

## Applications and Uses

MIST MS22 assemblies are an excellent choice where extreme operating conditions prevail in wash down situations and very wet environments. External cables will withstand washdowns and optional stainless steel armor or overbraid prevents abrasion wear. These assemblies come standard with a 1/4" diameter probe. Larger diameters or reduced tip probes are also available.

## Stock Items

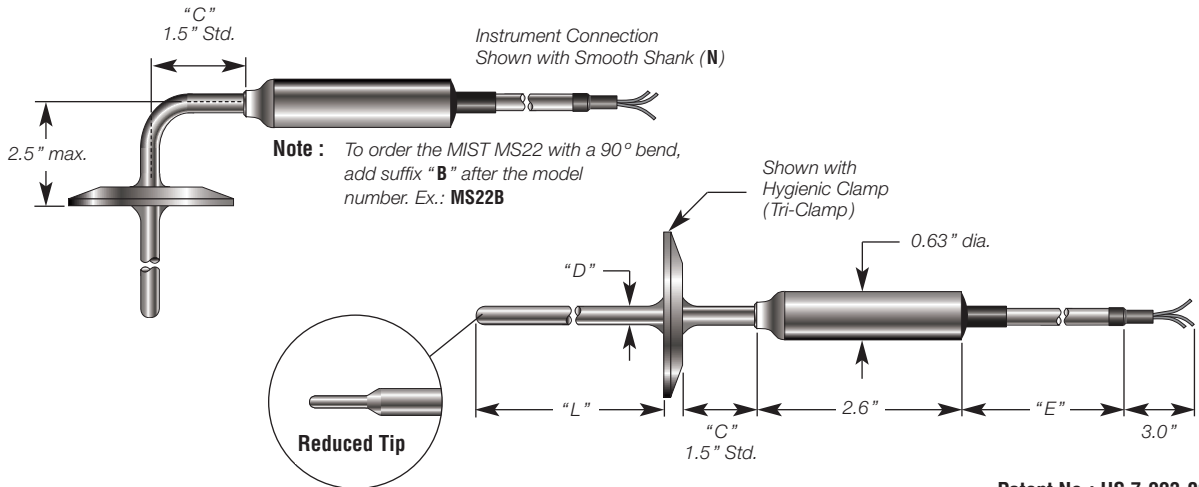
Intempco stocks the most commonly used MIST MS22 assemblies with the following features :

- *Factory calibrated 4-20 mA output to a customer specified temperature range*
- *Cable supplied is Teflon® jacketed or Teflon® shrink over SS armor , 22 AWG stranded 3-conductor*
- *Operating temperature range of -50 to 200 Deg. C*
- *Built-in, fully programmable, microprocessor based transmitter*
- *Order MIST PKIT to recalibrate to other temperature ranges*
- *1.5" and 2" hygienic clamp union sizes available (Tri-Clamp)*
- *Immersion lengths available are 2.5" and 4" and 6"*
- *1/4" probe diameter, stainless steel 316*

To order a MIST MS22 with 2" hygienic clamp union, a 4" probe with a range of -25 to 125°C, specify the inventory number and temperature range, ex.: MS22L-T20040 (-25/125)°C on your order. To field calibrate the MIST MS22, order the Intempco MIST PKIT which includes the module and software.

## Ordering Information (Order stock items using Intempco inventory number)

Inventory Number (Teflon® Jacket)	Inventory Number (Teflon® Covered Armor)	Probe Length "L"	Hygienic Clamp Union Size
MS22L-T15025TF	MS22L-T15025TT	2.5"	1.5"
MS22L-T15040TF	MS22L-T15040TT	4.0"	1.5"
MS22L-T15060TF	MS22L-T15060TT	6.0"	1.5"
MS22L-T20025TF	MS22L-T20025TT	2.5"	2"
MS22L-T20040TF	MS22L-T20040TT	4.0"	2"
MS22L-T20060TF	MS22L-T20060TT	6.0"	2"



Patent No.: US 7,223,014  
CND 2,561,570

## Custom Builder

MODEL 1 2 3 4 5 6 7 8 9 10 11

MS22 - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ]

BOX 1 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)
H*	-200°C to 600°C (-328/1112°F)

\* Code **L** & **H** are 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.

BOX 2 CODE	Output
LP	4-20mA loop, upscale burnout (std.)
LD	4-20mA 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.

BOX 3 CODE	Probe Diameter "D"	
D	1/4"	
F	3/8"	
H	1/2"	
CODE	Sheath O.D.	Tip O.D.
DB	1/4"	1/8"
FC	3/8"	3/16"
HC	1/2"	3/16"
HD	1/2"	1/4"
JD	5/8"	1/4"

Other diameters available. Consult factory.

BOX 4 CODE	Probe Material
S	Stainless steel 316/316L

Other materials available. Consult factory.

BOX 5 CODE	Probe Length "L"
---	In 0.1" increments Ex.: <b>065</b> =6.5" long

BOX 6 CODE	Extension Length "C"
N --	In 0.1" increments (1.5" Std.) Ex.: <b>N15</b> =1.5" long

BOX 7 CODE	Instrument Connection
N	None, smooth shank
SR	Strain Relief
EN	1/2" NPT male
EE	1/2" NPS male

Other connections available. Consult factory.

BOX 8 CODE	Process Fitting Type / Size
T10	Hygienic clamp union, 1"
T15	Hygienic clamp union, 1.5"
T20	Hygienic clamp union, 2"
T25	Hygienic clamp union, 2.5"
T30	Hygienic clamp union, 3"

Other fittings available. Consult factory.

BOX 9 CODE	Extension Cable Type
PV	PVC insulation, 90°C (195°F) max.
TF	Teflon® insulation, 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.

**Note:** 1. Leads "E" length 12" and less are single conductor Teflon® insulation, 22 AWG

BOX 10 CODE	Extension Cable Length "E"
---	In inches Ex.: <b>060</b> =60" long

BOX 11 CODE	Surface Finish
SF	32µ-in (0.8µm) Ra max. or better
F1	20µ-in (0.5µm) Ra max., w/o EP
F4	15µ-in (0.4µm) Ra max., with EP