

## sc Sensor Cable (without plug and coupling)

**Note:** This datasheet applies only to the cable as yard ware without plug and coupling.

Shielded data cable for high electrical and mechanically requirements. The cable is halogen free, oil resistant according to VDE 0473 part 811 and as far as possible grease, coolant and lubricant resistant. Manufactured in accordance with DIN VDE 0207, 0250, 0293 and 0295. The electrical test meets the standards DIN 0472 and IEC.

### Technical data

Specifications are subject to change without notice.

Cable construction		
Cable	Cu	AWG 22 - 19×0.15 mm AWG 26 - 18×0.10 mm
Isolation	Polyethylene	AWG 22 ca. 1.50 mm AWG 26 ca. 1.00 mm
Wire Coding	by color	AWG 22 brown, black AWG 26 white, blue
Outside coat	PUR (Elastoplan 1185), RoHS-conformal	Surface beamless, less adhesion, halogen free, pressure extruded, homogeneous and round shape
Total shielding	Cu- netting, tinned, shield attenuation ≥ 55 dB	
Coat color	black, RAL 9005	
External diameter	6.8 ± 0.3 mm	
Electrical specifications		
Normal voltage	U <sub>ss</sub>	250 V
Test voltage	U <sub>eff</sub> wire/wire wire/shield	1200 V 750 V
Insulating resistance	at 20 °C	≥ 20 MOhm × km
Wire resistance	AWG 22 at 20 °C AWG 26 at 20 °C	max. 106 Ohm/km (Loop) max. 260 Ohm/km (Loop)
Wave resistance	AWG 22 pairs AWG 26 pairs	ca. 95 Ohm at 1 kHz ca. 90 Ohm at 1 kHz
Operating temperature	flexible installation fixed installation	-30 °C to +70 °C -40 °C to +80 °C
Minimal bend radius	flexible installation fixed installation	7.5 × Outer diameter 5 × Outer diameter
Cable Wire Color	Terminal Designation (see <a href="#">Figure 1</a> and <a href="#">Figure 2</a> on page 3)	
Brown	+12 V DC	
White	Data (-)	
Blue	Data (+)	
Black	Ground (Circuit Common)	
Grey	Screen (Shield)	

## Options

Sensor	Sensor Cable length	Cable Ø	Max. recommended cable length
1200 S sc	10 m (32 ft)	6.8 mm	400 m (1312 ft), sc1000: max. 100 m (328 ft)
1720E	1.80 m (5.9 ft)	6 mm	no extension allowed
3798 S sc	10 m (32 ft)	6.8 mm	400 m (1312 ft), sc1000: max. 100 m (328 ft)
5740 S sc	10 m (32 ft)	6 mm	400 m (1312 ft), sc1000: max. 100 m (328 ft)
918x S sc	0.4 m (1.3 ft)	6.8 mm	400 m (1312 ft), sc1000: max. 100 m (328 ft)
AMTAX sc	2 m (6 ft)	6.8 mm	no extension allowed
AN-ISE sc, AISE sc, NISE sc	10 m (32 ft)	6.8 mm	90 m (295 ft)
Digital Gateways	plug only		400 m (1312 ft), sc1000: max. 100 m (328 ft)
FilterTrak 660 sc	1.80 m (5.9 ft)	6 mm	
FP 360 sc	1.5 m (4.9 ft) or 10 m (32 ft)	6.8 mm	30 m (98 ft)
LDO (Model 1 and Model 2)	10 m (32 ft)	5 mm	400 m (1312 ft), sc1000: max. 100 m (328 ft)
NH4D sc	10 m (32 ft)	6 mm	90 m (295 ft)
NITRATAX sc	10 m (32 ft)	6.8 mm	60 m (197 ft)
NO3D sc	10 m (32 ft)	6 mm	90 m (295 ft)
pHD S sc	10 m (32 ft)	6 mm	400 m (1312 ft), sc1000: max. 100 m (328 ft)
PHOSPHAX sc	2 m (6 ft)	6.8 mm	no extension allowed
SOLITAX sc	10 m (32 ft)	6.8 mm	90 m (295 ft)
SONATAX sc	10 m (32 ft)	6.8 mm	90 m (295 ft)
Surface Scatter	2 m (6.6 ft)	6 mm	9.62 m (31.6 ft)
TSS sc	10 m (32 ft)	9 mm	90 m (295 ft)
ULTRATURB plus sc	min. 0.35 m (1.1 ft)	6.8 mm	90 m (295 ft)
UVAS plus sc	10 m (32 ft)	6.8 mm	60 m (197 ft)

## Optional Accessories

Optional Accessories	for cable Ø	Part Number
sc Sensor Plug (RoHS-conformal, IP 67)	6–8 mm	LZX971
sc Sensor Coupling (RoHS-conformal, IP 67)	6–8 mm	LZX972
sc Sensor Plug (RoHS-conformal, IP 67)	4–6 mm	LZX987
sc Sensor Coupling (RoHS-conformal, IP 67)	4–6 mm	LZX986
Termination Box Assembly		5867000 (do not use with sc1000)

## Pin assignment of optional sc Sensor plug and sc Sensor Coupling

**Important Note:** Incorrect connecting of the cables will impact the function of the instrument and/or damage the instrument.

Use cable end sleeves for the wire connection!

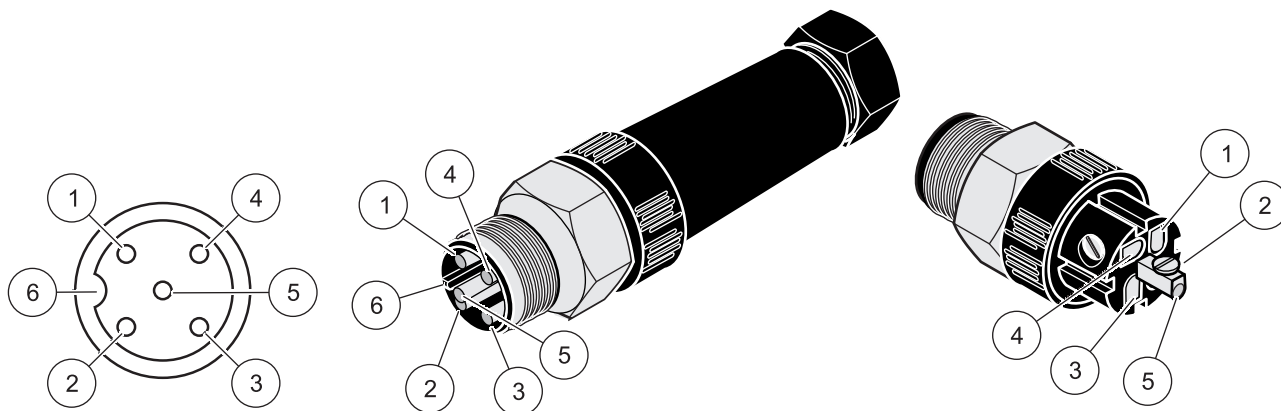


Figure 1 Pin assignment of sc Sensor Plug

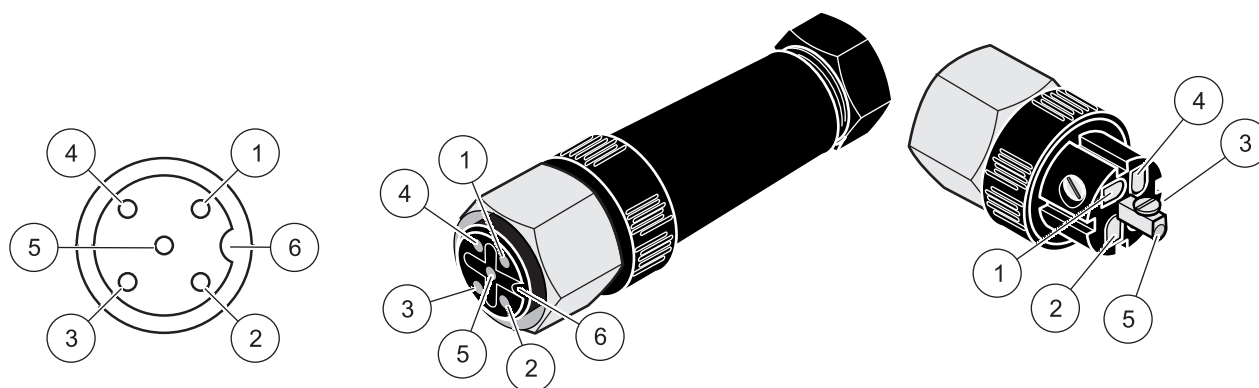


Figure 2 Pin assignment of sc Sensor Coupling

Pos.	clamp number	Assignment	Wire color
1	1	+12 V DC	brown
2	2	Data (-)	white
3	3	Data (+)	blue
4	4	Ground	black
5	5	Screen	grey
6	6	Guidance	-

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## Assembled Extension Cable (6.8 mm cable Ø)

Cable Length	Part Number
0.35 m (1.1 ft)	LZX847
5 m (16 ft)	LZX848
10 m (32 ft)	LZX849
15 m (49 ft)	LZX850
20 m (65 ft)	LZX851
30 m (98 ft)	LZX852
50 m (164 ft)	LZX853

## More Versions (5 or 6 mm cable Ø)

Cable Length	Part Number
7.7 m (25.3 ft)	5796000
15 m (49 ft)	5796100
31 m (101 ft)	5796200

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