

**Industrial Ethernet
IE-C6ES8UG0100U40XSH-E**

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Assembled IE cables for EtherNet/IP applications with plug-in connector, type M12 X, cat. 6A, according to IEC 61076-2-109 and RJ45 plug-in connector for 10 GBit/s applications

General ordering data

Type	IE-C6ES8UG0100U40XSH-E
Order No.	2124020100
Version	System cable, RJ45 IP 20, M12 X-type, flange, socket, back panel mounting, Cat.6 _A / Class E _A (ISO/IEC 11801 2010), PUR, 10 m
GTIN (EAN)	4050118425628
Qty.	1 pc(s).

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Technical data**Dimensions and weights**

Length	10 m	Length (inches)	0.394 inch
Net weight	0.001 g	Insulation cross-section	0.98 mm

Temperatures

Operating temperature, max.	80 °C	Operating temperature, min.	-40 °C
Storage temperature, max.	80 °C	Storage temperature, min.	-40 °C
Operating temperature	-40 °C...80 °C	Storage temperature	-40 °C...80 °C
Installation temperature	-20 °C...60 °C		

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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Standards

Impervious to smoke	gemäß IEC 61034	Standard, assembly	UL Style 20963
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Cable structure

Copper diameter	0.48 µm	Wiring	EIA/TIA T568 B
Wire material	Stranded tin-plated copper wire	Standard designations	S/FTP, LIO2YSC11Y 4x2x0.15 PIMF FRNC GN
Strands	7	Cross-section	4*2*AWG 26/7 - 4*2*0.128 mm ²
Insulation	PE	Insulation cross-section	0.98 mm
No. of wires	8	Arrangement of wire cores	Twisted pair
Wire pair shielding		Colour sequence or wires - wire pairs	white - blue, white - orange, white - green, white - brown
Shielding	Aluminium foil	Complete shielding	Shielding braid made from copper wiring
Shielding braid thickness	0.1 mm	Material sheath	PUR
Sheath diameter, min.	6.1 mm	Sheath diameter, max.	6.7 mm
Sheathing colour	green (RAL 6018)		

Electrical properties of cable

Category	Cat.6 _A / Class E _A (ISO/IEC 11801 2010)	Test voltage: wire-wire-shield	700 V _{rms} , 50 Hz, 1 min
Characteristic impedance	100 ± 5 Ω at 100MHz	Loop resistance	290 Ω/km
Transfer impedance	15 mΩ/m at 1 MHz, 10 mΩ/m at 10 MHz, 30 mΩ/m at 30 MHz	Signal propagation time	5.2 ns/m
Speed	10 GBit/s		

Mechanical and material properties of cable

Min. bending radius, once only	5 x cable diameter	Min. bending radius, repetitive	10 x cable diameter
Speed	10 GBit/s	Abrasion resistance	very good
Resistance to spread of flame	in accordance with IEC 60332-1-2	Resistance to oils	in accordance with IEC 60811-2-1
Halogen	halogen-free, according to IEC 60754-1	Impervious to smoke	gemäß IEC 61034

Data sheet

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Technical data

plug

Connector left	Connector right	M12 X-type, flange, socket, back panel mounting
RJ45 IP 20		

Classifications

ETIM 6.0	EC002599	eClass 6.2	27-06-03-90
eClass 9.0	27-06-03-08	eClass 9.1	27-06-03-08

Approvals

ROHS	Conform
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Downloads

Brochure/Catalogue	FL FIELDWIRING EN PI PROFINET CABLING EN
User Documentation	MAN IE GUIDE DE MAN IE GUIDE EN

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Drawings

Wiring

RJ45	1	White, Orange	1	M12
	2	Orange	2	
	3	White, Green	3	
	4	Blue	8	
	5	White, Blue	7	
	6	Green	4	
	7	White, Brown	5	
	8	Brown	6	

Pinning

