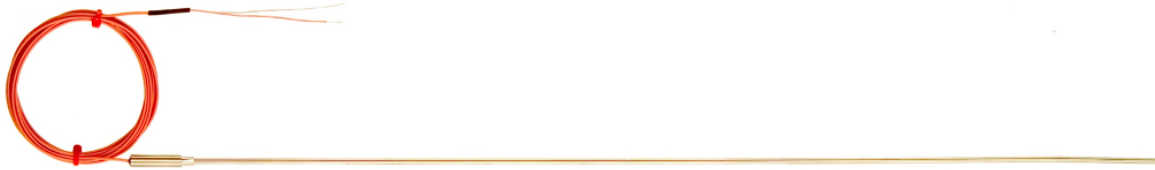


Datasheet

IEC Mineral Insulated Thermocouples – Type ‘N’

Includes 2 metre Teflon lead & tails – Inconel® Alloy 600 or Nicrosil Alloy sheath



- Superior Type ‘N’ Mineral insulated Thermocouple to IEC 584
- Nicrosil/Nisil conductors
- Type ‘N’ recognised for its improved thermal emf stability and higher operating temperature range
- Choice of Inconel® Alloy 600, or Nicrosil Alloy sheath
- 1.5mm or 3.0mm diameters in 500mm probe lengths
- Highly flexible, sheath can be bent/formed to suit many applications and processes
- Insulated hot junction
- Probe temperature range, Inconel® Alloy 600 sheath: -40°C to +1100°C, Nicrosil: -40°C to +1250°C
- Plain pot seal (200°C)
- 2 metre 7/0.2mm PFA Teflon® insulated flat pair cable and tails (colour coded to IEC 584-3)

Specifications

Sensor type:	Type ‘N’ with Nickel Chrome Silicon/Nickel Silicon conductors
Construction:	Flexible mineral insulated probe with a choice of Inconel® Alloy 600, or Nicrosil Alloy sheath, plain pot seal & 2-metre-long extension cable
Sheath composition:	Inconel® Alloy 600 (Nickel, Chromium, Iron) Nicrosil Alloy (Nickel, Chromium, Silicon Alloy)
Element/hot junction:	Single element, hot junction insulated from sheath in order to prevent electrical noise & interference
Termination:	2 metre 7/0.2mm PFA Teflon® insulated flat pair cable with tail wires, colour coded in accordance with IEC 584-3
Probe temperature range:	-40°C to +1100°C (Inconel® Alloy 600 sheath) -40°C to +1250°C (Nicrosil sheath)
Pot seal rating:	200°C

Inconel® Alloy 600:

Excellent oxidation resistance to 1100°C (not suitable for sulphur bearing atmospheres above 550°C)

Typical applications include heat treatment processes, annealing furnaces, chemical reactors, man-made fibre & synthetic material production, steam boilers, paper industry etc.

T/C Type	Probe Dia. (mm)	Probe Length (mm)	Sheath	Cable jacket	Tails: +pos/-neg	Allied Code	RS order Code
N	1.5	500	ALLOY 600	Pink	Pink/White	70646195	611-8286
N	3.0	500	ALLOY 600	Pink	Pink/White	70646196	611-8292

Nicrosil Alloy:

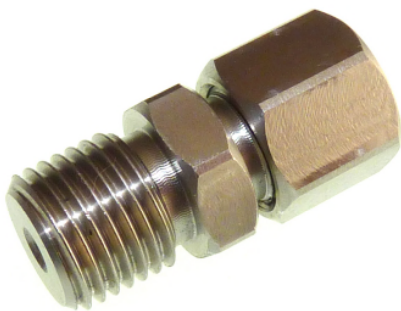
Performs well in oxidising and carburising atmospheres to 1250°C, in addition it will withstand reducing sulphur atmospheres to around 500°C and oxidising sulphur atmospheres to around 800°C

Typical applications include heat treatment furnaces, metal working, glass industry, pottery & ceramic production, brick & tile industry etc.

