

### **Thermometers**

# **Thermowells**

Solid Machined, Weld-in Type

Form BS per DIN 16179

### **Application**

The thermowells form BS are welded into the process. They are suitable for high process loads, that might occur as a result of flow, temperature and process pressure influences or vibrations.

### Standard features

#### Thermowell material

Stainless steel 1.4571 Steel 1.0460

# Thermowell outer diameter

Ø30mm

#### Instrument connection

Female thread G 1/2

#### Bore size 1)

Ø8.2 mm, Ø10.2 mm

#### Insertion length 1) I2

73, 133, 173 or 223 mm

#### **Total length**

Insertion length + 39 mm

# Maximum process temperature 2)

300 °C with thermowell material steel 1.0460

400 °C with thermowell material stainless steel 1.4571

# Maximum process pressure (static) 2)

150 bar with thermowell material stainless steel 1.4571

160 bar with thermowell material steel 1.0460

# **Optional extras**

Quality certificates



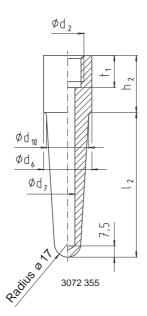
<sup>2)</sup> Ratings depends on below parameters:

- Process medium
- Process pressure and temperature
- Flow rate
- Design of thermowell (dimensions, material)



### **Dimensions**





### Legend:

h<sub>2</sub> Connection lengthl<sub>2</sub> Insertion length

t<sub>1</sub> Bore depth for female thread

Ø d<sub>2</sub> Instrument connection

Ø d<sub>6</sub> Thermowell outer diameter

Ø d<sub>7</sub> Bore size

Ø d<sub>10</sub> Root diameter

Model	Material	Dimensions in mm						Weight in kg			
		h <sub>2</sub>	t <sub>1</sub>	Ød <sub>2</sub>	Ød <sub>6</sub>	Ød <sub>7</sub>	Ø d <sub>10</sub>	l <sub>2</sub> = 73	l <sub>2</sub> = 133	l <sub>2</sub> = 173	l <sub>2</sub> = 223
9170	steel 1.0460	39	19	G ½	30	8.2	25	0.320	0.460	0.560	0.670
9171						10.2		0.300	0.430	-	_
9280	stainless steel 1.4571					8.2		0.320	0.470	0.570	0.690
9281						10.2		0.310	0.440	-	-

## Suitable stem lengths of mechanical thermometers

#### Dial thermometers

Design of connection	Stem length I₁				
S/4/5	$I_1 = I_2 + 27 \text{mm}$				
2	$I_1 = I_2 + 7 \text{mm}$				

### Machine glass thermometers

Design of connection	Stem length I <sub>1</sub>		
E	$I_1 = I_2 + 27 \text{mm}$		

### **Ordering information**

State: Model / Material Instrument connection / Bore size / Insertion length I<sub>2</sub> / Optional extras required

Specifications and dimensions given in this leaflet are correct at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.

