

**Applications**

SIMBAL 'ROBOTFLEX 'T' cables are suitable for use in cable drag chains and continually moving machines as well as robots. The use of the special Semocore insulation material results in a very small outer diameter without reducing the cable's ability to withstand high mechanical stresses. The cable is also highly resistant to abrasion, halogen free and flame resistant.

**Design**

1. **Conductor** :- Flexible plain copper, Class 6 to DIN VDE 0295
2. **Insulation** :- Semocore
3. **Wrapping** :- Fleece
4. **Outer Sheath** :- Special polyurethane,
5. **Colour** :- Grey RAL 7001

**Marking**

Semoflex Roboschlepp core x cross section

**Core Identification**

Up to 0.34mm<sup>2</sup> - acc. To DIN 47 100

From 0.50mm<sup>2</sup> - white cores with black numbers

From 3 cores—with green & yellow earth conductor

**Standards**

DIN VDE 0250



Mechanical Properties		
Bending Radii (Dynamic Installations)	5 x Cable diameter	
Chemical Properties		
For Indoor & Outdoor applications Flame & Fire retardant to IEC 332-1 & VDE 0472 part 804, test type B Lead & Silicon free, Halogen free & Oil resistant		
Electrical & Thermal Properties		
Nominal Voltage	0.14-0.34mm <sup>2</sup> 0.50mm <sup>2</sup> & above	U <sub>o</sub> / U 350V U <sub>o</sub> / U 300/500V
Test Voltage	up to 1.50mm <sup>2</sup> 2.5 - 4.0mm <sup>2</sup> 6.0mm <sup>2</sup> & above	2000 V 2500V 3000V
Current Rating	See below	
Max surface temperature		
	- fixed installation	- 50 deg C up to + 90 deg C
	- mobile installation	- 40 deg C up to + 90 deg C