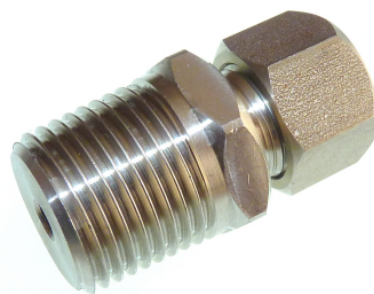
T/C Type	Probe Dia. (mm)	Probe Length (mm)	Sheath	Cable jacket	Tails: +pos/-neg	Allied Code	RS order Code
N	1.5	500	NICROSIL	Pink	Pink/White	70646197	611-8309
N	3.0	500	NICROSIL	Pink	Pink/White	70646198	611-8315

Stainless Steel Compression Glands – Parallel, Tapered & M16 Thread

(BSP, BSPT, M16)



(BSP parallel example - 381-7362, see below for other sizes)



(BSPT tapered example – 286-787, see below for other sizes)

- Thermocouple installation fittings
- To suit a wide range of mineral insulated and other probe type sensors offered by RS
- Male in-line stainless steel compression type with nut & olive
- 1/8", 1/4", & 1/2" BSP parallel or BSPT tapered threads available. 1/2" M16 thread also available.
- Suits 1.0mm, 1.5mm, 3.0mm, 4.0mm, 4.5mm, 6.0mm, 8.0mm, 1/8", 1/4" or 3/16" probe diameters
- Stainless steel locknuts also available (see below)

BSP Parallel:

Type	Thread Size	Thread Type	Suits Probe Ø	Allied code	RS order code
St/Steel	1/8"	BSP Parallel	1.0mm	70654828	804-7975
St/Steel	1/8"	BSP Parallel	1.5mm	70643728	381-7334
St/Steel	1/8"	BSP Parallel	3.0mm	70643729	381-7340
St/Steel	1/8"	BSP Parallel	4.0mm	70657784	839-9566
St/Steel	1/8"	BSP Parallel	4.5mm	70657785	839-9569
St/Steel	1/8"	BSP Parallel	6.0mm	70643730	381-7356
St/Steel	1/8"	BSP Parallel	1/4"		110-4476
St/Steel	1/8"	BSP Parallel	1/8"	70657782	839-9557
St/Steel	1/8"	BSP Parallel	3/16"	70657783	839-9563
St/Steel	1/4"	BSP Parallel	3.0mm	70643731	381-7362
St/Steel	1/4"	BSP Parallel	4.5mm	70657786	839-9572
St/Steel	1/4"	BSP Parallel	6.0mm	70643732	381-7378
St/Steel	1/4"	BSP Parallel	1/4"	70657787	839-9575
St/Steel	1/4"	BSP Parallel	3/16"	70657779	839-9547
St/Steel	1/2"	BSP Parallel	3.0mm	70657788	839-9579
St/Steel	1/2"	BSP Parallel	4.5mm	70657791	839-9588
St/Steel	1/2"	BSP Parallel	6.0mm	70643735	381-7407
St/Steel	1/2"	BSP Parallel	8.0mm	70657789	839-9581

BSPT Tapered:

Type	Thread Size	Thread Type	Suits Probe Ø	Allied code	RS order code
St/Steel	1/8"	BSPT Tapered	1.0mm	70654831	804-7984
St/Steel	1/8"	BSPT Tapered	1.5mm	70637825	286-743
St/Steel	1/8"	BSPT Tapered	3.0mm	70636461	158-610
St/Steel	1/8"	BSPT Tapered	4.5mm	70637826	286-759
St/Steel	1/8"	BSPT Tapered	6.0mm	70657792	839-9591
St/Steel	1/8"	BSPT Tapered	1/4"		110-4475
St/Steel	1/8"	BSPT Tapered	1/8"	70657793	839-9594
St/Steel	1/8"	BSPT Tapered	3/16"	70657794	839-9597
St/Steel	1/4"	BSPT Tapered	3.0mm	70643733	381-7384
St/Steel	1/4"	BSPT Tapered	4.5mm	70657796	839-9604
St/Steel	1/4"	BSPT Tapered	6.0mm	70643734	381-7390
St/Steel	1/4"	BSPT Tapered	1/4"	70657797	839-9608
St/Steel	1/4"	BSPT Tapered	1/8"	70657795	839-9601
St/Steel	1/4"	BSPT Tapered	3/16"	70657790	839-9585
St/Steel	1/2"	BSPT Tapered	3.0mm	70657777	839-9541
St/Steel	1/2"	BSPT Tapered	4.5mm	70637828	286-787
St/Steel	1/2"	BSPT Tapered	6.0mm	70637829	286-793
St/Steel	1/2"	BSPT Tapered	8.0mm	70657780	839-9550

