

## Datasheet

**BS Mineral Insulated Thermocouples with Threaded Pot**

Type 'K' with threaded pot &amp; tails – 310 stainless steel or Inconel® Alloy 600 sheath



- Mineral insulated Type 'K' Thermocouple
- Choice of 310 stainless steel or Inconel® Alloy 600 sheath
- Highly flexible, sheath can be bent/formed to suit many applications and processes
- Probe diameters in 1.5, 3.0 & 6.0mm
- Insulated hot junction
- Probe temperature range -40°C to +1100°C
- M8 x 1.0mm fine pitch threaded pot seal
- M8 locknuts available as an option (see below)
- 100mm 7/0.2mm PVC insulated tails, colour coded to former British standard – BS1843-1952
- Conforms to IEC 584-1&2

**Specifications**

Sensor type:	Type 'K' (Nickel Chromium/Nickel Aluminium) to IEC 584-1&2
Construction:	Flexible mineral insulated probe with 310 stainless steel or Inconel® Alloy 600 sheath with M8 x 1.0mm fine pitch threaded pot seal & tails
Element/hot junction:	Single element, junction insulated from sheath (offers protection against electrical noise)
Termination:	7/0.2mm PVC insulated tails x 100mm long, colour coded in accordance with former British standard BS1843-1952 (pos + brown/ neg - blue)
Probe temperature range:	-40°C to +1100°C
Pot seal rating:	105°C max

**310 stainless steel:** Good corrosion & oxidation resistance to suit a wide range of processes, satisfactorily operates in sulphur bearing atmospheres

Typical applications include brick & cement kilns, glass industry, heat treatment & annealing furnaces, power stations, flues, heat exchangers etc.

T/C Type	Probe Dia. (mm)	Probe Length (mm)	Sheath	+Positive tail wire	-Negative tail wire	Allied code	RS order code
K	1.5	500	310SS	Brown	Blue	70636468	<b>159-023</b>
K	1.5	1000	310SS	Brown	Blue	70636469	<b>159-039</b>
K	3.0	500	310SS	Brown	Blue	70636470	<b>159-045</b>
K	3.0	1000	310SS	Brown	Blue	70636471	<b>159-051</b>
K	3.0	2000	310SS	Brown	Blue	70636472	<b>159-067</b>

**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	+Positive tail wire	-Negative tail wire	Allied code	RS order code
K	1.5	500	ALLOY 600	Brown	Blue	70636473	<b>159-095</b>
K	1.5	1000	ALLOY 600	Brown	Blue	70636474	<b>159-102</b>
K	3.0	500	ALLOY 600	Brown	Blue	70636475	<b>159-118</b>
K	3.0	1000	ALLOY 600	Brown	Blue	70636476	<b>159-124</b>
K	3.0	2000	ALLOY 600	Brown	Blue	70636477	<b>159-130</b>
K	6.0	1000	ALLOY 600	Brown	Blue	70636478	<b>159-146</b>
K	6.0	2000	ALLOY 600	Brown	Blue	70636479	<b>159-152</b>

**Optional M8 x 1 fine pitch threaded Locknuts:**

Brass:



**Thread**

Brass M8 x 1mm

**order code**

RS: **762-1162**

Allied: 70651753

Stainless Steel:



