K-424

POLYMER CABLE | 4 x 0.5mm² | ø 6.7 mm | BLACK

DESCRIPTION

This cable is halogen-free and highly flame retardant with reduced insulation for use in load-force-weight applications, specifically in harsh environments.

It is designed for fixed installation and for applications where limited movement may occur. It is commonly used in areas where human life, as well as valuable property, are exposed to a high risk of fire hazards. The cable is oil-, fuel- , acid- and alkali resistant according to EN 50306-4. Installation guidelines are per EN 50355 and EN 50343.

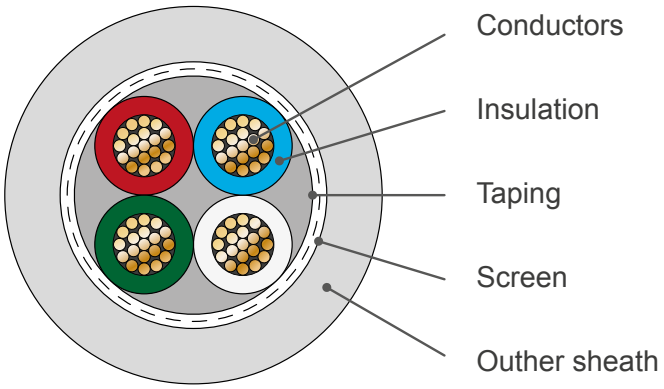
The screen protects against electrical interference.

APPLICATIONS

This cable is designed for load measuring devices and overload protection on cranes, hoisting gear, elevators and winches. It can also be used in force measurement for regulation processes in industrial installations and machinery production.

Moreover this cable is specifically designed for harsh, tropical, offshore, marine and harbor environments.

DESIGN



TECHNICAL FEATURES

GENERAL FEATURES AND STANDARDS	
Design	According to EN 50306-4 class 3E
Norm references	EN 50306-4 bzw. VDE 0260-306-4. Code designation MM S (MM = extra low temperature. Extra oil and fuel resistant)
Classification	EN 45545-2: Hazard Level HL1, HL2, HL3 NF F 16-101: Category A1, A2, B Category C for flame propagation Category F0 for smoke
Conductor	Tinned - copper strand, 19 or 37 wires, SRC (Special Round Conductor) acc. to EN 50306-2
Core isolation	Electron beam cross-linked polymer compound acc. to EN 50306-2
Core identification	Red, blue, white, green
Taping	Plastic foil
Screen	Braid of tinned copper wires. Coverage = 85 % (nominal value)
Outer sheath	Electron beam cross-linked polymer compound. Halogen free and flame retardant. S2 according to EN 50306-1; color: Black, similar RAL 9005

©2021 MAGTROL | Due to continual product development, Magtrol reserves the right to modify specifications without forewarning.

ELECTRICAL CHARACTERISTICS

Nominal voltage	U_0 / U : 300 / 500 VAC according to EN 50306 U_m : 550 VAC according to EN 50306 U_0 / U : 600 / 1000 VAC
Test voltage	Core / core and core / screen: 3.5 kVAC or 8.4 kV DC

MECHANICAL & THERMAL CHARACTERISTICS

Min. bending radius	Fixed installation: 10 x cable diameter Occasional flexing: 10 x cable diameter
Temperature range	Fixed installation: -45 °C ... + 125 °C max. conductor temp. (20 000 h) Occasional flexing: -35 °C ... + 105 °C max. conductor temp.
Short circuit temperature	max. + 160 °C (5 s)

FIRE PROTECTION (according to EN 50306-4 / EN 45545)

Classification	EN 45545-2: Hazard Level HL1, HL2, HL3
Flammability	According to EN 60332-1-2 resp. VDE 0482-332-1-2
No flame propagation acc. to	EN 60332-3-25 resp. VDE 0482-332-3-25
Smoke density	According to EN 50306-1, light transmission: min. 70 % according to IEC 61034-2; EN 61034-2
Halogen-free	According to IEC 60754-1; EN 60754-1; EN 50267-2-1 (chlorine and bromine) According to EN 60684-2 (fluorine)
Corrosivity	According to EN 50264-1, pH ≥ 4.3 and conductivity ≤ 10 µS / mm According to IEC 60754-2; EN 60754-2; EN 50267-2-2
Toxicity (< 6)	According to EN 50305

FIRE PROTECTION (according to NF)

Classification	NF F 16-101: Internal Category A1, A2, B External Category A1, A2, B Category C for flame propagation Category F0 for smoke
Flammability	According to NF C 32-070, Category C1 and C2
Smoke density	According to NF X 10-702
Toxicity	According to NF X 70-100

MATERIAL CHARACTERISTICS

Ozone resistance	According to EN 50306, method A or B
Mineral oil resistance	According to EN 50306
Fuel resistance	According to EN 50306
Acid and alkali resistance	According to EN 50306
UV resistance	According to EN 50525-1 (VDE 0285-525-1) are cables with black sheath suitable for a permanent outdoor use.
Tests	According to EN 50306-2 and EN 50306-4
EU Directives	These cables are conform to the EU-Directives 2014 / 35 / EC (Low Voltage Directive)

DIMENSIONS & ORDERING

P/N	Number of cores x cross section	Conductor	Max. conductor resistance (20°C)	Conductor ø reference value	Core ø reference value	Outer ø	Fire load reference value	Weight
	[n x mm²]	[n x mm ø]	[Ω / km]	[mm]	[mm]	[mm]	[kWh / m]	[kg / km]
957-36-40-5001	4 x 0.5	19 x 0.18	40.1	0.9	1.4	6.7 $^{\pm 0.3}$	0.2	75

©2021 MAGTROL | Due to continual product development, Magtrol reserves the right to modify specifications without forewarning.

MAGTROL INC
70 Gardenville Parkway
Buffalo NY 14224 | USA
phone +1 716 668 5555
fax +1 716 668 8705
e-mail magtrol@magtrol.com

MAGTROL SA
Route de Montena 77
1728 Rossens | Switzerland
phone +41 26 407 30 00
fax +41 26 407 30 01
e-mail magtrol@magtrol.ch

Offices in: Germany
France - China - India
Worldwide Distribution Network

ISO 9001 BUREAU VERITAS Certification