

**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

**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 Installations)	5 x Cable diameter
Tensile Strength	25 N/mm <sup>2</sup>
Max travelling speed	200 m/min (faster speeds may be available on request)
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	U <sub>0</sub> / U 600 / 1000V
Test Voltage	4000 V - 50Hz in AC
Current Rating	See below
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	Part No.	Gland PG (Metric)	Current rating at 30 deg C	Outer diameter Approx	Weight Approx
4c x 1.5mm <sup>2</sup>	08042 0150 04	PG11 / M20S	20 Amps	10.2mm	0.157 kg/m
5c x 1.5mm <sup>2</sup>	08042 0150 05	PG13.5 / M20S	20 Amps	10.8mm	0.176 kg/m
7c x 1.5mm <sup>2</sup>	08042 0150 07	PG16 / M20	20 Amps	12.9mm	0.245 kg/m
12c x 1.5mm <sup>2</sup>	08042 0150 12	PG29 / M25	20 Amps	18.4mm	0.337 kg/m
18c x 1.5mm <sup>2</sup>	08042 0150 18	PG29 / M25	20 Amps	18.6mm	0.526 kg/m
24c x 1.5mm <sup>2</sup> Bd	08042 0150 24	PG29 / M32	20 Amps	23.2mm	0.680 kg/m
30c x 1.5mm <sup>2</sup> Bd	08042 0150 30	PG29 / M32	20 Amps	27.4mm	0.920 kg/m
36c x 1.5mm <sup>2</sup> Bd	08042 0150 36	PG36 / M40	20 Amps	29mm	0.953 kg/m
42c x 1.5mm <sup>2</sup> Bd	08042 0150 42	PG36 / M40	20 Amps	29.5mm	1.192 kg/m
4c x 2.5mm <sup>2</sup>	08042 0250 04	PG13.5 / M20	25 Amps	11.7mm	0.208 kg/m
5c x 2.5mm <sup>2</sup>	08042 0250 05	PG16 / M20	25 Amps	12.7mm	0.263 kg/m
7c x 2.5mm <sup>2</sup>	08042 0250 07	PG21 / M25	25 Amps	14.8mm	0.327 kg/m
12c x 2.5mm <sup>2</sup>	08042 0250 12	PG29 / M32	25 Amps	20.4mm	0.533 kg/m
18c x 2.5mm <sup>2</sup>	08042 0250 18	PG29 / M32	25 Amps	21.1mm	0.725 kg/m
24c x 2.5mm <sup>2</sup> Bd	08042 0250 24	PG29 / M32	25 Amps	26.4mm	1.000 kg/m
30c x 2.5mm <sup>2</sup> Bd	08042 0250 30	PG36 / M40	25 Amps	28.8mm	1.299 kg/m
36c x 2.5mm <sup>2</sup> Bd	08042 0250 36	PG36 / M40	25 Amps	32.4mm	1.411 kg/m
42c x 2.5mm <sup>2</sup> Bd	08042 0250 42	PG36 / M50S	25 Amps	33.5mm	1.637 kg/m
49c x 2.5mm <sup>2</sup> Bd	08042 0250 49	PG42 / M50S	25 Amps	38mm	2.156 kg/m
4c x 4mm <sup>2</sup>	08042 0400 04	PG16 / M20	36 Amps	12.5mm	0.270 kg/m
5c x 4mm <sup>2</sup>	08042 0400 05	PG21 / M25	36 Amps	14.3mm	0.362 kg/m
4c x 6mm <sup>2</sup>	08042 0600 04	PG21 / M25	47 Amps	16.9mm	0.409 kg/m
5c x 6mm <sup>2</sup>	08042 0600 05	PG21 / M25	47 Amps	17.8mm	0.511 kg/m
7c x 6mm <sup>2</sup>	08042 0600 07	PG29 / M32	47 Amps	20.9mm	0.715 kg/m
4c x 10mm <sup>2</sup>	08042 1000 04	PG29 / M32	64 Amps	19.6mm	0.633 kg/m
5c x 10mm <sup>2</sup>	08042 1000 05	PG29 / M32	64 Amps	20.9mm	0.766 kg/m
7c x 10mm <sup>2</sup>	08042 1000 07	PG36 / M40	64 Amps	25.8mm	1.044 kg/m
4c x 16mm <sup>2</sup>	08042 1600 04	PG29 / M32	86 Amps	23.8mm	0.936 kg/m
5c x 16mm <sup>2</sup>	08042 1600 05	PG36 / M40	86 Amps	25.3mm	1.173 kg/m

**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 25mm <sup>2</sup>	08042 2500 04	PG36 / M40	114 Amps	27.7mm	1.483 kg/m
4c x 35mm <sup>2</sup>	08042 3500 04	PG36 / M40	140 Amps	30.1mm	2.115 kg/m
4c x 50mm <sup>2</sup>	08042 5000 04	PG42 / M50S	180 Amps	35.2mm	2.600 kg/m
4c x 70mm <sup>2</sup>	08042 7000 04	PG48 / M50	242 Amps	40.3mm	3.700 kg/m
4c x 95mm <sup>2</sup>	08042 9500 04	M63S	293 Amps	47.5mm	5.200 kg/m
4c x 120mm <sup>2</sup>	08042 1200 04	M63	340 Amps	50.7mm	5.800 kg/m
3c x 50 + 3 x 25/3mm <sup>2</sup>	08042 5000 03SP	PG42/M50S	180 Amps	32.5mm	2.100 kg/m
4c x 16 + 2 x (4 x 1.5)mm <sup>2</sup>	08042 1600 04SP	PG36/M40	86 Amps	29.3mm	1.152 kg/m
4c x 16 + 4 x 2.5mm <sup>2</sup>	08042 1600 04SP2	PG36/M32	86 Amps	23.6mm	1.100 kg/m