Dopyt

SNÍMAČE TEPLOTY

Séria TR10-B

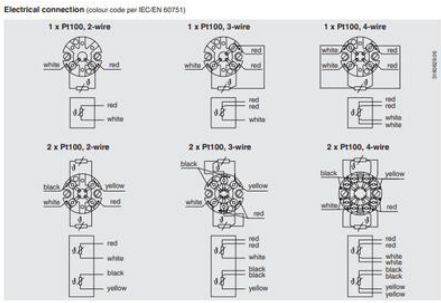
TR10B-14364745
PT100 2-trád -50-500°C 150x6mm G1/2 NL=50mm

- PT100, PT1000
- Teplota -196 až 600°C
- Pripojenie M, NPT
- Médiá voda, plyny, oleje
- ATEX, IECEx, SIL2, DNV GL

POPIS PRODUKTU

ŠPECIFIKÁCIA

Insertion length	150 mm
Materiál kontaktnej časti	Nerezová oceľ 316Ti
Materiál tela	Hliník
Neck length	0,05 m
Plug diameter	6 mm
Prevádzková teplota max.	500 °C
Prevádzková teplota min.	-50 °C
Teplota okolia do	80 °C
Teplota okolia od	-40 °C
Trieda krytia	IP65



Connection head

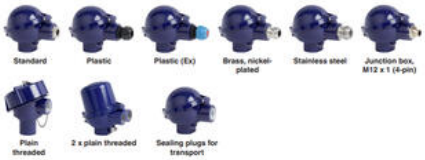
■ **European designs per EN 50446 / DIN 43735**

BS | BSZ, BSZ-K | BSZ-H, BSZ-HK, BSZ-H / DIH10 | BSS | BSS-H | BVS

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 [2]	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 [2]	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 [2]	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 [2]	IP65, IP68	Raised hinged cover with cylinder head screw	Blue, lacquered [4]	M24 x 1.5
BSZ-H / DIH10 [3]	Aluminium	M20 x 1.5 or ½ NPT [2]	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 [2]	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 [2]	IP65	Raised hinged cover with clamping lever	Blue, lacquered [4]	M24 x 1.5, ½ NPT
BVS	Stainless steel	M20 x 1.5 [2]	IP65	Precision-cast screw cap	Blank, electropolished	M24 x 1.5
BSZ-K	Plastic	M20 x 1.5 or ½ NPT [2]	IP65	Spherical hinged cover with cylinder head screw	Black	M24 x 1.5
BSZ-HK	Plastic	M20 x 1.5 or ½ NPT [2]	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 [3]	x	x	-	-	-
BSS	x	x	-	-	-
BSS-H	x	x	-	-	-
BVS	x	x	-	-	-
BSZ-K	x	x	-	-	-
BSZ-HK	x	x	-	-	-

Cable entry



Standard | Plastic | Plastic (Ex) | Brass, nickel-plated | Stainless steel | Junction box, M12 x 1 (4-pin) | Plain threaded | 2 x plain threaded | Sealing plugs for transport

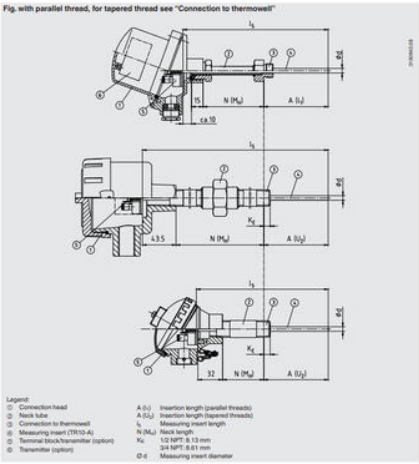
The pictures show examples of connection heads.

Cable entry	Cable entry thread size
Standard cable entry [1]	M20 x 1.5 or ½ NPT
Plastic cable gland (cable Ø 6 ... 12 mm) [1]	M20 x 1.5 or ½ NPT
Nickel-plated brass cable gland (cable Ø 6 ... 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 plain threaded [2]	2 x M20 x 1.5 or 2 x ½ NPT
Junction box M12 x 1 (4-pin) [5]	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	-60 °C / -40 ... +80 °C	x	-	-	-	-
Nickel-plated brass cable gland, Ex e	Blank	IP66, IP68	-60 °C / -40 ... +80 °C	x	x	x	x	x
Stainless steel cable gland	Blank	IP66, IP68	-60 °C / -40 ... +80 °C	x	x	x	-	-
Stainless steel cable gland, Ex e	Blank	IP66, IP68	-60 °C / -40 ... +80 °C	x	x	x	x	x
Plain threaded	-	IP00	-	x	x	x [6]	x [6]	x [6]
2 x plain threaded [2]	-	IP00	-	x	x	x [6]	x [6]	x [6]
Junction box M12 x 1 (4-pin) [5]	-	IP65	-40 ... +80 °C	x	x [7]	x [6]	-	-
Sealing plugs for transport	Transparent	-	-40 ... +80 °C	not applicable, transport protection				

