



## ZB9035 | Industrial Ethernet/EtherCAT cable, shielded, PUR, 1 x 4 x AWG26, drag-chain suitable, CAT5, yellow

Electrical data	
Rated voltage	30 V (according to IEC 61076-2-101)
Attenuation of shielding	$\geq 43$ dB
Insulation resistance	$\geq 150$ M $\Omega$ /km
Unbalanced capacitance to ground	$\leq 3400$ pF/km
Mutual capacitance	51 pF/m at 1 kHz
Characteristic impedance (Ethernet)	100 $\Omega$ $\pm 5$ $\Omega$ (100 MHz)
Loop resistance (Ethernet)	250 $\Omega$ /km
Unbalanced resistance (Ethernet)	< 3 %
Dielectric strength wire/wire (Ethernet)	1000 V DC/700 V AC
Dielectric strength wire/shield (Ethernet)	1000 V DC/700 V AC
Signal running time (Ethernet)	5.55 ns/m
Electrical parameters (Ethernet)	based on CAT 5
Test voltage	700 V
Mechanical data	
Cable structure (Ethernet)	star quad
Conductor construction (Ethernet)	19 x 0.1 mm
Cross section (Ethernet)	1 x 4 x 0.14 mm <sup>2</sup> (AWG26)
Min. bending radius, moved	20 x outer cable diameter
Min. bending radius, fixed installation	4 x outer cable diameter
Weight	41 kg/km (27 lb/1000 ft)
Outer cable diameter	5.4 mm $\pm$ 0.3 mm (0.213" $\pm$ 0.0118")
Conductor material (Ethernet)	copper, tinned
Shielding	aluminium-clad foil, braiding of tinned copper wires
Optical covering factor of shielding (Ethernet)	90 %
Use	drag-chain suitable
Max. acceleration	15 m/s <sup>2</sup>
Max. speed	15 m/s
Max. number of cycles	20 million

Wall thickness of wire insulation (Ethernet)	0.25 mm
Jacket colour	yellow
Material jacket	PUR (polyurethane)
Wire colour code	yellow, orange, white, blue
Wire insulation material	PP (polypropylene)
Printing on the jacket	"sequential length in metres" Industrial Ethernet Cat5 trailing * E130266 AWM 20963 80 °C 30 V *ZB9035 "month/year" "internal order number"
Printing colour	black
<b>Environmental data</b>	
Operation temperature range, moved	-40...+80 °C, -40...+176 °F
Operation temperature range, fixed installation	-40...+80 °C, -40...+176 °F
Acid, lye and solvent resistance	depends on medium, concentration, temperature and duration
LABS-free	yes
CFC-free	yes
Halogen-free	yes
Silicone-free	yes
RoHS compliant	yes
Approvals	UL-Style AWM 20963

Attenuation								
Max. insertion loss								
Frequency [MHz]	1	4	10	16	20	31.25	62.5	100
[db/100 m]	3.1	6.5	9.9	12.3	13.8	17.7	25.6	33.0
[db/100 ft]	0.9	2	3	3.7	4.2	5.4	7.8	10.1
Min. near-end crosstalk attenuation								
Frequency [MHz]	1	4	10	16	20	31.25	62.5	100
[db/100 m]	62	53.0	47.0	44.0	42.0	40.0	35.0	32.0
[db/100 ft]	18.9	16.2	14.3	13.4	12.8	12.2	10.7	9.8

## Notes

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

Ordering information	Length
ZB9035	sold by the metre

Beckhoff®, TwinCAT®, EtherCAT®, EtherCAT G®, EtherCAT G10®, EtherCAT P®, Safety over EtherCAT®, TwinSAFE®, XFC®, XTS® and XPlanar® are registered trademarks of and licensed by Beckhoff Automation GmbH. Other designations used in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owners.

© Beckhoff Automation GmbH & Co. KG 02/2021

The information provided in this brochure contains merely general descriptions or characteristics of performance which in case of actual application do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract.