

Applications

SIMBAL 'ROBOTFLEX 'T-CY' 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. The copper screen gives 85 - 90% coverage.

Design

1. **Conductor** :- Flexible plain copper, Class 6 to DIN VDE 0295
2. **Insulation** :- Semocore
3. **Wrapping** :- Fleece
4. **Screen** :- Tinned copper braid 85 - 90% coverage
5. **Outer Sheath** :- Special polyurethane,
6. **Colour** :- Grey RAL 7001

Marking

Semoflex Roboschlepp core x cross section

Core Identification

Up to 0.34mm² - acc. To DIN 47 100

From 0.50mm² - 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 A Lead & Silicon free, Halogen free & Oil resistant		
Electrical & Thermal Properties		
Nominal Voltage	0.14-0.34mm ² 0.50mm ² & above	U _o / U 350V U _o / U 300/500V
Test Voltage	up to 1.50mm ² 2.5 - 4.0mm ² 6.0mm ² & 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 ²	08094 0034 02		4.5mm	0.027 kg/m	2c x 1.00mm ²	08094 0100 02	16 Amps	6.6mm	0.058 kg/m
3c x 0.34mm ²	08094 0034 03		5.1mm	0.037 kg/m	3c x 1.00mm ²	08094 0100 03	16 Amps	6.9mm	0.072 kg/m
4c x 0.34mm ²	08094 0034 04		5.8mm	0.048 kg/m	4c x 1.00mm ²	08094 0100 04	16 Amps	7.4mm	0.087 kg/m
5c x 0.34mm ²	08094 0034 05		6.2mm	0.056 kg/m	5c x 1.00mm ²	08094 0100 05	16 Amps	8.1mm	0.107 kg/m
8c x 0.34mm ²	08094 0034 07		7.6mm	0.082 kg/m	8c x 1.00mm ²	08094 0100 08	16 Amps	9.6mm	0.157 kg/m
12c x 0.34mm ²	08094 0034 12		8.2mm	0.103 kg/m	12c x 1.00mm ²	08094 0100 12	16 Amps	11.3mm	0.225 kg/m
18c x 0.34mm ²	08094 0034 18		9.5mm	0.149 kg/m	18c x 1.00mm ²	08094 0100 18	16 Amps	13.1mm	0.300 kg/m
25c x 0.34mm ²	08094 0034 25		11.1mm	0.198 kg/m	25c x 1.00mm ²	08094 0100 25	16 Amps	15.7mm	0.436 kg/m
2c x 0.50mm ²	08094 0050 02	6 Amps	5.8mm	0.024 kg/m	30c x 1.00mm ²	08094 0100 30	16 Amps	16.1mm	0.492 kg/m
3c x 0.50mm ²	08094 0050 03	6 Amps	6mm	0.024 kg/m	36c x 1.00mm ²	08094 0100 36	16 Amps	17.5mm	0.585 kg/m
4c x 0.50mm ²	08094 0050 04	6 Amps	6.4mm	0.038 kg/m	2c x 1.50mm ²	08094 0150 02	20 Amps	7mm	0.071 kg/m
5c x 0.50mm ²	08094 0050 05	6 Amps	6.8mm	0.049 kg/m	3c x 1.50mm ²	08094 0150 03	20 Amps	7.3mm	0.089 kg/m
7c x 0.50mm ²	08094 0050 07	6 Amps	8mm	0.065 kg/m	4c x 1.50mm ²	08094 0150 04	20 Amps	8mm	0.112 kg/m
12c x 0.50mm ²	08094 0050 12	6 Amps	9.6mm	0.102 kg/m	5c x 1.50mm ²	08094 0150 05	20 Amps	8.7mm	0.135 kg/m