Components model TR10-B

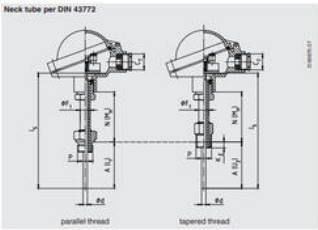
Fig. with parallel thread, for tapered thread see "Connection to thermowell"



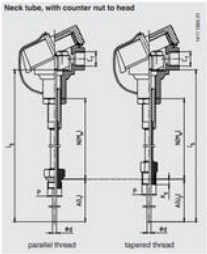
Neck tube

Neck tube designs

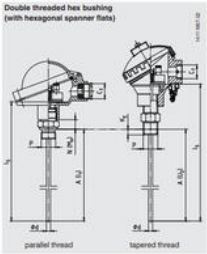
Neck tube per DIN 43772



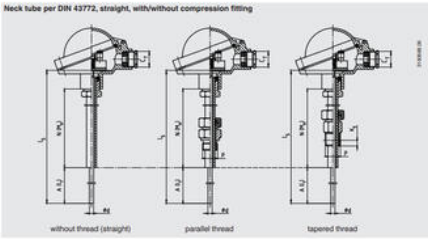
Neck tube, with counter nut to head



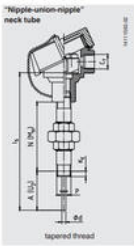
Double threaded hex bushing (with hexagonal spanner flats)



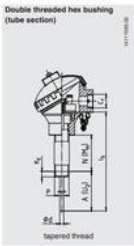
Neck tube per DIN 43772, straight, with/without compression fitting



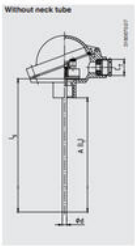
"Nipple-union-nipple" neck tube



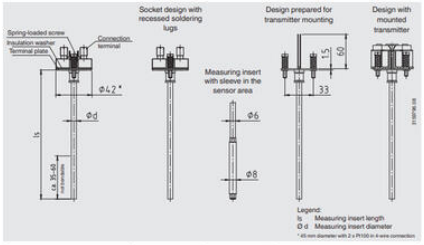
Double threaded hex bushing (tube section)



Without neck tube

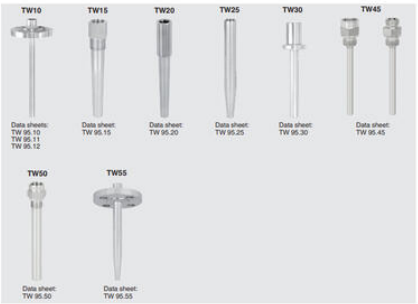


Dimensions in mm

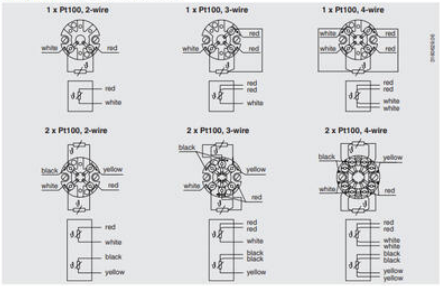


Measuring insert diameter Ø d in mm	Index per DIN 43735		Tolerance in mm	Sheath material	
				Standard design	Recessed soldering lugs
3 [1]	Standard	30	3 ±0.05	1.4571, 316L [1,2]	1.4571
6	Standard	60	6 $^{0}_{-0.1}$	1.4571, 316L [1,2]	1.4571
8 (6 mm with sleeve)	Standard	-	8 $^{0}_{-0.1}$	1.4571	1.4571
8	Standard	80	8 $^{0}_{-0.1}$	1.4571, 316L [1,2]	1.4571

Thermowell selection



Electrical connection (colour code per IEC/EN 60751)



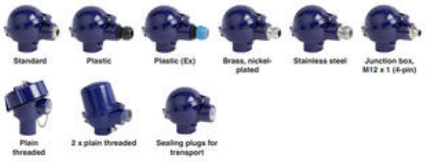
Connection head

■ European designs per EN 50446 / DIN 43735

Model	Material	Cable entry thread size	Ingress protection (max.) [1]	Cap	Surface	Connection to neck tube
BS	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 cap	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



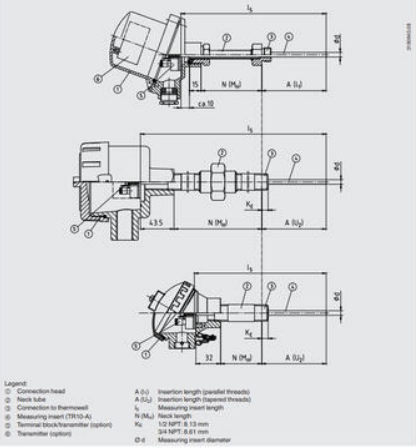
The pictures show examples of connection heads.

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 6 ... 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 plain threaded [2]	2 x M20 x 1.5 or 2 x ½ NPT
Junction box M12 x 1 (4-pin) [3]	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	-60 [4] / -40 ... +80 °C	x	-	-	-	-
Nickel-plated brass cable gland, Ex e	Blank	IP66, IP68	-60 [4] / -40 ... +80 °C	x	x	x	x	x
Stainless steel cable gland	Blank	IP66, IP68	-60 [4] / -40 ... +80 °C	x	x	x	-	-
Stainless steel cable gland, Ex e	Blank	IP66, IP68	-60 [4] / -40 ... +80 °C	x	x	x	x	x
Plain threaded	-	IP00	-	x	x	x [5]	x [5]	x [5]
2 x plain threaded [2]	-	IP00	-	x	x	x [5]	x [5]	x [5]
Junction box M12 x 1 (4-pin) [3]	-	IP65	-40 ... +80 °C	x	x [5]	x [5]	-	-
Sealing plugs for transport	Transparent	-	-40 ... +80 °C	not applicable, transport protection				

Components model TR10-B

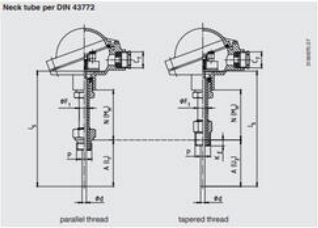
Fig. with parallel thread, for tapered thread see "Connection to thermowell"



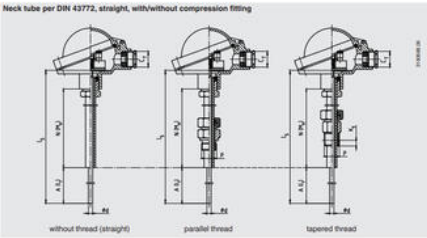
Neck tube

Neck tube designs

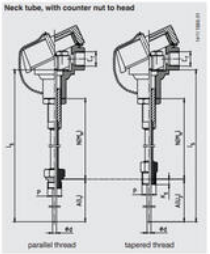
Neck tube per DIN 43772



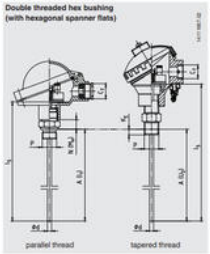
Neck tube per DIN 43772, straight, with/without compression fitting



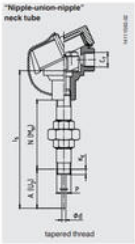
Neck tube, with counter nut to head



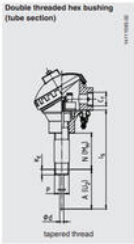
Double threaded hex bushing (with hexagonal spanner flats)



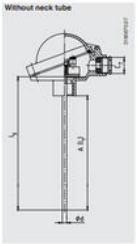
"Nipple-union-nipple" neck tube



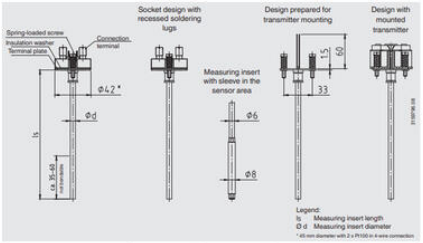
Double threaded hex bushing (tube section)

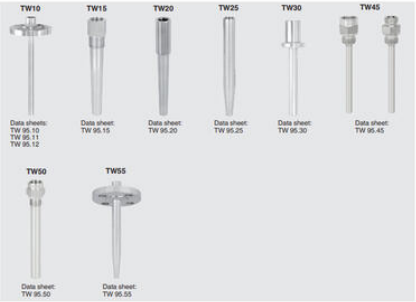


Without neck tube



Dimensions in mm



Measuring insert diameter Ø d in mm	Index per DIN 43735	Tolerance in mm	Sheath material	
			Standard design	Recessed soldering lugs
3 [1]	Standard	30	3 ±0.05	1.4571, 316L [1,2] 1.4571
6	Standard	60	6 +0.1 / -0.1	1.4571, 316L [1,2] 1.4571
6 (5 mm with sleeve)	Standard	-	6 +0.1 / -0.1	1.4571 1.4571
8	Standard	80	8 +0.1 / -0.1	1.4571, 316L [1,2] 1.4571

Thermowell selection