

OMEGA® Hypodermic Needle Temperature Probes are designed for industrial, laboratory, manufacturing and chemical research applications. Five probe types are available, with diameters from 0.2 to 1.65 mm (0.008 to 0.065"). The HYP0, HYP1 and HYP2 have type T (Copper-Constantan) thermocouple elements, while the HYP3 is available in J, K, T or E calibration, and the HYP4 has a 100  $\Omega$  Platinum RTD (a = 0.00385).

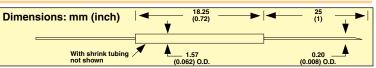
The HYP0 is a mini-hypodermic probe, with 0.2 mm (0.008") diameter. The HYP1 has an OD of 0.3 mm (0.012"), and has an added feature of being steam autoclavable to temperatures up to 160°C (325°F). The HYP3 and HYP4 are industrial probes, with thermocouple and RTD elements respectively.

The HYP0 Mini Hypodermic probe with a needle diameter of only 0.2 mm (0.008") is the least likely to disturb the surrounding insertion

area. Binocular microscope micromanufacturing techniques result in an extremely small type T (Copper-Constantan) thermocouple being implanted in a 33 gage, 25 mm (1") long stainless steel hypodermic needle. The HYPO has the fastest response of the hypodermic probes, and has a continuous temperature rating of 200°C (400°F). It has 1.5 m (5' long PFA coated, 36 AWG leads with an SMP type subminiature connector.

## **Thermocouple Probe Model HYP0**

The HYP0 mini-hypodermic probe with a needle diameter of only 0.2 mm (0.008") is the least likely to disturb the surrounding insertion area. Binocular microscope micro-manufacturing techniques result in an extremely small Type T (copper-constantan) thermocouple being implanted in a 33 gauge, 25 mm (1") long stainless steel hypodermic needle. The HYP0 has the fastest response of the hypodermic probes, and has a continuous temperature rating of 200°C (400°F). It has 1.5 m (5') long PFA-coated, 36 AWG leads with an SMP-type miniature connector.



### To Order

#### Model No. ANSI Color Code

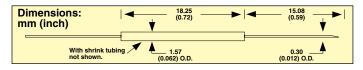
#### HYP0-33-1-(\*)-G-60-SMPW-M

\* Specify calibration: **K**, or **T**. T = Copper-Constantan,  $K = CHROMEGA^{\circ}-ALOMEGA^{\circ}$  Lead wire lengths over 1.5 m (60") at an additional cost/300 mm (12") and modify model number.

Ordering Example: HYP0-33-1-T-G-60-SMPW-M, mini hypodermic probe with Type T grounded thermocouple, 1.5 m (5') long bead wire, and a miniature SMPW male connector.

## Thermocouple Probe Model HYP1

OMEGA® Research, autoclavable probe is designed to give instant readings in plants, other semi-solids and liquids. A 30 gage x 15 mm needle provides this very fast response. The measurable temperature range is cryogenic to 200°C (400°F). This is a Type T (Copper-Constantan) grounded-junction probe with PFA insulated extension wire and a subminiature male connector termination. The entire assembly is steam autoclavable to a temperature of 160°C (325°F). All probes have 1.5 m (5') leads.



# Subminiature Probe These probes should not be used for human implantation

# Model No. ANSI Color Code

HYP1-30-1/2-(\*)-G-60-SMPW-M

\* Specify calibration: **K**, **T**, or **E**. K = CHROMEGA®-ALOMEGA®, T = Copper-Constantan, E = CHROMEGA®-Constantan For lead wire lengths over 1.5 m (60") at an additional cost/300 mm (12") and modify model number.

Ordering Example: HYP1-30-1/2-T-G-60-SMPW-M, thermocouple probe.

## Thermocouple Probe Model HYP2 and HYP5

The HYP2 and HYP5 Probes have Natural Science, Industrial and Food Processing uses. These assemblies comes complete with a Type T (Copper-Constantan) element, 1.2 m (4') PFA insulated lead wirest, and uses a standard (21 gage) hypodermic needle 38 mm (1.5") long. 1.2 m (4') lead wire is standard. Standard size male connector terminates the lead wire.

Model No. ANSI Color Code
HYP2-21-1-1/2-(*)-G-48-OSTW-M
HYP2-21-1-1/2-(*)-G-48-SMPW-M
HYP5-21-1-1/2-(*)-G-SMPW-M

† HYP5 does not have lead wires

Specify calibration: J, K, T, or E.

\* J = Iron-Constantan K = CHROMEGA®-ALOMEGA® T = Copper-Constantan E = CHROMEGA®-Constantan

Easy grip handle, add "EGH" suffix, for additional cost.

For lead wire lengths over 1.2 m (48") at an additional cost/300 mm (12") and modify model number.

Ordering Example: HYP2-21-1-1/2-T-G-48-OSTW-M, Type T grounded junction probes.

## Custom-Designs Available in Length, Dimension and Insulation! Consult our Custom-Design Department for Details. HYP2 HYP5 with **SMPW** connector. **OSTW** connector included on HYP2. Shown smaller than actual size. These probes should not be used for human implantation.

## Thermocouple Probe Model HYP3

OMEGA® Industrial Hypodermic Probe uses a 16 gage x 38 mm (1.5") long needle and may contain J. K. T. E calibrations; they may have a grounded or ungrounded junction, and come with stainless steel overbraided extension wire. The stainless steel overbraiding adds flexibility and extends the probe life. These probes are not autoclavable. They are designed for heavy-duty service. 1.2 m (4') lead wire is standard. Maximum tip temperature is 200°C (400°F).

## Model No. ANSI Color Code

#### HYP3-16-1-1/2-(\*)-(\*\*)-48-RP

When ordering, specify calibration and whether grounded or ungrounded junction is desired

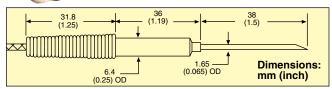
\* Specify calibration: J, K, T, or E. J = Iron-Constantan T = Copper-Constantan K = CHR E = CHROMEGA®-Constantan \*\* Specify measuring junction style: U or G K = CHROMEGA®-ALOMEGA®

Also Available: R and S (platinum)—consult factory for price and

Easy Grip Handle, add "**EGH**" suffix, for additional cost For lead wire lengths over 1.2 m (48") at an additional cost/300 mm (12") and modify model number.

To add an SMPW male connector add suffix "**-SMPW-M**" to model number for additional cost.

## Add an SMPW connector, see ordering example. Shown smaller than actual size. **Vow Available!** M8/M12 These probes should not be used for human implantation. CONNECTORS



For a male straight M8 plug add "M8-S-M" to the model number for additional cost, for a male straight M12 plug add "M12-S-M" to the model number for additional cost.

For a male right-angled M8 plug add "M8-R-M" to the model number for additional cost, for a male right-angled M12 plug add "**M12-R-M"** to the model number for additional cost

Ordering Example: HYP3-16-1-1/2-K-G-48-SMPW-M, Type K grounded junction probe with 1.2 m (48") leads.

#### **RTD Probe Model HYP4**

The RTD Hypodermic Probes are offered for Industrial, Natural Sciences and Food Processing use. These probes contain a 100  $\Omega$  platinum RTD ( $\alpha$  = 0.00385) within a 16 gage x 38 mm (1.5") hypodermic needle, and come with 1.2 m (4') PFA insulated lead wire.

#### Model No. ANSI Color Code

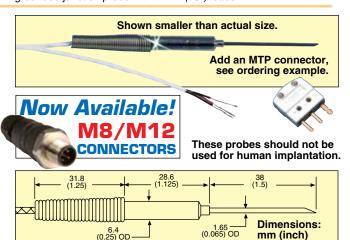
#### HYP4-16-1-1/2-100-EU-48-RP

All probes were designed for industrial, laboratory, manufacturing and chemical research only. They are not intended for medicinal use, or on humans. OMEGA assumes no responsibility if these products are used for medicinal purposes, or on humans, or are misused in any way. For lead wire lengths over 1.2 m (48") at an additional cost/300 mm (12") and modify model number.

For a male straight M8 plug add "M8-S-M" to the model number for additional cost, for a male straight M12 plug add "M12-S-M" to the model number for additional cost.

For a male right-angled M8 plug add "M8-R-M" to the model number for additional cost, for a male right-angled M12 plug add "M12-R-M" to the model number for additional cost.

To add an MPT-U male connector add suffix "-MTP-M" for additional cost.



Ordering Example: HYP4-16-1-1/2-100-EU-48-MTP-M, RTD hypodermic probe with 1.2 m (48" leads) and MPT-U male connector.

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Omega manufacturer:

Other Similar products are found below:

DPG409-100DWU OM-DAQXL-1-NA CASS-116U-12 DH-1-20-J-12 GG-J-24-SLE-1000 HPC-AU-P HPC-IR-P JMQSS-062U-6 KHSS-18G-RSC-12 KHXL-18G-RSC-12 KMQIN-125U-6 KMQXL-125G-12 KMQXL-125U-6 KQSS-18G-6 KQXL-14U-36 KQXL-18G-12 KQXL-18U-12 NB1-CAXL-14U-12 NB3-CAXL-14U-18 P-M-1/10-1/4-6-0-P-3 PX309-015A5V PX309-1KGI PX309-10KGV PX309-100AI PX309-100AV PX309-100GV PX309-3KG5V PX319-V050G5V PX319-005AI PX319-050A5V PX319-050GI PX319-10KGI PX319-10GV PX319-200AV PX319-200AV PX319-200A5V PX319-300G5V PX319-5KG5V PX319-500G5V PX319-500G5V PX319-500G5V PX319-500G5V PX319-500G5V PX319-500G5V PX319-500G5V PX319-500G5V PX319-500G5V PX319-300G5V PX319