M16

St/Steel	1/2"	M16	3.0mm	70657800	839-9617
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St/Steel	1/2"	M16	6.0mm	70657798	839-9610
St/Steel	1/2"	M16	8.0mm	70657799	839-9614

Stainless Steel locknuts also available:



Thread	Allied code	RS order code
S/Steel 1/8" BSPP	70651759	762-1180
S/Steel 1/4" BSPP	70651760	762-1184
S/Steel 1/2" BSPP	70651762	762-1193

Brass Compression Glands – Parallel, Tapered & NPT Thread

BSP, BSPT & NPT



- Thermocouple installation fittings
- To suit a wide range of mineral insulated and other probe type sensors offered by RS
- Male in-line brass compression type with nut & olive
- 1/8" & 1/4" BSP parallel thread to suit 1.5, 3.0, 4.0, 4.5 & 6.0mm. 3/16 also available.
- 1/2", 1/4" & 1/8" BSPT tapered thread to suit 1.5mm, 3.0mm, 4.5mm, 6.0mm, 1/8" & 3/16"
- Brass locknuts also available

BSPP Parallel:

Type	Thread Size	Thread Type	Suits Probe Ø	Allied code	RS order code
Brass	1/8"	BSP Parallel	1.5mm	70657765	839-9496
Brass	1/8"	BSP Parallel	3.0mm	70643725	381-7277
Brass	1/8"	BSP Parallel	4.0mm	70657764	839-9490
Brass	1/8"	BSP Parallel	4.5mm	70657766	839-9500
Brass	1/8"	BSP Parallel	6.0mm	70657768	839-9507
Brass	1/8"	BSP Parallel	3/16	70657767	839-9503
Brass	1/4"	BSP Parallel	3.0mm	70643727	381-7306
Brass	1/4"	BSP Parallel	4.5mm	70657770	839-9519
Brass	1/4"	BSP Parallel	3/16	70657769	839-9513

BSPT Tapered:

Brass	1/8"	BSPT Tapered	1.5mm	70637822	286-715
Brass	1/8"	BSPT Tapered	3.0mm	70637823	286-721
Brass	1/8"	BSPT Tapered	4.5mm	70637824	286-737
Brass	1/8"	BSPT Tapered	6.0mm	70657773	839-9529
Brass	1/8"	BSPT Tapered	1/8	70657771	839-9522
Brass	1/8"	BSPT Tapered	3/16	70657772	839-9525

Brass	1/4"	BSPT Tapered	3.0mm	70657774	839-9531
Brass	1/4"	BSPT Tapered	6.0mm	70657778	839-9544
Brass	1/4"	BSPT Tapered	1/4mm	70657776	839-9538
Brass	1/4"	BSPT Tapered	3/16	70657775	839-9535
Brass	1/2"	BSPT Tapered	6.0mm	70657781	286-771

NPT

Brass	1/8"	NPT	1.5mm	70657781	839-9553
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Brass locknuts also available:**Thread**

Brass 1/8" BSPP
 Brass 1/4" BSPP
 Brass 1/2" BSPP

Allied code

70651756
 70651757
 70651758

RS order code

762-1171
762-1174
762-1178

