



VOKA-ETH Profinet A 2YY(St)CY 2x2xAWG22/1 PVC

Date cable for industry and mechanical engineering.
Categorie 5e

APPLICATION

Data cable for analogue and digital signal transmission for wiring according to Profinet Standard in industrial environments.

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, solid, bare, AWG 22/1

Core insulation: PE

Core diameter: 1,35 ± 0,10 mm

Core identification: wh, ye, bu, or

Stranding: star-quad

Inner sheath material: Special PVC

Screening: plastic-laminated aluminium foil
tinned copper wire braid

Sheath material: Special PVC

Sheath color: green, RAL 6018

BEHAVIOR UNDER FIRE CONDITIONS

EN 60332-1-2 ; UL AWM 21694 or UL AWM 2464

CHEMICAL PROPERTIES

RoHS 2011/65/EU

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	-20°C to +70°C
Temperature range during inst.	-10°C to +50°C
min. bending radius installed	5 x diameter
min. bending radius moved	10 x diameter
Maximum traction	100N

Dimension	Diameter appr.mm	Cable weight appr.kg/km	Copper index kg/km	Article number
AWG22/1	6.5	65	25	

Version: 03/2023

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



Version: 03/2023

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

