

VASTUSLÄMPÖTILA-ANTURI LAIPALLA

TR10-F

TR10F-14369107

PT100 3-johdin -50-500°C 250x9 DN25 form2F

- Mittausalueet -196-600°C
- Vaihdeettava mittaosa
- Atex optiolla
- Saatavana lämpötilälähtettimeillä
- Laipallisella TW40 suojaputkella



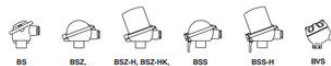
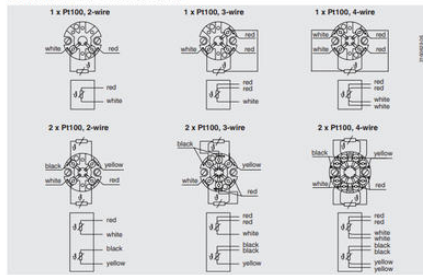
TUOTEKUVAUS

TR10-F sarjan vastuslämpötila-anturit on suunniteltu kiinnitettäväksi säiliöihin ja putkistoihin. Saatavilla on standardien DIN EN ja ASME mukaisia laippoja. Nämä lämpötilamittapääät sopivat nestemäisille ja kaasumaisille väliaineille, joita käytetään kohtalaisella mekaanisella kuormalla. Mukana putkimateriaalista valmistettu TW40-mallinen suojatasku.

TEKNISEET 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	500 °C
Max. painealue	16 bar
Max. ympäristön lämpötila	80 °C
Min. käyttölämpötila	-50 °C
Min. ympäristön lämpötila	-40 °C
Pistokkeen halkaisija	9 mm
Pituus	340 mm
Rungon materiaali	Alumiini

Electrical connection (colour code per IEC/EN 60719)



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

Model	Explosion protection	Ex I (gpa)	Ex I (dust)	Ex II (gpa)	Ex II (dust)
BS	X	X	-	-	-
BSZ	X	X	X	X	X
BSZ-H (2x cable outlet)	X	X	X	X	X
BSZ-H / DIN19	X	X	-	-	-
BSS	X	X	-	-	-
BSS-H	X	X	-	-	-
IVS	X	X	-	-	-
BSZ-K	X	X	-	-	-
BSZ-HK	X	X	-	-	-

Cable entry



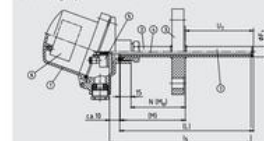
The pictures show examples of connection heads.

Cable entry	Cable entry thread size
Standard cable entry	M20 x 1.5 or 1/2 NPT
Plastic cable gland (cable Ø 6 ... 16 mm)	M20 x 1.5 or 1/2 NPT
Nickel-plated brass cable gland (cable Ø 6 ... 12 mm)	M20 x 1.5 or 1/2 NPT
Stainless steel cable gland (cable Ø 7 ... 12 mm)	M20 x 1.5 or 1/2 NPT
Plain threaded	M20 x 1.5 or 1/2 NPT
2 x M20 x 1.5	2 x M20 x 1.5
Junction box M12 x 1 (4-pin)	M20 x 1.5
Sealing plugs for transport	M20 x 1.5 or 1/2 NPT

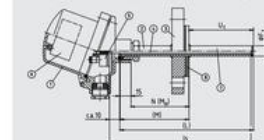
Cable entry	Colour	Ingress protection (max.)	Min./max. ambient temperature	Explosion protection	Ex I (gpa)	Ex I (dust)	Ex II (gpa)	Ex II (dust)
Standard cable entry	Black	IP65	-40 ... +80 °C	X	X	-	-	-
Plastic cable gland	Black or grey	IP65, IP68	-40 ... +80 °C	X	X	-	-	-
Plastic cable gland, Ex e	Light blue	IP65, IP68	-40 ... +80 °C (standard) -40 ... +70 °C (optional)	X	X	-	-	-
Plastic cable gland, Ex e	Black	IP65, IP68	-40 ... +80 °C (standard) -40 ... +70 °C (optional)	X	-	-	X	X
Nickel-plated brass cable gland	Black	IP65, IP68	-40 ... +80 ... +80 °C	X	-	-	-	-
Nickel-plated brass cable gland, Ex e	Black	IP65, IP68	-40 ... +80 ... +80 °C	X	X	X	X	X
Stainless steel cable gland	Black	IP65, IP68	-40 ... +80 ... +80 °C	X	X	X	X	X
Stainless steel cable gland, Ex e	Black	IP65, IP68	-40 ... +80 ... +80 °C	X	X	X	X	X
Plain threaded	-	IP60	-	X	X	X	X	X
2 x M20 x 1.5	-	IP60	-	X	X	X	X	X
Junction box M12 x 1 (4-pin)	-	IP65	-40 ... +80 °C	X	X	X	X	X
Sealing plugs for transport	Transparent	-	-40 ... +80 °C	not applicable, transport protection	-	-	-	-

