



CHARACTERISTICS

- **QUALITY ASSURANCE TESTS AND RETOOLING WITHOUT PROCESS INTERRUPTION AND WITHOUT LOOSENING THE ELECTRICAL WIRING.**
- **EXCHANGEABLE MEASURING INSERT WITH SPRING BEARINGS AND METALLIC CONTACT.**
- **PROGRAMMABLE TRANSMITTER (4-20 MA, PROFIBUS, HARD OR RESISTANCE OUTPUT WITH 2, 3 OR 4 WIRE SYSTEM)**
- **VARIOUS DESIGNS FOR APPROPRIATE INSTALLATION, ADAPTATION TO EXISTING MEASURING POINTS WITHOUT DESIGN CHANGES.**
- **QUICK RESPONSE TIMES DUE TO TAPERED SENSOR TIPS**

DESCRIPTION

The **QUICKTEMP** temperature sensor with the "easy connect" function makes QA tests and repair and maintenance work possible without having to interrupt the process and open the measuring point. The entire device, including the connection head and measuring insert can be taken out of the process without loosening the electrical cables. This saves time and resources.

The measuring insert is a PT100 sensor with spring bearings and metallic contacts to ensure good heat transmission and short response times. The design of the Quicktemp system is based on one basic device with various fitting lengths or process connections, assuming defined fitting lengths. For the user, this guarantees a high degree of flexibility, while at the same time minimising the storage costs.

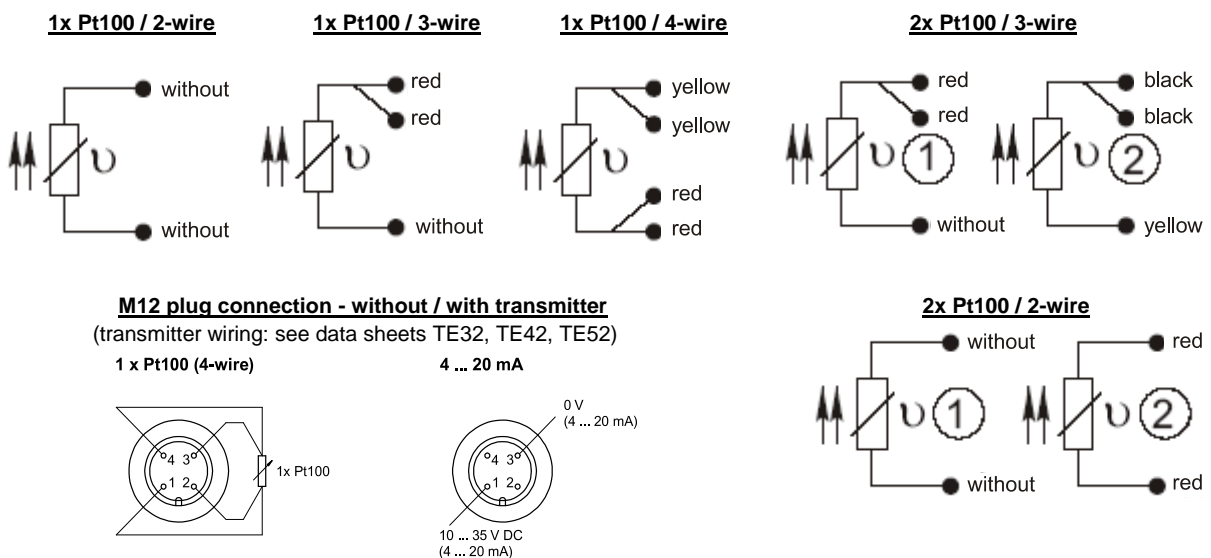
Application-appropriate fitting lengths and process connections are available. The temperature sensor can be designed as a resistance output (2, 3, or 4 wires, double PT100) or be equipped with a TE 42, HART (TE 52) or Profibus PA (TE 82) transmitter. Versions with double transmitters and the corresponding casing are also available.

