



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 variation 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:

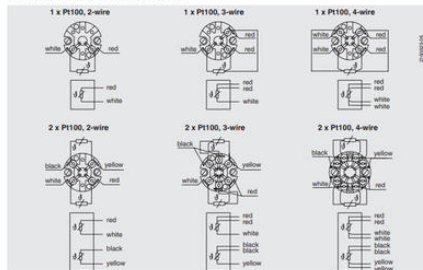
- Godkännanden?
- Antädningskydd?
- Fler godkännanden/cert?
- Sensortyp?
- Noggrannhet?
- Mätområde?
- Modell på huset?
- Kabelingång + storlek?
- Ev transmitter?
- Anslutning dykrör?
- Material dykrör?
- Dykrör storlek?
- Storlek fläns?
- Processanslutning?
- Instickslängd?

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	Tunnnfilmssensor
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

Electrical connection (colour code per IEC/EN 60751)



Model	Material	Cable entry thread size	Ingress protection (max.)	Cap	Surface	Connection to neck tube
BS	Aluminium	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	Aluminium	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	Aluminium	M20 x 1.5 or 1/2 NPT	IP65, IP68	Raised hinged cover with cylinder head screw	Blue, lacquered	M24 x 1.5, 1/2 NPT
BSZ-H (2x cable outlet)	Aluminium	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 / DH10	Aluminium	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	Aluminium	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	Aluminium	M20 x 1.5 or 1/2 NPT	IP65	Raised hinged cover with clamping lever	Blue, lacquered	M24 x 1.5, 1/2 NPT
BVS	Stainless steel	M20 x 1.5	IP65	Flange-cast 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

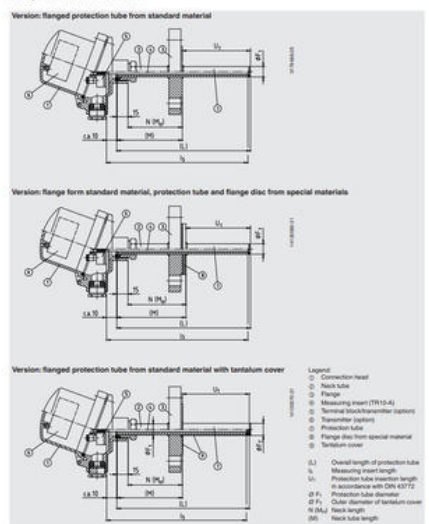
Model	Explosion protection				
	Without	Ex I (gas) Zone 0, 1, 2	Ex I (dust) Zone 20, 21, 22	Ex nA (gas) Zone 2	Ex tc (dust) Zone 22
BS	X	X	-	-	-
BSZ	X	X	X	X	X
BSZ-H	X	X	X	X	X
BSZ-H (2x cable outlet)	X	X	X	X	X
BSZ-H / DH10	X	X	-	-	-
BSS	X	X	-	-	-
BSS-H	X	X	-	-	-
BVS	X	X	-	-	-
BSZ-K	X	X	-	-	-
BSZ-HK	X	X	-	-	-

Cable entry



Cable entry	Colour	Ingress protection (max.)	Min./max. ambient temperature	Explosion protection
Standard cable entry	Black	IP65	-40 ... +80 °C	X
Plastic cable gland	Black or grey	IP65, IP68	-40 ... +80 °C	X
Plastic cable gland, Ex e	Light blue	IP65, IP68	-20 ... +80 °C (standard) -40 ... +70 °C (optional)	X
Plastic cable gland, Ex n	Black	IP65, IP68	-20 ... +80 °C (standard) -40 ... +70 °C (optional)	X
Nickel-plated brass cable gland, Ex e	Black	IP65, IP68	-40 °C / -40 ... +80 °C	X
Nickel-plated brass cable gland, Ex n	Black	IP65, IP68	-40 °C / -40 ... +80 °C	X
Stainless steel cable gland	Black	IP65, IP68	-40 °C / -40 ... +80 °C	X
Stainless steel cable gland, Ex e	Black	IP65, IP68	-40 °C / -40 ... +80 °C	X
Stainless steel cable gland, Ex n	Black	IP65, IP68	-40 °C / -40 ... +80 °C	X
2 x M20 x 1.5	-	IP60	-	X
Junction box M12 x 1 (4-pin)	-	IP65	-40 ... +80 °C	X
Sealing plugs for transport	Transparent	-	-40 ... +80 °C	not applicable, transport protection

Components model TR10-F

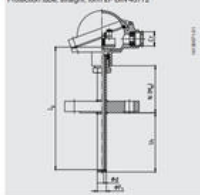


Protection tube

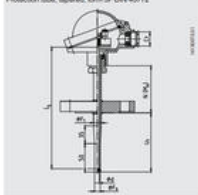
Protection tube designs

■ Protection tube in accordance with DIN 43772

Protection tube, straight, form 2F DIN 43772

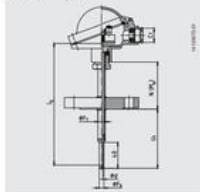


Protection tube, tapered, form 3F DIN 43772



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

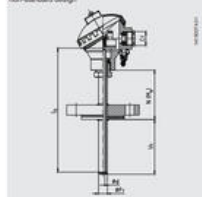
Protection tube, tapered



Legend:
 L Insertion length
 Lm Measuring insert length
 Lh Hook length
 Lc Overall length of protection tube
 D Measuring insert diameter
 Dm Diameter of protection tube tip
 Dm Outer diameter of tantalum cover
 Dm Overall length of protection tube
 Dm Thread cable entry
 Dm Protection tube diameter

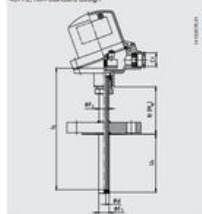
■ Protection tube in line with DIN 43772, wetted parts from special material, girth flange: stainless steel

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

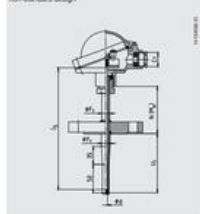


■ Protection tube in line with DIN 43772, tantalum cover with tantalum flange disc, center protection tube: stainless steel

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:
 L Insertion length
 Lm Measuring insert length
 Lh Hook length
 Lc Overall length of protection tube
 D Measuring insert diameter
 Dm Diameter of protection tube tip
 Dm Outer diameter of tantalum cover
 Dm Overall length of protection tube
 Dm Thread cable entry
 Dm 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	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 6 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 8 mm	3 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 6 mm	8 mm	

Protection tube designs in line with DIN 43772, wetted parts: special material, girth 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 (MonelK500) / stainless steel 2.4819 (Inconel C276) / stainless steel 2.4619 (Hastelloy C4) / stainless steel 3.7555 (Titan Grade 2) / stainless steel	13.7 x 2.2 mm	6 mm with sleeve Ø 6 mm / 8 mm	M24 x 1.5 (rotatable threaded connection, male nut)
Tapered, in line with form 3F DIN 43772, non-standard design	Tantalum / stainless steel	12 x 2.5 mm, tapered to 9 mm	6 mm	

Protection tube designs in line with DIN 43772, tantalum cover with tantalum flange disc,

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 / 15 x 3 mm, tantalum cover 10 x 0.4 mm	6 mm with sleeve Ø 6 mm / 8 mm	M24 x 1.5 (rotatable threaded 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	