

MODSTANDSFØLERE MED FLANGE TW40

Serie TR10-F

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

- Måleområde fra -196 til 600°C
- Udskiftelig måleindsats
- Option: ATEX-klassificering
- Option: 4-20mA udgangssignal
- Sammenføjet dyklomme TW40 med flange



PRODUKTBESKRIVELSE

Serie TR10-F er optimal til temperaturmåling i beholdere og rørledninger med væske eller gasser. Standardflanger i henhold til DIN EN eller ASME er tilgængelige. Beskyttelsesrøret svejses og skrues ind i tilslutningshovedet. Beskyttelsesrør i rustfrit stål er egnede til normale kemiske forhold. Som ekstraudstyr anbefales en belægning mod kemisk aggressive medier eller en slidbestandig belægning mod slibende medier.

Den udskiftelige måleindsats kan fjernes, uden at man behøver at tage hele sensoren tages ud af processen, hvilket gør inspektion, overvågning og service let.

Et bredt udvalg af indsatslængder, flangestørrelser, beskyttelsesrør og sensorhoveder gør hver føler velegnet til enhver anvendelse. Som option er det muligt at få føleren med en analog eller digital transmitter installeret.

Bestillingsnøgle:

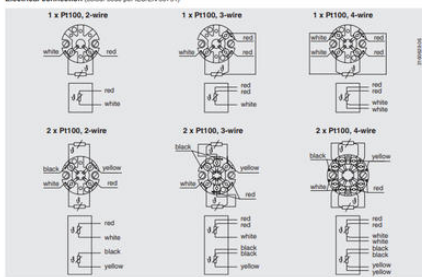
- Godkendelser?
- Anti-korrosionsbeskyttelse?
- Flere godkendelser / certifikater?
- Sensortype?
- Nøjagtighed?
- Måleområde?
- Model på huset?
- Kabelindgang + størrelse?
- Evt. transmitter?
- Tilslutnings halsrør?
- Halsrørslængde?
- Procesforbindelse?
- Indstikslængde?
- Diameter måleindsatsen?
- Materiale måleindsats?

SPECIFIKATIONER

Indstikslængde	250 mm
Inside diameter	7 mm
IP-klasse	IP65
Længde	340 mm

Material Sensor Body	Inconel - 600
Materiale hus	Aluminium
Materiale medieberørte del	Rustfrit stål 316Ti
Neck length	0,065 m
Omgivelsestemperatur fra	-40 °C
Omgivelsestemperatur til	80 °C
Plug diameter	9 mm
Temperaturområde fra	-50 °C
Temperaturområde til	500 °C
Trykmodstand max	16 bar

Electrical connection (colour code per IEC-EN 60751)



Model	Material	Cable entry thread size	Ingress protection (max)	Cup	Surface	Connection to neck tube
BS	Aluminium	M20 x 1.5 or 1/4 NPT	IP65, IP68	Flat cap with 2 screws	Blue, lacquered	M24 x 1.5, 1/4 NPT
BSZ	Aluminium	M20 x 1.5 or 1/4 NPT	IP65, IP68	Spherical hinged cover with cylinder head screw	Blue, lacquered	M24 x 1.5, 1/4 NPT
BSZ-H	Aluminium	M20 x 1.5 or 1/4 NPT	IP65, IP68	Raised hinged cover with cylinder head screw	Blue, lacquered	M24 x 1.5, 1/4 NPT
BSZ-H (2x cable outlet)	Aluminium	2 x M20 x 1.5 or 2 x 1/4 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 1/4 NPT	IP65	Raised hinged cover with cylinder head screw	Blue, lacquered	M24 x 1.5, 1/4 NPT
BSS	Aluminium	M20 x 1.5 or 1/4 NPT	IP65	Spherical hinged cover with clamping lever	Black, electropolished	M24 x 1.5, 1/4 NPT
BSS-H	Aluminium	M20 x 1.5 or 1/4 NPT	IP65	Raised hinged cover with clamping lever	Blue, lacquered	M24 x 1.5, 1/4 NPT
BVS	Stainless steel	M20 x 1.5	IP65	Physion-clad screw-on lid	Black, electropolished	M24 x 1.5
BSZ-K	Plastic	M20 x 1.5 or 1/4 NPT	IP65	Spherical hinged cover with cylinder head screw	Black	M24 x 1.5
BSZ-HK	Plastic	M20 x 1.5 or 1/4 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 3	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

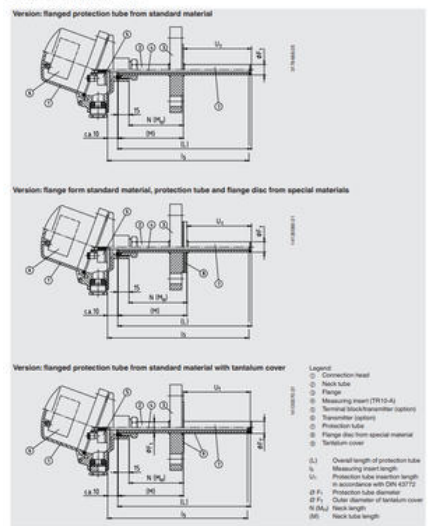


The pictures show examples of connection heads.

