

product description	Robust, flexible connection cable (4-core), preferred length, preassembled with two 4-pole M12 connectors (D-coded) IE Robust Connecting Cable M12-180/M12-180, IP69, pre-assembled IE FC Robust Food cable GP 2x2, with 2 M12 plugs (D-coded) length 1 m.
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suitability for use	For connecting Industrial Ethernet stations with degree of protection IP65/67/69. Cable with FEP jacket (fluorinated plastic, perfluoroethylene propylene) for use in the food, beverages and tobacco industries (IP69 resistant). Line is water-repellent, weather-proof, resistant to microbes, and extremely resistant to many cleaning agents and disinfectants (such as hypochlorite, chlorine dioxide, peroxyacetic acid, and quaternary ammonium cations).
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cable designation	2YY(ST)CY6Y 2X2X0.75/1.55 LI VZN
wire length	1 m

electrical data	
number of electrical connections	2
attenuation factor per length	
• at 10 MHz / maximum	0.095 dB/m
• at 100 MHz / maximum	0.32 dB/m
impedance	
• at 1 MHz ... 100 MHz	100 Ω
relative symmetrical tolerance	
• of the characteristic impedance at 1 MHz ... 100 MHz	5 %
near-end crosstalk per length	
• at 1 MHz ... 100 MHz	0.353 dB/m
transfer impedance per length / at 10 MHz	80 mΩ/m
loop resistance per length / maximum	120 mΩ/m
operating voltage	
• RMS value	80 V
NVP value in percent	69 %

mechanical data	
number of electrical cores	4
design of the shield	Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires
type of electrical connection / FastConnect	Yes
core diameter	
• of AWG22 insulated conductor	0.75 mm
outer diameter	
• of inner conductor	0.75 mm
• of the wire insulation	1.56 mm
• of the inner sheath of the cable	4 mm
• of cable sheath	6.5 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
material	
• of the wire insulation	polyethylene (PE)
• of the inner sheath of the cable	PVC

• of cable sheath	PVC/FEP; FEP transparent
color	
• of the insulation of data wires • of cable sheath	white/yellow/blue/orange green
bending radius	
• with single bend / minimum permissible • with multiple bends / minimum permissible • with continuous bending	26 mm 52 mm 100 mm
number of bending cycles	1000000; Acceleration 4 m/s ²
number of torsion cycles / with torsion by $\pm 180^\circ$ on 1 m cable length	1000000
tensile load / maximum	150 N
weight per length	72 kg/km
plug	
type of plug interlock	screwed
design of plug-in connection	M12-180
connector coding	M12
• of the M12 circular connector	D-coded
ambient conditions	
ambient temperature	
• during operation • during storage • during transport • during installation • note	-40 ... +80 °C -40 ... +80 °C -40 ... +80 °C -40 ... +80 °C Electrical properties measured at 20 °C, tests according to DIN VDE 0472
fire behavior	flame resistant according to IEC 60332-1-2
chemical resistance	
• to mineral oil • to grease • to water	oil resistant according to IEC 60811-404 (7x24h/90°C) Conditional resistance resistant
radiological resistance / to UV radiation	resistant
protection class IP	IP65/67/69
product features, product functions, product components / general	
product feature	
• halogen-free • silicon-free	No Yes
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; c(ETL)us 3047254 CMG FT4 75°C
UL/ETL style / 600 V Rating	Yes; AWM 22162 AWM I A/B 80°C 600V FT2
certificate of suitability	UL 2238
• EAC approval • CE marking • RoHS conformity	Yes Yes Yes
standard for structured cabling	Cat5e
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS)	No No No No No No No
reference code	
• according to IEC 81346-2 • according to IEC 81346-2:2019	WG WGB
further information / internet links	
internet link	
• to web page: SiePortal • to website: Image database • to website: Industry Online Support	https://sieportal.siemens.com/ https://www.automation.siemens.com/bilddb https://support.industry.siemens.com
security information	

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Approvals / Certificates		
General Product Approval	Environment	Industrial Commu- nication



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