ÖLFLEX® SERVO 2YSLCY-JB

ÖLFLEX® SERVO 2YSLCY and 2YSLCYK are flexible cables having special EMC- performance due double shielded, low capacitance design. Ideal for frequency converters for variable speed of 3 ~ AC motors, small, medium and large sizes. Contrary to usage of PVC insulated cables, PE insulated cables shows significant reduction of useless reactive power always needed for charging and discharging the cable during operating of the frequency converter.
2YSLCYK having a special concentric conductor array design, where PE conductor is splitted into 3 individuals. Its concentric design avoids from all cable-relevant parts of high frequency discharge currents, passing lubricating film of motors bearings. This effect may damage motors bearing, especially if switching frequency of the frequency converter is very high (up to 20kHz) and / or long cable lengths are required. This design also improves EMC noise situation of the whole drive system.
Cables are suitable in dry, damp and wet rooms/ locations. 2YSLCYK version is UV light protected for outdoor use incl. direct burial. Good resistance against acids, caustic solutions and certain oils at room temperature. Suitable for free, as well as for static use. Not suitable for continuously moving appliance under tensile load or if during flexing, accompanied by guidance.

Design

Conductor	fine wire strand of bare copper, in acc. to IEC 60228 resp. VDE 0295 Cl. 5
Insulation	Polyethylene (PE) 2YI2 acc. VDE 0207-2
Colour code	acc. HD 308 S2 /VDE 0293-308 conductors colour coded with one gnye conductor.
Twisting	4 conductors twisted together in one layer. 2YSLCYK version having splitted PE conductors, segmented into 3 individuals.
Screening	aluminium-mylar tape wrap, metal-side outwards, on top a tinned copper wire braid
Sheath	2YSLCY: PVC sheath made of PVC compound YM2 acc. VDE 0207 -5, leadfree, flame retardant & selve-extinguishing , transparent. 2YSLCYK PVC sheath made of cold-flexible PVC compound DMV5 acc. VDE 0276-603, leadfree, UV resistant. black, outdoor and direct burial use, flame retardant & selve-extinguishing, IEC 60332.1

EEU directives
cables conforms to EEC 79/29 directive (Low Voltage Directive)

Electrical properties at 20°C

Insulation resistance		min. GΩ x cm		20
Transfer impedance	at 30 MHz		Ω/km	< 250
Nominal voltage U_0/U V				600/1000
Test voltage core/core, core/screen			U_{eff} V	4000

Mechanical and thermal characteristics

Minimum bend radius	single bending	Cable-□ D in mm		4 x D
	multiple bending	Cable-□ D in mm		20 x D
Permissible temperature range	static		°C	- 40 to + 70
Permissible pulling force		°C		-5 to +70

Flame propagation flame retardant to VDE 0482-332-1-2 / IEC 60332-1

RS Article Number	Manufacture Part No.	Number of corse and mm² per conductor	Outer diameter in mm approx.	Copper weight kg/m	Weight kg/km approx.
145718	0036425	4 G 1,5	11,6	87	230
144872	0036426	4 G 2,5	13,1	133	300
144888	0036427	4 G 4,0	15,2	213	485
144939	0036428	4 G 6,0	16,9	298	630
144945	0036429	4 G 10	20,4	460	860