

## Applications and Uses

MIST M46 assemblies are designed for very corrosive environments such as plating shops and chemical processing plants. Vapors from acids and various corrosive chemicals do not damage these sensors. These assemblies are also the ideal solution for laboratory test applications where a high accuracy and dependable temperature measurement in corrosive liquids is required.

USA Patent No.: 7,223,014  
CDN Patent No.: 2,561,570

## Stock Items

Intempco stocks the most commonly used MIST M46 assemblies with the following features :

- *Factory calibrated 4-20 mA output to a customer specified temperature range*
- *Operating temperature range of -50 to 200 °C (-58 to 392 °F)*
- *Order MIST PKIT programming kit to re-program and re-calibrate in-house*
- *Adjustable 1/2" or 3/4" NPT Teflon fitting included*
- *Teflon jacketed 5/16" diameter probe with Teflon housing*
- *Cable supplied is a Teflon jacketed 22AWG stranded 4-conductor, copper silver plated, 6 ft long*
- *Probe lengths available are 12", 18", 24"*

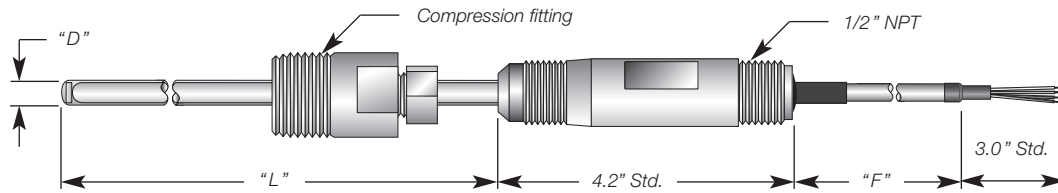
To order a MIST M46 with 12" probe, 1/2" NPT adjustable Teflon fitting with a range of -25 to 125°C, specify the inventory number and temperature range, ex.: M46L-T12T-120 (-25/125)°C on your order. To calibrate the MIST M46 in house, order the Intempco MIST PKIT which includes the module and software.

## Ordering Information (Order using Intempco inventory number)

Catalog Number	Inventory Number	Probe Length "L"	Fitting Type
M46-L-LP-E-T-120-0-T12T-TF-072	M46L-T12T-120	12.0"	1/2" NPT, adjustable, Teflon
M46-L-LP-E-T-180-0-T12T-TF-072	M46L-T12T-180	18.0"	1/2" NPT, adjustable, Teflon
M46-L-LP-E-T-240-0-T12T-TF-072	M46L-T12T-240	24.0"	1/2" NPT, adjustable, Teflon
M46-L-LP-E-T-120-0-T34T-TF-072	M46L-T34T-120	12.0"	3/4" NPT, adjustable, Teflon
M46-L-LP-E-T-180-0-T34T-TF-072	M46L-T34T-180	18.0"	3/4" NPT, adjustable, Teflon
M46-L-LP-E-T-240-0-T34T-TF-072	M46L-T34T-240	24.0"	3/4" NPT, adjustable, Teflon

# MIST M46

RTD Temperature Transmitter  
w/All Teflon Construction



USA Patent No.: 7,223,014  
CDN Patent No.: 2,561,570

## Custom Builder

MODEL      1      2      3      4      5      6      7      8      9

**M46** -  -  -  -  -  - **0** -  -  -

BOX1 CODE	Calibrated Temperature Range
05	0°C to 50°C (32/122°F)
10	0°C to 100°C (32/212°F)
15	0°C to 150°C (32/302°F)
20	0°C to 200°C (32/392°F)
55	-50°C to 50°C (-58/122°F)
51	-50°C to 150°C (-58/302°F)
52	-50°C to 200°C (-58/392°F)
L*	-50°C to 200°C (-58/392°F)

\* Code **L** is not factory calibrated. Requires customer calibration using the **MIST-PKIT**.

### Notes:

- MIST Temperature Sensors™ are factory calibrated at one point to an accuracy of ±0.12°@0°C or better. See MIST specs.
- For non-standard temperature ranges, indicate desired value in °C or °F in Box1 or see web site [www.intempco.com](http://www.intempco.com).
- Order **MIST-PKIT** for sensor customization.

BOX2 CODE	Output
LP	4-20 mA loop, upscale burnout (std.)
LD	4-20 mA loop, downscale burnout
VA	0-5 Vdc, 3-wire
VB	1-5 Vdc, 3-wire
VD	0-10 Vdc, 3-wire

Other outputs available. Consult factory.

BOX3 CODE	Probe Diameter "D"
E	5/16" (PFA only, std.)
F	3/8"

Other diameters available. Consult factory.

BOX4 CODE	Probe Material
T	PFA Teflon® clad SS316 tube (std.)
F	PTFE Teflon® clad SS316 tube

Other materials available. Consult factory.

BOX5 CODE	Probe Length "L"
----	In 0.1" increments Ex.: <b>012</b> = 1.2" long

BOX7 CODE	Fitting Type
N	None
T12T	1/2" NPT, adjustable, Teflon
T34T	3/4" NPT, adjustable, Teflon

Other fitting materials available. Consult factory.

BOX8 CODE	Extension Cable Type "F"
PV	PVC insulation, stranded cond. 90°C (195°F) max.
TF	Teflon® insulation, stranded cond. 200°C (392°F) max.
TA*	Teflon® with SS armor, 200°C (392°F) max.
TP	Teflon® with SS armor and polyolefin shrink, 90°C (195°F) max.
TT	Teflon® with SS armor and Teflon® shrink, 200°C (392°F) max.
TS*	Teflon® with SS overbraid, 200°C (392°F) max.

\* Code "**TA**" & "**TS**" are preferred methods of construction due to strength factors.

BOX9 CODE	Extension Cable Length "F"
----	In inches Ex.: <b>060</b> = 60" long

**Note :** Extension wires 12" long and less are single stranded leads, 22 AWG