## **SIEMENS**

Data sheet 6XV1871-2N

## product type designation

product description



## IE TP Robust Ground Cable 2x2 (Type C)

Standard cable with rigid cores for fast installation

Standard bus cable (4-core), for laying underground with metal rodent protection, sold by the meter, unassembled

IE robust ground cable 2x2; Cat5e; PROFINET Type C; underground cable; 4-core shielded, with rodent protection; sold by the meter; delivery unit max. 1000 m; minimum order quantity 20 m.

suitability for use	Standard cable with rigid cores for last installation
cable designation	2YH(ST)CY(Z)2Y 2X2X0.64/1.45-100 BK
electrical data	
attenuation factor per length	
• at 10 MHz / maximum	0.065 dB/m
• at 100 MHz / maximum	0.22 dB/m
impedance	
• at 1 MHz 100 MHz	100 Ω
relative symmetrical tolerance	
• of the characteristic impedance at 1 MHz 100 MHz	15 %
near-end crosstalk per length	
● at 1 MHz 100 MHz	0.5 dB/m
coupling loss / at 30 MHz 100 MHz / minimum	80 dB
transfer impedance per length / at 10 MHz	10 mΩ/m
loop resistance per length / maximum	115 mΩ/m
operating voltage	
RMS value	80 V
NVP value in percent	65 %
nechanical 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	
<ul> <li>of AWG22 insulated conductor</li> </ul>	0.64 mm
outer diameter	
<ul> <li>of inner conductor</li> </ul>	0.64 mm
<ul> <li>of the wire insulation</li> </ul>	1.5 mm
<ul> <li>of the inner sheath of the cable</li> </ul>	3.9 mm
<ul> <li>of cable sheath</li> </ul>	9.4 mm
of cable sheath / note	Cable diameter > 6.5 mm due to additional PE protective sheath and metal rodent protection. Cable can only be connected in the IE FC RJ45 Plug / IE FC M12 Plug PRO connector after stripping the protective sheath and the rodent protection.
symmetrical tolerance of the outer diameter / of cable sheath	0.4 mm
material	
<ul> <li>of the wire insulation</li> </ul>	polyethylene (PE)
<ul> <li>of the inner sheath of the cable</li> </ul>	PVC
of cable sheath	PE/PVC

color	1977 11 11 17
of the insulation of data wires	white/yellow/blue/orange
of cable sheath	Black
bending radius	
with single bend / minimum permissible	94 mm
with multiple bends / minimum permissible	141 mm
tensile load / maximum	3000 N
weight per length	129 kg/km
ambient conditions	
ambient temperature	
during operation	-40 +80 °C
during storage	-40 +80 °C
during transport	-40 +80 °C
during installation	-30 +70 °C
• note	Electrical properties measured at 20 °C, tests according to EN50288-2-1
fire behavior	inflammable
class of burning behaviour / according to EN 13501-6	Fca
chemical resistance	
• to mineral oil	conditional resistance
• to grease	Conditional resistance
• to water	Resistant
radiological resistance / to UV radiation	resistant
product features, product functions, product components / ger	neral
product feature	
<ul> <li>halogen-free</li> </ul>	No
• silicon-free	Yes
wire length / for Industrial Ethernet	
• with 100BaseTX	100 m
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	No
UL/ETL style / 600 V Rating	No
certificate of suitability	
<ul> <li>EAC approval</li> </ul>	Yes
CE marking	Yes
RoHS conformity	Yes
standard for structured cabling	Cat5e
Marine classification association	
American Bureau of Shipping Europe Ltd. (ABS)	No
<ul><li>American Bureau of Shipping Europe Ltd. (ABS)</li><li>French marine classification society (BV)</li></ul>	No No
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