

Field case for temperature transmitter Model TIF11

WIKA data sheet TE 62.02



Applications

- Plant construction
- Process engineering
- General industrial applications
- Energy and power plant technology
- Chemical industry, oil and gas

Special features

- Robust case designs
- Numerous connection options
- Large selection of temperature transmitters can be fitted
- Explosion-protected versions (option)

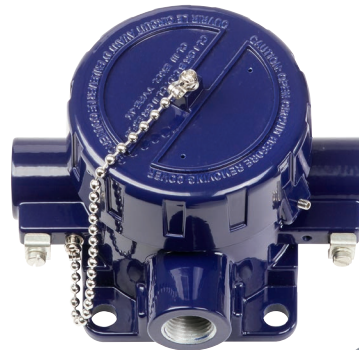


Fig. left: Field case, round, with screw-on lid
Fig. right: Field case, rectangular

Description

Field cases of this series are available in various case variants. Plastic, stainless steel and aluminium versions can be specified. They can be combined with a large number of temperature transmitters.

Direct wall mounting is the standard fixing method for these field cases. An optional pipe mounting kit is also available for fitting to pipes with a diameter of 1 ... 2".

Explosion protection (option)

- TIF11-S (without explosion protection)
- TIF11-I (Ex i, intrinsically safe)
- TIF11-F (Ex d, with flameproof enclosure)

Cable entry	Explosion protection			
	without	Ex i (gas) Zone 0, 1, 2	Ex i (dust) Zone 20, 21, 22	Ex db (gas) Zone 1
Plastic cable gland	x	x	-	-
Plastic cable gland, Ex e (blue)	x	x	x	-
Plastic cable gland, Ex e (black)	x	x	x	-
Brass cable gland, nickel-plated	x	x	x	-
Brass cable gland, nickel-plated, Ex e	x	x	x	-
Stainless steel cable gland	x	x	x	-
Stainless steel cable gland, Ex e	x	x	x	-
Stainless steel cable gland, Ex d	-	-	-	x
Plain threaded	x	x	x ²⁾	x ²⁾
Junction box, M12 x 1 (4-pin)	x	x ¹⁾	-	-
Plug screw	x	x	x	x
Sealing plugs for transport	not applicable, transport protection			

For arrangement/suitability of cable glands to the cases, see page 6

- 1) With appropriate mating connector connected
 2) Suitable cable gland required for operation

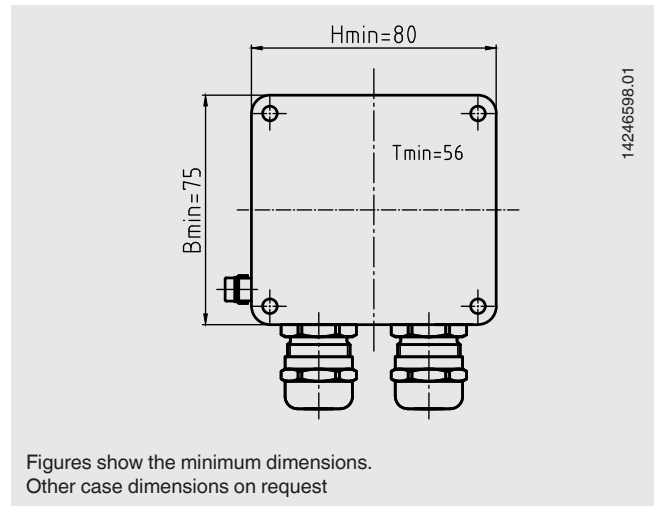
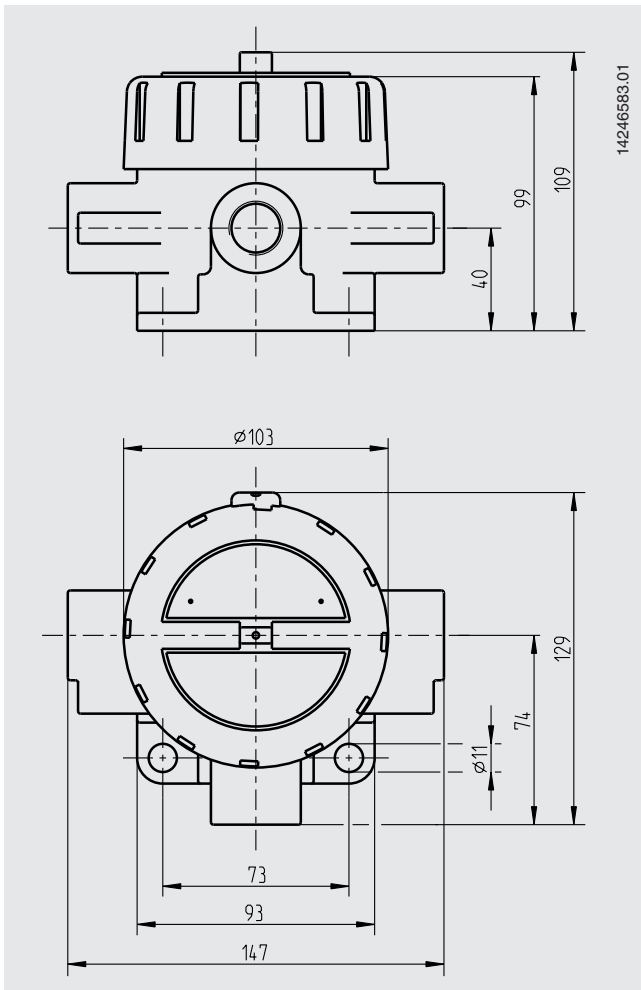
Instrument versions



