



MT-01

Industrial Thermometer



Features

- / Long scale
- / Robust design
- / Scratch-proof lettering
- / Legible from any direction
- / Straight or angled immersion tube
- / Connectable to any type of protection tubes

Description:

The immersion tube of the MT-01 series of industrial thermometers is either directly in contact with the medium or it is built into a protection tube to counter high processing pressure or chemically hostile environment. Within a short span of time it picks up the medium's temperature and transfers it to a glass capillary in its interior. The fluid filling in the capillary expands proportionally to the temperature. Its height is a reference for the measured temperature which can be read on a burned-in scale with an accuracy of 1% of the range end value.

Application:

The Profimess MT-01 Industrial Thermometers are deployed where temperatures need to be reliably measured without the use of electrical power. Their top portion is V-shaped and, therefore, can be comfortably read from any angle of view. It consists of brass-coloured anodized aluminium in which the lettering is placed below the anodized layer to ensure maximum mechanical strength. The prismatic capillary in the stem consists of solid glass material with a diameter of approx. 6 mm and has a black burned-in scale which is also absolutely resistant to scratches. The immersion tubes of the MT-01 series are made of brass for media temperatures up to 200°C. Moreover, steel or stainless steel tubes are also used. For special applications like sea-water, different suitable materials can be used.



Versions:

MT-01 Industrial Thermometer

Process connection: The thermometer can be connected to the process or to the protection tube without screw threads by insertion, with threads for screw mounting or by means of a brass swivel nut.

Immersion tube position: The top part and immersion tube are in vertical or rectangular position to each other. A third possibility is aligning it at 135°.

Scaling: The top part of MT-01 can have a single-side Celsius scale or a Celsius and a Fahrenheit scale on the right and left side of the capillary.

Filling: The capillary is white back with a wide, easy-to-read column with blue filling. The graduation is indelibly diffused into the glass. Other capillary fillings are available.

Insertion length: For MT-01 intended for insertion, the insertion length is according to the immersion tube length from "lower edge of the pin" and, in the screw on version and the variant with swivel nut it is the immersion tube length including the thread.

Connecting thread: Different thread types are available for the thread pin of MT-01.2 as well as for the swivel nut of MT-01.3.

Immersion tube material: The screw stems are available in brass, made from one piece, as per DIN Standard type B with threads for mounting lengths up to $L_1 = 63$ mm. They are hard-soldered for other lengths.

Ordering Codes:

Order number **MT-01. 2. 2. 1. 1. 1. 4. 2**

MT-01 Industrial Thermometer

Process connection /

- 1 = plug-in design, no thread (on request)
- 2 = screw on design
- 3 = brass swivel nut

Immersion tube position /

- 1 = immersion tube vertical
- 2 = immersion tube 90° angled
- 3 = immersion tube 135° angled

Operating range /

- 1 = -60...+40°C
- 2 = -30...+50°C
- 3 = 0...+60°C
- 4 = 0...+100°C
- 5 = 0...+120°C
- 6 = 0...+160°C
- 7 = 0...+200°C

Graduation /

- 1 = Celsius (°C)
- 2 = Celsius and Fahrenheit (°C + F)

Insertion length /

- 1 = 40 mm
- 2 = 50 mm
- 3 = 63 mm
- 4 = 100 mm
- 5 = 160 mm
- 6 = 250 mm
- 7 = 400 mm

Connecting thread /

- 0 = no thread (on request)
- 1 = G1/2A, SW27
- 2 = G3/4A, SW32
- 3 = M20 x 1,5, SW27
- 4 = M27 x 2, SW32

Immersion tube material /

- 1 = brass
- 2 = steel
- 3 = stainless steel 1.4571
- 4 = CuNi30Mn1Fe

Dimensions in mm:

