

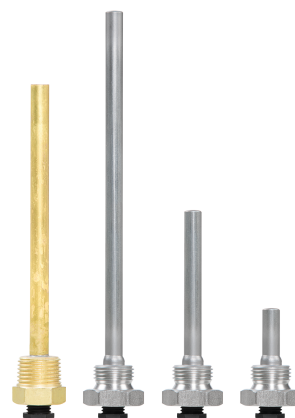
Thermowells

How energy efficiency is improved

Accessory component for sensors and thermostats for quick measurement that enable energy to be used according to needs.

Features

- Fitted in pipes and containers for holding sensor cartridges, immersion stems, temperature sensors, temperature controllers or thermostats
- Made of brass (Ms) or stainless steel (V4A)
- Versions with cylindrical pipe thread (G½" male ISO 228/1, flat-sealing)¹⁾ or cone-shaped (R½" ISO 7/1 sealing in thread)
- With pressure spring (LW 15)
- With retaining holder



Overview of types

Type	LW	Length	Material	Thread	Nominal pressure	Test pressure	T _{max}
0391022050	7	50 mm	Stainless steel	G½"	40 bar	60 bar	325 °C
0391022100	7	100 mm	Stainless steel	G½"	40 bar	60 bar	325 °C
0391022200	7	200 mm	Stainless steel	G½"	40 bar	60 bar	325 °C
0391022300	7	300 mm	Stainless steel	G½"	40 bar	60 bar	325 °C
0391022450	7	450 mm	Stainless steel	G½"	40 bar	60 bar	325 °C
0391022600	7	600 mm	Stainless steel	G½"	40 bar	60 bar	325 °C
0391011050	7	50 mm	Brass	R½"	10 bar	16 bar	160 °C
0391011100	7	100 mm	Brass	R½"	10 bar	16 bar	160 °C
0391011150	7	150 mm	Brass	R½"	10 bar	16 bar	160 °C
0391011200	7	200 mm	Brass	R½"	10 bar	16 bar	160 °C
0391011300	7	300 mm	Brass	R½"	10 bar	16 bar	160 °C
0391011450	7	450 mm	Brass	R½"	10 bar	16 bar	160 °C
0393022100	15	100 mm	Stainless steel	G½"	40 bar	60 bar	450 °C
0393022200	15	200 mm	Stainless steel	G½"	40 bar	60 bar	450 °C
0393022450	15	450 mm	Stainless steel	G½"	40 bar	60 bar	450 °C
0393012100	15	100 mm	Brass	G½"	16 bar	25 bar	160 °C
0393012200	15	200 mm	Brass	G½"	16 bar	25 bar	160 °C
0392022100	7	100 mm	Stainless steel	G½"	25 bar	40 bar	450 °C
0392022300	7	300 mm	Stainless steel	G½"	25 bar	40 bar	450 °C




¹⁾ G½" male ISO 228/1, flat-sealing: for welding bushings with flat seal (accessories)



- ⚡ 0392022100 and 0392022300 for TUC thermostats only
- ⚡ With TUC407F001 and TUC207F003, only use the supplied thermowells or stainless-steel thermowells (part nos.: 0393022*** or 0392022***).
- ⚡ 0391... with pressure screw (retaining holder) up to max. 200°C

Accessories

Type	Description
0300360008	Retaining holder for cable temperature sensor or capillary tube with 0392022*** (LW 7) or LW 15 (10 pcs)
0364263000	Welding sleeve of steel, with female thread G½", flat seal of copper
0300360017	Pressure spring for LW 15 (10 pieces)

			
LW 7, 50 mm	•	• L > 50 mm	-
LW 7, 100 mm	•	•	-
LW 7, 150 mm	•	•	-
LW 7, 200 mm	•	•	-
LW 7, 300 mm	•	• L > 300 mm	-
LW 7, 450 mm	•	•	-
LW 7, 600 mm	•	-	-
LW 15, 100 mm	•	-	•
LW 15, 200 mm	•	-	•
LW 15, 450 mm	•	-	•
0392022100	-	-	•
0392022300	-	-	•

- ⚡ 0392022100 and 0392022300 for TUC thermostats only.
- ⚡ With TUC407F001 and TUC207F003, only use the supplied thermowells or stainless-steel thermowells (part nos.: 0393022*** or 0392022***).
- ⚡ Only use the thermowells (LW 15) with at least 2 sensors or thermostats with a diameter of at least 6 mm.
- ⚡ 0391... with pressure screw (retaining holder) up to max. 200°C.