Cable entry	Cable entry thread size
Standard cable entry	M20 x 1.5 or 1/4 NPT
Plastic cable gland (cable Ø 6 - 10 mm)	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	2 x M20 x 1.5
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 1/4 NPT

Cable entry	Colour	Ingress protection (max)	Min./max. ambient temperature	Explosion protection			
				without	Ex I (Zone 0, Zone 1, 2)	Ex nA (Zone 3)	Ex tc (Zone 22)
Standard cable entry	Black	IP65	-40 - +80 °C	x	x	-	-
Plastic cable gland	Black or IP68	IP68	-40 - +80 °C	x	-	-	-
Plastic cable gland, Ex	Light blue	IP68	20 - +80 °C (standard) -40 - +75 °C (optional)	x	x	-	-
Plastic cable gland, Ex	Black	IP68	20 - +80 °C (standard) -40 - +75 °C (optional)	x	-	x	x
Nickel-plated brass cable gland	Black	IP68	-50 °C / -40 - +80 °C	x	-	-	-
Nickel-plated brass cable gland, Ex	Black	IP68	-50 °C / -40 - +80 °C	x	x	x	x
Stainless steel cable gland	Black	IP68	-50 °C / -40 - +80 °C	x	x	-	-
Stainless steel cable gland, Ex	Black	IP68	-50 °C / -40 - +80 °C	x	x	x	x
Plain threaded	-	IP00	-	x	x	x	x
2 x M20 x 1.5	-	IP00	-	x	x	x	x
Junction box M12 x 1 (4-pin)	-	IP65	-40 - +80 °C	x	x	-	-
Sealing plugs for transport	Transparent	-	-40 - +80 °C	-	-	-	-

Components model TR10-F

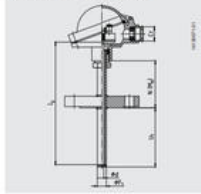


Protection tube

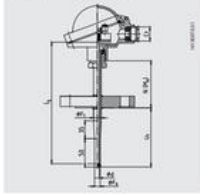
Protection tube designs

■ Protection tube in accordance with DIN 43772

Protection tube, straight, form 3F DIN 43772

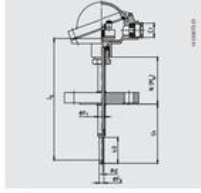


Protection tube, tapered, form 3F DIN 43772



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

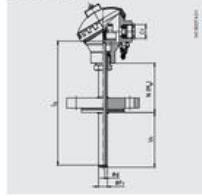
Protection tube, tapered



- Legend:
- L1 Insertion length
 - L2 Measuring insert length
 - L3 Back length
 - L4 Thread tube entry
 - L5 Protection tube diameter
 - Ø F1 Diameter of protection tube tip
 - Ø F2 Outer diameter of tantalum cover
 - Ø L Overall length of protection tube
 - Ø S Measuring insert diameter

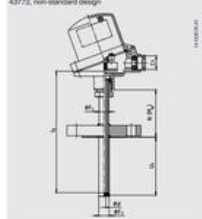
■ Protection tube in line with DIN 43772, wetted parts from special material, grinder flange: stainless steel

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

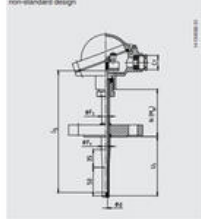


■ Protection tube in line with DIN 43772, tantalum cover with tantalum flange disc, carrier protection tube: stainless steel

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



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



- Legend:
- L1 Insertion length
 - L2 Measuring insert length
 - L3 Back length
 - L4 Thread tube entry
 - L5 Protection tube diameter
 - Ø F1 Diameter of protection tube tip
 - Ø F2 Outer diameter of tantalum cover
 - Ø L Overall length of protection tube
 - Ø S Measuring insert 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 3F DIN 43772	Stainless steel 1.4571	9 x 1 mm	6 mm	M24 x 1.5 (possible 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	3 mm	M24 x 1.5 (possible threaded connection, male nut)
		11 x 2 mm, tapered to 6 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, grinder 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	3.456 (Austenitic) / stainless steel 2.4819 (Austenitic C276) / stainless steel 2.4615 (Martensitic C4) / stainless steel 3.700 (Titan Grade 2) / stainless steel	13.2 x 2.2 mm	8 mm with sleeve Ø 8 mm	M24 x 1.5 (possible threaded connection, male nut)
		11 x 2 mm	8 mm	
		12 x 2.5 mm	8 mm	

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 2.4 mm	8 mm	M24 x 1.5 (possible threaded connection, male nut)
		15 x 3 mm, tantalum cover 16 x 3.4 mm	8 mm with sleeve Ø 8 mm / 8 mm	
		12 x 2.5 mm, tantalum cover 13 x 3.4 mm	8 mm	