

Industrial Ethernet

Cat6.A DataGuard® Armoured (SWA)
for Fixed Application LSZH

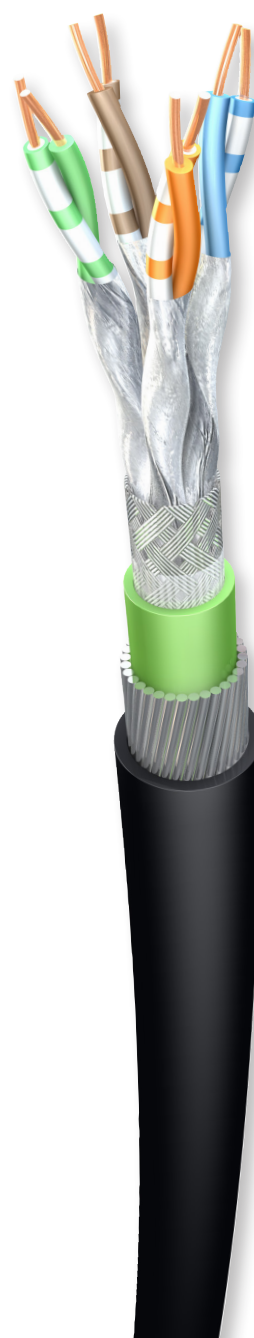
IE4.0
Ethernet
for Industry



Cable Design

Conductor	Solid bare copper wire Ø 0,64 mm (AWG22/1)
Insulation	Foamed Polyethylene Ø 1,52 - 1,57 mm
Core assembly	Stranded to pairs
Pair Shield	Plastic laminated aluminium-foil - metal facing outside
Assembly of elements	Stranding of 4 shielded pairs
Braid Shield	Tinned copper wire braid 85±5% optical coverage
Inner Jacket	LSZH flame retardant and not corrosive Ø 8,80 ± 0,20 mm
Inner Jacket Colour	Green similar RAL6018
Armour	DataGuard® Galvanised Steel Wires (SWA)
Outer Jacket	LSZH flame retardant and not corrosive Ø 13,50 ± 0,50 mm
Outer Jacket Colour	Green or Black options

Pair Identification	(1) blue/white-blue (2) orange/white-orange (3) green/white-green (4) brown/white-brown
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Characteristics

- Indoor/Outdoor applications
- Mechanical protection
- Rodent Protection
- Direct Burial
- UV-Stable and colourfast
- Flame Resistance acc. to IEC 60332-3-24
- Oil Resistance acc. to IEC 60811-404 and DIN EN 50363-10-2
- Amount of halogen acid gas compliant acc. to IEC 60754-1, DIN VDE 0472 part 815
- Degree of acidity of gases compliant acc. IEC 60754-2
- CE compliant (RoHS included)
- UKCA compliant

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Electrical and Transmission Data @ 20°C

Operation Voltage	max. 125 V (peak value, not for connection to public mains)
Test Voltage	50 Hz, 1 min, 2,000 V (core/core and core/screen)
Loop Resistance	max. 118.2 Ω /km
Insulation Resistance	min. 5 G Ω .km
Capacitance	nom. 50 nF/km
RF-Characteristics	acc. to IEC 61156-5
Rel. Propagation Speed	nom. 74 % of the speed of light at 100 MHz
Delay Skew	max. 25 ns/100m
Characteristic Impedance	100 \pm 5 Ω at 100 MHz

Frequency [MHz]	Attenuation [dB/100m]		NEXT [dB]		Return Loss [dB]	
	Typical	Max.	Typical	Min.	Typical	Min.
4	3,3	3,7	107,8	78,0	35,1	23,0
10	5,0	5,9	107,5	78,0	42,8	25,0
16	6,3	7,4	107,3	78,0	38,8	25,0
20	7,1	8,3	106,0	78,0	37,1	25,0
31,25	9,1	10,4	100,4	78,0	36,5	23,6
62,5	13,0	14,9	98,2	75,5	35,6	21,5
100	16,5	19,0	96,7	72,4	34,0	20,1
200	23,5	27,5	96,0	67,9	33,9	18,0
250	26,5	31,0	95,8	66,4	31,5	17,3
300	29,1	34,2	88,8	65,2	31,1	17,3
500	38,0	45,3	87,1	61,9	30,8	17,3
600	41,8	50,1	85,5	60,7	25,4	17,3

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Specification

Part Number	Type
IE6A-SFB22-WAZH-01	Industrial Ethernet Cat6.A DataGuard® Armoured (SWA) for Fixed Application. 4x2x22/1AWG S/FTP. With BLACK outer jacket
IE6A-SFB22-WAZH-03	Industrial Ethernet Cat6.A DataGuard® Armoured (SWA) for Fixed Application. 4x2x22/1AWG S/FTP. With GREEN outer jacket

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