

Product type designation	IE TP Ground Cable 2x2 (Type C)
Product description	Standard bus cable (4-core), for laying underground, sold by the meter, unassembled IE GROUND CABLE 2X2 GROUND CABLE 4-WIRE SHIELDED, SOLD BY THE METER MAX. CONSIGNMENT 1000 M MIN. ORDER QUANTITY: 20 M
Suitability for use	Standard cable with rigid cores for fast installation
Cable designation	2YY(ST)CY2Y2x2x0.64/1.50-100

Electrical data

Damping ratio per length	
<ul style="list-style-type: none"> at 10 MHz / maximum at 100 MHz / maximum 	0.063 dB/m 0.213 dB/m
Impedance	
<ul style="list-style-type: none"> at 1 MHz ... 100 MHz 	100 Ω
Relative symmetrical tolerance	
<ul style="list-style-type: none"> of the characteristic impedance at 1 MHz ... 100 MHz 	5 %
Near-end crosstalk per length	
<ul style="list-style-type: none"> at 1 MHz ... 100 MHz 	0.5 dB/m
Transfer impedance per length / at 10 MHz	10 mΩ/m
Loop resistance per length / maximum	124 mΩ/m
Operating voltage	
<ul style="list-style-type: none"> RMS value 	100 V
NVP value in percent	64 %

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	
<ul style="list-style-type: none"> of AWG22 core 	0.64 mm
Outer diameter	
<ul style="list-style-type: none"> of inner conductor of the wire insulation of the inner sheath of the cable of cable sheath of cable sheath / Note 	0.64 mm 1.5 mm 4 mm 9 mm cable diameter >6.5 mm because of additional PE outer cover. Cable can only be connected to RJ45/M12 connector after outer cover is removed.

Symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
Material <ul style="list-style-type: none"> • of the wire insulation • of the inner sheath of the cable • of cable sheath 	PE PVC PVC
Color <ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath 	white / yellow / blue / orange Black
Bending radius <ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible 	80 mm 80 mm
Tensile load / maximum	150 N
Weight per length	97 kg/km

Permitted ambient conditions

Ambient temperature <ul style="list-style-type: none"> • during operation • during storage • during transport • during installation • Note 	-40 ... +70 °C -40 ... +70 °C -40 ... +70 °C -5 ... +50 °C electrical properties measured at 20 Cel, tests according to EN50288-2-1
Burning behavior	flammable
Chemical resistance <ul style="list-style-type: none"> • to mineral oil • to grease • to water 	Conditional resistance Conditional resistance Resistant
Radiological resistance / to UV radiation	resistant

Product properties, functions, components / general

Product property <ul style="list-style-type: none"> • halogen-free • silicon-free 	No Yes
Cable length / for Industrial Ethernet <ul style="list-style-type: none"> • with 100BaseTX 	100 m

Standards, specifications, approvals

Certificate of suitability <ul style="list-style-type: none"> • CE marking • RoHS conformity 	Yes Yes
Standard for structured cabling	Cat5e
Marine classification association	

- American Bureau of Shipping Europe Ltd. (ABS)
- Bureau Veritas (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

Further Information / Internet Links

Internet-Link

- to website: Selector SIMATIC NET SELECTION TOOL
- to website: Industrial communication
- to website: Industry Mall
- to website: Information and Download Center
- to website: Image database
- to website: CAx Download Manager
- to website: Industry Online Support

<http://www.siemens.com/snst>
<http://www.siemens.com/simatic-net>
<https://mall.industry.siemens.com>
<http://www.siemens.com/automation/net/catalog>
<http://automation.siemens.com/bilddb>
<http://www.siemens.com/cax>
<https://support.industry.siemens.com>

last modified:

16.03.2015