

1136450	DATA SHEET	
valid from: 01.04.2024	ÖLFLEX® SERVO 2YSLCY-JB BK	

Application

ÖLFLEX® SERVO 2YSLCY-JB BK are double shielded low capacitance cables of flexible design, with PVC sheath and PE core insulation. They are suitable for frequency converters operated by three-phase current motors. They are also suitable for use in dry, damp or wet areas. They are largely resistant to acids, alkalis and certain oils at room temperature.

They are suitable for occasional, non-automated movements. The maximum tensile load is 15 N/mm² of conductor cross-section during installation and operation. Compulsory guidance is not permitted. The screening braid protects against interference from electrical fields.

Application range:

Connection cable between frequency converter and motor, paper industry, chemical industry, heavy industry

Design

Design	based on DIN VDE 0276-603 / HD 603 S1 + A3 DIN 57250-1 resp. VDE 0250-1
Certification	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 60228, class 5
Insulation	PE compound acc. to EN 50290-2-23, table 1, column L/MD
Core identification code	acc. to VDE 0293-308 resp. HD 308 S2
Stranding	4 cores twisted together in one layer
Screen	double screening with aluminium-coated plastic foil (metal-side outwards) and braid of tinned copper wires, braid coverage min. 70% (nominal value)
Outer sheath	PVC sheath TM2 acc. to EN 50363-4-1 UV resistant, outdoor use, colour: black, similar RAL 9005

Electrical properties at 20 °C

Specific volume resistivity	> 20 G Ω x cm
Transfer impedance	max. 250 mΩ/m (at 30 MHz)
Nominal voltage	600/1000 V
Test voltage	C/C: 4000 V C/S: 4000 V

Mechanical and thermal properties

Minimum bending radius	occasional flexing: 15 x outer diameter fixed installation: 4 x outer diameter
Temperature range	occasional flexing: -5 °C up to +70 °C max. conductor temperature fixed installation: -40 °C up to +70 °C max. conductor temperature
Flammability	flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2
UV resistance	acc. to EN 50525-1 cable with black sheath are suitable for permanent outdoor use.

Tests

acc. to IEC 60811 resp. EN 60811, VDE 0472, EN 50395, EN 50396

General requirements

These cables are 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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Part number	Dimension	Conductor design: approx. number x wire diameter [mm]	Core identification code	Copper braid: max. wire diameter [mm]	Copper braid: nom. cross section [mm²]	Outer diameter (nominal) [mm]	Current ratings at 30°C [A]	Inductance per core at 800 Hz [µH/km]	Capacitance core/core at 800 Hz [nF/km]	Capacitance core/screen at 800 Hz [nF/km]	Transfer impedance at 1 MHz [Ω/km]	Transfer impedance at 10 MHz [Ω/km]	Transfer impedance at 30 MHz [Ω/km]
1136450	4G1.5	29x0.25	GNYE, BN, BK, GY	0.21	2.5	11.4	18	366	70	110	-	-	240
1136451	4G2.5	50x0.25	GNYE, BN, BK, GY	0.21	4	12.4	26	340	80	130	18	175	210
1136452	4G4	54x0.3	GNYE, BN, BK, GY	0.21	4	15.6	34	339	90	150	11	95	210
1136453	4G6	82x0.3	GNYE, BN, BK, GY	0.21	6	17.0	44	321	90	150	6	50	150
1136454	4G10	78x0.4	GNYE, BN, BK, GY	0.26	6	19.6	61	301	120	200	7	60	180
1136455	4G16	126x0.4	GNYE, BN, BK, GY	0.26	6	22.1	82	285	140	230	9	80	190
1136456	4G25	196x0.4	GNYE, BN, BK, GY	0.26	16	26.3	108	280	140	240	4	32	95
1136457	4G35	276x0.4	GNYE, BN, BK, GY	0.31	16	29.5	135	271	150	260	3	26	85
1136458	4G50	396x0.4	GNYE, BN, BK, GY	0.31	16	35.8	168	270	190	320	2	13	40
1136459	4G70	532x0.4	GNYE, BN, BK, GY	0.31	16	40.3	207	262	190	320	2	18	45
1136460	4G95	722x0.4	GNYE, BN, BK, GY	0.31	25	46.5	250	261	250	410	2	18	45
1136461	4G120	931x0.4	GNYE, BN, BK, GY	0.31	25	53.2	292	256	110	180	2	18	45
1136462	4G150	1160x0.4	GNYE, BN, BK, GY	0.41	35	57.3	335	256	110	180	2	18	45
1136463	4G185	1420x0.4	GNYE, BN, BK, GY	0.41	35	62.3	382	255	110	180	2	18	45
1136467	4G240	1920x0.4	GNYE, BN, BK, GY	0.41	35	72.3	453	254	110	180	2	18	45

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