

ÖLFLEX AUTO 8681 MC

HDB85 189001EN

Version: 02 Date: 17.11.2023

1. Designation

ÖLFLEX AUTO 8681 MC

2. Application

The ÖLFLEX AUTO 8681 MC is a highly flexible PUR control cable specially designed for use in energy chains with small bending radii, automatic handling systems and constantly moving machine parts. The cable is resistant to some mineral oils and largely to abrasion.

3. Design

- Conductor : Fine wire stranded, bare copper wires according to IEC 60228, Class 6
- Core insulation : Thermoplastic polyester elastomer
The insulation colours are white with black numbering and green-yellow ground core
- Outer sheath : Thermoplastic polyurethane, halogen free and flame retardant
The sheath colour is black or yellow

4. ▶ Technical data ◀

Nominal voltage U_0/U	300/500 V AC
Test voltage	3.0 kV
Temperature range	flexing : -40 °C to +80 °C
Minimum bending radius	flexing : up from 5 x cable diameter fixed installation: 4 x cable diameter
Flame retardant	IEC 60332-1-2

5. Cable make up

5.1 Conductor

- Conductor make up: Fine wire stranded, bare copper wire according to IEC 60228/EN 60228 resp. VDE 0295 class 6
- Conductor resistance acc. to EN 60228 resp. VDE 0295 class 5+6 for bare copper wires

5.2 Insulation

- Insulation : Thermoplastic polyester elastomer
- Colours : white with black numbering and green-yellow ground core

5.3 Outer sheath

- Thermoplastic polyurethane, halogen free and highly flame retardant
- Colour : black or yellow

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5.4 Wall thicknesses and diameters

No. of core	Conductor	Insulation Thickness	Sheath Thickness	Outer diameter	Weight Approx. (g/m)
	Cross section (mm ²)	Nom. (mm)	Nom. (mm)	Nom. (mm)	
7	0.5	0.4	0.8	7.6	65
12	0.5	0.4	0.9	9.3	105
18	0.5	0.4	1.0	10.9	153
25	0.5	0.4	1.0	13	206
7	0.75	0.4	0.9	8.5	89
12	0.75	0.4	1.0	10.4	143
18	0.75	0.4	1.1	12.2	208
25	0.75	0.4	1.3	15	293
7	1.0	0.4	0.9	9.1	107
12	1.0	0.4	1.0	11	173
18	1.0	0.4	1.2	13.2	257
25	1.0	0.4	1.3	16	356
7	1.5	0.4	1.1	10.4	148
12	1.5	0.4	1.2	12.6	239
18	1.5	0.4	1.3	14.8	347
25	1.5	0.4	1.5	18.1	487

6. Common requirements

RoHS: Dangerous and forbidden substances according to EC-Directive 2011/65/EU regarding Restriction of the use of certain hazardous substances (RoHS), are not allowed during manufacturing.

REACH: All materials used in the manufacturing process of the product are subject to the EC-Regulation No.1907/2006 regarding Registration, Evaluation, Authorization and Restriction of Chemicals (**REACH**).

If substances based on the current Candidate List are used, they shall be listed with their designation and their concentration.