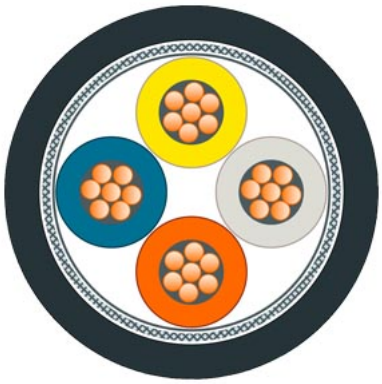
SIEMENS

Data sheet 6XV1871-2T

product type designation	**IE TP Train Cable 2x2 (Type C, AWG22/7)**
product description	Flexible bus cable with tinned copper leads (4-core) for rail applications, sold by the meter, unassembled
	IE TP TRAIN Cable 2x2; CAT5 TP installation cable for Rail applications, for connection to FC RJ45 plug 2x2, FC M12 plug pro 2x2; railway-certified, 4-core, shielded, Cat5e, sold by the meter, max. delivery unit 2000 m, minimum order quantity 20 m.



suitability for use	For laying in rail vehicles and buses
cable designation	SF/UTP
wire length	sold by the meter
electrical data	
attenuation factor per length	
● at 10 MHz / maximum	0.053 dB/m
● at 100 MHz / maximum	0.188 dB/m
impedance	
● at 1 MHz ... 100 MHz	100 Ω
relative symmetrical tolerance	
● of the characteristic impedance at 1 MHz … 100 MHz	5 %
near-end crosstalk per length	
● at 1 MHz ... 100 MHz	0.5 dB/m
transfer impedance per length / at 10 MHz	8 mΩ/m
loop resistance per length / maximum	124 mΩ/m
operating voltage	
● RMS value	125 V
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	No
core diameter	
● of AWG22 insulated conductor	0.75 mm
outer diameter	
● of inner conductor	0.75 mm
● of the wire insulation	1.5 mm
● of cable sheath	6.6 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
material	
● of the wire insulation	polyethylene (PE)
● of cable sheath	Elastomer meshed electron beam
color	
● of the insulation of data wires	white/yellow/blue/orange
● of cable sheath	Black
bending radius	
● with single bend / minimum permissible	40 mm
● with multiple bends / minimum permissible	40 mm

tensile load / maximum	100 N
weight per length	71 kg/km
ambient conditions	
ambient temperature	
● during operation	-40 ... +85 °C
● during storage	-40 ... +85 °C
● during transport	-40 ... +85 °C
● during installation	-25 ... +70 °C
● note	Electrical properties measured at 20 °C, tests according to DIN VDE 0472
fire behavior	BS 6853 cable internal Ia, Ib, II, cable external Ia, Ib, II, DIN 5510-2 fire protection level 1-4, EN 45545-2 Hazard Level HL 1-HL 3, EN 50306-4, NF F 16-101, NFPA 130, PN-K-02511 Class A, UIC 564-2 Class A
chemical resistance	
● to mineral oil	EN 50306-4 (72h/100 °C, method B volume concentration 200x10-6, 72h/100 °C IRM 902, 168h/70 °C IRM 903), DIN 51900
● to grease	Conditional resistance
● to water	conditional resistance
radiological resistance / to UV radiation	resistant
product features, product functions, product components / general	
product feature	
● halogen-free	Yes
● 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	
● EAC approval	Yes
● CE marking	Yes
● RoHS conformity	Yes
standard for structured cabling	Cat5
Marine classification association	
● American Bureau of Shipping Europe Ltd. (ABS)	No
● French marine classification society (BV)	No
● Det Norske Veritas (DNV)	No
● Germanische Lloyd (GL)	No
● Lloyds Register of Shipping (LRS)	No
● Nippon Kaiji Kyokai (NK)	No
● Polski Rejestr Statkow (PRS)	No
reference code	
● according to IEC 81346-2	WG
● according to IEC 81346-2:2019	WGB
further information / internet links	
internet link	
● to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
● to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
● to web page: SiePortal	https://sieportal.siemens.com/
● to website: Image database	https://www.automation.siemens.com/bilddb
● to website: CAx-Download-Manager	https://www.siemens.com/cax
● to website: Industry Online Support	https://support.industry.siemens.com
security information	
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, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions

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Approvals / Certificates

General Product Approval				Environment	
CE EG-Konf.	Declaration of Conformity	UKCA	CCC	Confirmation	Environmental Confirmations

last modified: 2/26/2025