**Cable Specification**

No. of cores & cross section	Part No.	Current rating at 30 deg C	Outer diameter Approx	Weight Approx	No. of cores & cross section	Part No.	Current rating at 30 deg C	Outer diameter Approx	Weight Approx
2c x 0.34mm <sup>2</sup>	08093 0034 02		4.5mm	0.024 kg/m	2c x 1.00mm <sup>2</sup>	08093 0100 02	16 Amps	4.5mm	0.024 kg/m
3c x 0.34mm <sup>2</sup>	08093 0034 03		4.7mm	0.024 kg/m	3c x 1.00mm <sup>2</sup>	08093 0100 03	16 Amps	4.7mm	0.024 kg/m
4c x 0.34mm <sup>2</sup>	08093 0034 04		5.3mm	0.038 kg/m	4c x 1.00mm <sup>2</sup>	08093 0100 04	16 Amps	5.3mm	0.038 kg/m
5c x 0.34mm <sup>2</sup>	08093 0034 05		5.9mm	0.049 kg/m	5c x 1.00mm <sup>2</sup>	08093 0100 05	16 Amps	5.9mm	0.049 kg/m
8c x 0.34mm <sup>2</sup>	08093 0034 07		6.9mm	0.065 kg/m	8c x 1.00mm <sup>2</sup>	08093 0100 08	16 Amps	6.9mm	0.065 kg/m
12c x 0.34mm <sup>2</sup>	08093 0034 12		8.5mm	0.102 kg/m	12c x 1.00mm <sup>2</sup>	08093 0100 12	16 Amps	8.5mm	0.102 kg/m
18c x 0.34mm <sup>2</sup>	08093 0034 18		9.8mm	0.154 kg/m	18c x 1.00mm <sup>2</sup>	08093 0100 18	16 Amps	9.8mm	0.154 kg/m
25c x 0.34mm <sup>2</sup>	08093 0034 25		11.5mm	0.202 kg/m	25c x 1.00mm <sup>2</sup>	08093 0100 25	16 Amps	11.5mm	0.202 kg/m
2c x 0.50mm <sup>2</sup>	08093 0050 02	6 Amps	4.5mm	0.024 kg/m	30c x 1.00mm <sup>2</sup>	08093 0100 30	16 Amps	9.8mm	0.154 kg/m
3c x 0.50mm <sup>2</sup>	08093 0050 03	6 Amps	4.7mm	0.024 kg/m	36c x 1.00mm <sup>2</sup>	08093 0100 36	16 Amps	11.5mm	0.202 kg/m
4c x 0.50mm <sup>2</sup>	08093 0050 04	6 Amps	5.3mm	0.038 kg/m	2c x 1.50mm <sup>2</sup>	08093 0150 02	20 Amps	6.1mm	0.024 kg/m
5c x 0.50mm <sup>2</sup>	08093 0050 05	6 Amps	5.9mm	0.049 kg/m	3c x 1.50mm <sup>2</sup>	08093 0150 03	20 Amps	6.4mm	0.024 kg/m
7c x 0.50mm <sup>2</sup>	08093 0050 07	6 Amps	6.9mm	0.065 kg/m	4c x 1.50mm <sup>2</sup>	08093 0150 04	20 Amps	7mm	0.038 kg/m
12c x 0.50mm <sup>2</sup>	08093 0050 12	6 Amps	8.5mm	0.102 kg/m	5c x 1.50mm <sup>2</sup>	08093 0150 05	20 Amps	7.6mm	0.049 kg/m
18c x 0.50mm <sup>2</sup>	08093 0050 18	6 Amps	9.8mm	0.154 kg/m	7c x 1.50mm <sup>2</sup>	08093 0150 07	20 Amps	9.4mm	0.065 kg/m
25c x 0.50mm <sup>2</sup>	08093 0050 25	6 Amps	11.5mm	0.202 kg/m	12c x 1.50mm <sup>2</sup>	08093 0150 12	20 Amps	11mm	0.102 kg/m
30c x 0.50mm <sup>2</sup>	08093 0050 30	6 Amps	11.9mm	0.236 kg/m	18c x 1.50mm <sup>2</sup>	08093 0150 18	20 Amps	12.8mm	0.154 kg/m
36c x 0.50mm <sup>2</sup>	08093 0050 36	6 Amps	14mm	0.274 kg/m	25c x 1.50mm <sup>2</sup>	08093 0150 25	20 Amps	15.2mm	0.202 kg/m
2c x 0.75mm <sup>2</sup>	08093 0075 02	13 Amps	5.3mm	0.030 kg/m	30c x 1.50mm <sup>2</sup>	08093 0150 30	20 Amps	16.19mm	0.236 kg/m
3c x 0.75mm <sup>2</sup>	08093 0075 03	13 Amps	5.5mm	0.038 kg/m	36c x 1.50mm <sup>2</sup>	08093 0150 36	20 Amps	17.7mm	0.274 kg/m
4c x 0.75mm <sup>2</sup>	08093 0075 04	13 Amps	6mm	0.048 kg/m	3c x 2.50mm <sup>2</sup>	08093 0250 03	30 Amps	8.3mm	0.120 kg/m
5c x 0.75mm <sup>2</sup>	08093 0075 05	13 Amps	6.5mm	0.063 kg/m	4c x 2.50mm <sup>2</sup>	08093 0250 04	30 Amps	9.1mm	0.148 kg/m
7c x 0.75mm <sup>2</sup>	08093 0075 07	13 Amps	7.6mm	0.091 kg/m	5c x 2.50mm <sup>2</sup>	08093 0250 05	30 Amps	9.9mm	0.177 kg/m
12c x 0.75mm <sup>2</sup>	08093 0075 12	13 Amps	9.3mm	0.140 kg/m	7c x 2.50mm <sup>2</sup>	08093 0250 07	30 Amps	11.7mm	0.247 kg/m
18c x 0.75mm <sup>2</sup>	08093 0075 18	13 Amps	10.8mm	0.199 kg/m	12c x 2.50mm <sup>2</sup>	08093 0250 12	30 Amps	13.9mm	0.382 kg/m
25c x 0.75mm <sup>2</sup>	08093 0075 25	13 Amps	12.7mm	0.275 kg/m	18c x 2.50mm <sup>2</sup>	08093 0250 18	30 Amps	16.7mm	0.585 kg/m
30c x 0.75mm <sup>2</sup>	08093 007530	13 Amps	13.1mm	0.318 kg/m	25c x 2.50mm <sup>2</sup>	08093 0250 25	30 Amps	20.5mm	0.827 kg/m
36c x 0.75mm <sup>2</sup>	08093 0075 36	13 Amps	14.6mm	0.396 kg/m	4c x 4.0mm <sup>2</sup>	08093 0400 04	40 Amps	11.5mm	0.232 kg/m
					5c x 4.0mm <sup>2</sup>	08093 0400 05	40 Amps	12.6mm	0.285 kg/m
					7c x 4.0mm <sup>2</sup>	08093 0400 07	40 Amps	15mm	0.385 kg/m
					4c x 6.0mm <sup>2</sup>	08093 0600 04	50 Amps	14.7mm	0.370 kg/m
					5c x 6.0mm <sup>2</sup>	08093 0600 05	50 Amps	15.2mm	0.418 kg/m
					7c x 6.0mm <sup>2</sup>	08093 0600 07	50 Amps	19.1mm	0.598 kg/m

**OTHER SIZES AVAILABLE ON REQUEST**

**Cable Specification (Continued)**

<b>Number of cores &amp; nominal cross section</b>	<b>Part No.</b>	<b>Gland PG (Metric)</b>	<b>Current rating at 30 deg C</b>	<b>Outer diameter Approx</b>	<b>Weight Approx</b>
4c x 10mm <sup>2</sup>	08093 1000 04	PG29 / M25	70 Amps	18.1mm	0.566 kg/m
5c x 10mm <sup>2</sup>	08093 1000 05	PG29 / M32	70 Amps	19.9mm	0.718 kg/m
4c x 16mm <sup>2</sup>	08093 1600 04	PG29/M32	95 Amps	21.9mm	0.885 kg/m
4c x 25mm <sup>2</sup>	08093 2500 04	PG36/M40	125 Amps	25.8mm	1.295 kg/m