

**Applications**

SIMBAL 'ROUNDFLEX 500 YY' PVC/PVC cables are typically used in dry & moist applications for light mechanical stresses. Cables should be protected when used outdoors, & should not be used in water. Cable is suitable for fixed installations in industrial plants & production lines.

**Design**

1. **Conductor :-** Flexible plain copper, Class 5 to DIN VDE 0295
2. **Insulation :-** PVC type YI 2 (Polyvinyl chloride)
3. **Outer Sheath :-** PVC type YM 2 (Polyvinyl chloride) Colour - Grey

**Core Identification**

In accordance with DIN VDE 0293 : 1990-01  
JZ - Black with white numbers with or without green / yellow earth core

**Standards**

DIN VDE 0245



**Mechanical Properties**

Bending Radii (Dynamic)	10 x cable thickness
Bending Radii (Static)	6 x cable thickness

**Chemical Properties**

Lead & Silicon Free  
For Indoor applications  
Flame retardant in accordance with IEC 60 332 part 1

**Electrical & Thermal Properties**

Nominal Voltage	U <sub>0</sub> / U	300 / 500 V
Maximum Operating Voltage in AC systems	U <sub>m</sub>	500 V
Maximum Operating Voltage in DC systems	V <sub>m</sub>	750 V
Test Voltage	2.0 k V - 50Hz in AC	
Current Rating	See facing page	
Max surface temperature		
- fixed installation	- 35 deg C up to + 70 deg C	
- mobile installation	- 15 deg C up to + 70 deg C	
Max conductor temperature		
- In operation	+ 70 deg C	
- In short circuit	+ 150 deg C	

**Cable Specification**

Number of cores & nominal cross section	Gland PG / ISO	Current rating at 30 deg C	Outer diameter Approx	Weight Approx	Stock Item
3c x 0.75mm <sup>2</sup>	PG7.0 / M20-16	13 Amps	5.4 mm	0.050 kg/m	Yes
4c x 0.75mm <sup>2</sup>	PG7.0 / M20-16	13 Amps	5.9 mm	0.060 kg/m	
5c x 0.75mm <sup>2</sup>	PG9.0 / M20-16	13 Amps	6.7 mm	0.072 kg/m	
7c x 0.75mm <sup>2</sup>	PG9.0 / M20-16	13 Amps	7.1 mm	0.090 kg/m	Yes
8c x 0.75mm <sup>2</sup>	PG9.0 / M20-16	13 Amps	7.4 mm	0.100 kg/m	
12c x 0.75mm <sup>2</sup>	PG11.0 / M20S	13 Amps	9.4 mm	0.146 kg/m	
16c x 0.75mm <sup>2</sup>	PG13.5 / M20S	13 Amps	10.8 mm	0.215 kg/m	Yes
25c x 0.75mm <sup>2</sup>	PG16.0 / M20	13 Amps	13.4 mm	0.289 kg/m	Yes
3c x 1.00mm <sup>2</sup>	PG7.0 / M20/16	16 Amps	5.6 mm	0.060 kg/m	Yes
4c x 1.00mm <sup>2</sup>	PG9.0 / M20/16	16 Amps	6.5 mm	0.069 kg/m	
5c x 1.00mm <sup>2</sup>	PG9.0 / M20/16	16 Amps	6.7 mm	0.083 kg/m	Yes
7c x 1.00mm <sup>2</sup>	PG9.0 / M20/16	16 Amps	7.5 mm	0.104 kg/m	
8c x 1.00mm <sup>2</sup>	PG11.0 / M20/16	16 Amps	8.0 mm	0.120 kg/m	
12c x 1.00mm <sup>2</sup>	PG11.0 / M20S	16 Amps	9.9 mm	0.174 kg/m	
16c x 1.00mm <sup>2</sup>	PG13.5 / M20S	16 Amps	11.1 mm	0.226 kg/m	
25c x 1.00mm <sup>2</sup>	PG21.0 / M20	16 Amps	14.3 mm	0.346 kg/m	
3c x 1.50mm <sup>2</sup>	PG9.0 / M20/16	20 Amps	6.7 mm	0.078 kg/m	Yes
4c x 1.50mm <sup>2</sup>	PG9.0 / M20/16	20 Amps	7.4 mm	0.092 kg/m	Yes
5c x 1.50mm <sup>2</sup>	PG11.0 / M20/16	20 Amps	7.9 mm	0.109 kg/m	
7c x 1.50mm <sup>2</sup>	PG11.0 / M20S	20 Amps	9.0 mm	0.147 kg/m	Yes
8c x 1.50mm <sup>2</sup>	PG13.5 / M20S	20 Amps	9.5 mm	0.169 kg/m	Yes
12c x 1.50mm <sup>2</sup>	PG16.0 / M20	20 Amps	11.6 mm	0.237 kg/m	Yes
16c x 1.50mm <sup>2</sup>	PG16.0 / M20	20 Amps	12.9 mm	0.310 kg/m	
25c x 1.50mm <sup>2</sup>	PG21.0 / M25	20 Amps	16.9 mm	0.490 kg/m	
3c x 2.5mm <sup>2</sup>	PG9.0 / M20/16	25 Amps	7.7 mm	0.119 kg/m	Yes
4c x 2.5mm <sup>2</sup>	PG11.0 / M20S	25 Amps	8.5 mm	0.148 kg/m	Yes
5c x 2.5mm <sup>2</sup>	PG11.0 / M20S	25 Amps	9.7 mm	0.180 kg/m	
7c x 2.5mm <sup>2</sup>	PG13.5 / M20S	25 Amps	10.1 mm	0.232 kg/m	Yes
8c x 2.5mm <sup>2</sup>	PG13.5 / M20	25 Amps	11.3 mm	0.274 kg/m	
12c x 2.5mm <sup>2</sup>	PG16.0 / M25	25 Amps	13.9 mm	0.377 kg/m	Yes
4c x 4.0mm <sup>2</sup>	PG13.5 / M20S	36 Amps	10.2 mm	0.219 kg/m	Yes
4c x 6.0mm <sup>2</sup>	PG16.0 / M20	45 Amps	12.3 mm	0.323 kg/m	Yes
4c x 10.0mm <sup>2</sup>	PG21.0 / M25	64 Amps	15.0 mm	0.513 kg/m	Yes
4c x 16.0mm <sup>2</sup>	PG29.0 / M32	87 Amps	19.2 mm	0.844 kg/m	Yes
4c x 25.0mm <sup>2</sup>	PG29.0 / M32	115 Amps	23.0 mm	1.252 kg/m	Yes
4c x 35.0mm <sup>2</sup>	PG36.0 / M40	140 Amps	26.7 mm	1.658 kg/m	
4c x 50.0mm <sup>2</sup>	PG36.0 / M40	180 Amps	31.5 mm	2.360 kg/m	