



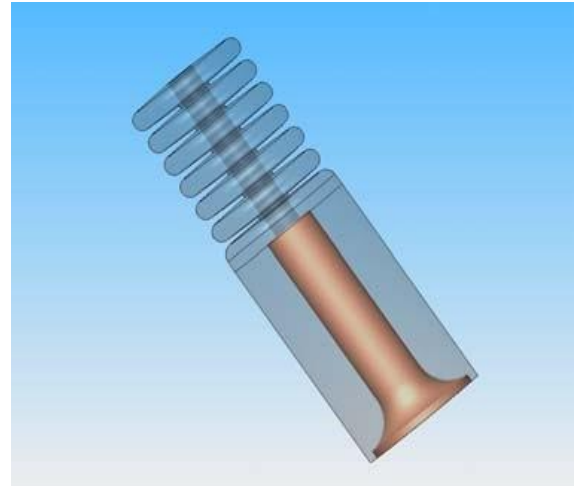
S3™

Sensor Mounting System

The solution for mounting sensors on Hot Water Cylinders

Features.

- **Quick and Straightforward Sensor Installation.**
- **Universal fit for a wide range of insulation thicknesses**
- **Improved reliability of sensor installation**
- **Compatible with all inner cylinder metal types due to electrically isolated pad**
- **High sensor accuracy vs water temperature**
- **Available Pre-wired with SolaSmart™ and Smart Hot Water® controllers**
- **Alternative to fitted sensor pockets on hot water cylinders**
- **Installer can choose best position for sensors**



Introduction.

The S3™ system uses a carefully designed heat transferring copper foot surrounded by an insulating cover. The cover together with attachable split rings also acts as a low tension spring, holding the sensor foot against the inner wall, self-adjusting for expansion and contraction. An outer flange attaches to the cladding to secure the assembly and provide a surface for the spring to act against. The contact point (the foot) has a thermally conductive but electrically insulating pad that eliminates incompatible metal galvanic corrosion

The S3™ patented design* allows for a rapid, reliable and accurate sensor installation onto a hot water cylinder in a straight forward manner.

Senztek NZ Ltd has experience in designing and manufacturing SolaStat™ and SolaSmart™ Solar Hot Water Controllers to Industrial Electronic Standards for over 20 years. This has earned SolaStat™ a reputation for Quality, Accuracy, Efficiency and Reliability. To support their range of Solar Hot Water Controllers, Senztek introduced a reliable and practical solution to mounting our sensors on hot water cylinders where no sensor pocket was present. The S3™ has now been in use for over 8 years by many satisfied customers.

* Patent no:181331NZ R/MCG

Ordering Information.

S3-16C-PV-3 6mm SolaStat™ Sensor Mount c/w 18mm cover and copper foot installed on a 3m PVC sensor.

Quality Assurance Programme.

The strict procedures of the ISO9001 Quality Assurance Programme applied during design, development, production and final inspection grant the long term reliability of the product

S3™ installation 12-Aug-16

S3™ Installation Instructions:

Note. There are an exceedingly wide range of insulation thicknesses on hot water cylinders. The minimum recommend wall thickness for the standard S3™ is 40mm. This should only be the case on very old hot water cylinders. To install on a cylinder with insulation thinner than this a special order needs to be made or some other adaptation.

Installation instructions.

1. Locate the best sensor position on the cylinder. See installation guide of controller to assess this.¹⁾
2. Drill a 18mm hole through the outer cladding being careful not to puncture the inner cylinder wall.²⁾ Thick tape on the hole saw barrel is a way to manage depth
3. Remove the insulation material within that hole.
4. Ensure that no residual insulation material remains in front of the exposed inner cylinder wall (this is critical to the success of the installation).



5. Place the sensor assembly in the hole. Add Spacers until a millimetre or so of the last ring is protruding beyond the outer cladding. Spacers can be added by gently opening the split in the ring and pushing them over the sensor cable.

6. Remove assembly and apply a liberal amount of heat transfer compound to the exposed insulated foot of the S3™ assembly.



7. Re-insert the sensor assembly.
8. Fix in place by securing the flange to the outer cladding with the 4 screws provided.

¹⁾ Typical heights might be the (upper) 'cylinder' sensor at 1/3 to 1/2 way from the top, 'inlet' sensor 1/4 way up from the bottom or just below the booster element.

S3™ Specifications.

Dimensions

Outer Diameter of cover:	18mm
Length of cover:	40mm (25mm as a special order)
Width of spacer:	5mm

Flange dimensions

Inner hole diameter:	6.5mm
Outer diameter:	45mm
Affixing holes diameter:	5mm (not hole size drilled for screws)

Foot construction:	Solid Copper (Cu)
Insulation and ring material:	Red Silicone
Flange material:	Acetyl
Maximum Insulation Temperature:	250°C

Insulating pad

Thickness:	0.5mm
Temperature range:	-60°C to 200°C
Galvanic isolation:	1000 volts

NOTES:

1. This information describes our products. It does not constitute guaranteed properties and is not intended to affirm the suitability of a product for a particular application.
2. Technical data are subject to change without notification.
3. Each product is subject to the Conditions of Sale or Distributor Agreement.

Distributor.



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