

DATA SHEET

PSWF 300 N+ Thermal Store

| Main Features | |
|-------------------|--|
| Application | Storage and subsequent distribution of thermal energy from solid-fuel boilers, heat pumps or other heat sources; the tank is fitted with 2 flanged openings that can permit installation of a DHW tube heat exchanger or connecting a solar thermal system |
| Working fluid | water, water-glycol mixture (max. 1:1), water-glycerine mixture (max. 2:1), thermal oil |
| Storage tank code | 14732 |
| Insulation code | 19342 |

Energy Efficiency Data (as per EC Regulation No. 812/2013)

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|-------------------------|----------------------------------|
| | valid for a tank with insulation |
| Energy efficiency class | C |
| Static loss | 78 W |
| Storage volume | 271 l |

Technical data

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|---|--------------------|
| Total storage tank volume | 280 l |
| Fluid volume in tank | 271 l |
| Heat exchanger volume | 9.0 l |
| Heat exchanger surface area | 1.5 m ² |
| Max. working temperature in storage tank | 95 °C |
| Max. working temperature in heat exchanger | 110 °C |
| Max. working pressure in storage tank | 4 bar |
| Max. working pressure in heat exchanger | 10 bar |
| Storage tank diameter | 550 mm |
| Storage tank diameter with insulation | 750 mm |
| Storage tank overall height | 1405 mm |
| Tipping height without insulation | 1430 mm |
| Storage tank perimeter insulation thickness | 100 mm |
| Storage tank bottom insulation thickness | 50 mm |
| Storage tank top insulation thickness | 100 mm |
| Empty weight without insulation | 87 kg |

Materials

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|--|------------------|
| Storage tank material | S235JR |
| Storage tank perimeter insulation | fleece |
| Storage tank outer surface insulation | hard polystyrene |
| Top and bottom storage tank insulation | fleece |
| Solar heat exchanger | S235JR+N |

