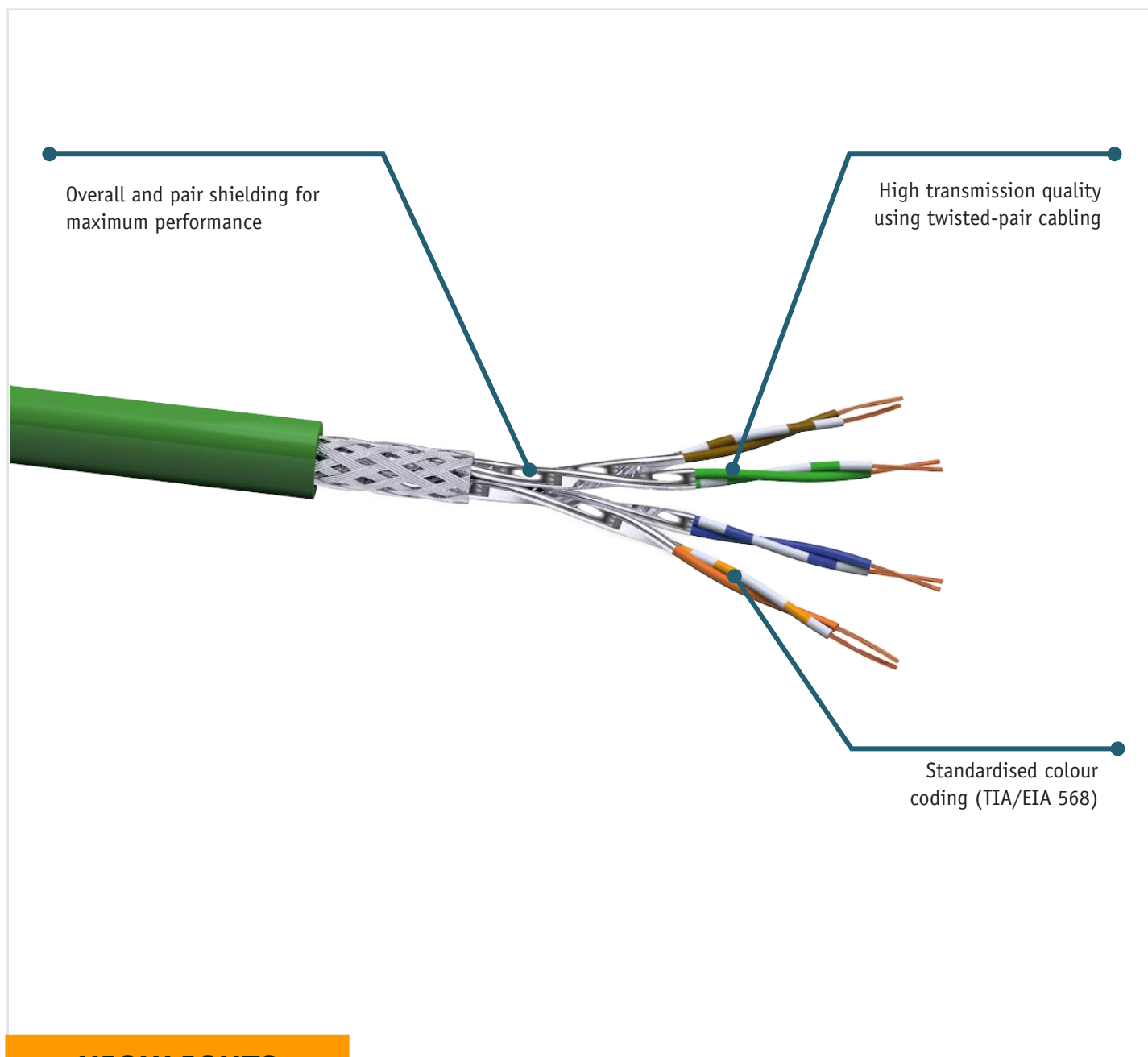


PROconnect Cat6A SF/FTP



HIGHLIGHTS

Easy installation:



- Fast Connect
- Standardised colour coding

High performance:



