PROFIBUS®-PA, Cable Specifications

- **Cable that Meets the Requirements of ISA/SP50 and PROFIBUS-PA Requirements for Type A Cable**
- **All Cables are Rated -40° to +105°C and are Sunlight Resistant**
- **Available in 3-wire Versions with a Device Ground or 2-wire Versions**

Type A Cable Specifications

- Designed for harsh environments
- Temperature range: -40° to +105°C
- Governed by: ISA SP50.02 specification
- Sunlight resistant per test
- PLTC and ITC rated (CSA FT4)
- Impedence [Z_0 at f_r (31.25 kHz)] = 100 Ohms $\pm$ 20 %
- Maximum attenuation at 1.25 f_r (39 kHz) = 3.0 dB/km
- Maximum capacitive unbalance to shield = 2 nF/km
- Maximum DC resistance (per conductor) = 24 Ohms /km
- Maximum propagation delay variance 0.25 f_r to 1.25 f_r = 1.7 µs/km
- Conductor cross-sectional area (wire size) = nominal 0.8 mm^2 (#18 AWG)
- Minimum shield coverage shall be 90%.

Figure A

Figure B

Type	Approvals	Data Pair		Device Ground	Outer Jacket	Shields	Bulk Cable Part Number / Weight/300 M	Figure
		AWG Color Code	DCR (/1000 feet) Insulation	AWG Color Code	Material Color Nominal O.D.	Type Drain Wire		
483 105°C 300 Volts	**NEC ITC** PLTC Open Wiring **CEC** [CMG]	2/18 AWG BU/BN	6.5 Ohms XLPE	None	PVC Orange 7.9 mm (.310 in)	Foil/Braid 20 AWG	RB50785-*M 59 lbs.	A
483B 105°C 300 Volts	**NEC ITC** PLTC Open Wiring **CEC** [CMG]	2/18 AWG BU/BN	6.5 Ohms XLPE	None	PVC Blue 7.9 mm (.310 in)	Foil/Braid 20 AWG	RB50786-*M 59 lbs.	A
482A 105°C 300 Volts	**NEC ITC** PLTC/CM **CEC** [CMG HLBCD]	2/18 AWG BU/BN	6.5 Ohms PVC	18 AWG GN/YE	Armor/PVC Orange 14.9 mm (0.585 in)	Foil 20 AWG	RB50929-*M 96 lbs.	B
482BA 105°C 300 Volts	**NEC ITC** PLTC **CEC** [CMG]	2/18 AWG BU/BN	6.5 Ohms PE	18 AWG GN/YE	Armor/PVC Blue 14.9 mm (0.585 in)	Foil 20 AWG	RBS50929-*M 96 lbs.	B
483BK 105°C 300 Volts	**NEC ITC** PLTC Open Wiring **CEC** [CMG]	2/18 AWG BU/BN	6.5 Ohms PE	None	PVC Black 7.9 mm (.310 in)	Foil/Braid 20 AWG	RB50860-*M 59 lbs.	A

* Indicates length in meters.
Standard cable lengths are 1, 2, 4, 5, 6, 8, 10, 15, and in +5 meter increments from there. Consult factory for other lengths.