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RESISTANSGIVARE MED FLÄNSAT DYKRÖR TW40

Serie TR10-F

TR10F-14369107
PT100 3-tråd -50-500°C 250x9 DN25 form2F

- Mätområden från -196 till 600°C
- Utbytbar mätinsats
- Option: ATEX-klassning
- Option: 4-20mA utsignal
- Sammanfogat dykrör TW40 med fläns

PRODUKTBESKRIVNING

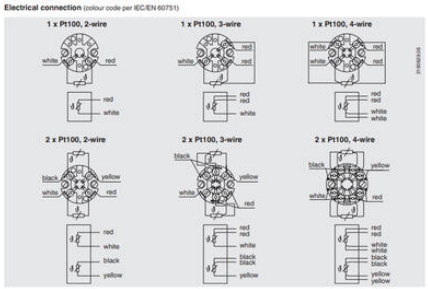
Serie TR10-F är optimal för temperaturmätning i kärl och rörledningar med vätska eller gaser. Standardflänsar enligt DIN EN eller ASME är tillgängliga. Insticksröret är svetsat mot huset, rostfritt stål funkar utmärkt under kemiska förhållanden, medans en beläggning rekommenderas vid aggressiv media. Den utbytbara mätinsatsen kan tas bort utan att hela givaren behöver kopplas från processen, vilket gör att inspektion, övervakning och service blir enkelt. En bred variantion av instickslängder, flänsstorlekar, dykrörs-designer och sensorhuvuden gör att varje termoelementet passar varje applikation.
Som option finns möjlighet att få givaren med en analog eller digital transmitter installerad.

Beställningsnyckel:
- Godkännanden?
- Antädningsskydd?
- Fler godkännanden/cert?
- Sensortyp?
- Noggrannhet?
- Mätområde?
- Modell på huset?
- Kabelingång + storlek?
- Ev transmitter?
- Anslutning dykrör?
- Material dykrör?
- Dykrör storlek?
- Storlek fläns?
- Processanslutning?
- Instickslängd?

TEKNISK DATA

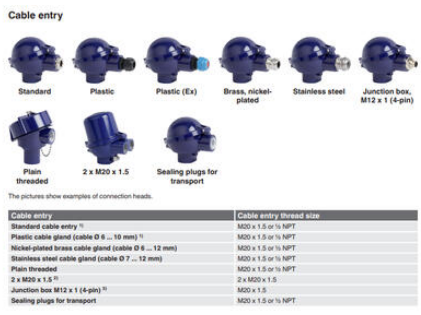
Anslutning	Form 2F, rakt instick
Elektrisk anslutning	M20x1,5
Innerdiameter	7 mm
Insticksdiameter	9 mm

Instickslängd	250 mm
IP-klass	IP65
Längd	340 mm
Material Givarkropp	Inconel - 600
Material Hus	Aluminium
Material Mediaberörda delar	Rostfritt stål 316Ti
Mätprincip	Pt100 3-tråd
Mätsensor	Tunnfilmssensor
Nacklängd	0,065 m
Noggrannhet	Klass B enl. IEC 60751
Omgivningstemperatur från	-40 °C
Omgivningstemperatur till	80 °C
Processanslutning	Fläns DN25 DIN2526/2527
Temperaturområde från	-50 °C
Temperaturområde till	500 °C
Trycktålighet max	16 bar
Övrigt	BSZ hus



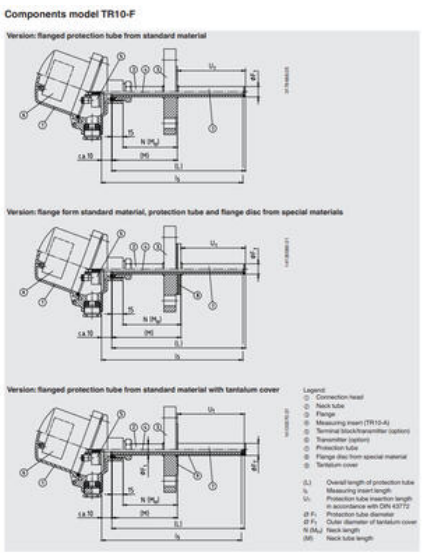
Model	Material	Cable entry thread size	Ingress protection (max.) [1]	Cap	Surface	Connection to neck tube
BS	Aluminium	M20 x 1.5 or ½ NPT [1]	IP65, IP68	Flat cap with 2 screws	Blue, lacquered [4]	M24 x 1.5, ½ NPT
BSZ	Aluminium	M20 x 1.5 or ½ NPT [1]	IP65, IP68	Spherical hinged cover with cylinder head screw	Blue, lacquered [4]	M24 x 1.5, ½ NPT
BSZ-H	Aluminium	M20 x 1.5 or ½ NPT [1]	IP65, IP68	Raised hinged cover with cylinder head screw	Blue, lacquered [4]	M24 x 1.5, ½ NPT
BSZ-H (2x cable outlet)	Aluminium	2 x M20 x 1.5 or 2 x ½ NPT [1]	IP65, IP68	Raised hinged cover with cylinder head screw	Blue, lacquered [4]	M24 x 1.5
BSZ-H / DIH10 [2]	Aluminium	M20 x 1.5 or ½ NPT [1]	IP65	Raised hinged cover with cylinder head screw	Blue, lacquered [4]	M24 x 1.5, ½ NPT
BSS	Aluminium	M20 x 1.5 or ½ NPT [1]	IP65	Spherical hinged cover with clamping lever	Blue, lacquered [4]	M24 x 1.5, ½ NPT
BSS-H	Aluminium	M20 x 1.5 or ½ NPT [1]	IP65	Raised hinged cover with clamping lever	Blue, lacquered [4]	M24 x 1.5, ½ NPT
BVS	Stainless steel	M20 x 1.5 [1]	IP65	Precision-cast screw-on lid	Blank, electropolished	M24 x 1.5
BSZ-K	Plastic	M20 x 1.5 or ½ NPT [1]	IP65	Spherical hinged cover with cylinder head screw	Black	M24 x 1.5
BSZ-HK	Plastic	M20 x 1.5 or ½ NPT [1]	IP65	Raised hinged cover with cylinder head screw	Black	M24 x 1.5

Model	Explosion protection				
	Without	Ex i (gas) Zone 0, 1, 2	Ex i (dust) Zone 20, 21, 22	Ex nA (gas) Zone 2	Ex tc (dust) Zone 22
BS	x	x	-	-	-
BSZ	x	x	x	x	x
BSZ-H	x	x	x	x	x
BSZ-H (2x cable outlet)	x	x	x	x	x
BSZ-H / DIH10 [2]	x	x	-	-	-
BSS	x	x	-	-	-
BSS-H	x	x	-	-	-
BVS	x	x	-	-	-
BSZ-K	x	x	-	-	-
BSZ-HK	x	x	-	-	-



Cable entry	Cable entry thread size
Standard cable entry [1]	M20 x 1.5 or ½ NPT
Plastic cable gland (cable Ø 6 ... 10 mm) [1]	M20 x 1.5 or ½ NPT
Nickel-plated brass cable gland (cable Ø 8 ... 12 mm)	M20 x 1.5 or ½ NPT
Stainless steel cable gland (cable Ø 7 ... 12 mm)	M20 x 1.5 or ½ NPT
Plain threaded	M20 x 1.5 or ½ 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 ½ NPT

Cable entry	Colour	Ingress protection (max.)	Min./max. ambient temperature	Explosion protection				
				without	Ex i (gas) Zone 0, 1, 2	Ex i (dust) Zone 20, 21, 22	Ex nA (gas) Zone 2	Ex tc (dust) Zone 22
Standard cable entry [1]	Blank	IP65	-40 ... +80 °C	x	x	-	-	-
Plastic cable gland [1]	Black or grey	IP66, IP68	-40 ... +80 °C	x	-	-	-	-
Plastic cable gland, Ex e [1]	Light blue	IP66, IP68	-20 ... +80 °C (standard) -40 ... +70 °C (option)	x	x	x	-	-
Plastic cable gland, Ex e [1]	Black	IP66, IP68	-20 ... +80 °C (standard) -40 ... +70 °C (option)	x	-	-	x	x
Nickel-plated brass cable gland	Blank	IP66, IP68	-50 [1] / -40 ... +80 °C	x	-	-	-	-
Nickel-plated brass cable gland, Ex e	Blank	IP66, IP68	-50 [1] / -40 ... +80 °C	x	x	x	x	x
Stainless steel cable gland	Blank	IP66, IP68	-50 [1] / -40 ... +80 °C	x	x	x	-	-
Stainless steel cable gland, Ex e	Blank	IP66, IP68	-50 [1] / -40 ... +80 °C	x	x	x	x	x
Plain threaded	-	IP00	-	x	x	x [1]	x [1]	x [1]
2 x M20 x 1.5 [1]	-	IP00	-	x	x	x [1]	x [1]	x [1]
Junction box M12 x 1 (4-pin) [1]	-	IP65	-40 ... +80 °C	x	x [1]	x [1]	-	-
Sealing plugs for transport	Transparent	-	-40 ... +80 °C	not applicable, transport protection				

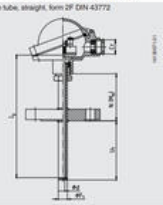


Protection tube

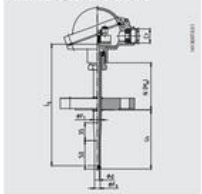
Protection tube designs

■ **Protection tube in accordance with DIN 43772**

Protection tube, straight, form 2F DIN 43772

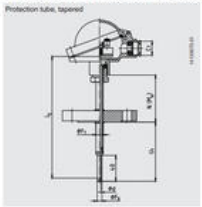


Protection tube, tapered, form 3F DIN 43772



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

Protection tube, tapered

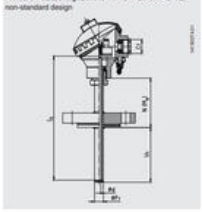


Legend:

U_1	Insertion length	$\varnothing F_2$	Diameter of protection tube tip
l_e	Measuring insert length	$\varnothing F_1$	Outer diameter of tantalum cover
N (N_{el})	Neck length	(L)	Overall length of protection tube
C_1	Thread cable entry	$\varnothing d$	Measuring insert diameter
$\varnothing F_3$	Protection tube diameter		

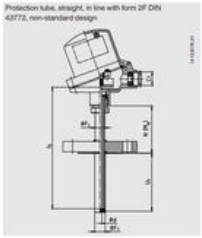
■ **Protection tube in line with DIN 43772, wetted parts from special material, girder flange: stainless steel**

Protection tube, straight, in line with form 2F DIN 43772, non-standard design



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

Protection tube, straight, in line with form 2F DIN 43772, non-standard design



Protection tube, tapered, in line with form 3F DIN 43772, non-standard design

Legend:

U_1	Insertion length	$\varnothing F_2$	Diameter of protection tube tip
l_e	Measuring insert length	$\varnothing F_1$	Outer diameter of tantalum cover
N (N_{el})	Neck length	(L)	Overall length of protection tube
C_1	Thread cable entry	$\varnothing d$	Measuring insert diameter
$\varnothing F_3$	Protection tube diameter		

The pictures show examples of connection heads.

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 11 x 2 mm 12 x 2.5 mm	6 mm	M24 x 1.5 (rotatable threaded connection, male nut)
		14 x 2.5 mm	6 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	4 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	8 x 1 mm, tapered to 8 mm 11 x 2 mm, tapered to 6 mm 12 x 2.5 mm, tapered to 6 mm	3 mm	M24 x 1.5 (rotatable threaded connection, male nut)

Protectio tube designs in line with DIN 43772, wetted 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 2F DIN 43772, non-standard design	2.4360 (Monel400) / stainless steel 2.4819 (Hastelloy C276) / stainless steel 2.4610 (Hastelloy C4) / stainless steel 3.7035 (Titan Grade 2) / 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)

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 0.4 mm	6 mm	M24 x 1.5 (rotatable threaded connection, male nut)
		15 x 3 mm, tantalum cover 16 x 0.4 mm	6 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 0.4 mm	6 mm	