Specifications	Case	
	Round, with screw-on lid (head 5/6000 F, 5/6000 S)	Rectangular
Material	<ul style="list-style-type: none"> ■ Aluminium ■ Stainless steel 	<ul style="list-style-type: none"> ■ Plastic ¹⁾ ■ Aluminium ■ Stainless steel
Surface	Aluminium: Blue, lacquered (RAL 5022) Stainless steel: Natural finish	Blank
Cable outlet thread size	<ul style="list-style-type: none"> ■ M20 x 1.5 ■ ½ NPT 	M20 x 1.5 others on request
IP ingress protection (max.)	IP66	IP66
Explosion protection (option)	<ul style="list-style-type: none"> ■ Ex i ■ Ex d 	Ex i

1) Not for explosion protection

Dimensions in mm



Cable entry



Cable entry	For cable Ø	Thread size	Colour	Ingress protection (max.)	Min./max. ambient temperature
Plastic cable gland	6 ... 10 mm	M20 x 1.5	Black or grey	IP66	-40 ... +80 °C
Plastic cable gland, Ex e	6 ... 10 mm	M20 x 1.5	Light blue	IP66	-20 ... +80 °C (standard) -40 ... +70 °C (option)
Plastic cable gland, Ex e	6 ... 10 mm	M20 x 1.5	Black	IP66	-20 ... +80 °C (standard) -40 ... +70 °C (option)
Brass cable gland, nickel-plated	6 ... 12 mm	M20 x 1.5 or ½ NPT	Blank	IP66	-60 ¹⁾ / -40 ... +80 °C
Brass cable gland, nickel-plated, Ex e	6 ... 12 mm	M20 x 1.5 or ½ NPT	Blank	IP66	-60 ¹⁾ / -40 ... +80 °C
Stainless steel cable gland	7 ... 12 mm	M20 x 1.5 or ½ NPT	Blank	IP66	-60 ¹⁾ / -40 ... +80 °C
Stainless steel cable gland, Ex e	7 ... 12 mm	M20 x 1.5 or ½ NPT	Blank	IP66	-60 ¹⁾ / -40 ... +80 °C
Stainless steel cable gland, Ex d	7 ... 12 mm	M20 x 1.5 or ½ NPT	Blank	IP66	-60 ¹⁾ / -40 ... +80 °C
Plain threaded	-	M20 x 1.5 or ½ NPT	-	IP00	-
Junction box, M12 x 1 (4-pin)	-	M20 x 1.5	-	IP65	-40 ... +80 °C
Plug screw	-	M20 x 1.5 or ½ NPT	Blank	IP66	-60 ... +80 °C
Sealing plugs for transport	-	M20 x 1.5 or ½ NPT	Transparent	-	-40 ... +80 °C



Cable entry	For cable Ø	Thread size	Colour	Ingress protection (max.)	Min./max. ambient temperature
Plastic cable gland	6 ... 10 mm	M20 x 1.5	Black or grey	IP66	-40 ... +80 °C
Plastic cable gland, Ex e	6 ... 10 mm	M20 x 1.5	Light blue	IP66	-20 ... +80 °C (standard) -40 ... +70 °C (option)
Plastic cable gland, Ex e	6 ... 10 mm	M20 x 1.5	Black	IP66	-20 ... +80 °C (standard) -40 ... +70 °C (option)
Brass cable gland, nickel-plated	6 ... 12 mm	M20 x 1.5	Blank	IP66	-60 ¹⁾ / -40 ... +80 °C
Brass cable gland, nickel-plated, Ex e	6 ... 12 mm	M20 x 1.5	Blank	IP66	-60 ¹⁾ / -40 ... +80 °C
Stainless steel cable gland	7 ... 12 mm	M20 x 1.5	Blank	IP66	-60 ¹⁾ / -40 ... +80 °C
Stainless steel cable gland, Ex e	7 ... 12 mm	M20 x 1.5	Blank	IP66	-60 ¹⁾ / -40 ... +80 °C
Plain threaded	-	M20 x 1.5	-	IP00	-
Junction box, M12 x 1 (4-pin)	-	M20 x 1.5	-	IP65	-40 ... +80 °C
Plug screw	-	M20 x 1.5	Blank	IP66	-60 ... +80 °C
Sealing plugs for transport	-	M20 x 1.5	Transparent	-	-40 ... +80 °C

1) Special version on request (only available without explosion protection or with specific approvals). other temperatures on request

Number and position of cable inlets / cable glands after consultation

Transmitter



Output signal 4 ... 20 mA, HART® protocol, FOUNDATION™ Fieldbus and PROFIBUS® PA				
Transmitter (selectable versions)	Model T15 (for RTD)	Model T16 (for TC)	Model T32	Model T53
Data sheet	TE 15.01	TE 16.01	TE 32.04	TE 53.01
Output				
4 ... 20 mA	x	x	x	-
HART® protocol	-	-	x	-
FOUNDATION™ Fieldbus and PROFIBUS® PA	-	-	-	x
Explosion protection	Optional	Optional	Optional	Standard

For detailed specifications see respective transmitter data sheet

Mounting of two or more transmitters only possible without explosion protection.

Fitting of third-party products possible, suitable approval required.

Mounting position, number of transmitters and their fixing method on request.

Functional safety (option) with temperature transmitter model T32



In safety-critical applications, the entire measuring chain must be taken into consideration in terms of the safety parameters. The SIL classification allows the assessment of the risk reduction achieved by the safety installations.

Selected TIF11 field cases, in combination with a suitable temperature transmitter (e.g. model T32.1S, TÜV certified SIL version for protection systems developed in accordance with IEC 61508), are suitable as sensors for safety functions to SIL 2.

Operating conditions

Ambient and storage temperature

-60 ¹⁾ / -40 ... +80 °C



1) Special version on request (only available with specific approvals)

Other ambient and storage temperatures on request






Accessories

(suitable for the respective transmitter model)



■ Models T15 and T16

Model	Description	Order number
Programming unit Model PU-548 	<ul style="list-style-type: none"> ■ Easy to use ■ LED status display ■ Compact design ■ No further voltage supply needed, neither for the programming unit nor for the transmitter ■ Incl. 1 model magWIK magnetic quick connector 	14231581
Magnetic quick connector magWIK 	<ul style="list-style-type: none"> ■ Replacement for crocodile clips and HART® terminals ■ Fast, safe and tight electrical connection ■ For all configuration and calibration processes 	14026893

■ Model T32.xS

Model	Description	Order number
Programming unit, model PU-H		
VIATOR® HART® USB 	HART® modem for USB interface	11025166
VIATOR® HART® USB PowerXpress™ 	HART® modem for USB interface	14133234
VIATOR® HART® RS-232 	HART® modem for RS-232 interface	7957522
VIATOR® HART® Bluetooth® Ex 	HART® modem for Bluetooth interface, Ex	11364254
Magnetic quick connector magWIK 	<ul style="list-style-type: none"> ■ Replacement for crocodile clips and HART® terminals ■ Fast, safe and tight electrical connection ■ For all configuration and calibration processes 	14026893

