



ZB9013 | Industrial Ethernet/EtherCAT cable, shielded, PVC, 1 x 4 x AWG22, fixed installation, CAT5, yellow

Electrical data	
Rated voltage	600 V
Insulation resistance	$\geq 500 \text{ M}\Omega/\text{km}$
Characteristic impedance (Ethernet)	$100 \Omega \pm 15 \Omega$ (100 MHz)
Loop resistance (Ethernet)	$\leq 115 \Omega/\text{km}$
Signal running time (Ethernet)	5.3 ns/m
Electrical parameters (Ethernet)	based on CAT 5
Test voltage	$\geq 2000 \text{ V}$
Mechanical data	
Cable structure (Ethernet)	star quad
Conductor construction (Ethernet)	solid
Cross section (Ethernet)	$1 \times 4 \times 0.34 \text{ mm}^2$ (AWG 22)
Min. bending radius, moved	7.5 x outer cable diameter
Min. bending radius, fixed installation	3 x outer cable diameter
Weight	67 kg/km (45.0 lb/1000 ft)
Outer cable diameter	$6.5 \text{ mm} \pm 0.2 \text{ mm}$ ($0.2559'' \pm 0.0079''$)
Shielding	aluminium-clad foil, braiding of tinned copper wires
Optical covering factor of shielding (Ethernet)	90 %
Use	fixed installation
Jacket colour	yellow
Material jacket	PVC (polyvinyl chloride)
Wire colour code	yellow, orange, white, blue
Printing colour	black
Environmental data	
Operation temperature range, moved	$-40 \dots +75 \text{ }^\circ\text{C}$, $-40 \dots +167 \text{ }^\circ\text{F}$
Operation temperature range, fixed installation	$-20 \dots +60 \text{ }^\circ\text{C}$, $-4 \dots +140 \text{ }^\circ\text{F}$
Ambient temperature, transport/storage	$-40 \dots +75 \text{ }^\circ\text{C}$, $-40 \dots +167 \text{ }^\circ\text{F}$
Flame-retardant	according to IEC 60332-1-2, according to UL 1685 (CSA FT 4)

Attenuation								
Max. insertion loss								
Frequency [MHz]	1	4	10	16	20	31.25	62.5	100
[db/100 m]	1.6	3.2	5.2	6.9	7.8	10.5	15.0	19.5
[db/100 ft]	0.5	1	1.6	2.1	2.4	3.2	4.6	5.9
Min. near-end crosstalk attenuation								
Frequency [MHz]	1	4	10	16	20	31.25	62.5	100
[db/100 m]	80	75.0	70.0	65.0	63.0	60.0	55.0	50.0
[db/100 ft]	24.4	22.9	21.3	19.8	19.2	18.3	16.8	15.2

Notes

- The following length tolerances apply: 2-3 %
- Illustrations similar

Ordering information	Length
ZB9013	sold by the metre

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