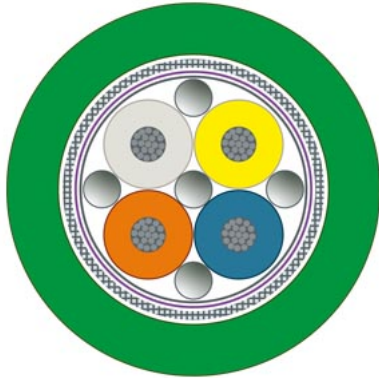


product description



Highly flexible bus cable (4-core), sold by the meter, unassembled

IE TP Robot Cable GP 2x2 (PROFINET type R), TP installation cable, 4-core, for use in highly flexible applications (torsion, cable carriers), sold by the meter; max. 1000 m, minimum order quantity 20 m.

suitability for use

constant motion control when used in the robot (torsional and bending load)

electrical data

attenuation factor per length	
<ul style="list-style-type: none"> at 10 MHz / maximum at 100 MHz / maximum 	0.095 dB/m 0.32 dB/m
impedance	
<ul style="list-style-type: none"> at 1 MHz ... 100 MHz 	120 Ω
relative symmetrical tolerance	
<ul style="list-style-type: none"> of the characteristic impedance at 1 MHz ... 100 MHz 	15 %
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	120 mΩ/m
operating voltage	
<ul style="list-style-type: none"> RMS value 	100 V
NVP value in percent	69 %

mechanical data

number of electrical cores	4
design of the shield	Overlapped aluminum-clad foil, sheathed in a braided screen of tinned copper wires
type of electrical connection / FastConnect	No
core diameter	
<ul style="list-style-type: none"> of AWG22 insulated conductor 	0.74 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 	0.74 mm 1.6 mm 5 mm 6.5 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
material	
<ul style="list-style-type: none"> of cable sheath 	PUR
color	
<ul style="list-style-type: none"> of the insulation of data wires of cable sheath 	white/yellow/blue/orange green
bending radius	
<ul style="list-style-type: none"> with single bend / minimum permissible with continuous bending 	32.5 mm 75 mm
number of bending cycles	5000000; For use in cable carriers, for 5 million bending cycles with a

number of torsion cycles / with torsion by $\pm 180^\circ$ on 1 m cable length	bending radius of 75 mm, a speed of 5 m/s, and an acceleration of 20 m/s ² 5000000
tensile load / maximum weight per length	100 N 63 kg/km
ambient conditions	
ambient temperature	0 ... 60 °C
<ul style="list-style-type: none"> during operation during storage during transport during installation note 	-20 ... +80 °C -20 ... +80 °C 0 ... 60 °C Electrical properties measured at 20 °C, tests according to DIN VDE 0472
ambient condition / for operation	temperature range for permanent installation -20 °C to 80 °C
fire behavior	flame-resistant according to IEC 60332-1-2 and flame retardant acc. to UL 1581, Sec. 1061
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
<ul style="list-style-type: none"> to mineral oil to grease to water 	oil-resistant according to DIN EN 60811-404 (7 x 24 h/90 °C) Conditional resistance 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 silicon-free 	No Yes
wire length / for Industrial Ethernet	
<ul style="list-style-type: none"> with 100BaseTX 	100 m
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes
UL/ETL style / 600 V Rating	Yes
certificate of suitability	
<ul style="list-style-type: none"> EAC approval CE marking RoHS conformity 	Yes Yes Yes
standard for structured cabling	Cat5e
Marine classification association	
<ul style="list-style-type: none"> American Bureau of Shipping Europe Ltd. (ABS) French marine classification society (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
reference code	
<ul style="list-style-type: none"> according to IEC 81346-2 according to IEC 81346-2:2019 	WG WGB
further information / internet-Links	
Internet-Link	
<ul style="list-style-type: none"> to web page: selection aid TIA Selection Tool to website: Industrial communication to website: Industry Mall to website: Information and Download Center to website: Selection guide for cables and connectors to website: Image database to website: CAx-Download-Manager to website: Industry Online Support 	http://www.siemens.com/tia-selection-tool http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter https://sie.ag/2QdlxcP http://automation.siemens.com/bilddb http://www.siemens.com/cax https://support.industry.siemens.com
last modified:	2/3/2023 