Resistance thermometer QUICKTEMP system - type TP60/TW39...T500

TECHNICAL DATA

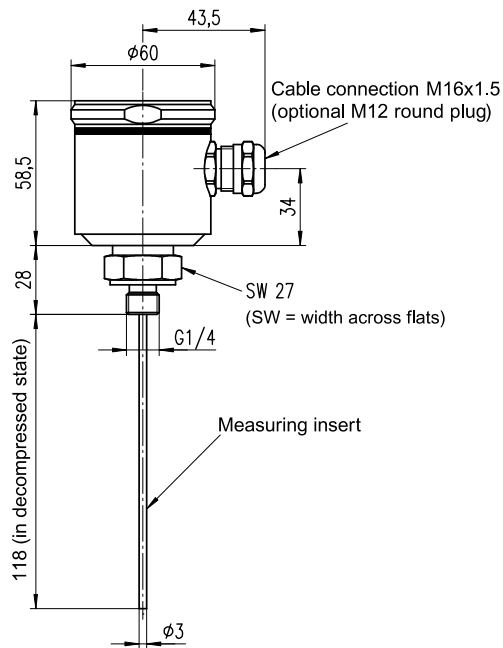
Design configuration:	- Basic device -
Type	Field casing IP 67
Casing material	Stainless steel 1.4301
Temperature sensor	PT 100 according to EN 60751, insert pipe 1.4571
Material of measuring insert	Stainless steel 1.4571
Diameter of measuring insert	continuously smooth, d = 3 mm, exchangeable
Length of measuring insert	MEL = 154 mm for T500
Connection, electrical	Cable connection M16 x 1.5, MS nickel-plated
Measuring insert, electrical	1 x PT 100 in a 2-, 3- or 4-wire circuit, 2 x PT 100 in 2- or 3-wire circuit
Type of connection, electrical	- Transmitter TE 41/42, 4-20 mA, 2L, programmable, galvanically separated (TE41) - Transmitter TE 52, HART - Transmitter TE 82, Profibus PA - Ceramic connection socket - M12 x 1 round plug - Sheathed cable version (vibration-resistant version) - free wires
Temperature of measuring material	T _{max} at the sensor = -50... +200°C
Response times	T50 (measured in water): 6 s (design-dependent, d = 6 mm), < 6 s with tapered sensor tip, on request
Accuracy	Tolerance class acc. to EN 60751, standard: Class A, optional: Class B 1/10, 1/3, 1/2 DIN
Protection type EN 60529	IP 67
Admissible pressure	design- and temperature-dependent
Process connections, standard	- Quicktemp zeh / TP16 – T500, G1/2, with metal sealing cone, standard fitting length = 50 mm, d = 6 mm - Quicktemp zeh / TP15 – T500, smooth sensor, no threaded joint, standard fitting length = 102 mm, d = 6mm - Quicktemp zeh / TP136 - T475, welded spherical protection sleeve, DN = 25 mm, standard fitting length = 50 mm, d = 6 mm - Quicktemp zeh / T535, smooth welded sensor, standard fitting length = 117 mm, d = 6 mm, tapering to d = 4 mm
Options:	(on request)
Process connections	- Quicktemp zeh / TP19, Varivent flange, d = 68 mm, fitting length = on request - Quicktemp zeh / TP26, M12x1,5 with metal sealing cone, further fitting lengths = on request
Calibration	Factory calibration, calibration certificate (3-point or 5-point), traceable to DKD standard
Certificates	Material certificate
CE conformity	EMV guidelines are met, CE symbol
Accessories:	(process connections: see data sheet - overview of WTH accessories)