Components model TR10-F

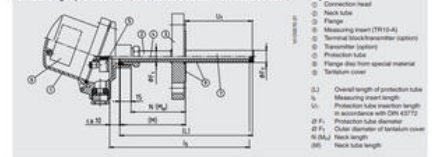
Version: flanged protection tube from standard material



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



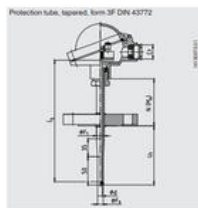
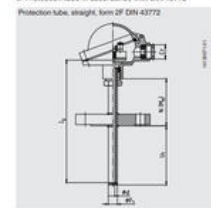
Version: flanged protection tube from standard material with tantalum cover



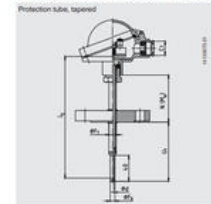
Protection tube

Protection tube designs

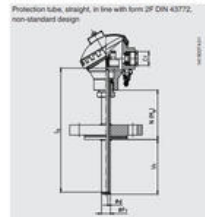
Protection tube, straight, form 3F DIN 43772



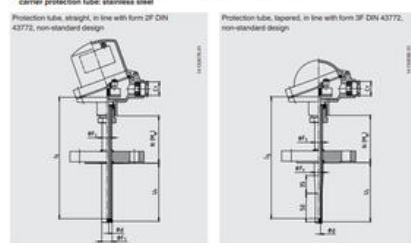
Protection tube in line with DIN 43772, weld-on solid tip



Protection tube in line with DIN 43772, welded parts from special material, girder flange: stainless steel



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



Protection tube designs in accordance with DIN 43772

Protection tube	Material	Protection tube Ø	Suitable for measuring insert Ø	Connection to head
Straight, form 3F DIN 43772	Stainless steel 1.4371	9 x 1 mm 11 x 2 mm 12 x 2.5 mm	6 mm 8 mm 8 mm with sleeve Ø 8 mm / 8 mm	M24 x 1.5 (available) Pneumatic connection, male nut
Tapered, form 3F DIN 43772	Stainless steel 1.4371	12 x 2.5 mm, tapered to 9 mm	6 mm	M24 x 1.5 (available) Pneumatic connection, male nut

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 1.4371	9 x 1 mm, tapered to 6 mm 11 x 2 mm, tapered to 6 mm 12 x 2.5 mm, tapered to 6 mm	3 mm	M24 x 1.5 (available) Pneumatic connection, male nut

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

Protection tube	Material	Protection tube Ø	Suitable for measuring insert Ø	Connection to head
Straight, in line with form 3F DIN 43772, non-standard design	2.406 (MonelK500) / stainless steel 2.4819 (Inconel C718) / stainless steel 2.4810 (Inconel C4) / stainless steel 3.7035 (Titan Grade 5) / stainless steel	13.7 x 2.2 mm	6 mm with sleeve Ø 8 mm / 8 mm	M24 x 1.5 (available) Pneumatic connection, male nut

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 3F DIN 43772, non-standard design	Tantalum / stainless steel	11 x 2 mm, tantalum cover 12 x 0.4 mm 15 x 3 mm, tantalum cover 18 x 0.4 mm	6 mm 8 mm with sleeve Ø 8 mm / 8 mm	M24 x 1.5 (available) Pneumatic connection, male nut
Tapered, in line with form 3F DIN 43772, non-standard design	Tantalum / stainless steel	12 x 2.5 mm, tantalum cover 13 x 0.4 mm	6 mm	M24 x 1.5 (available) Pneumatic connection, male nut

Legend:
L1: Measuring insert length
L2: Rack tube length
C: Thread cable entry
Ø P: Protection tube diameter

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