

Servo Motor Cables

Applications

Applications of combined motor connection cables

These flexible motor connection cables are used for the power supply of motors. Depending on the construction type, power and control conductors are possible. The cables are suitable for high mechanical demands in dry, damp and wet conditions as well as at low temperatures.

Exemplary applications:

SL 841 C SL 871 C SL 863 C	Highly flexible, cable track applications in industries with intelligent servo drives, e.g. automation technologies, machine construction, construction of industrial robots and plants, motor power, control and manufacturing engineering, in handling systems, car manufacturing industry, in cable tracks on wood-working machines, color coding acc. to DESINA
SL 875 C	All-in-one cable solution with integrated elements for digital signal feedback

Applications of 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 839 C SL 842 C SL 843 C	Highly flexible, mobile connection cables for e.g. speedometer, brake, temperature control in motors, for continuous flex 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
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Applications of motor connection cables for DNC* motors 0.6/1kV

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 833 C SL 834 C SL 860 C	Industries with intelligent servo drives, e.g. automation technology, motor power, control and production engineering, handling systems, car manufacturing industry, cable tracks	*three-phase shunt motor
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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 jacket colors are defined as a function code:

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

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

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Selection Table

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		Cable Type	G/5	G/6	G/7	G/8	G/9	G/10	G/11	G/12	G/13	G/14
			SL 860 C	SL 863 C	SL 833 C	SL 841 C	SL 834 C	SL 871 C	SL 875 C	SL 842 C	SL 839 C	SL 843 C
Application	Feedback cable									●		
	Transmission cable										●	●
	Motor connection cable		●		●		●		●			
	Combined motor connection cable			●		●		●	●			
	Motor connection cable for frequency converters				●		●					
	Suitable for resolvers and shaft encoders									●	●	●
	Shielded		●	●	●	●	●	●	●	●	●	●
Temperature range fixed laying*	+90°C											
	+70°C		●	●								
	-30°C											
	-40°C											
	-50°C											
Voltage	Peak operating voltage max. 30 V										●	
	Peak operating voltage max. 350 V			●		●		●				●
	Peak operating voltage max. 500 V								●	●		
	Nominal voltage U ₀ /U 0.6/1 kV		●	●	●	●	●	●	●			
	Voltage UL 30 V										●	
	Voltage UL 300 V					●		●		●		●
	Voltage UL 1000 V		●	●	●		●	●	●			
	Voltage CSA 300 V					●		●	●	●		●
	Voltage CSA 1000 V				●		●	●	●			
	Testing voltage 600 V										●	
	Testing voltage 1500 V					●						
	Testing voltage 2000 V			●					●		●	●
	Testing voltage 3000 V								●			
	Testing voltage 4000 V		●	●	●	●	●	●	●			
Standards and approvals	Fire performance flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2		●	●	●	●	●	●	●	●		●
	Fire performance UL FT1		●	●	●	●	●	●	●	●		●
	Fire performance CSA FT1											●
	Fire performance CSA FT1, FT 2				●	●	●	●	●	●		
	UL recognized		●	●	●	●	●	●	●	●	●	●
	CSA approved				●	●	●	●	●	●		●
DESINA® colors			●	●	●	●	●	●	●	●	●	
Characteristics	Halogen-free					●	●	●	●	●	●	●
	PWIS-free (PWIS = paint wetting impairment substances)				●	●	●	●	●	●	●	●
	Low capacity construction		●	●			●	●	●			
	Outer jacket surface: low adhesion			●	●	●	●	●	●	●	●	●
	Very good oil resistance acc. to EN 50363-10-2 + VDE 0207-363-10-2		●	●		●	●	●	●	●	●	●
	Oil rating 60°C acc. to UL 758				●						●	
Good resistance against acids, alkalines, solvents, hydraulic liquids, etc.				●	●	●	●	●	●	●	●	



*The temperature range for flexible application is mentioned on the corresponding catalog page