Description of operation

Thermowell for sensors and thermostats to be fitted in pipes and containers for holding sensor cartridges, immersion stems, temperature sensors, temperature controllers or thermostats.

The thermowells are components in accordance with the Pressure Equipment Directive 97/23/EC. As such, the thermowells may be fitted in pressurised piping or containers. According to the directive, no component part may bear the CE mark. The thermowells conform to the key safety requirements of appendix I of the Pressure Equipment Directive. It is the responsibility of the operator to check and verify that the sensor materials are compatible with the fluids in which they are submerged. (The sensor materials are indicated in the dimension drawings.) The thermowells are not approved for use in water intended for drinking.

Intended use

This product is only suitable for the purpose intended by the manufacturer, as described in the "Description of operation" section.

All related product regulations must also be adhered to. Changing or converting the product is not admissible.

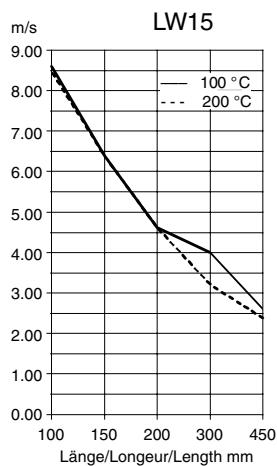
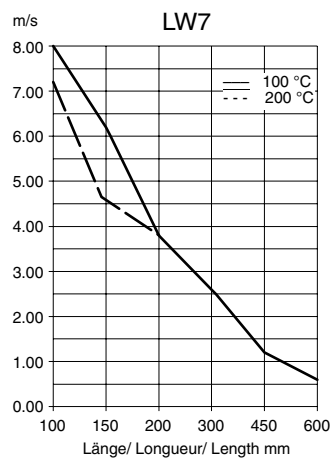
The lower temperature is always valid for combinations with sensor cartridges, immersion sleeves, temperature sensors, temperature controllers and thermostats.

The use of the thermowells is restricted to fluids which do not pose harm to humans, animals and the environment. The user must check the compatibility of the fluid and the material of the thermowell.

Engineering notes

Admissible flow rate for cross-flow to thermowells in water.

The flow causes the thermowell to vibrate. If the specified speeds are only marginally exceeded (e.g. by 0.2 m/s), the vibrating can change abruptly, and material fatigue can significantly reduce the serviceable life of the thermowell.



Only use the thermowells (LW 15) with at least 2 sensors or thermostats with a diameter of at least 6 mm.

The thermowells must be earthed according to the intended application or the local regulations for fitting.

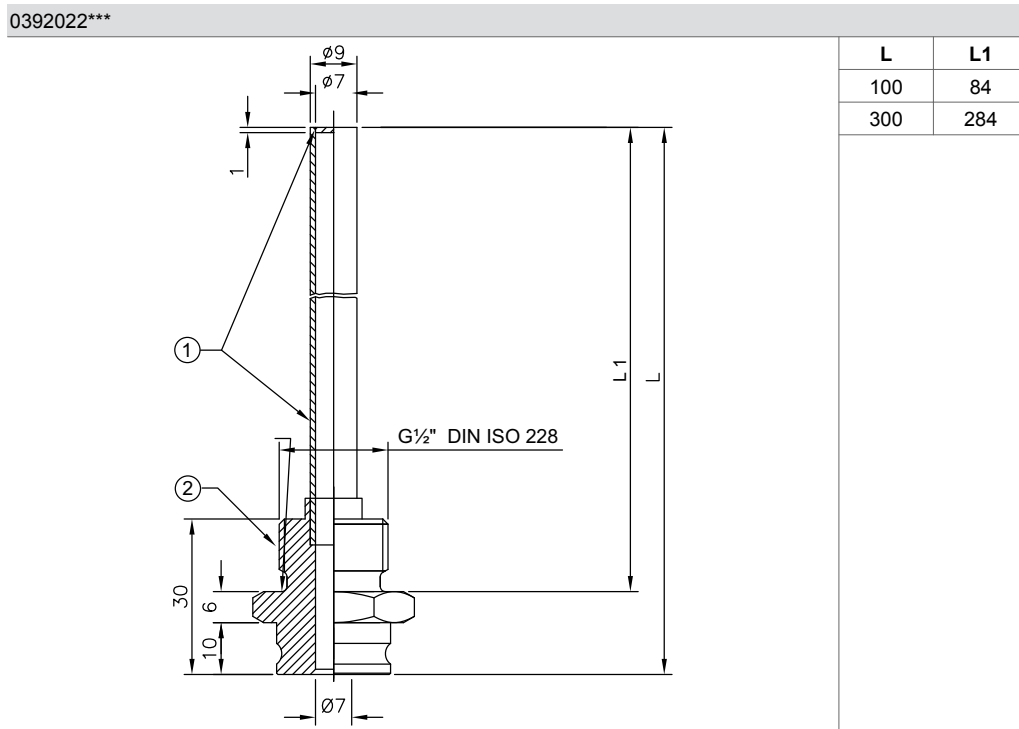
Disposal

When disposing of the product, observe the currently applicable local laws.

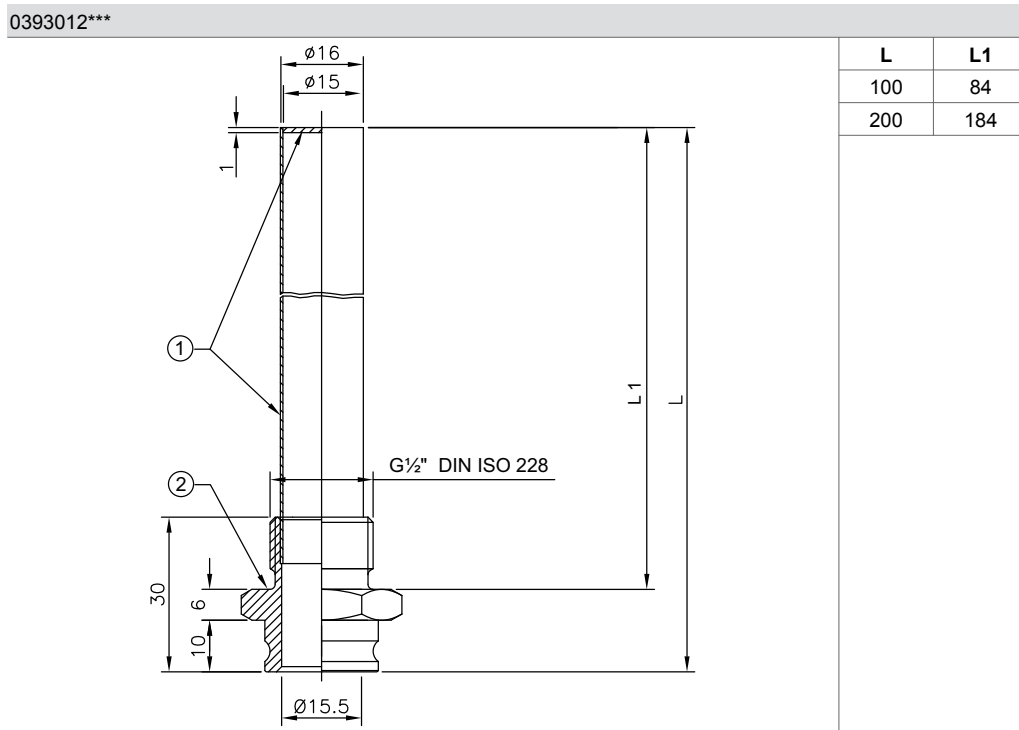
More information on materials can be found in the Declaration on materials and the environment for this product.

Dimension drawings

All dimensions in millimetres.

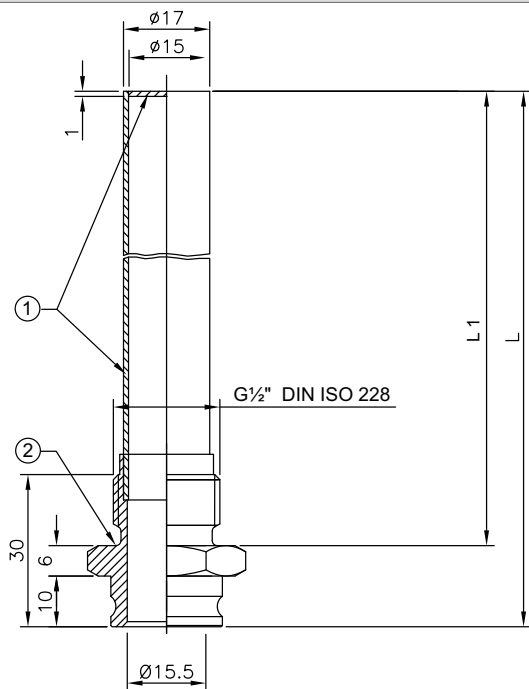


- (1) Tube material: 1.4404, cover: 1.4571
- (2) Nipple material: 1.4404



- (1) Tube and cover material: CuZn37 (Ms 63)
- (2) Nipple material: CuZn39Pb3 (Ms 58)

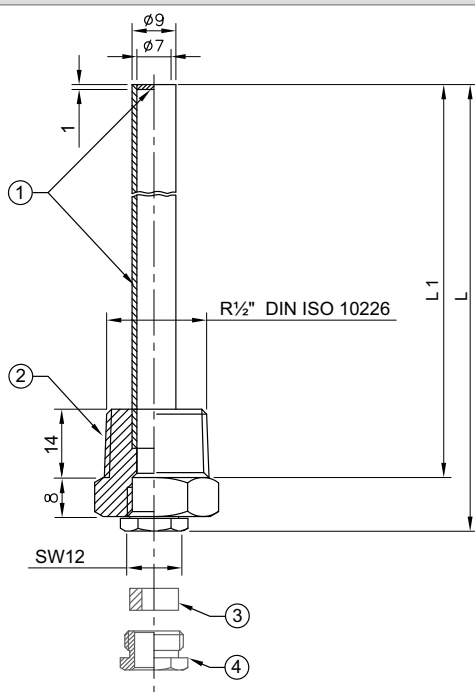
0393022***



L	L1
100	84
200	184
450	434

- (1) Tube material: 1.4404, cover: 1.4571
- (2) Nipple material: 1.4404

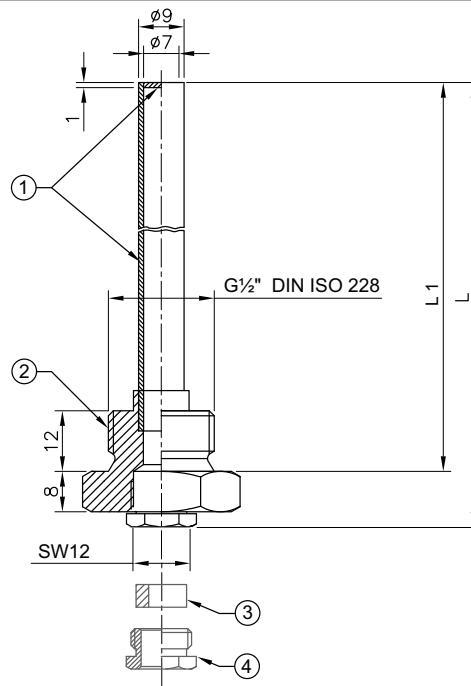
0391011***



L	L1
50	36
100	86
150	136
200	186
300	286
450	436

- (1) Tube and cover material: CuZn37 (Ms 63)
- (2) Nipple material: CuZn39Pb3 (Ms 58)
- (3) Ring, silicone
- (4) Pressure screw, M12 × 1.5, plastic PA/GK

0391022***

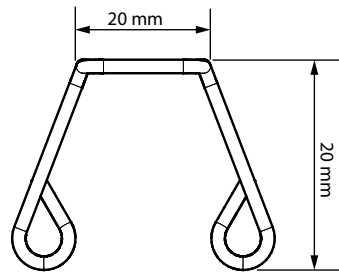


L	L1
50	36
100	86
200	186
300	286
450	436
600	586

- (1) Tube material: 1.4404, cover: 1.4571
- (2) Nipple material: 1.4404
- (3) Ring, silicone
- (4) Pressure screw, M12 × 1.5, plastic PA/GK

Accessories

0300360008



0364263000

