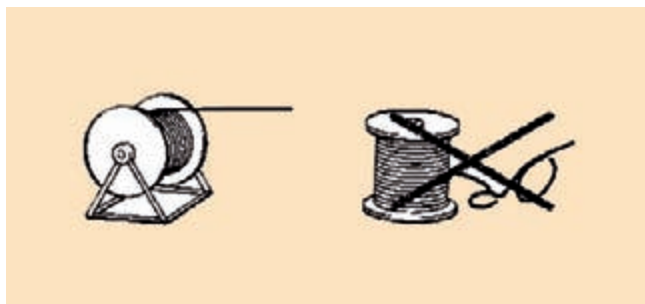


Servo Motors for SIMOVERT MASTERDRIVES

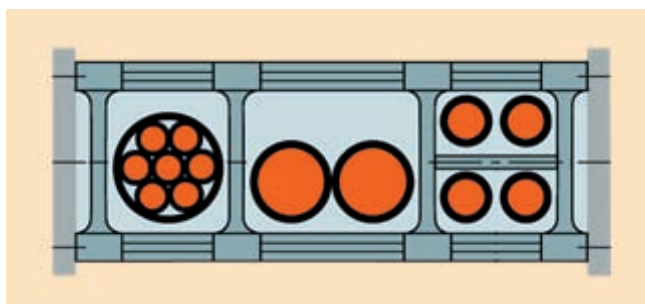
MOTION-CONNECT Cables and Connections

General information

Function



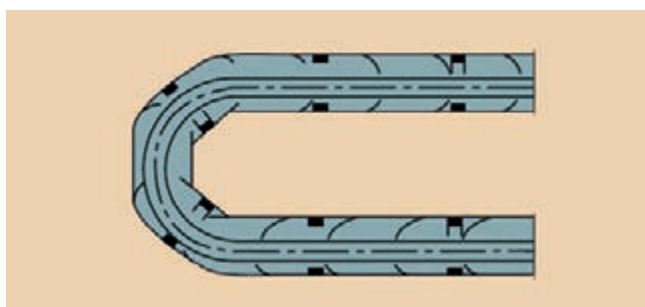
When removing cable from its drum, you must ensure that it does not become twisted, i. e. cable must be rolled out and must never be looped and pulled off over the drum edge.



To ensure a long lifecycle for the drag chain and cables, cables made of different materials must be laid with a separating web in the drag chain. These webs must be filled evenly to ensure that the position of the cables does not shift during operation. The cables should be distributed as symmetrically as possible according to their weight and dimensions. Cables with very different outer diameters should be separated by webs.

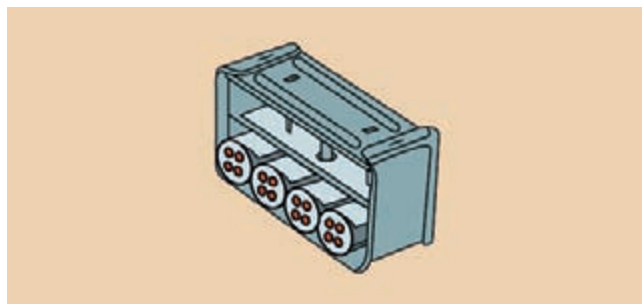
When placing cable assemblies in the drag chain, **do not** pull on the connector or else you might damage the strain relief or cable terminal.

Cables in the drag chain must be unattached and movable.



Cables must be able to move without constraint, especially in the bending radii of the chain. The defined minimum bending radii must be maintained.

The cable fixtures must be placed in a “dead” zone at each end, suitably far away from the end points of the moving parts.



Our cables have been tested in a drag chain. A strain relief assembly is applied to the cables at the movable ends of the drag chain; this is done over a large area of the sheath surface without crimping the cable construction.

The assembly instructions of the drag chain manufacturer must always be followed when laying cables, while taking into account the requirements of the plant design.

Notes:

If, for example, cable assemblies are installed in a drag chain and the connector hinders installation, preassembled cables without an integral connector (signal and power cables) are also available and can be used instead. With this type of cable, the contacts are crimped, and the connector housing is enclosed separately in the cable shipment. After laying the cables, the customer then assembles the connector housing.

When laying cables, always comply with the specifications of the drag chain manufacturer.

Our cables are approved for a horizontal traveling distance of up to 5 m (16.4 ft).

