

**Applications**

SIMBAL ‘SEMOFLEX’ drum reeling cables are suitable for use in dry and damp areas, explosive environments and for various heavy duty outdoor applications such as hoisting gear, transportation systems, motorised cable reels rail traction motors and agricultural machinery plus many other applications where high mechanical stresses are involved.

**Design**

1. **Conductor :-** Flexible plain copper, Class 6 to DIN VDE 0295
2. **Insulation :-** Semocore on polyester base
3. **Inner sheath :-** Special polyurethane with support braid from textile threads.
4. **Outer Sheath :-** Special polyurethane, flame resistant, halogen free.
5. **Colour :-** Yellow or Black

**Marking**

Semoflex Drum 0.6/1kV core x cross section

**Core Identification**

Up to 5 cores - colour coded in acc. With VDE 0293  
From 7 cores - white cores with black numbers

**Standards**

VDE reg No 6510 E 195107 Style 10264/20235 80 deg C  
1000 V LL 46997 CSA AWM II A/B 600V 90 deg C FT1



**Mechanical Properties**

Bending Radii (Dynamic)	5 x cable thickness
Tensile Strength	25 N/mm <sup>2</sup>
Max travelling speed	200 m/min (faster speeds may be available on request)

**Chemical Properties**

Lead & Silicon Free, Halogen Free & Oil resistant  
For Indoor & Outdoor applications  
Flame retardant in accordance with VDE 0472 part 804, test type B, IEC 332-1

**Electrical & Thermal Properties**

Nominal Voltage	U <sub>o</sub> / U	0.6/1kV
Test Voltage	4000 V	
Current Rating	See facing page	
Max surface temperature		
- fixed installation	- 50 deg C up to + 80 deg C	
- mobile installation	- 40 deg C up to + 80 deg C	

**Cable Specification**

Number of cores & nominal cross section	Gland PG / ISO	Current rating at 30 deg C	Outer diameter Approx	Weight Approx
4c x 1.50mm <sup>2</sup>	PG11 / M20S	20 Amps	10.2mm	0.157kg/m
5c x 1.50mm <sup>2</sup>	PG13.5 / M20S	20 Amps	10.8mm	0.176kg/m
7c x 1.50mm <sup>2</sup>	PG16 / M20	20 Amps	12.9mm	0.245kg/m
12c x 1.50mm <sup>2</sup>	PG29 / M25	20 Amps	18.4mm	0.337kg/m
18c x 1.50mm <sup>2</sup>	PG29 / M25	20 Amps	18.6mm	0.526kg/m
24c x 1.50mm <sup>2</sup>	PG29 / M32	20 Amps	21.3mm	0.662kg/m
30c x 1.50mm <sup>2</sup>	PG29 / M32	20 Amps	24.6mm	0.901kg/m
36 x 1.50mm <sup>2</sup>	PG36 / M40	20 Amps	25.4mm	0.934kg/m
42c x 1.50mm <sup>2</sup>	PG36 / M40	20 Amps	26.5mm	1.056kg/m
4c x 2.50mm <sup>2</sup>	PG13.5 / M20	25 Amps	11.7mm	0.208kg/m
5c x 2.50mm <sup>2</sup>	PG16 / M20	25 Amps	12.7mm	0.263kg/m
7c x 2.50mm <sup>2</sup>	PG21 / M25	25 Amps	14.8mm	0.327kg/m
12c x 2.50mm <sup>2</sup>	PG29 / M32	25 Amps	20.4mm	0.533kg/m
18c x 2.50mm <sup>2</sup>	PG29 / M32	25 Amps	21.1mm	0.725kg/m
24c x 2.50mm <sup>2</sup>	PG29 / M32	25 Amps	24.8mm	0.988kg/m
30c x 2.50mm <sup>2</sup>	PG36 / M40	25 Amps	27.6mm	1.242kg/m
36c x 2.50mm <sup>2</sup>	PG36 / M40	25 Amps	28.2mm	1.325kg/m
42c x 2.50mm <sup>2</sup>	PG36 / M50S	25 Amps	31.4mm	1.511kg/m
50c x 2.50mm <sup>2</sup>	PG42 / M50S	25 Amps	34.9mm	2.134kg/m
4c x 4.0mm <sup>2</sup>	PG16 / M20	36 Amps	12.5mm	0.270kg/m
5c x 4.0mm <sup>2</sup>	PG21 / M25	36 Amps	14.3mm	0.362kg/m
4c x 6.0mm <sup>2</sup>	PG21 / M25	47 Amps	16.9mm	0.409kg/m
5c x 6.0mm <sup>2</sup>	PG21 / M25	47 Amps	17.8mm	0.511kg/m
7c x 6.0mm <sup>2</sup>	PG29 / M32	47 Amps	20.9mm	0.715kg/m
4c x 10.0mm <sup>2</sup>	PG29 / M32	64 Amps	19.6mm	0.633kg/m
5c x 10.0mm <sup>2</sup>	PG29 / M32	64 Amps	20.9mm	0.766kg/m
7c x 10.0mm <sup>2</sup>	PG36 / M40	64 Amps	25.8mm	1.044kg/m
4c x 16.0mm <sup>2</sup>	PG29 / M32	86 Amps	23.8mm	0.936kg/m
5c x 16.0mm <sup>2</sup>	PG36 / M40	86 Amps	25.3mm	1.173kg/m
4c x 25.0mm <sup>2</sup>	PG36 / M40	114 Amps	27.7mm	1.483kg/m
4c x 35.0mm <sup>2</sup>	PG36 / M40	140 Amps	30.1mm	2.115kg/m
4c x 50.0mm <sup>2</sup>	PG42 / M50S	180 Amps	35.2mm	2.600kg/m
4c x 70.0mm <sup>2</sup>	PG48 / M50	242 Amps	40.3mm	3.700kg/m
4c x 95.0mm <sup>2</sup>	M63S	293 Amps	47.5mm	5.200kg/m
4c x 120.0mm <sup>2</sup>	M63	340 Amps	50.7mm	5.800kg/m
3c x 50 + 3 x 25/3mm <sup>2</sup>	PG42 / M50S		32.5mm	2.100kg/m
4c x 16 + 2 x (4x1.5)mm <sup>2</sup>	PG36 / M40		29.3mm	1.512kg/m
4c x 16 + 4 x 2.50mm <sup>2</sup>	PG36 / M32		23.6mm	1.100kg/m