

Technical data sheet

TPE Network cables · ETHERNET · C-track compatible · shielded

LUTZE MOTIONFLEX® ETHERNET (C) TPE

Flexing Ethernet Cable for Linear and Twisting Motion Applications



Identification

Type SU ET TPE CAT 5e SF/UTP (4×2×AWG24)
Part No. [A1040020](#)

Product version

Datasheet version 00

Use/Application/Properties

- Application
- For the cabling of industrial Ethernet systems
 - Cable design for harsh industrial environments and operating conditions with high noise levels
 - Application in the automation technology, in tool and machine construction, plants and device construction, transport and conveyor technology
 - Suitable for motion application with repetitive movement, flexing and torsional stress
 - Compliant with NFPA 79 requirements
- Properties
- High protection against electromagnetic interferences (EMI)
 - Oil resistance
 - Sunlight resistant
 - Ecolab certified resistance to common cleaning agents and chemicals used in food and beverage washdown procedures
 - Design and approvals for machine and field level
 - Flexible for easy installation
 - Talc free and silicone free

Construction

Ethernet Key SF/UTP
Description LUTZE MOTIONFLEX™ ETHERNET TPE
Number of conductors/cross-section (4×2×AWG24/7)
Number of conductors 8
Cross-section AWG AWG 24
Jacket material TPE

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SYSTEMATIC TECHNOLOGY

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Jacket color	teal similar to RAL 5018
Outer Ø	7.6 mm
Outer Ø	0.299 inch
Surface	matte, adhesion-free
Weight	6.84 kg/100 m
Weight	46 Lbs/Mft
Cu-Index	4.01 kg/100 m
Cu-Index	27 Lbs/Mft

Construction Element 1

Element construction	(4×2×AWG24/7)
Conductor	AWG conductor CU-wire tin-plated
Conductor marking	white/blue · blue · white/orange · orange · white/green · green · white/brown · brown
Conductor insulation	HDPE
Stranding	conductors stranded in pairs

Overall construction

Overall shield	aluminium-laminated film shield Braid shield tinned copper wires optical cover approx. 75 %
Jacket characteristics	Flame-retardant Oil resistant UV resistant (normal lighting conditions) abrasion resistant Silicone-free

Technical data

Rated voltage U_N	cULus 300 V cURus 600 V
Test voltage type	AC 2000 V
Temperature range moving	-25 °C ... +70 °C
Temperature range fixed	-40 °C ... +80 °C
Minimum bending radius moving	10×D
Minimum bending radius fixed	7.5×D
Recommended bending radius moving	20×D
Torsion	± 270°/m

Technical Data Element 1

Element construction	(4×2×AWG24/7)
Insulation resistance at 20 °C	≥14 MΩ×km
Operating capacitance wire-wire	approx.56 pF/m
Impedance	nom.100 Ω

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Certifications/Standards

Certifications	cULus CMX Outdoor CMR cURus CMG 75 °C acc. UL 444 -40°C cold bend, cold impact
UL style	AWM 2463
Conformity	CE RoHS REACH TSCA
Burning behavior according to	UL 1666
Oil resistant according to	Oil Res II UL 1277 12.2
UV-resistant according to	UL Sun Res

General

Note	CE These products are in conformity with the EU Low Voltage Directive 2014/35/EU
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