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| Accessories | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|--|------------|------------------------------|------|-------------|------------|-------------|-----------|-------------------------|----------|------|-----------|-----------------------|----------|-----|-----------|---------------------|----------|------|-----------|-----------------------|----------|-----|-----------|--------------------|----------|------|-----------|--------------------|----------|-----|-----------|--------------------|----------|-----|----------|-------------|----------|-----|----------|--------------|----------|-----|-----------|------------------------|----------|------|-----------|------------------------|----------|-----|-----------|------------------------|----------|-----|-----------|------------------------|----------|-----|-----------|------------------------|----------|-----|-----------|------------------------------------|--------|-----|-----------|-----------------------------------|--------|-----|-----------|--------------|----------|------|
| Electrical heating element | | | ETT-A, C, D, F, P, M | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Heating element max. length | | | 635 mm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blind flange | | | code 6230 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blind flange for heat exchanger | | | code 6231 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tube heat exchanger | | | max. area 1.8 m ² | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dimensions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | TAPPINGS <table border="1"> <thead> <tr> <th>pos.</th><th>description</th><th>connection</th><th>height [mm]</th></tr> </thead> <tbody> <tr> <td>H1</td><td>Supply from heat source</td><td>G 6/4" F</td><td>1120</td></tr> <tr> <td>B2</td><td>Return to heat source</td><td>G 6/4" F</td><td>220</td></tr> <tr> <td>H1</td><td>Supply to heat sink</td><td>G 6/4" F</td><td>1405</td></tr> <tr> <td>H2</td><td>Return from heat sink</td><td>G 6/4" F</td><td>220</td></tr> <tr> <td>C1</td><td>Temperature sensor</td><td>G 1/2" F</td><td>1135</td></tr> <tr> <td>C2</td><td>Temperature sensor</td><td>G 1/2" F</td><td>520</td></tr> <tr> <td>C3</td><td>Temperature sensor</td><td>G 1/2" F</td><td>830</td></tr> <tr> <td>T</td><td>Thermometer</td><td>G 1/2" F</td><td>895</td></tr> <tr> <td>P</td><td>Safety valve</td><td>G 1/2" F</td><td>375</td></tr> <tr> <td>U1</td><td>Universal inlet/outlet</td><td>G 6/4" F</td><td>1120</td></tr> <tr> <td>U2</td><td>Universal inlet/outlet</td><td>G 6/4" F</td><td>360</td></tr> <tr> <td>U3</td><td>Universal inlet/outlet</td><td>G 6/4" F</td><td>795</td></tr> <tr> <td>U4</td><td>Universal inlet/outlet</td><td>G 6/4" F</td><td>520</td></tr> <tr> <td>U5</td><td>Universal inlet/outlet</td><td>G 6/4" F</td><td>880</td></tr> <tr> <td>X1</td><td>Inlet from solar thermal collector</td><td>G 1" F</td><td>670</td></tr> <tr> <td>X2</td><td>Return to solar thermal collector</td><td>G 1" F</td><td>220</td></tr> <tr> <td>L1</td><td>Upper flange</td><td>12 x M12</td><td>1010</td></tr> </tbody> </table> | | | pos. | description | connection | height [mm] | H1 | Supply from heat source | G 6/4" F | 1120 | B2 | Return to heat source | G 6/4" F | 220 | H1 | Supply to heat sink | G 6/4" F | 1405 | H2 | Return from heat sink | G 6/4" F | 220 | C1 | Temperature sensor | G 1/2" F | 1135 | C2 | Temperature sensor | G 1/2" F | 520 | C3 | Temperature sensor | G 1/2" F | 830 | T | Thermometer | G 1/2" F | 895 | P | Safety valve | G 1/2" F | 375 | U1 | Universal inlet/outlet | G 6/4" F | 1120 | U2 | Universal inlet/outlet | G 6/4" F | 360 | U3 | Universal inlet/outlet | G 6/4" F | 795 | U4 | Universal inlet/outlet | G 6/4" F | 520 | U5 | Universal inlet/outlet | G 6/4" F | 880 | X1 | Inlet from solar thermal collector | G 1" F | 670 | X2 | Return to solar thermal collector | G 1" F | 220 | L1 | Upper flange | 12 x M12 | 1010 |
| pos. | description | connection | height [mm] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| H1 | Supply from heat source | G 6/4" F | 1120 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B2 | Return to heat source | G 6/4" F | 220 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| H1 | Supply to heat sink | G 6/4" F | 1405 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| H2 | Return from heat sink | G 6/4" F | 220 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C1 | Temperature sensor | G 1/2" F | 1135 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C2 | Temperature sensor | G 1/2" F | 520 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C3 | Temperature sensor | G 1/2" F | 830 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T | Thermometer | G 1/2" F | 895 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P | Safety valve | G 1/2" F | 375 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U1 | Universal inlet/outlet | G 6/4" F | 1120 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U2 | Universal inlet/outlet | G 6/4" F | 360 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U3 | Universal inlet/outlet | G 6/4" F | 795 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U4 | Universal inlet/outlet | G 6/4" F | 520 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U5 | Universal inlet/outlet | G 6/4" F | 880 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| X1 | Inlet from solar thermal collector | G 1" F | 670 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| X2 | Return to solar thermal collector | G 1" F | 220 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| L1 | Upper flange | 12 x M12 | 1010 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Heat sources | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B1 | Supply from heat source | G 6/4" F | 1120 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B2 | Return to heat source | G 6/4" F | 220 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Heat system | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| H1 | Supply to heat sink | G 6/4" F | 1405 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| H2 | Return from heat sink | G 6/4" F | 220 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Control and safety | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C1 | Temperature sensor | G 1/2" F | 1135 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C2 | Temperature sensor | G 1/2" F | 520 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C3 | Temperature sensor | G 1/2" F | 830 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T | Thermometer | G 1/2" F | 895 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P | Safety valve | G 1/2" F | 375 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Universal inlet/outlet | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U1 | Universal inlet/outlet | G 6/4" F | 1120 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U2 | Universal inlet/outlet | G 6/4" F | 360 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U3 | Universal inlet/outlet | G 6/4" F | 795 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U4 | Universal inlet/outlet | G 6/4" F | 520 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U5 | Universal inlet/outlet | G 6/4" F | 880 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Solar thermal system | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| X1 | Inlet from solar thermal collector | G 1" F | 670 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| X2 | Return to solar thermal collector | G 1" F | 220 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flanges | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| L1 | Upper flange | 12 x M12 | 1010 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

PSWF 300 N+ Thermal Store**Heat exchanger pressure drop graph**