

Mold temperature sensors for injection molds

Type 6196A, 6197A, 6198A

Temperature sensors in three different versions for detecting the temperature in the injection mold and for monitoring and optimizing the injection molding process. The measuring principle is based on Type J thermocouples.

- Short response time to temperature changes for fast reactions in the controlled system
- Robust against mechanical stress
- All sensor types have a bend protection spring
- Type J iron/cupro-nickel acc. to DIN EN 60584 & ANSI 96.1

Description

Mineral-insulated thermocouple Type 6196A...

The mineral-insulated thermocouples consist of a flexible, thin-walled, mineral-insulated cable that allows a long service life thanks to its shock-proof construction. They differ from other temperature sensors in their compact construction, fast response times to temperature changes, and flexibility, which allows their introduction into hard-to-reach measuring points. The mineral-insulated thermocouple has optimum strength properties at high temperatures and meets the typical requirements in environments with gaseous and liquid media. The thermocouple is mounted on the tool with a compression fitting.

Angle thermocouple Type 6197A...

The angle thermocouple is suitable for measuring temperature on injection and die-cast molds in plastic. Angle sensors are beneficial wherever a straight cable outlet is not possible or not wanted, e.g. for space reasons on hot-runner manifolds. The connection lead's bend-protection spring serves as mechanical protection. The sensor can be attached easily with a screw.

Thermocouple with bayonet cap Type 6198A...

Thermocouples with a bayonet cap are used preferentially for temperature measurements in tools, e.g. for injection molding or extrusion of plastics in the plastics industry. Due to the special shape of the tip, these temperature sensors are suitable for use in plane and tapered bore holes. The stiff compression spring made of rust- and acid-resistant stainless steel, which simultaneously acts as bend protection, ensures that the probe tip exerts consistent contact pressure in the bore hole.

Type 6196A...



Type 6197A...



Type 6198A...



The installation length can be varied by twisting the bayonet cap. The bayonet cap is available in several diameters. Screw-in adapters are available in various designs.

Application

The temperature sensors are used to detect the temperature in the injection mold and to monitor:

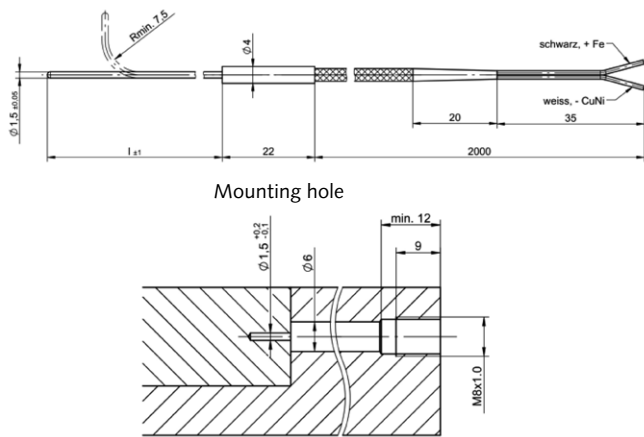
- Variations in mold temperature control
- Fluctuations in flow rate or blockage of cooling channels
- Variations in the melting temperature

Technical data

Thermocouple	Type	J (Fe-CuNi)
Measuring accuracy	Norm	DIN EN 60584
Operation temperature range	°C	0 ... 400
Lead cross-section	mm ²	0.22
Cable		
Positive	+	black
Negative	-	white

