



VOKA-ETH Profinet C 2YH(St)C11Y 2x2xAWG22/7 PUR

Data cable for industry and mechanical engineering.
Categorie 5e

APPLICATION

Data cable for analogue and digital signal transmission for flexible wiring acc. to Profinet Standard in industrial environments. With solid PUR for high chemical and mechanical load.

Usage: IEEE 802.3 : Ethernet 10Base-T ; Fast Ethernet 100Base-T
IEEE 802.5 : 16 MB; ISDN ; FDDI ; ATM

STANDARDS

EN 50288-2-1 ; EN 50173 ; ISO/IEC 11801 2. edition;
IEC 61156-5 ; PROFInet Cabling Guide

CONSTRUCTION

Conductor: copper strand, tinned AWG 22/7

Core insulation: PE

Core diameter: 1,50 ± 0,10 mm

Core identification: wh, ye, bu, or

Stranding: star-quad

Inner sheath material: FRNC Compound

Screening: plastic-laminated aluminium foil
tinned copper wire braid

Sheath material: PUR FHF

Sheath color: green, RAL 6018

BEHAVIOR UNDER FIRE CONDITIONS

EN 60332-1-2 ; IEC 60754-2 ; UL AWM 21164

CHEMICAL PROPERTIES

RoHS 2011/65/EU ; REACH Compliant (EG) Nr. 1907/2006 ;
IEC 60811-404 (IRM 902, 4h bei 70°C; IRM 902, 7dh bei 90°C ;
IRM 902, 21d bei 90°C Total EDC 95-11, 1680h bei 70 °C)

ELECTRICAL CHARACTERISTICS

loop resistance max.	max. 115 Ω / km
Insulation resistance min.	min. 5 GΩ x km at +20°C
Operating capacity	nom. 50 nF / km
Impedance	100 Ω ± 5 Ω
Test voltage	700 V / AC
Nominal voltage U_0/U	125 V
NVP	ca. 0,66 c
Signal delay	max. 510 ns/100m
Delay skew	< 25 ns/100m
Coupling attenuation	> 80 dB
Coupling resistance	< 20 mΩ/m at 10MHz

THERMAL & MECHANICAL PROPERTIES

Temperature range stationary	-40°C to +80°C
Temperature range during inst.	-20°C to +60°C
min. bending radius installed	5 x diameter
min. bending radius moved	10 x diameter
min. bending radius chain	20 x diameter
max. bending cycles	> 3 Mio.
Maximum traction	120N

Dimension	Diameter appr.mm	Cable weight appr.kg/km	Copper index kg/km	Article number
AWG22/7	6.6	65	25	

Version: 11/2023

We reserve changes which serve technical progress • Price upon quantity-specific request

Transmission characteristics

The stated performance data are characteristic measurements.

f (MHz)	Attenuation (dB/100m)	NEXT (dB)	ACR (dB/100m)	EL-FEXT (dB/100m)	RL (dB)
	NOM	NOM	NOM	NOM	NOM
1	1,9	75	73,1	69	-
4	3,7	65	61,3	57	25
10	5,8	60	54,2	50	30
16	7,6	54	46,4	46	30
20	8,6	52	41,4	44	30
31,25	11	49	38	40	28,5
62,5	16,3	47	30,7	34	27
100	20,9	45	24,1	30	24



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