight [kg]	190	235	280	325	375	420

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

Corrugated pipe

Material	Stainless steel corrugated pipe 1.4404 (AISI 316 L, V4A)					
Max. operating pressure	6 bar					
Length	19 m	24 m	24 m	24 m	29 m	34 m
Surface area (corrugated hose = 0.258 m ² /m)	4.90 m ²	6.19 m ²	6.19 m ²	6.19 m ²	7.48 m ²	8.77 m ²
Contents	35 lt	45 lt	45 lt	45 lt	55 lt	60 lt

Solar register top/bottom

Material	S 235 JR steel					
Outer diameter	33.7 mm					
Inner diameter	29.1 mm					
Wall thickness	2.3 mm					
Smooth pipe surface area	1.3 / 1.9 m ²	1.6 / 2.3 m ²	2.0 / 3.0 m ²	2.3 / 3.4 m ²	2.5 / 3.7 m ²	2.8 / 4.2 m ²
Length	13 / 18 m	15 / 22 m	19 / 28 m	22 / 32 m	24 / 35 m	27 / 40 m
Contents	8.6 / 12.0 lt	10.0 / 14.6 lt.	12.6 / 18.6 lt	14.6 / 21.2 lt	16.0 / 23.3 lt	18.0 / 26.6 lt
Max. recommended collector surface area	10.5 m ²	13 m ²	15.5 m ²	18 m ²	21 m ²	25.5 m ²

		500/2R	800/2R	1000S/2R	1250/2R	1500/2R	2000/2R
Discharge capacity and hot water tap output (+/- 5% deviation)							
Single discharge capacity (hot water 38°C) when the back-up tank is loaded at 60 °C	litres	380	540	700	900	1050	1360
Single discharge capacity (hot water 38 °C) when the back-up tank is loaded at 55 °C	litres	304	432	560	720	843	1090
Single discharge capacity (hot water 38°C) when the back-up tank is loaded at 50°C	litres	262	372	483	620	727	940
Temperature difference between a semi-charged back-up tank and hot water with an HW tap quantity of	30 l/min	°C	6		5	4	3
	40 l/min	°C	8		7	6	5
	50 l/min	°C	14		12	10	8

Polyester fibre fleec insulation for FS 1R and FS 2R

The outer shell is made of hard synthetic polystyrene sheeting. The inner insulation shell is made of polyester fibre fleec. Entire insulation: Fire resistance class B2, CFC-free and 100% recyclable.

Property	Test method	Value	Unit
Density	-	12	kg/m
Fogging behaviour	DIN 75201 B	< 0,2	mg
Formaldehyde emission	VDA 275	< 2	mg/kg
Fire test	DIN 75200	< 100	mm/min
Fire resistance class	DIN 4102	B2	-
Fire resistance class in a compound	DIN 4102	B2	-
Continuous connection temperature	-	max. 130	°C.
Colour	-	white	-
Thermal conductivity of the insulation	-	0.041	W/mK

Dimensions

Type	ISO-VL-FS 375/1R	ISO-VL-FS 500/1R	ISO-VL-FS 800/1R	ISO-VL-FS 1000S/1R	ISO-VL-FS 500/2R	ISO-VL-FS 800/2R	ISO-VL-FS 1000S/2R	ISO-VL-FS 1250/2R	ISO-VL-FS 1500/2R	ISO-VL-FS 2000/2R
Item no.	1610552	1610553	1610554	1610555	1610742	1610556	1610557	1610795	1610796	1610800
Outer diameter	710 mm	850 mm	950 mm	990 mm	850 mm	950 mm	990 mm	1100 mm	1200 mm	1300 mm
Material thickness	80 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm

