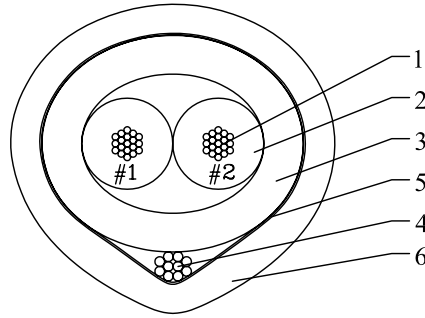| REV. | DESCRIPTION | DATE |
|---|---|---|
| 7 | Updated construction details, print legend. | 03/21/2006 |

### General Properties:

Controlled impedance, meets SAE J-1939/11, excellent abrasion, temperature and fluid resistance.

### Application:

Including but not limited to: Sensors, engine diagnostics, multiplexing network protocol.

### General Composition of Cable:



Color Code

| | |
|---|---|
| #1 | GR |
| #2 | YL |

### Construction Data:

| | Description | | Dimensions |
|---|---|---|---|
| 1. Conductor: | 0.50mm² 19/.18mm Bare Copper | | 0.89 mm (.035") nom. |
| 2. Insulation: | RADXL 150A, 0.76mm (0.0295") wall nom. | | 2.40 mm (.094") nom. |
| Cabling: | 2 Primaries Twisted | Lay: 50.8mm (2.0") nom. | 4.26 mm (.170") nom. |
| 3. 1st Jacket: | RADXL 150A, 1.02mm (0.040") wall nom. | | 6.85 mm (.270") nom. |
| 4. Drain: | 20 AWG 10/30 Tinned Copper, spiral wrapped around 1st jacket | | 0.94 mm (.037") nom. |
| 5. Shield: | Aluminum/Mylar, 0.04mm (0.0015"), 20% Overlap, Foil in | | 6.97 mm (.274") nom. |
| 6. 2nd Jacket: | RADXL 150A, 0.76mm (0.030") wall reference | Color: Black | 8.50 mm (.335") max. |
| Print Legend: | Champlain RADXL SAE J-1939/11-20 Mulptiplex 11875 | | |

### Technical Data:

| | |
|---|---|
| Max. Temperature Rating: | 150 °C |
| Min. Temperature Rating: | -40 °C |
| Designed To: | SAE J-1939/11 |
| Spark Test: | 1.5 kVAC – 100% Test |
| Dry Dielectric: | 2.5 kVDC / 2 Seconds Conductor to Conductor |
| | 2.5 kVDC / 2 Seconds Conductor to Shield |
| Impedance: | 120 +/- 12 Ω @ 1 MHz between the signal wires with the shield grounded using 120-Ohm baluns. |
| Specific Capacitance: | Conductor to Conductor – 47 pf/m Nom. |
| | Conductor to Shield – 69 pf/m Nom. |

**CHAMPLAIN CABLE**
175 HERCULES DRIVE
COLCHESTER, VT 05446
802-654-4200

TITLE

## SAE J-1939/11 Databus Cable
### 0.50mm² 19/0.18mm Shielded

UNLESS OTHERWISE SPECIFIED,
DIMENSIONS AND TOLERANCES
ARE IN INCHES
**DO NOT SCALE THIS DRAWING**

| DRN. | Scott Hood | DATE | 11/21/2001 |
|---|---|---|---|
| CKD. | | DATE | |

| SIZE | PART NUMBER | | DOCUMENT NUMBER | |
|---|---|---|---|---|
| A | 23-00028-001 | | | 11875 |

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