

DOC: <i>documento</i>	1324.6.0	cause of release: <i>emissione</i>	<input checked="" type="checkbox"/> information <i>informazione</i>	<input type="checkbox"/> definitive <i>definitiva</i>	ITEM CODE: <i>codice articolo</i>	0502453
ITEM DESCRIPTION: <i>descrizione articolo</i>						
NETBUS L2/FIP P22M AWM20233 UL/CSA 1x2x22/19AWG 150 OHM (PROFIBUS™ DP CABLE) for fixed and flexible (drag chain) installation						
USE: <i>impiego</i>	<input checked="" type="checkbox"/> indoor interno edificio <input checked="" type="checkbox"/> outdoor limited esterno limitato <input type="checkbox"/> outdoor direct burial esterno interrato <input type="checkbox"/>	^{3052e}	INSTALLATION: <i>posa</i>	<input checked="" type="checkbox"/> fixed fissa <input checked="" type="checkbox"/> flexible limited flessibile limitata <input checked="" type="checkbox"/> dynamic (drag chain) mobile in catena <input type="checkbox"/> dynamic (torsion) mobile in torsione	INFORMATION: <i>informazioni</i>	<input checked="" type="checkbox"/> 2011/65/EC RoHS compliant <input checked="" type="checkbox"/> 2014/35/UE LVD compliant <input checked="" type="checkbox"/> CE marking <input type="checkbox"/>

Constructive characteristics

Inner conductor	stranded bare copper wire 0,38 mm ² (22/19AWG)
Insulation	foam skin polyethylene
Insulation diameter (nom.)	2,8 mm
Insulation colours	green, red
Core assembly	twisted to a pair with fillers
Pair separation	non-woven (PET/PA) tape with overlap
Pair Shield	- aluminium/polyester (AL/PET) tape with overlap - AL surface outside - tinned copper wire braid 85% nom. coverage
Outer jacket	PUR halogen free and flame retardant
Jacket diameter (nom)	8,1 mm (± 0,2 mm)
Jacket colour	violet similar RAL4001

Weight (approx.) 74 kg/km

Marking (ink jet) according to CEAM specification

Electrical and transmission properties @ 20°C

Max DC conductor resistance	59,4 Ω/km
Capacitance core/core (nom)	30 nF/km
Characteristic impedance	150 Ω (± 10 %) 1÷20MHz
Propagation velocity (approx.)	78%
Attenuation	max 0,3 dB/100m at 9,6 KHz max 0,5 dB/100m at 38,4 KHz max 0,6 dB/100m at 200 KHz max 2,2 dB/100m at 4 MHz max 4,4 dB/100m at 16 MHz max 4,9 dB/100m at 20 MHz
Dielectric test voltage	1,5 kVac/1min (core/core)
Dielectric test voltage	1,5 kVac/1min (core/shield)
Min insulation resistance	5,0 GΩxkm
Transfer impedance	10 mΩ/m @ 100 kHz; 8 mΩ/m @ 1 MHz; 10 mΩ/m @ 10 MHz; 20 mΩ/m @ 30 MHz; 30 mΩ/m @ 100 MHz

Fire performance

Flame retardant	compliant UL1581 §1060 (FT1), §1061 (cable flame), §1080 (VW-1) , IEC 60332-1-2 Std.
Determination of the amount of halogen acid gas	compliant EN 50267-2-1 and IEC 60754-1 Std.
Determination of degree of acidity of gases	compliant EN 50267-2-2 and IEC 60754-2 Std
Heat release (approx.)	1259 MJ/km (0,349 kWh/m)

Approvals

UL/CSA	insulated wire according to AWM Style 10578 300V/80°C jacketed wire according to AWM Style 20233 300V/80°C
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Standard reference

Other properties

Max operating voltage	300 V
Temperature rating (fixed)	-40°C / +80°C
Temperature rating (dynamic)	-30°C / +70°C
Min bend radius (fixed)	6 x outer Ø [mm]
Min bend radius (dynamic)	12 x outer Ø [mm]
Oil resistance	compliant IEC 60811-2-1, ASTM-oil 1, ICEA S-82-552 Std.
UV resistance	compliant UL1581 §1200 Std
Mud resistance	compliant NEK 606 Std
Ozone resistance	compliant VDE 0472 par.1 Std
Microbe resistance	compliant VDE 0282/10 Std
Saturated hydrocarbons resistance	good resistant (diesel, kerosene, petrol ether)
Max translation speed (axial drag chain)	3,0 m/sec (subject to correct installation)
Max acceleration (axial drag chain)	3,0 m/sec ² (subject to correct installation)
Torsion use	not recommended

note/s:

- free of paint wetting impairment substance (eg. Silicone)

DATE: <i>data</i>	06/09/2018	FILLED IN BY: <i>14 compilato</i>	Davide Dall'Angelo	AUTHORIZED: <i>visto</i>	
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