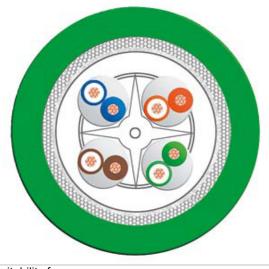
## **SIEMENS**

Data sheet 6XV1878-2B

## Product type designation

Product description



## IE FC TP Flexible Cable GP 4x2 (AWG 24, Type C)

Shielded TP installation cable (8-core) with flexible cores, sold by the meter, unassembled

IE FC TP FLEXIBLE CABLE GP 4X2, TP-INSTALLATIONS CABLE CAT6 FOR CONNECTING TO IE FC RJ45 PLUG 4X2, AWG24, SOLD BY THE METER, MAX. CONSIGNMENT: 1000 M, MIN. LENGTH ORDERED: 20 M

Suitability for use

Flexible cable for quick assembly, for occasionally moving machine parts

Electrical data	
Damping ratio per length	
• at 10 MHz / maximum	0.089 dB/m
• at 100 MHz / maximum	0.287 dB/m
• at 250 MHz / maximum	0.466 dB/m
• at 300 MHz / maximum	0.514 dB/m
Impedance	
● at 1 MHz 100 MHz	100 Ω
Near-end crosstalk per length	
● at 1 MHz 100 MHz	0.453 dB/m
● at 1 MHz 250 MHz	0.393 dB/m
● at 1 MHz 300 MHz	0.381 dB/m
Transfer impedance per length / at 10 MHz	20 mΩ/m
Loop resistance per length / maximum	180 mΩ/m
Insulation resistance coefficient	5000 GΩ·m
Operating voltage	
● RMS value	100 V
NVP value in percent	68 %

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 the AWG24 core	0.51 mm
Outer diameter	
• of inner conductor	0.6 mm
<ul> <li>of the wire insulation</li> </ul>	1.05 mm
<ul> <li>of the inner sheath of the cable</li> </ul>	6.4 mm
• of cable sheath	8 mm
Symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
Material	
<ul> <li>of the wire insulation</li> </ul>	PE
<ul> <li>of the inner sheath of the cable</li> </ul>	FRNC
<ul><li>of cable sheath</li></ul>	PVC
Color	
• of the insulation of data wires	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown
• of cable sheath	green
Bending radius	
<ul> <li>with single bend / minimum permissible</li> </ul>	24 mm
• with multiple bends / minimum permissible	40 mm
Tensile load / maximum	100 N
Weight per length	86 kg/km
Permitted ambient conditions	
Ambient temperature	
<ul><li>during operation</li></ul>	-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 60332-3-24 (Category C)
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 properties, functions, components / genera	al
Product property	
• halogen-free	No
• silicon-free	Yes
Cable length / for Industrial Ethernet	

● with 100BaseTX	80 m
• with 1000BaseT	80 m

Standards, specifications, approvals		
Certificate of suitability		
● CE marking	Yes	
<ul> <li>RoHS conformity</li> </ul>	Yes	
Standard for structured cabling	Cat6A	
Marine classification association		
<ul> <li>American Bureau of Shipping Europe Ltd.</li> <li>(ABS)</li> </ul>	No	
Bureau Veritas (BV)	No	
<ul><li>Det Norske Veritas (DNV)</li></ul>	No	
<ul> <li>Germanische Lloyd (GL)</li> </ul>	No	
<ul> <li>Lloyds Register of Shipping (LRS)</li> </ul>	No	
Nippon Kaiji Kyokai (NK)	No	
<ul> <li>Polski Rejestr Statkow (PRS)</li> </ul>	No	

## Further Information / Internet Links

Internet-Link

• to website: Selector SIMATIC NET <a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a> SELECTION TOOL

• to website: Industrial communication <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>

• to website: Industry Mall <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>

• to website: Information and Download Center <a href="http://www.siemens.com/automation/net/catalog">http://www.siemens.com/automation/net/catalog</a>

• to website: Image database <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>

• to website: CAx Download Manager <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>

• to website: Industry Online Support <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

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