

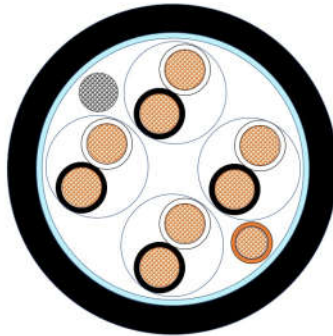


### Technical Specification

**Cable Type: 4x2x16# PVC Insulated and Jacketed Foil Shielded 60V Instrumentation Cable**

**Western Wire Part Number: DF604J1V**

**Revision: 03/23 Date: 05 March 2023**



### Cable construction

|                               |                                                                                                                                                                      |                                                                                     |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Basic Wires conductors        | <b>Signal wires</b><br>Stranded bare annealed copper, 7x0.49 mm nom. (16 AWG)                                                                                        | <b>Communication wire</b><br>Stranded bare annealed copper, 7x0.23 mm nom. (22 AWG) |
| Insulation type               | FR-PVC compound                                                                                                                                                      | FR-PVC compound                                                                     |
| Insulation thickness          | 0.4 mm nom.                                                                                                                                                          | 0.4 mm nom.                                                                         |
| Insulation OD                 | 2.3 mm nom.                                                                                                                                                          | 1.55 mm nom.                                                                        |
| Total number of conductors    | 8                                                                                                                                                                    | 1                                                                                   |
| Total number of twisted pairs | 4                                                                                                                                                                    | N/A                                                                                 |
| Color code                    | Black x White (All pairs)                                                                                                                                            | Orange                                                                              |
| Pair identification           | Printed numbers on the white wire with black ink                                                                                                                     |                                                                                     |
| Pair construction             | The 2 wires are cabled together in a lay length of 50mm max. Adjacent pairs are twisted with different lays                                                          |                                                                                     |
| Core cabling                  | The 4 pairs are cabled together with the communication wire                                                                                                          |                                                                                     |
| Core warp                     | Polyester tape, providing 100% coverage                                                                                                                              |                                                                                     |
| Drain wire                    | Stranded annealed tinned copper, 7x0.49 mm nom. (16 AWG)                                                                                                             |                                                                                     |
| Overall shield                | Polyester-aluminum tape, foil face in, providing 100% coverage                                                                                                       |                                                                                     |
| Outer jacket                  | UV-Resistant FR-PVC compound                                                                                                                                         |                                                                                     |
| Jacket thickness              | 1.3 mm nom.                                                                                                                                                          |                                                                                     |
| Overall diameter              | 12.3 q 0.5 mm                                                                                                                                                        |                                                                                     |
| Jacket color                  | Black, RAL 9005                                                                                                                                                      |                                                                                     |
| Surface marking               | WESTERN WIRE DF604J1V 4x2x16 AWG SHIELDED 60V INSTRUMENTATION CABLE FR IEC 60332-1 CE 2011/65/EU (RoHS-2) [Month, Year] [Batch Number] [Sequential Meter Mark] METER |                                                                                     |

### Physical Properties

|                       |                                                                    |
|-----------------------|--------------------------------------------------------------------|
| Minimum bend radius   | 6 x D                                                              |
| Storage temperature   | -20 to +60°C                                                       |
| Operating temperature | -30 to +90°C                                                       |
| Flame test            | IEC 60332-1                                                        |
| Total weight          | 235 kg/km nom.                                                     |
| Note:                 | All dimensional & weight values are calculated values and may vary |

### Electrical Properties @ 20°C

|                                |                                               |
|--------------------------------|-----------------------------------------------|
| DC Resistance - 16#            | 13.9 $\Omega$ /km max.                        |
| DC Resistance - 22#            | 73.8 $\Omega$ /km max.                        |
| Continuous working voltage     | 60V rms max.                                  |
| Insulation Dielectric strength | 2000 V rms min/ 1 minute (between conductors) |
| Jacket Dielectric strength     | 5000 V rms min/ 1 minute (shield to water)    |
| Velocity of propagation        | 55% nom. @ 1 kHz                              |

**This cable fully conforms to EU Directive 2011/65/EU (RoHS-2)**