

## Data sheet

6XV1871-5BH30

product type designation

product description

IE Connecting Cable IE FC RJ45-180 / IE FC RJ45-180

Flexible plug-in cable (4-core), preferred length, preassembled with two IE FC RJ45 connectors 2x2

IE connecting cable IE FC RJ45 Plug-180/IE FC RJ45 Plug-180; IE FC Trailing Cable GP Pre-assembled with 2x IE FC RJ45 plug 180; length 3.0 m.



Technical Product Detail Page

<https://i.siemens.com/1P6XV1871-5BH30>

suitability for use

For connecting Industrial Ethernet stations with an RJ45 interface (10/100 Mbps)

cable designation

SF/UTP

wire length

3 m

**electrical data**

number of electrical connections

2

attenuation factor per length

0.06 dB/m

• at 10 MHz / maximum

0.2 dB/m

• at 100 MHz / maximum

impedance

100 Ω

• at 1 MHz ... 100 MHz

relative symmetrical tolerance

5 %

• of the characteristic impedance at 1 MHz ... 100 MHz

near-end crosstalk per length

0.5 dB/m

• at 1 MHz ... 100 MHz

transfer impedance per length / at 10 MHz

20 mΩ/m

loop resistance per length / maximum

120 mΩ/m

operating voltage

80 V

• RMS value

NVP value in percent

66 %

**mechanical data**

number of electrical cores

4

design of the shield

SF/UTP, overlapped aluminum-clad foil, sheathed in a protective braided shield of tinned copper wires

core diameter

0.75 mm

• of AWG22 insulated conductor

outer diameter

0.75 mm

• of inner conductor

1.5 mm

• of the wire insulation

3.9 mm

• of the inner sheath of the cable

6.5 mm

• of cable sheath

symmetrical tolerance of the outer diameter / of cable sheath

0.2 mm

material

polyethylene (PE)

• of the wire insulation

PVC

• of the inner sheath of the cable

PVC

• of cable sheath

color	<ul style="list-style-type: none"> <li>• of the insulation of data wires</li> <li>• of cable sheath</li> </ul>	white/yellow/blue/orange green
bending radius	<ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> <li>• with multiple bends / minimum permissible</li> <li>• with continuous bending</li> </ul>	32.5 mm 58.5 mm 100 mm
number of bending cycles		3000000; Drag chain suitable for 3 million bending cycles at a bending radius of 100 mm, a speed of 4 m/s and an acceleration of 4 m/s <sup>2</sup>
tensile load / maximum		150 N
weight per length		68 kg/km
<b>plug</b>		
design of plug-in connection	RJ45-180	
<b>ambient conditions</b>		
ambient temperature	<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> <li>• during installation</li> </ul>	-25 ... +75 °C -25 ... +75 °C -25 ... +75 °C -10 ... +60 °C
fire behavior	flame resistant according to UL 1685 (CSA FT 4)	
chemical resistance	<ul style="list-style-type: none"> <li>• to mineral oil</li> <li>• to grease</li> <li>• to water</li> </ul>	conditional resistance Conditional resistance conditional resistance
radiological resistance / to UV radiation	resistant	
<b>product features, product functions, product components / general</b>		
product feature		
<ul style="list-style-type: none"> <li>• halogen-free</li> <li>• PoE capability</li> <li>• PoE+ capability</li> <li>• silicon-free</li> </ul>	No Yes Yes Yes	
<b>standards, specifications, approvals</b>		
UL/ETL listing / 300 V Rating	Yes; c(ETL)us, CMG FT4 / (ETL)us PLTC / Sun Res / OIL RES	
UL/ETL style / 600 V Rating	Yes; cRUus AWM 21694 AWM I A/B 60°C 600V FT2	
certificate of suitability		
<ul style="list-style-type: none"> <li>• EAC approval</li> <li>• CE marking</li> <li>• RoHS conformity</li> </ul>	Yes Yes Yes	
standard for structured cabling	Cat5e, Class D	
Marine classification association		
<ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> <li>• French marine classification society (BV)</li> <li>• Det Norske Veritas (DNV)</li> <li>• Germanische Lloyd (GL)</li> <li>• Lloyds Register of Shipping (LRS)</li> <li>• Nippon Kaiji Kyokai (NK)</li> <li>• Polski Rejestr Statków (PRS)</li> </ul>	No No No No No No No	
<b>further information / internet links</b>		
internet link		
<ul style="list-style-type: none"> <li>• to website: Selection guide for cables and connectors</li> <li>• to web page: selection aid TIA Selection Tool</li> <li>• to web page: SiePortal</li> <li>• to website: Image database</li> <li>• to website: CAx-Download-Manager</li> <li>• to website: Industry Online Support</li> </ul>	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a> <a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a> <a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a> <a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a> <a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a> <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>	
<b>security information</b>		
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, integrated cybersecurity strategy.	

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## Approvals / Certificates

### General Product Approval



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12/20/2025