If the cables are subject to vibration stress or if the cable entries are horizontal or vertical, we always recommend an additional cable attachment if a portion of the cable hangs freely or is not guided between the strain relief and the drag chain. To prevent the machine vibrations from being transferred to the connector, the cable attachment should be connected to the moving part on which the motor is installed.

Servo Motors for SIMOVERT MASTERDRIVES

MOTION-CONNECT Cables and Connections

Power Cables – Extensions

Selection and Ordering Data

Power Cables – Extension for 1FT/1FK Motors

No. of Cores x Cross Section	Connector Size	Extensions	Connector Size	Base Cables
		Order No.		Order No.
4x1.5	1	6FX 002 – 5 A05 –	1	6FX 002 – 5 A01 –
4x2.5	1	6FX 002 – 5 A15 –	1	6FX 002 – 5 A11 –
4x1.5	1.5	6FX 002 – 5 A28 –	1.5	6FX 002 – 5 A21 –
4x2.5	1.5	6FX 002 – 5 A38 –	1.5	6FX 002 – 5 A31 –
4x4	1.5	6FX 002 – 5 A48 –	1.5	6FX 002 – 5 A41 –
4x6	1.5	6FX 002 – 5 A58 –	1.5	6FX 002 – 5 A51 –
4x10	1.5	6FX 002 – 5 A68 –	1.5	6FX 002 – 5 A61 –
4x10	3	6FX 002 – 5 X18 –	3	6FX 002 – 5 A13 –
4x16	3	6FX 002 – 5 X28 –	3	6FX 002 – 5 A23 –
4x25	3	6FX 002 – 5 D X38 –	3	6FX 002 – 5 D A33 –
4x35	3	6FX 5 002 – 5 D X48 –	3	6FX 5 002 – 5 D A43 –
	3	6FX 8 002 – 5 D X48 –	3	6FX 8 002 – 5 D A43 –
4x50	3	6FX 5 002 – 5 D X58 –	3	6FX 5 002 – 5 D A53 –
	3	6FX 8 002 – 5 D X58 –	3	6FX 8 002 – 5 D A53 –
MOTION-CONNECT 500		5		5
MOTION-CONNECT 700 ¹⁾		7		7
MOTION-CONNECT 800		8		8
Without brake cores		C		C
With brake cores		D		D

See Length Codes on page 5/17

The power cable and extension combinations shown here are intended only as examples.

Replacement Power Connectors

Designation	Core Cross-Section mm ²	Design	Connector Order No.
Power connector, Size 1 (complete)	1.5 to 2.5	Screw cap, socket External thread, pins	6FX2 003 – 0CA10 6FX2 003 – 1CA10
Power connector, Size 1.5 (complete)	1.5 to 4	Screw cap, socket External thread, pins	6FX2 003 – 0CB10 6FX2 003 – 1CB10
	6 to 10	Screw cap, Socket External thread, pins	6FX2 003 – 0CB20 6FX2 003 – 1CB20
Power connector, Size 3 (housing and insulator) • contacts	10 to 50	Screw cap, Socket External thread, pins	6FX2 003 – 0LU20 6FX2 003 – 0LA20
	5 x 10 + 3 x 1.0 ... 2.5	Socket	6FX2 003 – 8LB10
	5 x 16 + 3 x 1.0 ... 2.5	Socket	6FX2 003 – 8LB16
	5 x 25 + 3 x 1.0 ... 2.5	Socket	6FX2 003 – 8LB25
	5 x 35 + 3 x 1.0 ... 2.5	Socket	6FX2 003 – 8LB35
	5 x 50 + 3 x 1.0 ... 2.5	Socket	6FX2 003 – 8LB50
	5 x 10 + 3 x 1.0 ... 2.5	Pin	6FX2 003 – 8LS10
	5 x 16 + 3 x 1.0 ... 2.5	Pin	6FX2 003 – 8LS16
	5 x 25 + 3 x 1.0 ... 2.5	Pin	6FX2 003 – 8LS25
	5 x 35 + 3 x 1.0 ... 2.5	Pin	6FX2 003 – 8LS35
	5 x 50 + 3 x 1.0 ... 2.5	Pin	6FX2 003 – 8LS50

1) MOTION-CONNECT 700 only in "With Brake Cores" design.