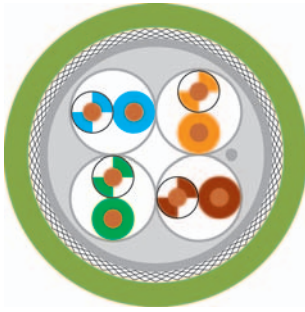


Industrial Ethernet

10GIG**HELUKAT® 500IND**

S/FTP, Category 6A



Type

Cable structure

Inner conductor diameter:
Core insulation:
Core colours:
Stranding element:
Shielding 1:
Inner sheath material:
Shielding 2:
Total shielding:
Drain wire:
Outer sheath material:
Cable external diameter:
Outer sheath colour:

Industrial Area

S/FTP 4x2xAWG 22/1

Copper, bare (AWG 22/1)
Foam-skin-PE
whbu/bu, whog/og, whgn/gn, whbn/bn
Double core
Polyester foil over stranded bundle
PVC
Polyester foil, aluminium-lined
Foil + braid
yes
PVC
app. 9,6 mm ± 0,3 mm
Green similar to RAL 6018

Electrical data

Characteristic impedance: 100 Ohm ± 15 ohm at 1 to 100 MHz
100 Ohm ± 20 Ohm at 101 to 500 MHz
Conductor resistance, max.: 59 Ohm/km
Insulation resistance, min.: 0,5 GOhm x km
Loop resistance: 118 Ohm/km max.
Mutual capacitance: 72 nF/km nom.
Test voltage: 0,7 kV
Relative propagation velocity: 62 %

Typical values

Frequency (MHz)	10	16	62,5	100	250	500
Attenuation (db/100m)	5,9	7,5	15,0	19,1	31,1	45,3
Next (dB)	60,3	57,2	48,4	45,3	39,3	34,3
PSNext (dB)	57,3	54,2	45,4	42,3	36,3	31,8

Technical data

Weight: app. 115 kg/km
bending radius, repeated: 80 mm
Operating temperature range min.: -40°C
Operating temperature range max.: +70°C
Caloric load, approx. value: 1,69 MJ/m
Copper weight: 44,00 kg/km

Norms

Acc. to ISO/IEC 11801, Acc. to EN 50173, Acc. to EIA/TIA 568-A, Category 6A, Flame-retardant acc. to IEC 60332-3, CMG FT4

Application

HELUKAT® 600IND 10GIG was designed specially for extreme industrial applications. The copper data cable is especially well-suited for Category 6A Ethernet applications up to 10 Gigabits / 500 MHz (**IEC61156-5**). It guarantees excellent transmission characteristics and may be used even under the harshest conditions. The cable listed here is based on PROFinet Type A. Thanks to the additional inner sheath, the cable can be processed using the quick contact method. This version with PVC jacket is designed specifically for fixed installation under difficult industrial conditions.

Part no.

803693, INDUSTRIAL ETHERNET CAT.6A 10GIG

Dimensions and specifications may be changed without prior notice.

Industrial Ethernet

Drag Chain

HELUKAT® 250S

SF/UTP, Category 6



Type

Cable structure

Inner conductor diameter:
Core insulation:
Core colours:
Stranding element:
Shielding 1:
Inner sheath material:
Shielding 2:
Total shielding:
Outer sheath material:
Cable external diameter:
Outer sheath colour:

Drag chain applications

SF/UTP 4x2x0.15 mm² (stranded) PUR

Copper, tinned (AWG 26/19)
PP
whbu/bu, whog/og, whgn/gn, whbn/bn
Double core
-
FRNC
-
Foil + braid
PUR
app. 7,8 mm ± 0,2 mm
Green similar to RAL 6018

Electrical data

Characteristic impedance: 100 Ohm ± 15 ohm at 1 to 100 MHz
100 Ohm ± 20 Ohm bei 101 bis 250 MHz
Conductor resistance, max.: 140 Ohm/km
Insulation resistance, min.: 0,5 GOhm x km
Loop resistance: 280 Ohm/km max.
Mutual capacitance: 52 nF/km nom.
Test voltage: 0,7 kV
Relative propagation velocity: 67 %

Typical values

Frequency (MHz)	10	16	62,5	100	250
Attenuation (db/10m)	0,9	1,2	2,4	2,9	4,9
Next (db)	59,3	56,2	47,4	44,3	38,3
ACR (db)	58,4	55,0	45,0	41,4	33,4

Technical data

Weight: app. 63 kg/km
bending radius, repeated: 60 mm
Operating temperature range min.: -30°C
Operating temperature range max.: +70°C
Caloric load, approx. value: 1,35 MJ/m
Copper weight: 34,00 kg/km

Norms

Acc. to ISO/IEC 11801, Acc. to EN 50173, Acc. to EIA/TIA 568-A, Category 6, Flame-retardant acc. to IEC 60332-1, Halogen-free acc. to 60754-2, CMX 75°C (shielded)

Application

HELUKAT® 250S trailing cable Cat 6 is designed for use in cable carriers and the recurring loads caused by moving machine components and provides excellent transmission characteristics under extremely difficult conditions.

Part no.

803387, INDUSTRIAL ETHERNET CAT.6

Dimensions and specifications may be changed without prior notice.

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