



**Industrial-Ethernet/EtherCAT-Cable** | PUR, drag chain usable, flexibel, 1x4xAWG22

Electrical data									
Rated voltage	600 V								
Attenuation of shielding	≥40 dB								
Insulation resistance	500 MΩ*km								
Capacity unbalanced to ground	1600 pF/km								
Mutual capacitance	52 nF/km (1kHz)								
Characteristic impedance	100 Ω ±15 Ω (100Mhz)								
Loop resistance	≤ 115 Ω/km								
Differential impedance	250 Ω/km								
Unbalanced resistance	2 %								
Attenuation [dB/100m]	Frequency (MHz)	1	4	10	16	20	31.25	62.5	100
	typ. Value (db/100m)	2.1	4.0	6.3	8.0	9.0	11.4	16.5	21.3
	(db/100ft)	0.6	1.2	1.9	2.4	2.7	3.5	5.0	6.5
Near crosstalk [dB]	Frequency (MHz)	1	4	10	16	20	31.25	62.5	100
	typ. Value (db/100m)	80	76	70	65	63	60	55	50
	(db/100ft)	24.4	23.2	21.3	19.8	19.2	18.3	16.8	15.2
Dielectric strength wire/wire	1000 VDC / 700 VAC								
Dielectric strength wire/shield	1000 VDC / 700 VAC								
Signal running time	5.3 ns/m								
Electrical parameters	based on CAT5								
Test voltage	2000 V								
Mechanical data									
Cable structure	star quad								
Conductor construction	7x0.25 mm								
Cross section	0.34 mm <sup>2</sup> (AWG22)								
max. Bending radius, moved	7.5x cable outer diameter								
max. Bending radius, fixed installation	5x cable outer diameter								
Weight	61 kg/km (40.9lb/1000ft)								
Cable outer diameter	6.5 mm ±0.2 mm (0.142")								
Conductor material	copper, tinned								
Optical covering factor of shielding	85%								
max. Acceleration	4 m/s <sup>2</sup>								
max. Speed	4 m/s								

<b>max. Number of cycles</b>	3 million
<b>Wall thickness of wire insulation</b>	0.375 mm
<b>Wall thickness of jacket</b>	0.9 mm
<b>Jacket color</b>	green
<b>Jacket material</b>	PUR (polyurethane)
<b>Wire insulation material</b>	white, yellow, blue, orange
<b>Wire insulation material</b>	PP (polypropylene)
<b>Printing on the jacket</b>	BECKHOFF ZB9020 Industrial Ethernet / EtherCAT Trailing Cable * CAT5PLUS * 22AWG (SHIELDED) (UL) E119100 CMX 75°C VERIFIED (UL) CAT 5E PATCH CABLE FRNC **sequential length in meters"
<b>Printing color</b>	black
<b>Environmental data</b>	
<b>Operation temperature range, moved</b>	-20°C up to 60°C (-4°F up to 140°F)
<b>Operation temperature range, fixed installation</b>	-40°C up to 70°C (-40°F up to 158°F)
<b>UV resistance</b>	yes
<b>Oil resistance</b>	yes
<b>Acid, lye and solvent resistance</b>	depends on medium, concentration, temperature and time
<b>Other characteristics</b>	RoHS-conform, flame resistant, free from harmful substances, halogen, silicon, CFC
<b>approvals</b>	UL
<b>Ordering information</b>	
<b>ZB9020</b>	product sold by meter