ELECTRICAL CONNECTION

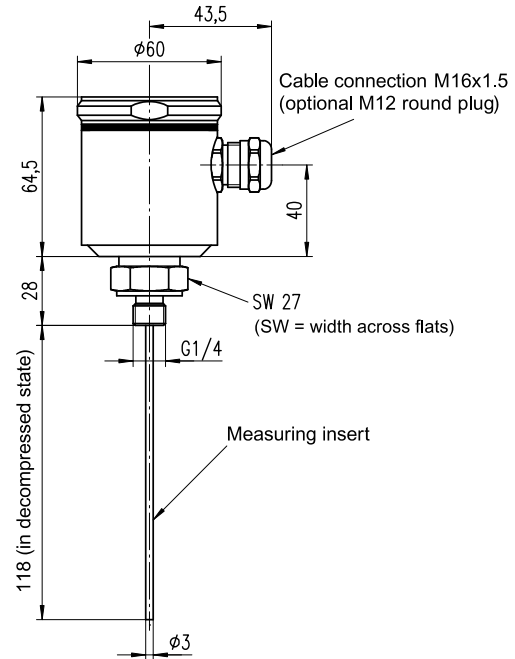


T/TP60-Quicktemp/D-e-08-1/2

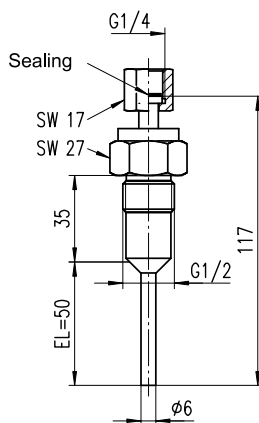
DIMENSIONAL DRAWINGS



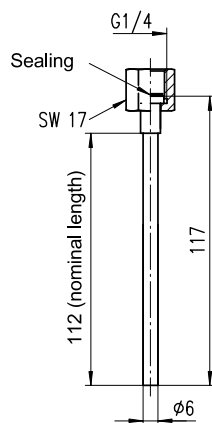
Quicktemp basic unit
TP60 / TW39...H...T500
Connection head H



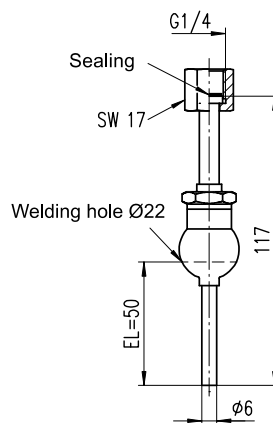
Quicktemp basic unit
TP60 / TW39...P...T500
Connection head P (for Profibus)



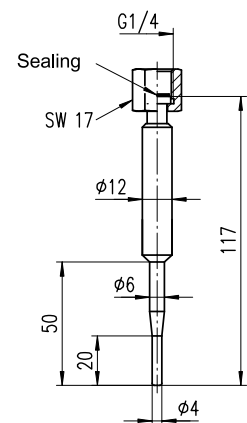
Quicktemp sleeve
zeh / TP16 - T500
metal sealing cone
Item No. 06402380



Quicktemp sleeve
zeh / TP15 - T500
smooth sensor, cylindrical
Item No. 06402381



Quicktemp sleeve
zeh / TP136 - T500
spherical welded socket
Item No. 06402382



Quicktemp sleeve
zeh / T535
smooth sensor, tapered tip
Item No. 06402400

Resistance thermometer QUICKTEMP system - type TP60/TW39...T500



ORDER INFORMATION

Type	
TP60	Quicktemp basic device (without sleeve)

Sensor type, tolerance class, switch mechanism	
A	1 x PT100, class A, 2 wires
B	1 x PT100, class A, 3 wires
C	1 x PT100, class A, 4 wires
D	2 x PT100, class A, 2 wires
E	2 x PT100, class A, 3 wires

Connection head	
H	Field housing
3	S79 form
K	BUKH form, polyamide PA (for dual transmitter)
1	B form
P	Higher field casing (Profibus version)

Fitting length / nominal length (basic device TP60/T500)	
90	MEL = 154 mm

Output version	
K0	Resistance output
L0	Transmitter (TE 42), 4 -20 mA, 2-L (standard)
P0	Profibus PA transmitter (TE 82)

Measuring range	
00	Resistance output
30	0 – 50 °C
40	0 – 100 °C
50	0 – 150 °C
60	0 – 200 °C
70	0 – 300 °C
80	0 – 400 °C
99	other measuring ranges

TP60/TW39			90			T500
-----------	--	--	----	--	--	------

Process adaptation for QUICKTEMP system	(please order separately)
QUICKTEMP sleeve, zeh / TP16 – T500, with metallic sealing cone G½ B	Item No. 06402380
QUICKTEMP sleeve, zeh / TP15 – T500, with smooth sensor, cylindrical	Item No. 06402381
QUICKTEMP sleeve, zeh / TP136 – T500, with spherical welded socket	Item No. 06402382
QUICKTEMP sleeve, zeh / T535, with smooth sensor, tapered tip	Item No. 06402400
Options / accessories:	please specify acc. to data sheet for TW-D-07 resistance thermometer

Our equipment is currently being developed, therefore we reserve the right to make amendments.