

ZB9030 | Industrial Ethernet/EtherCAT cable, shielded, PVC, 1 x 4 x AWG26, fixed installation, CAT5, green

Electrical data					
	may 200 V (not for high voltage purposes)				
Rated voltage	max. 300 V (not for high voltage purposes)				
Attenuation of shielding	≥ 43 dB				
Insulation resistance	≥ 500 MΩ/km				
Unbalanced capacitance to ground	1600 pF/km				
Mutual capacitance	52 nF/km				
Characteristic impedance (Ethernet)	100 Ω ±5 Ω (100 MHz) (EN 50289-1-11)				
Loop resistance (Ethernet)	280 Ω/km				
Unbalanced resistance (Ethernet)	2 %				
Dielectric strength wire/wire (Ethernet)	2000 V				
Dielectric strength wire/shield (Ethernet)	2000 V				
Signal running time (Ethernet)	5.3 ns/m				
Electrical parameters (Ethernet)	based on CAT 5				
Test voltage	≥ 2000 V				
Mechanical data					
Mechanical data Cable structure (Ethernet)	star quad				
	star quad 7 x 0.167				
Cable structure (Ethernet)	·				
Cable structure (Ethernet) Conductor construction (Ethernet)	7 x 0.167				
Cable structure (Ethernet) Conductor construction (Ethernet) Cross section (Ethernet)	7 x 0.167 1 x 4 x 0.14 mm ² (AWG26)				
Cable structure (Ethernet) Conductor construction (Ethernet) Cross section (Ethernet) Min. bending radius, moved Min. bending radius, fixed	7 x 0.167 1 x 4 x 0.14 mm ² (AWG26) 7 x outer cable diameter				
Cable structure (Ethernet) Conductor construction (Ethernet) Cross section (Ethernet) Min. bending radius, moved Min. bending radius, fixed installation	7 x 0.167 1 x 4 x 0.14 mm² (AWG26) 7 x outer cable diameter 5 x outer cable diameter				
Cable structure (Ethernet) Conductor construction (Ethernet) Cross section (Ethernet) Min. bending radius, moved Min. bending radius, fixed installation Weight	7 x 0.167 1 x 4 x 0.14 mm² (AWG26) 7 x outer cable diameter 5 x outer cable diameter 33 kg/km (22.2 lb/1000ft)				
Cable structure (Ethernet) Conductor construction (Ethernet) Cross section (Ethernet) Min. bending radius, moved Min. bending radius, fixed installation Weight Outer cable diameter	7 x 0.167 1 x 4 x 0.14 mm ² (AWG26) 7 x outer cable diameter 5 x outer cable diameter 33 kg/km (22.2 lb/1000ft) 4.9 mm ± 0.2mm (0.193" ± 0.0079")				
Cable structure (Ethernet) Conductor construction (Ethernet) Cross section (Ethernet) Min. bending radius, moved Min. bending radius, fixed installation Weight Outer cable diameter Conductor material (Ethernet)	7 x 0.167 1 x 4 x 0.14 mm² (AWG26) 7 x outer cable diameter 5 x outer cable diameter 33 kg/km (22.2 lb/1000ft) 4.9 mm ± 0.2mm (0.193" ± 0.0079") bare copper				
Cable structure (Ethernet) Conductor construction (Ethernet) Cross section (Ethernet) Min. bending radius, moved Min. bending radius, fixed installation Weight Outer cable diameter Conductor material (Ethernet) Shielding Optical covering factor of	7 x 0.167 1 x 4 x 0.14 mm² (AWG26) 7 x outer cable diameter 5 x outer cable diameter 33 kg/km (22.2 lb/1000ft) 4.9 mm ± 0.2mm (0.193" ± 0.0079") bare copper aluminium-clad foil, braiding of tinned copper wires				
Cable structure (Ethernet) Conductor construction (Ethernet) Cross section (Ethernet) Min. bending radius, moved Min. bending radius, fixed installation Weight Outer cable diameter Conductor material (Ethernet) Shielding Optical covering factor of shielding (Ethernet)	7 x 0.167 1 x 4 x 0.14 mm² (AWG26) 7 x outer cable diameter 5 x outer cable diameter 33 kg/km (22.2 lb/1000ft) 4.9 mm ± 0.2mm (0.193" ± 0.0079") bare copper aluminium-clad foil, braiding of tinned copper wires ≥ 80 %				
Cable structure (Ethernet) Conductor construction (Ethernet) Cross section (Ethernet) Min. bending radius, moved Min. bending radius, fixed installation Weight Outer cable diameter Conductor material (Ethernet) Shielding Optical covering factor of shielding (Ethernet) Use Wall thickness of wire insulation	7 x 0.167 1 x 4 x 0.14 mm² (AWG26) 7 x outer cable diameter 5 x outer cable diameter 33 kg/km (22.2 lb/1000ft) 4.9 mm ± 0.2mm (0.193" ± 0.0079") bare copper aluminium-clad foil, braiding of tinned copper wires ≥ 80 % fixed installation				

Material jacket	PVC (polyvinyl chloride)				
Wire colour code	yellow, orange, white, blue				
Wire insulation material	PE (polyethylene)				
Printing on the jacket	"sequential length in metres" Industrial Ethernet Cat5 flex *E130266 AWM STYLE 2464 80 °C 300 V* ZB9030 "month/year" "internal order number"				
Printing colour	black				
Environmental data					
Operation temperature range, fixed installation	-40+80 °C, -40+176 °F				
Flame-retardant	according to IEC 60332-1-2				
Halogen-free	DIN VDE 0472 part 815				
Approvals	UL-Style 2464				

Attenuation								
Max. insertion loss								
Frequency [MHz]	1	4	10	16	20	31.25	62.5	100
[db/100 m]	3.2	6.0	9.5	12.1	13.6	17.1	24.8	32.0
[db/100 ft]	1	1.8	2.9	3.7	4.1	5.2	7.6	9.8
Min. near-end crosstalk attenuation								
Frequency [MHz]	1	4	10	16	20	31.25	62.5	100
[db/100 m]	65.3	56.3	50.3	47.2	45.8	42.9	38.4	35.3
[db/100 ft]	19.9	17.2	15.3	14.4	14	13.1	11.7	10.8

Notes

- The following length tolerances apply: 2-3 $\,\%$

Ordering information	Length
ZB9030	sold by the metre

Beckhoff®, TwinCAT®, EtherCAT®, EtherCAT®, EtherCAT G®, EtherCAT G0®, EtherCAT G0®, 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 expressively agreed in the terms of contract.