

Industrial Mineral-Insulated Thermocouples with Protection Head and Process Connection

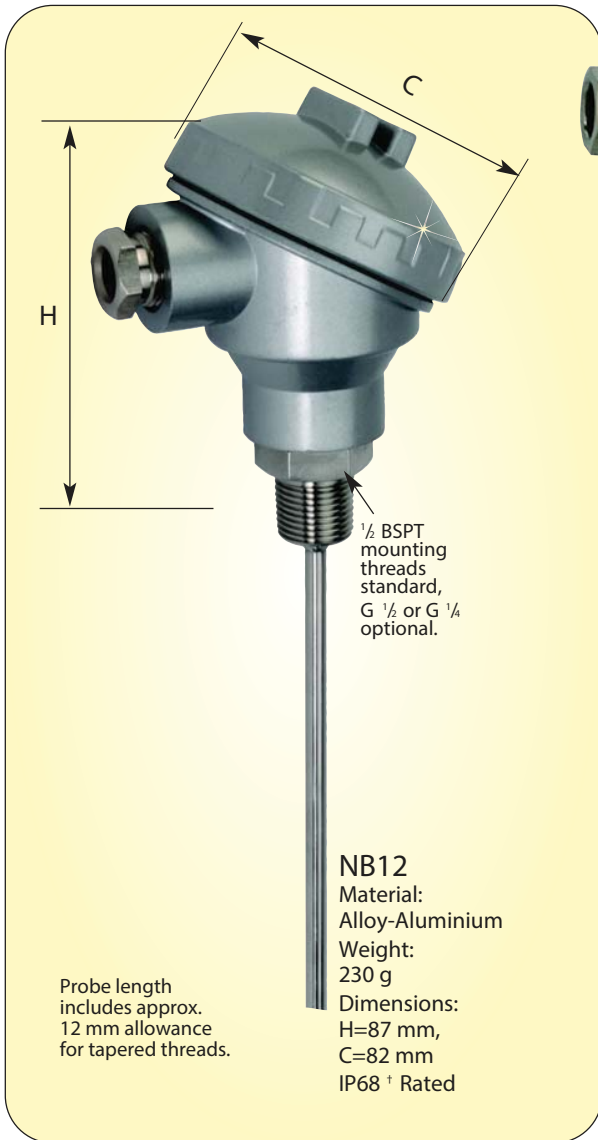
- ✓ Made from Class 1 Tolerance MI Cable
- ✓ All Head Styles Include a Terminal Block as Standard
- ✓ Optional In-Head Mounted Transmitters Available
- ✓ All Probes Individually Pressure and Insulation Tested
- ✓ ½ BSPT, G ½ or G ¼ Process Fittings
- ✓ 310, 316, 321 SS, Inconel * or Super OMEGA CLAD™ XL sheaths
- ✓ Type K, N, T or J Thermocouple Types



Available!
Probes with Built-In Transmitters!



Cast Iron NB5
Material: Cast iron
IP67 † Rated
Weight: 1.6 kg
Dimensions:
H=95 mm,
C=86 mm



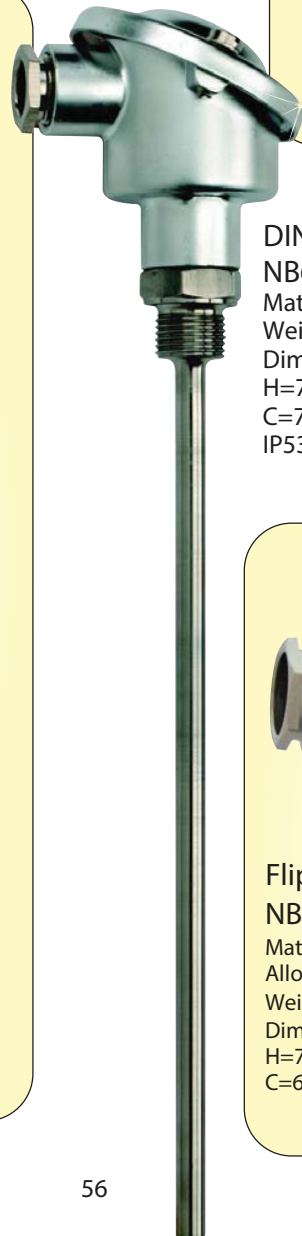
H

C

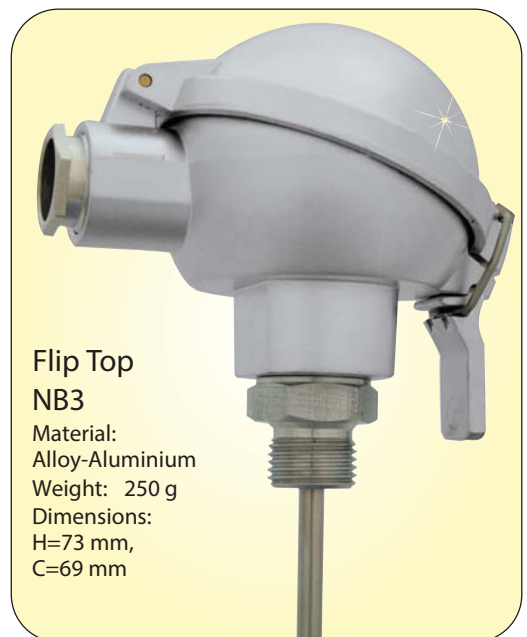
½ BSPT mounting threads standard, G ½ or G ¼ optional.

