

Applications

SIMBAL 'ROUND FLEX 191-CY (UL/CSA) PVC/PVC cable is a UL - Listed and CSA certified flexible Screened control cable rated at 600 V. Used in machine tool manufacturing, heating & air conditioning, data processing etc. For Indoor / Outdoor installation of electrical equipment under medium mechanical stress. Suitable for installation in dry, moist or wet environments and moderate flexing applications.

Design

1. **Conductor** :- Flexible plain copper, Class 5 to DIN VDE 0295
2. **Insulation** :- PVC type YI 8 to DIN VDE 0207 pt 4 & class 43 to UL Std 1581
3. **Screen** :- Tinned copper wire braid
4. **Outer Sheath** :- PVC type YM 5 to DIN VDE 0207 pt 4 & class 43 to UL std 1581
5. **Colour** - Grey (RAL 7001)

Core Identification

Black with white numbers with or without green / yellow earth core (4c and above)

Standards

HD21.13 S1, DIN VDE 0281 T13
UL style 2587 bzw. 2550 + 21098
CSA AWM I A/B II A/B



Mechanical Properties		
Bending Radii	(Dynamic Installations)	20 x Cable diameter
	(Static Installations)	6 x Cable diameter
Chemical Properties		
For Indoor & Outdoor applications		
Flame retardant in acc. With IEC 60 332 part 1		
Lead & Silicon free		
Resistant to mineral oils, synthetic oils & water based coolants		
Electrical & Thermal Properties		
Nominal Voltage	600V	
Test Voltage	3000 V	
Breakdown Voltage	6000V	
Current Rating	See below	
Max surface temperature		
- fixed installation	- 40 deg C up to + 90 deg C	
- mobile installation	- 5 deg C up to + 90 deg C	
Max conductor temperature		
- In operation	+ 90 deg C	
- In short circuit	+ 150 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
3c x 1.00mm ² (AWG18)	08051 0100 03CYCSA	PG11 / M20S	16 Amps	8.8mm	0.122 kg/m
4c x 1.00mm ² (AWG18)	08051 0100 04CYCSA	PG11 / M20S	16 Amps	9.6mm	0.157 kg/m
5c x 1.00mm ² (AWG18)	08051 0100 05CYCSA	PG13.5 / M20S	16 Amps	10.3mm	0.183 kg/m
7c x 1.00mm ² (AWG18)	08051 0100 07CYCSA	PG13.5 / M20	16 Amps	11.2mm	0.207 kg/m
12c x 1.00mm ² (AWG18)	08051 0100 12CYCSA	PG21 / M25	16 Amps	14.6mm	0.342 kg/m
18c x 1.00mm ² (AWG18)	08051 0100 19CYCSA	PG21 / M25	16 Amps	17mm	0.472 kg/m
25c x 1.00mm ² (AWG18)	08051 0100 25CYCSA	PG29 / M32	16 Amps	20.1mm	0.648 kg/m
3c x 1.50mm ² (AWG16)	08051 0150 03CYCSA	PG11 / M20S	20 Amps	9.6mm	0.166 kg/m
4c x 1.50mm ² (AWG16)	08051 0150 04CYCSA	PG13.5 / M20S	20 Amps	10.3mm	0.191 kg/m
5c x 1.50mm ² (AWG16)	08051 0150 05CYCSA	PG13.5 / M20	20 Amps	11.3mm	0.222 kg/m
7c x 1.50mm ² (AWG16)	08051 0150 07CYCSA	PG16 / M20	20 Amps	12.1mm	0.270 kg/m
12c x 1.50mm ² (AWG16)	08051 0150 12CYCSA	PG21 / M25	20 Amps	16.1mm	0.464 kg/m
18c x 1.50mm ² (AWG16)	08051 0150 19CYCSA	PG29 / M25	20 Amps	18.7mm	0.679 kg/m
25c x 1.50mm ² (AWG16)	08051 0150 25CYCSA	PG29 / M32	20 Amps	22.8mm	0.952 kg/m
3c x 2.50mm ² (AWG14)	08051 0250 03CYCSA	PG13.5 / M20S	25 Amps	10.5mm	0.221 kg/m
4c x 2.50mm ² (AWG14)	08051 0250 04CYCSA	PG16 / M20S	25 Amps	11.4mm	0.269 kg/m
5c x 2.50mm ² (AWG14)	08051 0250 05CYCSA	PG16 / M20	25 Amps	12.8mm	0.325 kg/m
7c x 2.50mm ² (AWG14)	08051 0250 07CYCSA	PG21 / M25	25 Amps	14.1mm	0.421 kg/m
12c x 2.50mm ² (AWG14)	08051 0250 12CYCSA	PG29 / M25	25 Amps	17.9mm	0.769 kg/m
18c x 2.50mm ² (AWG14)	08051 0250 19CYCSA	PG29 / M32	25 Amps	21.1mm	1.102 kg/m
4c x 4.0mm ² (AWG12)	08051 0400 04CYCSA	PG16 / M25	36 Amps	13.6mm	0.462 kg/m
5c x 4.0mm ² (AWG12)	08051 0400 05CYCSA	PG21 / M25	36 Amps	14.9mm	0.535 kg/m
7c x 4.0mm ² (AWG12)	08051 0400 07CYCSA	PG21 / M25	36 Amps	16.2mm	0.735 kg/m
4c x 6.0mm ² (AWG10)	08051 0600 04CYCSA	PG21 / M25	45 Amps	15.8mm	0.574 kg/m
5c x 6.0mm ² (AWG10)	08051 0600 05CYCSA	PG29 / M25	45 Amps	17.3mm	0.737 kg/m
7c x 6.0mm ² (AWG10)	08051 0600 07CYCSA	PG29 / M32	45 Amps	18.8mm	0.950 kg/m