


4 190 101	DATA SHEET	
valid from: 14.11.2025	ÖLFLEX® WIRE MS B	

Application

ÖLFLEX® WIRE MS B wiring cables are UL, CSA and HAR* approved and are designed for use for control cabinet wiring as well as for installation in protective tubes, applicable within the scope of the UL- or Canadian or European standard specifications.

They are especially qualified for wiring in industrial machines in accordance with NFPA 79.

At room temperature they are widely resistant to oils.

Application range:

HAR: Wiring cable for internal wiring acc. to EN 50565-2

UL (AWM): Internal Wiring of Appliances where exposed to oil at a temperature not exceeding 60 deg. C

UL (MTW): Machine-Tool Wire for use as specified in ANSI/NFPA 70 and NFPA 79

CSA (TEW): Internal wiring of electrical equipment, oil resistant

Design

Design	acc. to EN 50525-2-31 UL AWM Style 10269, UL 758 UL 1063 CSA 22.2 No.127-18
Certification	H07V2-K <HAR> (*) acc. to EN 50525-2-31 (*) For the dimensions 0.5; 0.75; 1.0; 16 mm ² as well for the colours GN and YE, and also for multi-coloured cores (except for GN/YE) there are no HAR-approval available (X07V2-K)! UL (AWM) Style 10269, UL 758 (File No. E63634) UL (MTW): UL 1063 (File E198296) CSA (TEW): C22.2 No. 127-18 EN 13501-6 and EN 50575 Classification of fire behaviour (article/dimension range see www.lappkabel.com/cpr)
Conductor	fine wire strands of bare copper, acc. to IEC 60228 resp. EN IEC 60228, class 5
Insulation	special PVC-based compound
Core identification code	different core colours


Electrical properties at 20 °C

Nominal voltage	H07V2-K; X07V2-K, U0/U: 450/750 V AC
Rated voltage	UL (AWM): 1000 V UL (MTW): 600 V CSA (TEW): 600 V
Test voltage	H07V2-K; X07V2-K: 2500 V AC Spark test (AC) acc. to UL 1063: 22 AWG - 10 AWG: 7.5 kV RMS 9 AWG - 2 AWG: 10.0 kV RMS 1 AWG - 4/0 MCM: 12.5 kV RMS

Mechanical and thermal properties

Minimum bending radius	fixed installation: at normal use: OD ≤ 8 mm: 4 x outer diameter 8 < OD ≤ 12 mm: 5 x outer diameter OD > 12 mm: 6 x outer diameter at careful bending at termination (with a former) OD ≤ 8 mm: 2 x outer diameter 8 < OD ≤ 12 mm: 3 x outer diameter OD > 12 mm: 4 x outer diameter
Temperature range	fixed installation: H07V2-K; X07V2-K: -40 °C up to +90 °C max. conductor temperature UL (AWM): up to +105 °C max. conductor temperature UL (MTW): up to +90 °C max. conductor temperature CSA (TEW): up to +105 °C max. conductor temperature
Flammability	flame retardant acc. to HAR: IEC 60332-1-2 resp. EN 60332-1-2 UL: Vertical flame test VW-1 acc. to UL 2556, 9.4 CSA: FT1 acc. to CSA C22.2 No. 2556, 9.3
Oil resistance	UL (AWM) / CSA (TEW): 60 °C rating

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Tests

acc. to IEC 60811 resp. EN 60811, UL 1581, UL 1063 and CSA C22.2 No 127

General requirements

These cables conform to the EU-Directive 2014/35/EU (Low Voltage Directive).

A part of these cables (see www.lappkabel.com/cpr) are classified in accordance with the EU-Regulation no. 305/2011 (CPR).

Environmental information

These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS).

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