NB12
Material: Alloy-Aluminium
Weight: 230 g
Dimensions:
H=87 mm,
C=82 mm
IP68 † Rated

Probe length includes approx. 12 mm allowance for tapered threads.



DIN Form B NB6
Material: Alloy-Aluminium
Weight: 250 g
Dimensions:
H=72 mm,
C=72 mm
IP53 † Rated

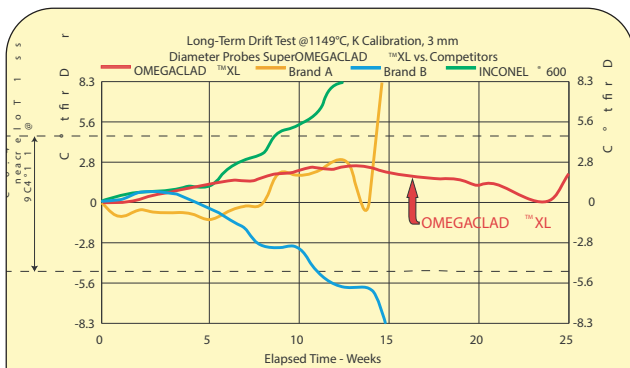


Flip Top NB3
Material: Alloy-Aluminium
Weight: 250 g
Dimensions:
H=73 mm,
C=69 mm

† Final IP rating depends on quality of installation.

Industrial Thermocouple Protection Head Probe Assemblies

Why Choose Super OMEGA CLAD™ Probes?
 You've chosen an industrial head for your application. Why not complement it with an OMEGA Super OMEGA CLAD™ XL sheathed probe? These probes can be used at high temperatures for prolonged periods with very little drift of the base metal thermocouple. Super OMEGA CLAD™ XL sheathing provides excellent oxidation resistance, and can withstand exposure to combustion gases or air at temperatures up to 1335°C. Superior resistance to oxidation attack results from an internal protective high-temperature film that does not affect the stability of the thermocouple alloys. Super OMEGA CLAD™ XL sheathing also provides excellent resistance to corrosion in high temperature chlorine-contaminated oxidizing environments and ammonia/nitride-rich environments at temperatures above 980°C, the temperature at which the protective film forms.



Super OMEGA CLAD™ XL's low-drift characteristic ensures reliability of temperature readings longer than other brands and sheath materials. Within 15 weeks of continuous testing, Brands A and B, and an Inconel™ 600 probe, exhibited more than 8.3°C drift. At 25 weeks, Super OMEGA CLAD™ XL's drift was less than 2.8°C.



See page 26 to 29.

MEETS OR EXCEEDS SPECIAL LIMITS OF ERROR (SLE) AND EN 60584-2: Tolerance Class 1

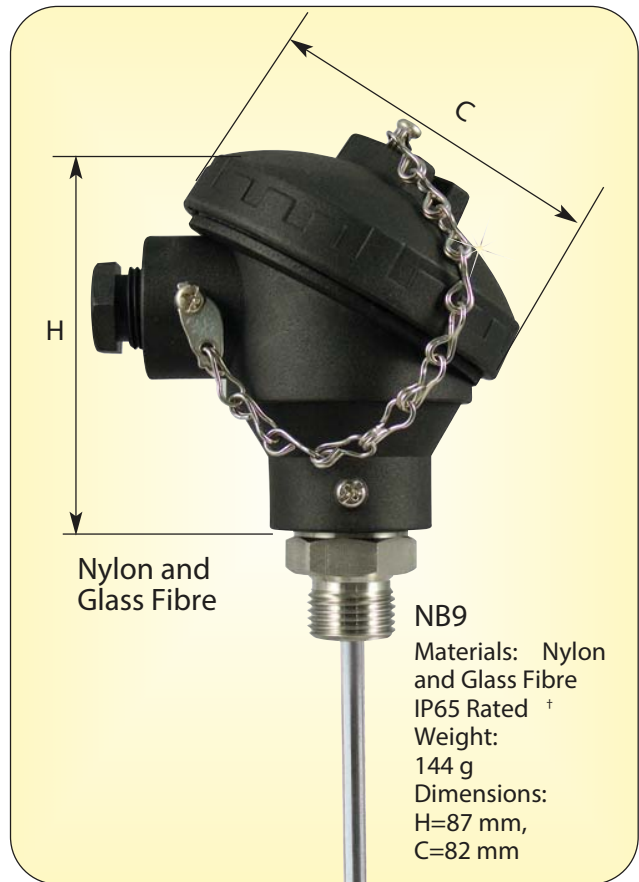
Available! Probes with Built-In Transmitters!