■ Common accessories

Model	Description	Order number
Adapter 	<ul style="list-style-type: none"> ■ Suitable for TS 35 per DIN EN 60715 (DIN EN 50022) or TS 32 per DIN EN 50035 for mounting on a DIN rail ■ Material: Plastic / stainless steel ■ Dimensions: 60 x 20 x 41.6 mm 	3593789
Adapter 	<ul style="list-style-type: none"> ■ Suitable for TS 35 per DIN EN 60715 (DIN EN 50022) for mounting on a DIN rail (2 adapters required per transmitter) ■ Material: Steel, tin-plated ■ Dimensions: 49 x 8 x 14 mm 	3619851

Configuration software

■ WIKAsoft-TT (for T15 and T16)

The screenshot shows the WIKAsoft-TT configuration software interface. At the top, it displays "Digital temperature transmitter" and the WIKAL logo. The main window is titled "Configuration" and contains several sections:

- File Instrument ?**: Includes a "COM port" dropdown menu set to "COM25".
- Buttons**: "Configuration" (highlighted), "Diagnostics", and "Measurement".
- Load instrument data**: A section with a folder icon and a "Load instrument data" button.
- Transmitter model code**: "T15.H.ZZZZZ".
- Serial number**: "IA00AFEV8M".
- Firmware**: "1.0.8".
- Permissible ambient temperature**: "-40 ... 85 °C".
- Maximum instrument temperature**: "20 °C".
- Date of factory calibration**: "12/13/2016".
- Date of last configuration**: "6/2/2017".
- TAG no.**: "SAMPLE".
- Description**: Empty text field.
- User message**: Empty text field.
- Input**:
 - Sensor type**: "Pt100".
 - Wire connection**: "4-wire".
 - Measuring range**: "0 ... 50 °C".
 - Damping**: "0 Seconds".
- Error signaling (NAMUR)**:
 - Internal hardware error**: "Downscale (3.5 mA)".
 - Sensor short-circuit**: "Downscale (3.5 mA)".
 - Sensor break**: "Downscale (3.5 mA)".
 - Configuration error**: "Downscale (3.5 mA)".
 - Measured value out of measuring range**: "Deactivated".
- Process adaption**: "no adaption".
- Image**: A small image of a blue and silver temperature transmitter module.
- Buttons**: "Configuration protocol" and "Write to instrument" (with a lock icon).

■ WIKAsoft-TT2

The screenshot shows the WIKAsoft-TT2 configuration software interface. The window title is "0001 from instrument". The menu bar includes "Disk", "Instrument", "Services", "Options", "Return", and "Help".

- Input**:
 - Sensor**: "Pt100".
 - Measurement range**: "+0.0 ... +150.0 °C".
 - Sensor connection**: "3-wires".
 - Damping**: "0".
- Output**:
 - Output**: "4 ... 20 mA" with a dropdown menu and "linear to temperature" text.
 - Output limits**: "NAMUR" with a dropdown menu, "lower: 3.8 mA", and "upper: 20.5 mA".
 - Signalization**: "NAMUR" with a dropdown menu, "down scale: 3.5 mA", and "up scale: 21.5 mA".
 - Buttons**: "Error Configuration" (with a right arrow).
- Tag data / Instrument information / HART settings**:
 - TAG**: "0001".
 - Description**: Empty text field.
 - Device**: "0".
 - Model**: "T32".
 - Serial No.**: "5 7D70 00028226".
 - Date**: "2010-02-09".
 - Sensor**: "0".
 - Buttons**: "HART" (with a right arrow).
- Footer**: "F1 Help F10 Menu Menu, instrument data Specialist Offline 2010-02-09".

Certificates (option)

Certification type	Measuring accuracy of the built-in transmitter	Material certificate
2.2 test report	x	-
3.1 inspection certificate	x	-
DKD/DAkkS calibration certificate	x	-

Approvals and certificates, see website

Ordering information

Model / Explosion protection / Case material / Transmitter / Cable bushings / Threaded connection for cable bushing /
Certificates / Options

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