

**IE-C6EL8UG0120U40XCS-E****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



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**

Version	System cable, RJ45 IP 20, M12 X-type IP 67 straight male, Cat.6A / Class EA (ISO/IEC 11801 2010), PUR, 12 m
Order No.	<a href="#">1457580120</a>
Type	IE-C6EL8UG0120U40XCS-E
GTIN (EAN)	4050118264159
Qty.	1 pc(s).

Creation date March 13, 2023 2:11:19 PM CET

Catalogue status 03.03.2023 / We reserve the right to make technical changes.

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## Technical data

### Dimensions and weights

Length	12 m	Length (inches)	472.441 inch
Net weight	566 g		

### Temperatures

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

### Cable specific standards

Impervious to smoke	According to IEC 61034	Standard, assembly	UL Style 20963
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### General standards

Connector standard	IEC 60603-7-5 1, IEC 61076-2-109
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### Standards

Connector standard	IEC 60603-7-5 1, IEC 61076-2-109	Impervious to smoke	According to IEC 61034
Standard, assembly	UL Style 20963		

### Cable structure

Arrangement of wire cores	Twisted pair	Colour sequence or wires - wire pairs	white - blue, white - orange, white - green, white - brown
Complete shielding	Shielding braid made from copper wiring	Copper diameter	0.48 µm
Cross-section	4*2*AWG 26/7 - 4*2*0.128 mm <sup>2</sup>	Insulation	PE
Insulation cross-section	0.98 mm	Material sheath	PUR
Number of wires	8	Sheath diameter, max.	6.7 mm
Sheath diameter, min.	6.1 mm	Sheathing colour	green (RAL 6018)
Shielding	S/FTP	Shielding braid thickness	0.1 mm
Standard designations	S/FTP, LIO2YSC11Y 4x2x0.15 PIMF FRNC GN	Strands	7
Wire material	Stranded tin-plated copper wire	Wire pair shielding	Aluminium foil
Wiring	EIA/TIA T568 B		

### Electrical properties of cable

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

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### Mechanical and material properties of cable

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

### Plug

Plug left	RJ45, IP20, male contact, straight, plug, Plastic, shielded	Plug right	M12, X, IP67, male contact, straight, plug, Plastic, shielded
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### Plug, left

Connector left	RJ45 IP 20
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### Plug, right

Connector right	M12 X-type IP 67 straight male
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### Classifications

ETIM 6.0	EC002599	ETIM 7.0	EC002599
ETIM 8.0	EC002599	ECLASS 9.0	27-06-03-08
ECLASS 9.1	27-06-03-08	ECLASS 10.0	27-06-03-08
ECLASS 11.0	27-06-03-08	ECLASS 12.0	27-06-03-08

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
SCIP	67cf1078-beca-4687-860b-dc475a6ec24a

### Approvals

ROHS	Conform
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### Downloads

Engineering Data	<a href="#">CAD data – STEP</a>
User Documentation	<a href="#">MAN IE GUIDE DE</a> <a href="#">MAN IE GUIDE EN</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	<a href="#">FL FIELDWIRING EN</a> <a href="#">PI PROFINET CABLING EN</a> <a href="#">PI PROFINET CABLING EN</a>

**Data sheet**

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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**

