

LAIPALLINEN TERMOELEMENTTI

TC10-F

TC10F-14369122

K Tyyppi -40-1200°C 250x12mm DN40 form 2F

- Mittaelementti tyyppille K, J, E, N ja T
- Mitta-alue -40-1200°C
- Hitsattu putki laipalla
- Vaihdeettava mittaosa



TUOTEKUVAUS

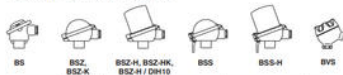
TC10-F sarjan termoelementit on suunniteltu kiinnitettäväksi säiliöihin ja putkistoihin. Saatavilla on standardien DIN EN ja ASME mukaisia laippoja. Nämä lämpötilamittapäät sopivat nestemäisille ja kaasumaisille väliaineille, joita käytetään kohtalaisella mekaanisella kuormalla. Mukana putkimateriaalista valmistettu TW40-mallinen suojatasku.

TEKNISET TIEDOT

Aineen kanssa kosketuksissa olevien osien materiaali	Ruostumaton teräs 316Ti
Asennussyvyys	250 mm
IP-luokka	IP65
Kaulan pituus	0,065 m
Kytinkotelon materiaali	Inconel - 600
Max. käyttölämpötila	1200 °C
Max. painealue	16 bar
Max. termostaatin käyttölämpötila	80 °C
Min. käyttölämpötila	-40 °C
Min. termostaatin käyttölämpötila	-40 °C
Pistokkeen halkaisija	12 mm
Rungon materiaali	Alumiini
Sisähalkaisija	7 mm

Connection head

■ European designs per EN 50446 / DIN 43735



Model	Material	Cable entry thread size	Ingress protection (max.) ¹⁾	Cap	Surface	Connection to neck tube
BS	Aluminum	M20 x 1.5 or 1/4 NPT ¹⁾	IP65, IP68	Flat cap with 2 screws	Blue, lacquered ¹⁾	M24 x 1.5, 1/4 NPT
BS2	Aluminum	M20 x 1.5 or 1/4 NPT ¹⁾	IP65, IP68	Spherical hinged cover with cylinder head screw	Blue, lacquered ¹⁾	M24 x 1.5, 1/4 NPT
BS2-H	Aluminum	M20 x 1.5 or 1/4 NPT ¹⁾	IP65, IP68	Raised hinged cover with cylinder head screw	Blue, lacquered ¹⁾	M24 x 1.5, 1/4 NPT
BS2-H (2x cable outlet)	Aluminum	M20 x 1.5 or 1/4 NPT ¹⁾	IP65	Raised hinged cover with cylinder head screw	Blue, lacquered ¹⁾	M24 x 1.5
BS2-H / DIN19 ¹⁾	Aluminum	M20 x 1.5 or 1/4 NPT ¹⁾	IP65	Raised hinged cover with cylinder head screw	Blue, lacquered ¹⁾	M24 x 1.5, 1/4 NPT
BS5	Aluminum	M20 x 1.5 or 1/4 NPT ¹⁾	IP65	Spherical hinged cover with clamping lever	Blue, lacquered ¹⁾	M24 x 1.5, 1/4 NPT
BS5-H	Aluminum	M20 x 1.5 or 1/4 NPT ¹⁾	IP65	Raised hinged cover with clamping lever	Blue, lacquered ¹⁾	M24 x 1.5, 1/4 NPT
BVS	Stainless steel	M20 x 1.5 ¹⁾	IP65	Precision-cast screw-on lid	Black, electropolished	M24 x 1.5
BS2-K	Plastic	M20 x 1.5 or 1/4 NPT ¹⁾	IP65	Spherical hinged cover with cylinder head screw	Black	M24 x 1.5
BS2-HK	Plastic	M20 x 1.5 or 1/4 NPT ¹⁾	IP65	Raised hinged cover with cylinder head screw	Black	M24 x 1.5

Model	Explosion protection				
	without	Ex (gas) Zone 0, 1, 2	Ex (dust) Zone 20, 21, 22	Ex (gas) Zone 2	Ex (dust) Zone 22
BS	x	x	-	-	-
BS2	x	x	x	x	x
BS2-H	x	x	x	x	x
BS2-H (2x cable outlet)	x	x	x	x	x
BS2-H / DIN19 ¹⁾	x	x	-	-	-
BS5	x	x	-	-	-
BS5-H	x	x	-	-	-
BVS	x	x	-	-	-
BS2-K	x	x	-	-	-
BS2-HK	x	x	-	-	-

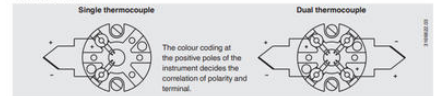
Cable entry



The pictures show examples of connection heads:

Cable entry	Cable entry thread size
Standard cable entry ¹⁾	M20 x 1.5 or 1/4 NPT
Plastic cable gland (cable Ø 6 ... 10 mm) ¹⁾	M20 x 1.5 or 1/4 NPT
Nickel-plated brass cable gland (cable Ø 6 ... 12 mm)	M20 x 1.5 or 1/4 NPT
Stainless steel cable gland (cable Ø 7 ... 12 mm)	M20 x 1.5 or 1/4 NPT
Plain threaded	M20 x 1.5 or 1/4 NPT
2 x M20 x 1.5 ¹⁾	2 x M20 x 1.5
Junction box M12 x 1 (4-pin) ¹⁾	M20 x 1.5
Sealing plugs for transport	M20 x 1.5 or 1/4 NPT

Electrical connection



Protection tube designs in accordance with DIN 43772

Protection tube	Material	Protection tube Ø	Suitable for measuring insert Ø	Connection to head
Straight, form 2F DIN 43772	Stainless steel 1.4571	9 x 1 mm	6 mm	M24 x 1.5 (rotatable threaded connection, male nut)
		11 x 2 mm	8 mm	
		12 x 2.5 mm	8 mm with sleeve Ø 8 mm / 8 mm	
Tapered, form 3F DIN 43772	Stainless steel 1.4571	12 x 2.5 mm, tapered to 9 mm	6 mm	

Protection tube designs in line with DIN 43772, weld-on solid tip

Protection tube	Material	Protection tube Ø	Suitable for measuring insert Ø	Connection to head
Tapered, weld-on solid tip, in line with DIN 43772, non-standard design	Stainless steel 1.4571	9 x 1 mm, tapered to 6 mm	6 mm	M24 x 1.5 (rotatable threaded connection, male nut)
		11 x 2 mm, tapered to 8 mm	8 mm	
		12 x 2.5 mm, tapered to 8 mm	8 mm	

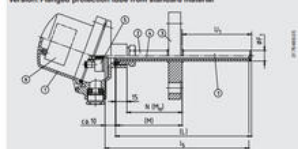
Protection tube designs in line with DIN 43772, wetted parts: special material, glider flange: stainless steel

Protection tube	Material	Protection tube Ø	Suitable for measuring insert Ø	Connection to head
Straight, in line with form 2F DIN 43772, non-standard design	2.4360 (MonelK505) - stainless steel	13.7 x 2.2 mm	6 mm with sleeve Ø 8 mm / 8 mm	M24 x 1.5 (rotatable threaded connection, male nut)
	2.4819 (Inconel C716) - stainless steel			
	2.4619 (Inconel C61) - stainless steel			
	3.7036 (Titan Grade 2) - stainless steel			

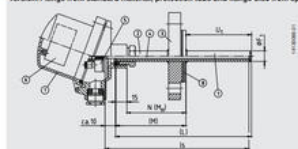
Protection tube designs in line with DIN 43772, tantalum cover with tantalum flange disc, carrier protection tube: stainless steel

Protection tube	Material	Protection tube Ø	Suitable for measuring insert Ø	Connection to head
Straight, in line with form 2F DIN 43772, non-standard design	Tantalum / stainless steel	11 x 2 mm, tantalum cover 12 x 5.4 mm	6 mm	M24 x 1.5 (rotatable threaded connection, male nut)
		15 x 3 mm, tantalum cover 16 x 5.4 mm	8 mm with sleeve Ø 8 mm / 8 mm	
Tapered, in line with form 3F DIN 43772, non-standard design	Tantalum / stainless steel	12 x 2.5 mm, tantalum cover 13 x 5.4 mm	6 mm	

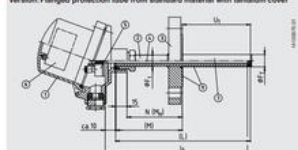
Version: Flanged protection tube from standard material



Version: Flange from standard material, protection tube and flange disc from special materials



Version: Flanged protection tube from standard material with tantalum cover



- Legend:
- 1) Connection head
 - 2) Neck tube
 - 3) Measuring insert (TC10-A)
 - 4) Tantalum (black/transparent) support
 - 5) Transmitter (padding)
 - 6) Protection tube
 - 7) Flange disc from special material
 - 8) Tantalum cover
- L) Overall length of protection tube
L1) Measuring insert length
L2) Protection tube insertion length, in accordance with DIN 43772
L3) Protection tube diameter
L4) Outer diameter of tantalum cover
L5) Neck length
L6) Neck tube length