SIEMENS

Data sheet 6XV1878-5TH20

product type designation	IE TP Cord M12-180/RJ45-180
product description	Flexible plug-in cable (8-wire), preferred length, pre-assembled with 1 x IE M12 plug 4X2, X-coded, 180 degrees cable outlet and 1x RJ45 connector; 4x2, 180 degrees cable outlet
	IE TP Cord M12-180/RJ45-180 pre-assembled IE Flexible Cable with 1x M12 plug (X-coded) 180 degrees cable outlet and 1x RJ45 plug; 180-degree cable outlet; length 2.0 m.
suitability for use	For connecting Industrial Ethernet stations with an M12 interface (e.g. SCALANCE W and SCALANCE X)
wire length	2 m
electrical data	
number of electrical connections	2
attenuation factor per length	
at 10 MHz / maximum	0.086 dB/m
• at 100 MHz / maximum	0.28 dB/m
• at 300 MHz / maximum	0.402 dB/m
• at 600 MHz / maximum	0.735 dB/m
impedance	
• at 1 MHz 100 MHz	100 Ω
near-end crosstalk per length	
● at 100 MHz	0.724 dB/m
• at 300 MHz	0.653 dB/m
● at 600 MHz	0.608 dB/m
loop resistance per length / maximum	290 mΩ/m
insulation resistance coefficient	5000 GΩ·m
operating voltage	
RMS value	80 V
NVP value in percent	68 %
mechanical data	
number of electrical cores	8
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 AWG26 insulated conductor 	0.48 mm
outer diameter	
 of the wire insulation 	1 mm
 of the inner sheath of the cable 	5.4 mm
of cable sheath	6.5 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.3 mm
material	
 of the wire insulation 	polyethylene (PE)
of cable sheath	PUR
color	
 of the insulation of data wires 	white/blue, white/orange, white/green, white/brown
of cable sheath	green
bending radius	
with single bend / minimum permissible	32.5 mm
with multiple bends / minimum permissible	65 mm
	100 N
tensile load / maximum	.00.11
tensile load / maximum weight per length	45 kg/km
weight per length	

during storage	-40 +80 °C
during storageduring transport	-40 +80 °C
during transport during installation	-40 +80 °C
fire behavior	flame resistant according to IEC 60332-1-2, smoke density according to IEC 61034
chemical resistance	
• to mineral oil	oil resistant according to DIN EN 60811-2-1
• to grease	Conditional resistance
• to water	conditional resistance
radiological resistance / to UV radiation	resistant
protection class IP	IP65/67 (M12), IP20 (RJ45)
product features, product functions, product components / gener	
product feature	
• halogen-free	Yes
• silicon-free	Yes
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; AWM Style 21815
UL/ETL style / 600 V Rating	No
certificate of suitability	
EAC approval	Yes
CE marking	Yes
RoHS conformity	Yes
standard for structured cabling	Cat6A
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 web page: selection aid TIA Selection Tool	http://www.siemens.com/tia-selection-tool
to website: Industrial communication	http://www.siemens.com/simatic-net
to website: Industry Mall	https://mall.industry.siemens.com
to website: Information and Download Center	http://www.siemens.com/industry/infocenter
to website: Selection guide for cables and connectors	https://sie.ag/2QdlxcP
to website: Image database	http://automation.siemens.com/bilddb
to website: Industry Online Support	https://support.industry.siemens.com

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