18c x 0.50mm ²	08094 0050 18	6 Amps	10.9mm	0.154 kg/m	7c x 1.50mm ²	08094 0150 07	20 Amps	10.5mm	0.197 kg/m
25c x 0.50mm ²	08094 0050 25	6 Amps	12.8mm	0.202 kg/m	12c x 1.50mm ²	08094 0150 12	20 Amps	12.3mm	0.294 kg/m
30c x 0.50mm ²	08094 0050 30	6 Amps	13.4mm	0.236 kg/m	18c x 1.50mm ²	08094 0150 18	20 Amps	14.3mm	0.417 kg/m
36c x 0.50mm ²	08094 0050 36	6 Amps	14.3mm	0.274 kg/m	25c x 1.50mm ²	08094 0150 25	20 Amps	16.9mm	0.567 kg/m
2c x 0.75mm ²	08094 0075 02	13 Amps	6.2mm	0.050 kg/m	30c x 1.50mm ²	08094 0150 30	20 Amps	17.6mm	0.656 kg/m
3c x 0.75mm ²	08094 0075 03	13 Amps	6.4mm	0.060 kg/m	36c x 1.50mm ²	08094 0150 36	20 Amps	19.1mm	0.780 kg/m
4c x 0.75mm ²	08094 0075 04	13 Amps	6.9mm	0.075 kg/m	3c x 2.50mm ²	08094 0250 03	30 Amps	9.2mm	0.148 kg/m
5c x 0.75mm ²	08094 0075 05	13 Amps	7.4mm	0.089 kg/m	4c x 2.50mm ²	08094 0250 04	30 Amps	10.1mm	0.186 kg/m
7c x 0.75mm ²	08094 0075 07	13 Amps	8.7mm	0.118 kg/m	5c x 2.50mm ²	08094 0250 05	30 Amps	11mm	0.240 kg/m
12c x 0.75mm ²	08094 0075 12	13 Amps	10.4mm	0.183 kg/m	7c x 2.50mm ²	08094 0250 07	30 Amps	13mm	0.307 kg/m
18c x 0.75mm ²	08094 0075 18	13 Amps	12.1mm	0.258 kg/m	12c x 2.50mm ²	08094 0250 12	30 Amps	15.6mm	0.475 kg/m
25c x 0.75mm ²	08094 0075 25	13 Amps	14.2mm	0.347 kg/m	18c x 2.50mm ²	08094 0250 18	30 Amps	18.2mm	0.680 kg/m
30c x 0.75mm ²	08094 007530	13 Amps	14.6mm	0.390 kg/m	25c x 2.50mm ²	08094 0250 25	30 Amps	21.8mm	0.930 kg/m
36c x 0.75mm ²	08094 0075 36	13 Amps	15.9mm	0.460 kg/m	4c x 4.0mm ²	08094 0400 04	40 Amps	12mm	0.270 kg/m
					5c x 4.0mm ²	08094 0400 05	40 Amps	13mm	0.326 kg/m
					7c x 4.0mm ²	08094 0400 07	40 Amps	15.8mm	0.458 kg/m
					4c x 6.0mm ²	08094 0600 04	50 Amps	14.4mm	0.390 kg/m
					5c x 6.0mm ²	08094 0600 05	50 Amps	15.8mm	0.478 kg/m
					7c x 6.0mm ²	08094 0600 07	50 Amps	19.2mm	0.668 kg/m

OTHER SIZES AVAILABLE ON REQUEST

Cable Specification (Continued)

Number of cores & nominal cross section	Part No.	Gland PG (Metric)	Current rating at 30 deg C	Outer diameter Approx	Weight Approx
4c x 10mm ²	08094 1000 04	PG29 / M25	70 Amps	18.6mm	0.640 kg/m
5c x 10mm ²	08094 1000 05	PG29 / M32	70 Amps	20.8mm	0.784 kg/m
4c x 16mm ²	08094 1600 04	PG29/M32	95 Amps	22.1mm	0.946 kg/m
4c x 25mm ²	08094 2500 04	PG36/M40	125 Amps	26.4mm	1.440 kg/m
4c x 35mm ²	08094 3500 04	PG36/M40	170 Amps	29.7mm	1.920 kg/m