**Thread**

S/Steel M8 x 1mm

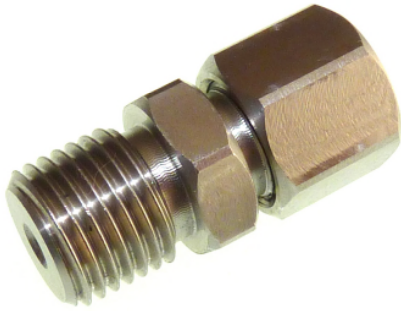
**order code**

RS: **762-1187**

Allied: 70651761

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

**BSPT Tapered:**

Type	Thread Size	Thread Type	Suits Probe Ø	Allied code	RS order code
St/Steel	1/8"	BSPT Tapered	1.0mm	70654831	<b>804-7984</b>
St/Steel	1/8"	BSPT Tapered	1.5mm	70637825	<b>286-743</b>
St/Steel	1/8"	BSPT Tapered	3.0mm	70636461	<b>158-610</b>
St/Steel	1/8"	BSPT Tapered	4.5mm	70637826	<b>286-759</b>
St/Steel	1/8"	BSPT Tapered	6.0mm	70657792	<b>839-9591</b>
St/Steel	1/8"	BSPT Tapered	1/4"		<b>110-4475</b>
St/Steel	1/8"	BSPT Tapered	1/8"	70657793	<b>839-9594</b>
St/Steel	1/8"	BSPT Tapered	3/16"	70657794	<b>839-9597</b>
St/Steel	1/4"	BSPT Tapered	3.0mm	70643733	<b>381-7384</b>
St/Steel	1/4"	BSPT Tapered	4.5mm	70657796	<b>839-9604</b>
St/Steel	1/4"	BSPT Tapered	6.0mm	70643734	<b>381-7390</b>
St/Steel	1/4"	BSPT Tapered	1/4"	70657797	<b>839-9608</b>
St/Steel	1/4"	BSPT Tapered	1/8"	70657795	<b>839-9601</b>
St/Steel	1/4"	BSPT Tapered	3/16"	70657790	<b>839-9585</b>
St/Steel	1/2"	BSPT Tapered	3.0mm	70657777	<b>839-9541</b>
St/Steel	1/2"	BSPT Tapered	4.5mm	70637828	<b>286-787</b>
St/Steel	1/2"	BSPT Tapered	6.0mm	70637829	<b>286-793</b>
St/Steel	1/2"	BSPT Tapered	8.0mm	70657780	<b>839-9550</b>
<b>M16</b>					
St/Steel	1/2"	M16	3.0mm	70657800	<b>839-9617</b>
St/Steel	1/2"	M16	6.0mm	70657798	<b>839-9610</b>
St/Steel	1/2"	M16	8.0mm	70657799	<b>839-9614</b>

**Stainless Steel locknuts also available:**

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

# 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	<b>839-9496</b>
Brass	1/8"	BSP Parallel	3.0mm	70643725	<b>381-7277</b>
Brass	1/8"	BSP Parallel	4.0mm	70657764	<b>839-9490</b>
Brass	1/8"	BSP Parallel	4.5mm	70657766	<b>839-9500</b>
Brass	1/8"	BSP Parallel	6.0mm	70657768	<b>839-9507</b>
Brass	1/8"	BSP Parallel	3/16	70657767	<b>839-9503</b>
Brass	1/4"	BSP Parallel	3.0mm	70643727	<b>381-7306</b>
Brass	1/4"	BSP Parallel	4.5mm	70657770	<b>839-9519</b>
Brass	1/4"	BSP Parallel	3/16	70657769	<b>839-9513</b>

## BSPT Tapered:

Brass	1/8"	BSPT Tapered	1.5mm	70637822	<b>286-715</b>
Brass	1/8"	BSPT Tapered	3.0mm	70637823	<b>286-721</b>
Brass	1/8"	BSPT Tapered	4.5mm	70637824	<b>286-737</b>
Brass	1/8"	BSPT Tapered	6.0mm	70657773	<b>839-9529</b>
Brass	1/8"	BSPT Tapered	1/8	70657771	<b>839-9522</b>
Brass	1/8"	BSPT Tapered	3/16	70657772	<b>839-9525</b>
Brass	1/4"	BSPT Tapered	3.0mm	70657774	<b>839-9531</b>
Brass	1/4"	BSPT Tapered	6.0mm	70657778	<b>839-9544</b>
Brass	1/4"	BSPT Tapered	1/4mm	70657776	<b>839-9538</b>
Brass	1/4"	BSPT Tapered	3/16	70657775	<b>839-9535</b>
Brass	1/2"	BSPT Tapered	6.0mm	70657781	<b>286-771</b>

## NPT

Brass	1/8"	NPT	1.5mm	70657781	<b>839-9553</b>
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## Brass locknuts also available:

Thread	Allied code	RS order code
Brass 1/8" BSPP	70651756	<b>762-1171</b>
Brass 1/4" BSPP	70651757	<b>762-1174</b>
Brass 1/2" BSPP	70651758	<b>762-1178</b>

