







FMC900 Control cables





CSB® FLEXMOV® FMC900

- TPE outer jacket
- Oil and bio-oil-resistant
- Indoor and outdoor applications
- Resistant to hydrolysis and microbes
- Low-temperature-flexibility
- PVC and halogen-free

Dynamic Information

	Min. bending radius	Moving in cable carriers	5 x d
		Flexible moving	4 x d
		Fixed installation	3 x d
	Temperature	Moving in cable carriers	-35°C to +100°C
		Flexible moving	-50°C to +100°C
		Fixed installation	-55°C to +100°C
	v max.	Unsupported	10 m/s
		Gliding	6 m/s
	a max.	100 m/s ²	
	Travel distance	Unsupported travel distances and for gliding applications up to 400 m and more	
	Torsion	±90°/m	

Cable structure

	Conductor	Conductor consisting of bare copper wires (according to EN 60228).
	Conductor insulation	Mechanically high-quality TPE mixture.
	Conductor construction	Number of conductors < 12: Conductors cabled in a layer with short pitch length.
		Number of conductors ≥ 12: Conductors combined in bundles and stranded together around a high-tensile strength core, using short pitch directions for a low-torsion cable structure.
	Color code	Cross -sectional < 0.75 mm ² : Color code in accordance with DIN 47100
		Cross -sectional ≥ 0.75 mm ² : Black with white numbers, one conductor green-yellow
		FMC900.02.03.INI: brown, blue, black
		FMC900.03.04.INI: brown, blue, black, white
		FMC900.03.05.INI: brown, blue, black, white, green-yellow
FMC900.03.16.07.03.INI:	0.34mm ² : violet/red/grey/red-blue, green/grey-pink/white-green/white-yellow, white-grey/black/yellow-brown/brown-green, white/yellow/pink/grey-brown	
	0.75mm ² : blue/green-yellow/brown	
	Low-adhesion mixture on the basis of TPE, especially abrasion-resistant and highly flexible, adapted to suit the requirements in cable carriers. Color: Steel blue RAL 5011	

Electrical Information

	Nominal voltage	U_0/U : 300/500 V (following VDE0298-3)
	Test voltage	2000 V (following EN50395)

Properties and approvals

	UV-resistance	High
	Hydrolysis-resistance	High
	Cold-resistant	-55°C
	Oil resistance	Oil-resistant (following IEC60811-404, tested by SGS), bio-oil-resistant (following VDMA24568, tested by SGS)
	Halogen-free	Following IEC60754
	REACH	According 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 UL22187, 600V, 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	6.8	7.5	8.5
-25/+90	5	6	7
+90/+100	6.8	7.5	8.5

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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]
FMC900.02.02	2×0.25	4.5	6.0	18.0
FMC900.02.03.INI	3×0.25	4.5	9.0	22.0
FMC900.02.06	6×0.25	5.5	16.0	36.0
FMC900.02.07	7×0.25	6.5	18.0	42.0
FMC900.02.08	8×0.25	6.5	21.0	48.0
FMC900.02.12	12×0.25	8.0	31.0	71.0
FMC900.02.18	18×0.25	9.0	46.0	100.0
FMC900.02.20	20×0.25	9.5	50.0	108.0
FMC900.02.25	25×0.25	10.5	63.0	137.0
FMC900.03.04.INI	4×0.34	5.0	15.0	31.0
FMC900.03.05.INI	5×0.34	5.5	18.0	37.0
FMC900.03.06	6×0.34	6.0	21.0	42.0
FMC900.03.08	8×0.34	7.0	29.0	56.0
FMC900.03.16.07.03.INI	16×0.34+3×0.75	11.0	77.0	152.0
FMC900.05.02	2×0.5	5.0	11.0	26.0
FMC900.05.03	3×0.5	5.0	16.0	32.0
FMC900.05.04	4×0.5	5.5	21.0	39.0
FMC900.05.05	5×0.5	6.0	25.0	47.0
FMC900.05.07	7×0.5	7.0	36.0	65.0
FMC900.05.12	12×0.5	10.0	61.0	115.0
FMC900.05.18	18×0.5	11.5	91.0	169.0
FMC900.05.25	25×0.5	13.0	124.0	223.0
FMC900.05.36	36×0.5	15.5	179.0	316.0
FMC900.07.04	4G0.75	6.0	31.0	55.0
FMC900.07.05	5G0.75	6.5	38.0	65.0
FMC900.07.07	7G0.75	8.0	54.0	90.0
FMC900.07.12	12G0.75	10.5	91.0	162.0
FMC900.07.20	20G0.75	13.0	149.0	253.0
FMC900.07.25	25G0.75	14.5	186.0	315.0
FMC900.10.03	3G1.0	6.0	31.0	52.0
FMC900.10.04	4G1.0	6.5	41.0	67.0
FMC900.10.05	5G1.0	7.5	50.0	81.0
FMC900.10.12	12G1.0	11.5	120.0	203.0
FMC900.10.18	18G1.0	14.0	179.0	297.0
FMC900.10.25	25G1.0	16.5	248.0	420.0

Part No.	Number of cores and conductor nominal cross-section [mm]	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
FMC900.15.02	2×1.5	6.5	31.0	56.0
FMC900.15.04	4G1.5	7.5	61.0	92.0
FMC900.15.05	5G1.5	8.0	76.0	110.0
FMC900.15.07 ^{⑦)}	7G1.5	9.5	107.0	157.0
FMC900.15.12	12G1.5	13.5	179.0	284.0
FMC900.15.18	18G1.5	16.5	268.0	422.0
FMC900.15.25	25G1.5	20.0	371.0	600.0
FMC900.15.36	36G1.5	23.5	530.0	847.0
FMC900.25.04	4G2.5	8.5	100.0	151.0
FMC900.25.05	5G2.5	10.0	124.0	186.0
FMC900.25.07 ^{⑦)}	7G2.5	12.0	176.0	269.0
FMC900.25.12	12G2.5	17.5	297.0	492.0
FMC900.25.16	16G2.5	19.5	396.0	654.0
FMC900.25.18 ^{⑧)}	18G2.5	22.5	445.0	766.0
FMC900.25.25	25G2.5	23.5	612.0	980.0
FMC900.40.04	4G4.0	10.5	159.0	227.0
FMC900.60.04	4G6.0	12.5	238.0	317.0
FMC900.60.05	5G6.0	13.5	297.0	389.0
FMC900.100.04	4G10	16.5	396.0	549.0
FMC900.160.04	4G16	20.5	628.0	873.0

⑦) When using the cables with "7G1.5mm²" and "7G2.5mm²" minimum bend radius must be 17.5xd with gliding travel distance ≥ 5m.

⑧) Nominal voltage: 600/1000V

Note: The outer diameters are reference values.

G: With green-yellow earth core

x: Without earth core