

SERVO MOTOR CABLES

Applications

■ Combined motor connection cables

These flexible motor connection cables are used for motors that due to their construction allow the installation of a combined cable with supply and control conductors (thermal contact / brake to stop). The cables are suitable for high mechanical demands in dry, damp and wet conditions as well as at low temperatures.

Exemplary applications:

SL 801 C SL 841 C	Highly flexible cable track applications in intelligent industries with servo drives, e.g. automation technologies, machine construction, construction of industrial robots and plants, motive power, control and manufacturing engineering, in handling systems, car manufacturing industry, in cable tracks on wood-working machines, color coding acc. to DESINA
SL 806 C	Flexible applications in industries with intelligent servo drives, e.g. automation technologies, machine construction, construction of industrial robots and plants, motive power, control and manufacturing engineering, in handling systems, car manufacturing industry, in engineered machining machines, optimised combination of supply and control conductors in order to supply energy for drives and their temperature monitor respectively for the brake to stop

■ Motor feedback and transmission cables

Feedback cables are used for controlling motor speed and for giving feedback values. Transmission cables transmit control pulses for positioning and procedure characteristics, e.g. connection of speedometer, brake and pulse generators.

Exemplary applications:

SL 802 C SL 803 C SL 839 C SL 842 C SL 843 C	Highly flexible, mobile connection cables for e.g. speedometer, brake, temperature control in motors, for continuously flexible applications in automation technology, control and production engineering, in cable tracks on wood-working machines, machine and industrial plant construction, even with high mechanical demands and in dry, damp and wet conditions, as well as at low temperatures
SL 807 C SL 808 C	Flexible connection cables e.g. for speedometer, brake, temperature control in motors, for continuously flexible applications in automation technology, control and product engineering.

■ Motor connection cables for DNC* motors 0.6/1 kV

These cables are suitable for the fixed installation and flexible use e.g. in machine and industrial plant construction with average mechanical demand in dry, damp and wet conditions.

Exemplary applications:

SL 810 SL 811 SL 820	Automation technology, control and product engineering, machine and industrial plant construction, motor construction, on drive systems
SL 812 C SL 813 C SL 851 C	Automation technology, control and product engineering, machine and industrial plant construction, motor construction, on drive systems, power supply cable between frequency converter and servo motor
SL 823 C SL 833 C	Industries with intelligent servo drives, e.g. automation technology, motive power, control and production engineering, handling systems, car manufacturing industry, cable tracks

*three-phase shunt motor

Applications

■ Motor connection cables for DNC* motors on frequency converters U^{1.7} kV

These cables are to be used for power wiring for frequency converters, speed changeable motors, industrial drives and especially if increased EMC characteristics are required in various areas of industry.

The cables can be used for average mechanical stress, for fixed installation as well as for flexible application without tensile stress and without restricted movement without forced movement control in dry, damp or wet conditions and in explosive proof areas. They are generally not to be used for outdoor applications. However, in rare cases it is permissible if the cables are fixed and protected against solar radiation.

Exemplary applications:

SL 851 C

Climate technologies, food industry, paper and steel production, metal finishing and printing machine engineering. Due to the low mutual capacitance this cable allows a more efficient power transfer than conventional PVC cables. Electromagnetic influences are reduced as low as possible by the low surface transfer impedance.

* three-phase shunt motor









DESINA - DistributEd and Standardized INstAllation technology

DESINA is an extensive concept for standardizing and distributing fluid and electric installations of machines and plants. A co-operation of machine construction, car manufacturing and supply industries has, furthermore, set up the specification of necessary components.

DESINA applies already existing solutions such as open bus systems, industrial standards for connectors, etc. By standardizing components, interfaces and connecting systems, e.g. an optical fiber copper hybrid cable, most varying systems can be realized on a physical basis.

The following sheath colors are defined as a function code:

	orange RAL 2003:	servo cable, screened
	green RAL 6018:	measuring systems, screened
	violet RAL 4001:	field bus, hybrid cables
	yellow RAL 1021:	sensor/actuator cable, unscreened 4 x 0.34 mm ² copper
	black RAL 9005:	power cable, unscreened
	grey RAL 7001:	24 V control cable, unscreened

The sheaths of all cables are to be resistant against industrial lubricants.

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Selection index

		cable type																	
		SL 806 C	SL 810	SL 812 C	SL 851 C	SL 811	SL 813 C	SL 820	SL 823 C	SL 801 C	SL 833 C	SL 841 C	SL 807 C	SL 802 C	SL 842 C	SL 808 C	SL 803 C	SL 839 C	SL 843 C
Application	Combined motor connection cable	x								x		x							
	Feedback cable												x	x	x				
	Transmission cable															x	x	x	x
	Motor connection cable		x	x	x	x	x	x	x		x								
	Motor connection cable for frequency converters		x	x	x	x	x	x	x		x								
	Screened	x		x	x		x		x	x	x	x	x	x	x	x	x	x	x
Temperature range static*	+ 90 °C																		
	+ 80 °C																		
	+ 70 °C																		
	- 30 °C																		
	- 40 °C																		
	- 50 °C																		
Voltage	Nominal voltage supply conductors Uo/U 0.6/1 kV	x	x	x		x	x	x	x	x	x	x							
	Nominal voltage Uo/U 0,6/1 kV																		
	Operating voltages in three-phase current and single-phase current application Uo/U 0.7/1.2 kV				x														
	Peak operating voltage max. 30 V																		x
	Peak operating voltage max. 350 V												x				x		
	Peak operating voltage max. 500 V	x								x				x	x				x
Standards and approvals	UL acc. to AWM Style										x	x			x			x	x
	CSA acc. to AWM I/II/A/B										x	x			x				x
	DESINA colors						x		x	x	x	x					x	x	x
Characteristics	Zero Halogen							x	x	x	x	x		x	x		x	x	x
	LABS uncritical**							x	x	x	x	x		x	x		x	x	x
	Very good oil resistance acc. to DIN VDE					x	x	x	x	x	x	x		x	x		x	x	x
	Oil resistance acc. to SAB internal standard	x	x	x	x								x			x			
	Outer sheath surface: low adhesion					x	x	x	x	x	x	x		x	x		x	x	x
	Good resistance against acids, alkalines, solvents, hydraulic liquids etc.					x	x	x	x	x	x	x		x	x		x	x	x

Temperature range:



*The temperature range for flexing is mentioned on the particular catalog page

**LABS = enamel moisturing interfering substances