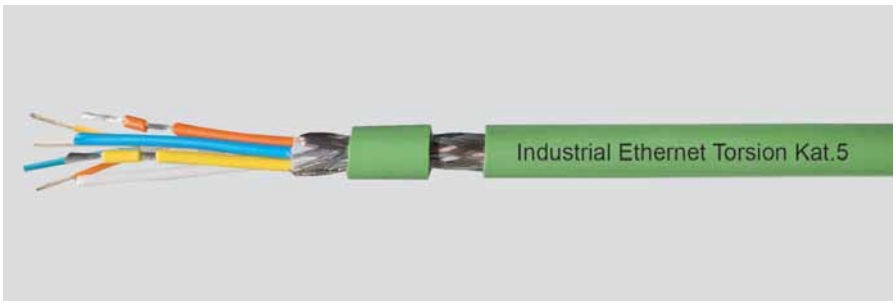
Industrial Ethernet

IE Torsion

HELUKAT®

PUR



Type
Cable structure

Torsional applications
2x2x0,75 mm (stranded)

Inner conductor diameter:	Copper, tinned (AWG 22/19)
Core insulation:	Foam-skin-PE
Core colours:	wh, ye, bu, og
Stranding element:	Star quad
Separator:	Polyester foil over stranded bundle
Total shielding:	Cu braid, tinned
Outer sheath material:	PUR
Cable external diameter:	app. 6,5 mm ± 0,2 mm
Outer sheath colour:	Green similar to RAL 6018

Electrical data

Characteristic impedance:	100 Ohm ± 15 Ohm at 1 to 100 MHz
Conductor resistance, max.:	60 Ohm/km
Insulation resistance, min.:	0,5 GOhm x km
Loop resistance:	120 Ohm/km max.
Mutual capacitance:	52 nF/km nom.
Test voltage:	0,7 kV

Typical values

Frequency	(MHz)	10	16	62,5	100
Attenuation	(db/100m)	7,6	10,0	26,5	41,0
ELFEXT	(db)	43,8	39,7	24,0	20,0

Technical data

Weight:	app. 54 kg/km
bending radius, repeated:	70 mm
Operating temperature range min.:	-40°C
Operating temperature range max.:	+80°C
Caloric load, approx. value:	0,45 MJ/m
Copper weight:	32,00 kg/km

Norms

Category 5e, Flame-retardant acc. to IEC 60332-1-2, Halogen-free acc. to 60754-1, AWM Style 21161 80°C

Application

HELUKAT® INDUSTRIAL ETHERNET Category 5e TORSION offers excellent transmission characteristics and is designed for applications with torsion loads, e.g. in robots. The cable listed here corresponds to the classification for continous movement.

Part no.

802186, INDUSTRIAL ETHERNET CAT.5e

Dimensions and specifications may be changed without prior notice.

Ideal accessory:
RJ45 copper connector
805401 + 805402
chapter 4, page 294