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Dimensions and installation



Mounting hole

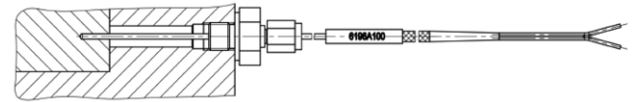
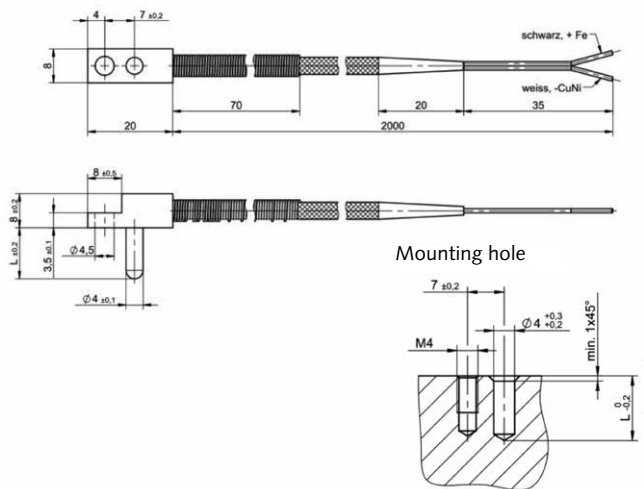


Fig. 2: Installation Type 6196A... with compression fitting

Fig. 1: Dimensions Type 6196A...



Mounting hole

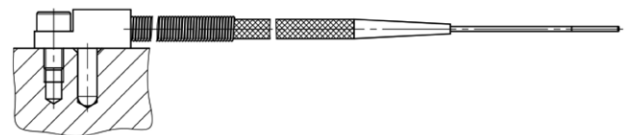
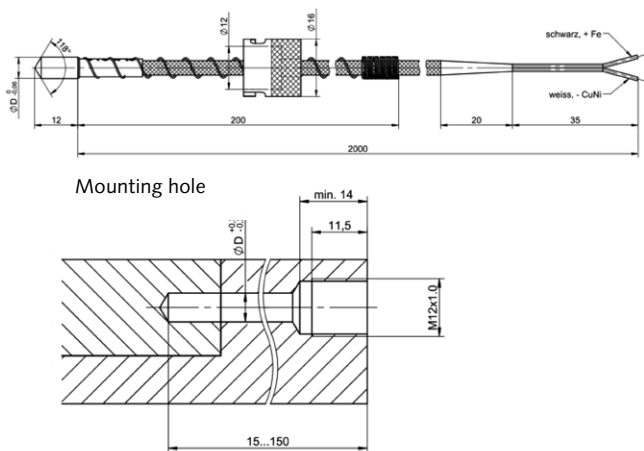


Fig. 4: Installation Type 6197A... with cylinder head screw M4x8

Fig. 3: Dimensions Type 6197A...



Mounting hole

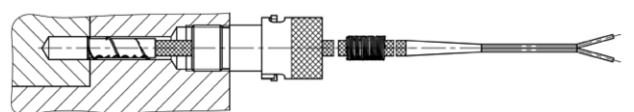


Fig. 6: Installation Type 6198A... with bayonet cap

Fig. 5: Dimensions Type 6198A...

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Accessories included

- Cylinder head screw M4x8 for 6197A...

Type/Mat. Nr.
65012776

Optional accessories

- Temperature amplifier (2 channel) with measuring range up to 200 °C
- Temperature amplifier (4 channel) with measuring range up to 200 °C
- 4-channel extension cable for Type 2205A (ComeNeo)
- 4-channel extension cable for Type 2205A... (Como Injection)

Type/Mat. Nr.
2205A122

2205A142

1491A...

1457A...

Ordering Key

Mineral-insulated thermocouple

Type 6196A		
Length 100 mm	100	↑
Length 150 mm	150	
Length 300 mm	300	
Compression fitting	K	↑
With Fischer K102 connector	E	↑

Angle thermocouple

Type 6197A		
Depth 12 mm	12	↑
Depth 25 mm	25	
With Fischer K102 connector	E	↑

Thermocouple with bayonet cap

Type 6198A		
Diameter 6 mm	6	↑
Diameter 8 mm	8	
Screw-in adapter 25 mm	E25	↑
Screw-in adapter 40 mm	E40	
Screw-in adapter 60 mm	E60	
With Fischer K102 connector	E	↑