Miniature Aluminium Head

NB11
 Material: Alloy-Aluminium
 Weight: 140 g
 Dimensions: H=64 mm, C=62 mm
 IP68 Rated †

† Final IP rating depends on quality of installation.



Nylon and Glass Fibre

NB9
 Materials: Nylon and Glass Fibre
 IP65 Rated †
 Weight: 144 g
 Dimensions: H=87 mm, C=82 mm



Stainless Steel Head

NB13
 Material: 316 SS
 IP68 Rated †
 Weight: 820 g
 Dimensions: H=87 mm, C=82 mm

To Order: Insert the head style number into the part numbers shown in the "To Order" table on page 58. See ordering example below.

Ordering Example: NB12-CA310SS-IM60U-300, 300 mm insulated junction Type K stainless steel thermocouple, 6 mm sheath diameter probe with an NB12 protection head

NB12 Low-Profile Aluminium Head with Internal Terminal Block

- ✓ Made from Class 1 Tolerance MI Cable
- ✓ All Head Styles Include a Terminal Block as Standard
- ✓ Optional In-Head Mounted Transmitters Available
- ✓ All Probes Individually Pressure and Insulation Tested
- ✓ 1/2 BSPT, G 1/2 or G 1/4 Process Fittings
- ✓ 310, 316, 321 SS, Inconel or Super OMEGA CLAD™ XL sheaths
- ✓ Type K, N, T or J Thermocouple Types

These industrial thermocouple assemblies are manufactured from Class 1 MI cable. The semi-rigid sheath may be shaped to suit different applications. Protection heads and process fittings that suit most environmental and application conditions are available. A 1/2" BSPT process fitting is standard; refer to the note below the order table for details on how to specify G 1/2 or G 1/4 process threads.



Discount Schedule	
1 to 10 unitsNet
11 to 24 units10%
25 to 49 units20%
55 and up	..Consult UK Sales

 SUPER OMEGA CLAD™ XL HIGHLIGHTED!

To Order (Specify Model Number)					
Calibration IEC Code	Sheath Material	Sheath Dia. mm	Upper Temp Guidelines °C T/C Junction	Model No. 300 mm Length**	
K CHROMEGA ALOMEGA™	304SS	1.5	899	NB(*)-CASS-IM15(+)-300	
	304SS	3.0	899	NB(*)-CASS-IM30(+)-300	
	304SS	4.5	899	NB(*)-CASS-IM45(+)-300	
	304SS	6.0	899	NB(*)-CASS-IM60(+)-300	
	INC600	1.5	921	NB(*)-CAIN-IM15(+)-300	
	INC600	3.0	1071	NB(*)-CAIN-IM30(+)-300	
	INC600	4.5	1149	NB(*)-CAIN-IM45(+)-300	
	INC600	6.0	1149	NB(*)-CAIN-IM60(+)-300	
	XL	1.5	1038	NB(*)-CAXL-IM15(+)-300	
	XL	3.0	1149	NB(*)-CAXL-IM30(+)-300	
T IRON- CONSTANTAN	304SS	1.5	441	NB(*)-CPSS-IM15(+)-300	
	304SS	3.0	521	NB(*)-CPSS-IM30(+)-300	
	304SS	4.5	621	NB(*)-CPSS-IM45(+)-300	
	304SS	6.0	721	NB(*)-CPSS-IM60(+)-300	
J IRON- CONSTANTAN	304SS	6.0	721	NB(*)-ICSS-IM15(+)-300	
	304SS	6.0	721	NB(*)-ICSS-IM30(+)-300	
	304SS	6.0	721	NB(*)-ICSS-IM45(+)-300	
	304SS	6.0	721	NB(*)-ICSS-IM60(+)-300	
N OMEGA-P™ -N™	XL	1.5	371	NB(*)-NNXL-IM15(+)-300	
	XL	3.0	371	NB(*)-NNXL-IM30(+)-300	
	XL	4.5	371	NB(*)-NNXL-IM45(+)-300	
	XL	6.0	371	NB(*)-NNXL-IM60(+)-300	

Note: PFA coating is available, 204°C max. **Other lengths available; consult Sales Department.
To order with with alternative Stainless Steel Sheaths change "SS" in part number to "310SS", "316SS" or "321SS."

†Specify junction type: E (exposed), G (grounded), U (ungrounded/insulated).

*Insert the numbers "3" to "13" for NB3, NB5, NB6, NB8, NB9, NB11, NB12 or NB13 heads, respectively. Standard process fitting is 1/2" BSPT. For G 1/2 or G 1/4 fittings, add "-G2" or "-G4" to end of model number, no additional charge. for NB6, 8, 9, 11 and 12. There is an in-head 4-20 mA transmitter add -TX to end of part number and specify scaling required.

Ordering Example: NB5-CA310SS-IM60U-300, 150 mm insulated-junction 310 SS probe, Type K, 6 mm, sheath diameter, cast-iron head,