

## FMM903 Motor cables



- TPE outer jacket
- Flame resistance
- UV-resistance
- Oil-resistant
- Resistant to hydrolysis and microbes



## Dynamic Information

	Min. bending radius	Moving in cable carriers	7,5 x d
		Flexible moving	6 x d
		Fixed installation	4 x d
	Temperature	Moving in cable carriers	-35°C to +90°C
		Flexible moving	-45°C to +90°C
		Fixed installation	-50°C to +90°C
	v max.	Unsupported	10 m/s
		Gliding	6 m/s
	a max.	80 m/s <sup>2</sup>	
	Travel distance	Unsupported travels and up to 400 m for gliding applications	
	Torsion	±90°/m	












## Cable structure

	Conductor	Cross-sectional < 10 mm <sup>2</sup> : Stranded conductor in especially bending-resistant version consisting of bare copper wires (according to DIN EN 60228). Cross-sectional ≥ 10 mm <sup>2</sup> : Conductor cable consisting of pre-leads (according to DIN EN 60228).
	Conductor insulation	Mechanically high-quality, especially low-capacitance XLPE mixture.
	Conductor construction	Cores wound with a short pitch length around a high tensile strength centre element.
	Color code	Black cores with white numbers, one green-yellow core. Core1: U/L1/C/L+ Core2: V/L2 Core3: W/L3/D/L- Core4: 4/N
	Outer jacket	Low-adhesion mixture on the basis of TPE, especially abrasion-resistant and highly flexible, adapted to suit the requirements in cable carriers. Color: black RAL 9005

### Electrical Information

 Nominal voltage	$U_0/U$ : 600/1000 V (following VDE0298-3)
 Test voltage	4000 V (following EN50395)

### Properties and approvals

 UV-resistance	High
 Hydrolysis-resistance	High
 Cold-resistant	-50°C
 Oil resistance	Oil-resistant (following IEC60811-404, tested by SGS), bio-oil-resistant (following VDMA24568, tested by SGS)
 Flame resistance	According to IEC 60332-1-2, VW-1, FT1
 REACH	Accordding to the regulation (EC) No. 1907/2006 (REACH)
 EAC	Certificate No. KG 417/043.CN.02.00249
 Lead-free	Following 2015/863/EU (RoHS-II Tested by SGS)
 Cleanroom	Following ISO 14644-1
 CE	Following 2014/35/EU
 UL	Following UL22188, 1000V, 80°C

### Guaranteed service life

Double strokes	5 million times	7.5 million times	10 million times
Temperature, from/to [°C]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
-35/-25	10	11	12
-25/+80	7.5	8.5	9.5
+80/+90	10	11	12

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Part No.	Number of cores and conductor nominal cross-section [mm]	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
FMM903.15.04	4G1.5	8	61	102
FMM903.25.04	4G2.5	10	100	159
FMM903.40.04	4G4.0	11.5	163	236
FMM903.60.04	4G6.0	13.5	237	332
FMM903.60.05	5G6.0	15	297	406
FMM903.100.04	4G10	16.5	407	537
FMM903.100.05	5G10	19.5	515	670
FMM903.160.04	4G16	20	646	819
FMM903.160.05	5G16	22.5	815	1009
FMM903.250.04	4G25	24.5	1014	1271

Note: The outer diameters are reference values.

G: With green-yellow earth core

x: Without earth core