

FMD612 Data cables



- PVC outer jacket
- Shielded
- Oil-resistant
- Flame resistance
- Low cost



Dynamic Information

	Min. bending radius	Moving in cable carriers	10 x d
		Flexible moving	8 x d
		Fixed installation	5 x d
	Temperature	Moving in cable carriers	5°C to +70°C
		Flexible moving	-5°C to +70°C
		Fixed installation	-15°C to +70°C
	v max.	Unsupported	3 m/s
		Gliding	2 m/s
	a max.	20 m/s ²	
	Travel distance	Unsupported travels and up to 50 m for gliding applications	









Cable structure

	Conductor	Fine bare copper stranded wires with high flexibility design
	Conductor insulation	Mechanically high-quality TPE mixture.
	Conductor construction	The individual cores are wound in layers with a short pitch length.
	Color code	Colour code following DIN 47100
	Intermediate layer	Foil taping over the outer layer.
	Overall shield	Extremely flexible braiding made of tinned copper wires. Coverage linear approx. 70%, optical approx. 90%
	Outer jacket	Low adhesion mixture on the basis of PVC, adapted to suit the requirements in cable carriers. Color: Grey RAL 7001

Electrical Information

 Nominal voltage	U ₀ /U: 300/300 V (following VDE0298-3)
 Test voltage	1500 V (following EN50395)

Properties and approvals

 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	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 UL2464, 300V, 80°C

Guaranteed service life

Double strokes	5 million times		7.5 million times		10 million times	
	< 10 m	≥ 10 m	< 10 m	≥ 10 m	< 10 m	≥ 10 m
Temperature, from/to [°C]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
+5/+15	12.5	15	13.5	16	14.5	17
+15/+60	10	12.5	11	13.5	12	14.5
+60/+70	12.5	15	13.5	16	14.5	17

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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]
FMD612.01.03	(3×0.14)C	5.0	12.0	28.0
FMD612.01.04	(4×0.14)C	5.0	17.0	32.0
FMD612.01.05	(5×0.14)C	5.5	19.0	37.0
FMD612.01.07	(7×0.14)C	6.0	25.0	47.0
FMD612.01.14	(14×0.14)C	7.0	41.0	75.0
FMD612.01.18	(18×0.14)C	7.5	51.0	90.0
FMD612.01.24	(24×0.14)C	8.5	64.0	125.0
FMD612.02.03	(3×0.25)C	5.0	19.0	35.0
FMD612.02.04	(4×0.25)C	5.5	23.0	45.0
FMD612.02.05	(5×0.25)C	6.0	28.0	49.0
FMD612.02.07	(7×0.25)C	6.5	35.0	61.0
FMD612.02.08	(8×0.25)C	7.0	39.0	68.0
FMD612.02.14	(14×0.25)C	7.5	60.0	92.0
FMD612.02.18	(18×0.25)C	8.5	71.0	122.0
FMD612.02.24	(24×0.25)C	10.0	95.0	161.0
FMD612.03.02	(2×0.34)C	5.5	21.0	37.0
FMD612.03.03	(3×0.34)C	5.5	29.0	42.0
FMD612.03.04	(4×0.34)C	6.0	33.0	51.0
FMD612.03.05	(5×0.34)C	6.5	38.0	56.0
FMD612.03.07	(7×0.34)C	7.5	50.0	77.0
FMD612.03.10	(10×0.34)C	8.0	58.0	97.0
FMD612.03.14	(14×0.34)C	8.0	74.0	112.0
FMD612.03.18	(18×0.34)C	9.0	91.0	139.0
FMD612.03.24	(24×0.34)C	10.0	119.0	177.0

Note: The outer diameters are reference values.

G: With green-yellow earth core

x: Without earth core