- Excellent signal quality
- Up to 10 Gbit/s

TECHNICAL DATA SHEET

InduSol America – Specialist for industrial networks

PROconnect Cat6A SF/FTP | Technical details

Article	Typ B	Typ C	Typ R
Item number	114060030	114060031	114060032
Construction			
Cable construction	4x2xAWG24/7 SF/FTP		
Conductor	AWG 24/7, tinned		
Insulation	Polyolefin (SFS-PE)		
Wire diameter	1,38 ± 0,05 mm		
Colour code	TIA/EIA 568: Pair 1: blue/white-blue Pair 2: white-orange/orange Pair 3: white-green/green Pair 4: white-brown/brown		
Pair shielding	Plastic laminated aluminium foil		
Inner jacket	Special PVC	FRNC Compound	
Overall shield	Plastic laminated aluminium foil Copper braiding (Wire 0,10 tinned, Optical coverage > 80%)		
Outer jacket	Special PVC	PUR FHF	
Jacket colour	green, RAL 6018		
Outer diameter	9,0 ± 0,2 mm	9,8 ± 0,2 mm	
Wall thickness	Nom. 1,0 ± 0,1 mm		
Weight	103 kg/km	105 kg/km	
Copper index	41 kg/km		
Applications			
Signal type / Category	Cat.6A		
Data rates	10 Mbit/s, 100 Mbit/s, 1 Gbit/s, 10 Gbit/s		
Application	fixed installation flexible	Energy/drag chains	Robots
Fast Connect (FC) cable	Yes		
Environmental conditions / Product characteristics			
Temperature, fixed installation	-30° - 80°C	-40° - 80°C	
Temperature, moving	-15° - 50°C	-25° - 60°C	
Bend radius, fixed installation	8 x Outer diameter	8 x Outer diameter	8 x Outer diameter
Bend radius, moving	15 x Outer diameter	15 x Outer diameter	15 x Outer diameter
Bend radius, drag chain	15 x Outer diameter	15 x Outer diameter	15 x Outer diameter
Bend cycles, drag chain	50.000	> 2.000.000	
Drag chain speed	0,3 m/min	3m/s	
Torsion cycles			> 3 Mio. at ± 180°/m
max. tractive force	140 Nm		
Absence of specific substances (jacket)	silicone-free, LABS-free, lead-free, cadmium-free, FCKW-free	halogen-free, silicone-free, LABS-free, lead-free, cadmium-free, FCKW-free	
Flame retardancy	EN 60332-1-2 EN 13501-6 Class Fca UL AWM 2175	EN 60332-1-2 EN 13501-6 Class Fca IEC 60754-2 UL AWM 21586	
UV-resistant	Yes		
Oil-resistant	IEC 60811-2-1 (IRM 902, 4h at 70°C)	IEC 60811-2-1 (IRM 902, 4h at 70°C; IRM 902, 7dh at 90°C; IRM 902, 21d at 90°C Total EDC 95-11, 1680h at 70 °C)	
LABS-free	VDMA 24364-B2-L		

PROconnect Cat6A SF/FTP | Technical details

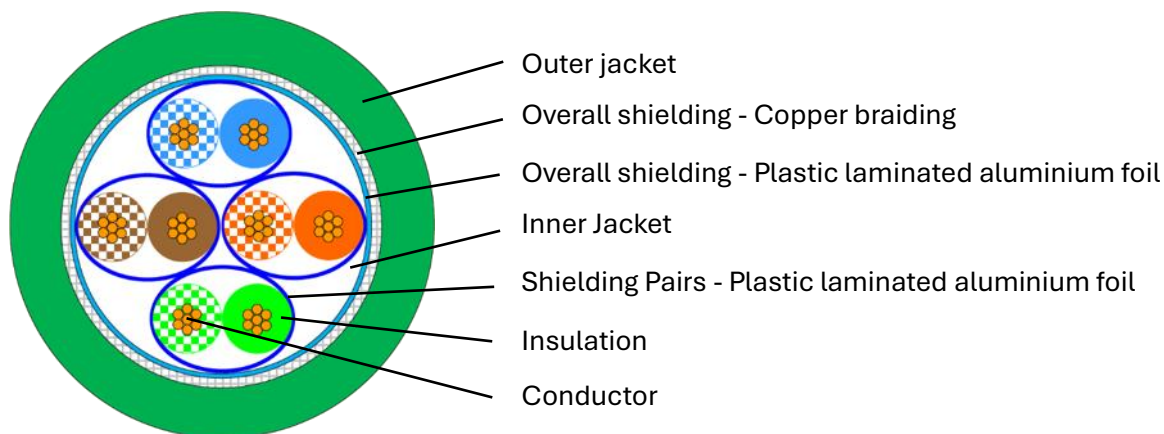
Article	Typ B	Typ C	Typ R
Item number	114060030	114060031	114060032
Electrical Data			
Loop resistance	max. 160 Ohm / km (VDE 0812)		
Insulation resistance	min. 5 GOhm x km at +20°C		
Operating capacity	nom. 45 nF / km		
Nominal characteristic impedance	100 Ohm ± 5 Ohm		
Test voltage	700 V / AC		
Velocity of propagation (NVP)	77 %		
Signal Term	max. 450 ns/100m		
Running time difference	< 5 ns/100m		
Screening attenuation to 1000 MHz	> 80 dB		
Coupling attenuation	> 90 dB		
Transfer impedance	< 5 mOhm/m at 10MHz		
Compliance/Approvals			
RoHS	Yes		
CE	Yes		

PROconnect Cat6A SF/FTP | Technical details

Transmission performance

f [MHz]	Dämpfung/ Attenuation (dB/100m)	NEXT (dB)	ACR (dB/10m)	ELFEXT (dB/10m)	RL (dB)
1	1,9	85	83	80	23
4	3,7	85	81	78	27
10	5,6	85	79	75	30
16	7,2	85	78	66	30
20	8,1	82	74	62	30
31,25	10,2	80	70	60	30
62,5	14,1	78	64	55	30
100	18,1	76	58	48	28
200	25,4	74	49	40	26
300	33,8	72	38	37	24
400	36,9	70	33	35	23
500	40,5	68	27	32	21

Structure (Typ B)



Structure (Typ C und Typ R)

