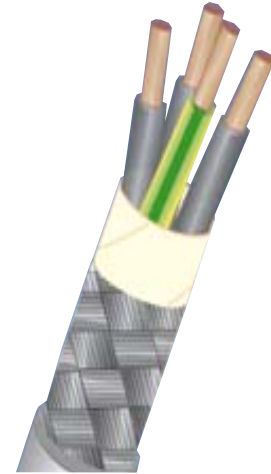


### Applications

SIMBAL 'ROUNDFLEX 500 CY' Screened PVC/PVC cables are typically used in dry & moist applications for light & medium mechanical stresses. Cables should be protected when used outdoors, & should not be used in water. Cable is suitable for measuring, controlling and regulating according to DIN VDE 0113, also used for computers and control equipment on machine tools, conveyors, production lines and industrial plant, either in fixed installations or with infrequent movement with no periodic recurrence.

### Design

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



### Core Identification

In accordance with DIN VDE 0293 : 1990-01

JZ/OZ - Black with white numbers with or without green / yellow earth core

### Standards

IEC 60298

### Mechanical Properties

Bending Radii (Dynamic)	20 x cable thickness
Bending Radii (Static)	10 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>o</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	6.3 mm	0.065 kg/m	
4c x 0.75mm <sup>2</sup>	PG9.0 / M20/16	13 Amps	6.8 mm	0.077 kg/m	
5c x 0.75mm <sup>2</sup>	PG9.0 / M20/16	13 Amps	7.3 mm	0.091 kg/m	
7c x 0.75mm <sup>2</sup>	PG11.0 / M20/16	13 Amps	7.8 mm	0.115 kg/m	
8c x 0.75mm <sup>2</sup>	PG11.0 / M20/16	13 Amps	8.3 mm	0.137 kg/m	
12c x 0.75mm <sup>2</sup>	PG13.5 / M20S	13 Amps	10.1 mm	0.177 kg/m	
18c x 0.75mm <sup>2</sup>	PG16.0 / M20	13 Amps	11.6 mm	0.250 kg/m	
25c x 0.75mm <sup>2</sup>	PG21.0 / M25	13 Amps	13.9 mm	0.326 kg/m	
3c x 1.00mm <sup>2</sup>	PG9.0 / M20/16	16 Amps	6.5 mm	0.073 kg/m	
4c x 1.00mm <sup>2</sup>	PG9.0 / M20/16	16 Amps	7.0 mm	0.089 kg/m	
5c x 1.00mm <sup>2</sup>	PG11.0 / M20/16	16 Amps	7.6 mm	0.105 kg/m	
7c x 1.00mm <sup>2</sup>	PG11.0 / M20/S	16 Amps	8.4 mm	0.139 kg/m	
8c x 1.00mm <sup>2</sup>	PG11.0 / M20/S	16 Amps	9.0 mm	0.157 kg/m	
12c x 1.00mm <sup>2</sup>	PG13.5 / M20S	16 Amps	10.4 mm	0.207 kg/m	
18c x 1.00mm <sup>2</sup>	PG16.0 / M20	16 Amps	12.4 mm	0.295 kg/m	
25c x 1.00mm <sup>2</sup>	PG21.0 / M25	16 Amps	14.9 mm	0.384 kg/m	
3c x 1.50mm <sup>2</sup>	PG9.0 / M20/16	20 Amps	7.2 mm	0.090 kg/m	
4c x 1.50mm <sup>2</sup>	PG11.0 / M20/16	20 Amps	7.8 mm	0.108 kg/m	Yes
5c x 1.50mm <sup>2</sup>	PG11.0 / M20S	20 Amps	8.4 mm	0.125 kg/m	
7c x 1.50mm <sup>2</sup>	PG11.0 / M20S	20 Amps	9.3 mm	0.160 kg/m	
12c x 1.50mm <sup>2</sup>	PG13.5 / M20	20 Amps	11.8 mm	0.279 kg/m	
18c x 1.50mm <sup>2</sup>	PG21.0 / M25	20 Amps	14.0 mm	0.350 kg/m	
25c x 1.50mm <sup>2</sup>	PG21.0 / M25	20 Amps	16.9 mm	0.530 kg/m	
3c x 2.5mm <sup>2</sup>	PG11.0 / M20S	25 Amps	8.6 mm	0.140 kg/m	
4c x 2.5mm <sup>2</sup>	PG11.0 / M20S	25 Amps	9.4 mm	0.173 kg/m	Yes
5c x 2.5mm <sup>2</sup>	PG13.5 / M20S	25 Amps	10.0 mm	0.206 kg/m	
7c x 2.5mm <sup>2</sup>	PG13.5 / M20S	25 Amps	10.8 mm	0.267 kg/m	
12c x 2.5mm <sup>2</sup>	PG21.0 / M25	25 Amps	14.6 mm	0.432 kg/m	
4c x 4.0mm <sup>2</sup>	PG 13.5 / M20S	36 Amps	11.1 mm	0.236 kg/m	Yes
4c x 6.0mm <sup>2</sup>	PG16.0 / M20	45 Amps	12.8 mm	0.339 kg/m	Yes
4c x 10.0mm <sup>2</sup>	PG21.0 / M25	64 Amps	16.1 mm	0.502 kg/m	Yes
4c x 16.0mm <sup>2</sup>	PG29.0 / M32	87 Amps	19.2 mm	0.771 kg/m	Yes
4c x 25.0mm <sup>2</sup>	PG29.0 / M32	115 Amps	20.2 mm	1.420 kg/m	