

ROBOTFLEX TPE/PUR Twisted Pairs with Overall Screen

Applications

SIMBAL 'ROBOTFLEX 'T-CY' twisted pairs 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 ₀ / U 350V U ₀ / 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
2 x 2 x 0.25mm ²	08094 0025 02x02		6.6mm	0.044 kg/m
3 x 2 x 0.25mm ²	08094 0025 03x02		7.1mm	0.061 kg/m
4 x 2 x 0.25mm ²	08094 0025 04x02		7.8mm	0.071 kg/m
5 x 2 x 0.25mm ²	08094 0025 05x02		8.4mm	0.085 kg/m
6 x 2 x 0.25mm ²	08094 0025 06x02		9.1mm	0.105 kg/m
8 x 2 x 0.25mm ²	08094 0025 08x02		10.3mm	0.125 kg/m
10 x 2 x 0.25mm ²	08094 0025 10x02		10.8mm	0.148 kg/m
14 x 2 x 0.25mm ²	08094 0025 14x02		11.4mm	0.173 kg/m
2 x 2 x 0.50mm ²	08094 0050 02x02	6 Amps	7.8mm	0.065 kg/m
3 x 2 x 0.50mm ²	08094 0050 03x02	6 Amps	8.4mm	0.094 kg/m
4 x 2 x 0.50mm ²	08094 0050 04x02	6 Amps	8.9mm	0.110 kg/m
5 x 2 x 0.50mm ²	08094 0050 05x02	6 Amps	10.2mm	0.136 kg/m
8 x 2 x 0.50mm ²	08094 0050 08x02	6 Amps	10.4mm	0.206 kg/m
10 x 2 x 0.50mm ²	08094 0050 10x02	6 Amps	12.9mm	0.240 kg/m
12 x 2 x 0.50mm ²	08094 0050 12x02	6 Amps	13.7mm	0.279 kg/m

PAARTRONIC-CY-CY LIYCY-CY Twisted Pairs with Ind Screened pairs & O/All screen

Applications

SIMBAL 'PAARTRONIC-CY-CY LIYCY-CY twisted pairs cables are suitable for data transmission of analogue & digital signals in process control facilities, and for lossless transmission of signals and data..

Design

1. **Conductor** :- Flexible plain copper, Class 5 to DIN VDE 0295
2. **Insulation** :- PVC
3. **Stranding** :- 2 cores twisted to form a pair
4. **Shield** :- Tinned copper braid (pair shield) - 85% coverage
5. **Inner sheath** :- PVC
6. **Overall Screen** :- Tinned copper braid 85 - 90% coverage
7. **Outer Sheath** :- PVC,
8. **Colour** :- Grey RAL 7032

Marking

Paartronic core x cross section

Core Identification

Colour coded to DIN 47 100

Standards

DIN VDE 0812 / 0814 & DIN 47414

Mechanical Properties		
Bending Radii (Dynamic Installations)	7.5 x Cable diameter	
Chemical Properties		
For Indoor use (Outdoor applications OK with UV protection) Flame & Fire retardant to IEC 332-1 Lead & Silicon free		
Electrical & Thermal Properties		
Nominal Voltage	0.14mm ² 0.25mm ² & above	U ₀ / U 250V U ₀ / U 300/500V
Test Voltage	0.14mm ² 0.25mm ² & above	1200 V 1500V
Current Rating	See below	
Max surface temperature		
	- fixed installation	- 30 deg C up to + 80 deg C
	- mobile installation	- 5 deg C up to + 70 deg C

Cable Specification

No. of cores & cross section	Part No.	Current rating at 30 deg C	Outer diameter Approx	Weight Approx
2 x 2 x 0.25mm ²	08094 0025 02x02CYCY		9.5mm	0.120 kg/m
3 x 2 x 0.25mm ²	08094 0025 03x02CYCY		10mm	0.145 kg/m
4 x 2 x 0.25mm ²	08094 0025 04x02CYCY		11.2mm	0.180 kg/m
5 x 2 x 0.25mm ²	08094 0025 05x02CYCY		12mm	0.210 kg/m
6 x 2 x 0.25mm ²	08094 0025 06x02CYCY		13.5mm	0.260 kg/m
8 x 2 x 0.25mm ²	08094 0025 08x02CYCY		15.5mm	0.320 kg/m
12 x 2 x 0.25mm ²	08094 0025 12x02CYCY		18.5mm	0.430 kg/m
16 x 2 x 0.25mm ²	08094 0025 16x02CYCY		22mm	0.610 kg/m
24 x 2 x 0.25mm ²	08094 0025 24x02CYCY		26mm	0.750 kg/m
32 x 2 x 0.25mm ²	08094 0025 32x02CYCY		29.4mm	0.865 kg/m
2 x 2 x 0.34mm ²	08094 0034 02x02CYCY		12.7mm	
3 x 2 x 0.34mm ²	08094 0034 03x02CYCY		10.2mm	0.136 kg/m
4 x 2 x 0.34mm ²	08094 0034 04x02CYCY		10.4mm	0.206 kg/m
6 x 2 x 0.34mm ²	08094 0034 06x02CYCY		12.9mm	0.240 kg/m
8 x 2 x 0.34mm ²	08094 0034 08x02CYCY		13.7mm	0.279 kg/m