

Product type designation

Product description

IE FC TP Standard Cable GP 4x2 (AWG 22)

Standard bus cable (8-core), sold by the meter, unassembled
Industrial Ethernet FC TP standard cable 4 x 2, TP installation cable
CAT6 for connection to FC RJ45 Modular outlet, AWG22, sold by the
meter, delivery length max. 1000 m minimum order 20 m



Suitability for use	Standard cable with rigid cores for fast, permanent installation
Cable designation	2YH (ST) C 4X2X0.64/1.25-100 GN 4x2xAWG22

Electrical data	
Damping ratio per length	
<ul style="list-style-type: none"> at 10 MHz / maximum 	0.06 dB/m
<ul style="list-style-type: none"> at 100 MHz / maximum 	0.19 dB/m
<ul style="list-style-type: none"> at 250 MHz / maximum 	0.33 dB/m
Impedance	
<ul style="list-style-type: none"> at 1 MHz ... 100 MHz 	100 Ω
Near-end crosstalk per length	
<ul style="list-style-type: none"> at 1 MHz ... 250 MHz 	0.383 dB/m
Transfer impedance per length / at 10 MHz	10 mΩ/m
Loop resistance per length / maximum	118 mΩ/m
Insulation resistance coefficient	5000 GΩ·m
Operating voltage	
<ul style="list-style-type: none"> RMS value 	80 V
NVP value in percent	63 %

Mechanical data	
Number of electrical cores	8
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 core	0.64 mm
Outer diameter	
• of inner conductor	0.64 mm
• of the wire insulation	1.25 mm
• of the inner sheath of the cable	7.6 mm
• of cable sheath	9.6 mm
Symmetrical tolerance of the outer diameter / of cable sheath	0.3 mm
Material	
• of the wire insulation	polyethylene (PE)
• of the inner sheath of the cable	PVC
• of cable sheath	PVC
Color	
• of the insulation of data wires	white/blue, white/orange, white/green, white/brown
• of cable sheath	green
Bending radius	
• with single bend / minimum permissible	38 mm
• with multiple bends / minimum permissible	80 mm
Tensile load / maximum	180 N
Weight per length	117 kg/km

Ambient conditions	
Ambient temperature	
• during operation	-40 ... +80 °C
• during storage	-40 ... +80 °C
• during transport	-40 ... +80 °C
• during installation	-40 ... +80 °C
Burning behavior	flame resistant according to IEC 60332-1
Class of burning behaviour / according to EN 13501-6	Eca
Chemical resistance	
• to mineral oil	oil resistant according to IEC 60811-2-1 (4 h / 70°C)
• to grease	Conditional resistance
• to water	conditional resistance
Radiological resistance / to UV radiation	resistant

Product features, product functions, product components / general	
Product feature	

<ul style="list-style-type: none"> • halogen-free 	No
<ul style="list-style-type: none"> • silicon-free 	Yes
Wire length / for Industrial Ethernet	
<ul style="list-style-type: none"> • with 100BaseTX 	90 m
<ul style="list-style-type: none"> • with 1000BaseT 	90 m

Standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; c(UL)us / CMG / cRU AWM I A/B 60°C 300V FT2 / Sun Res
UL/ETL style / 600 V Rating	No
Certificate of suitability	
<ul style="list-style-type: none"> • CE marking 	Yes
<ul style="list-style-type: none"> • RoHS conformity 	Yes
Standard for structured cabling	Cat6
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) 	No
<ul style="list-style-type: none"> • Bureau Veritas (BV) 	No
<ul style="list-style-type: none"> • Det Norske Veritas (DNV) 	No
<ul style="list-style-type: none"> • Germanische Lloyd (GL) 	No
<ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) 	No
<ul style="list-style-type: none"> • Nippon Kaiji Kyokai (NK) 	No
<ul style="list-style-type: none"> • Polski Rejestr Statkow (PRS) 	No

Further information / Internet-Links

Internet-Link	
<ul style="list-style-type: none"> • to website: Selector SIMATIC NET SELECTION TOOL 	http://www.siemens.com/snst
<ul style="list-style-type: none"> • to website: Industrial communication 	http://www.siemens.com/simatic-net
<ul style="list-style-type: none"> • to website: Industry Mall 	https://mall.industry.siemens.com
<ul style="list-style-type: none"> • to website: Information and Download Center 	http://www.siemens.com/industry/infocenter
<ul style="list-style-type: none"> • to website: Image database 	http://automation.siemens.com/bilddb
<ul style="list-style-type: none"> • to website: CAx Download Manager 	http://www.siemens.com/cax
<ul style="list-style-type: none"> • to website: Industry Online Support 	https://support.industry.siemens.com

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