Technical Specification
Cable Type: 2x2x24# SF/UTP 120 Ohm TIA-485 (RS-485) Yellow PVC Cable + Black PVC Jacket
Western Wire Part Number: JG202E11
Revision: 06/21 Date: 07 March 2021



A two-pair 120-Ohm cable, made of 24# flexible twisted pairs overall foil + braid shielded and inner jacketed with PVC compound for indoor use. An additional black PVC jacket renders the cable suitable for outdoor use. The cable supports a large variety of applications using digital signaling including TIA-485 interface (previously called RS-485). suitable for portable installations.

Physical Description	
Basic conductor	7x0.20 mm Stranded tinned annealed copper
Insulation	Solid PE, 1.35mm nom OD.
Total number insulated conductors	4, twisted into 2 pairs
Pair color code	Blue x White/Blue, Orange x White/Orange
Cable core	The 2 pairs are cabled together with two filler to maintain a round cross-section
Overall tape wrap	Polyester tape, providing 100% coverage
Overall inner shield	Polyester-aluminum foil, providing 100% coverage foil face out
Drain wire	24AWG (7x0.20) TC stranded drain wire laid helically over the aluminum foil
Overall outer shield	Tinned copper braid, 24x7x0.12mm, providing 80% min. coverage
Inner jacket	PVC compound for indoor use
Jacket color	Yellow RAL 1021
Inner jacket extrusion type	Tubing, maintaining minimum tightness
Inner jacket diameter	7.3 mm nom.
Outer jacket	Heavy-duty UV-resistant PVC compound for outdoor use
Outer jacket extrusion type	Tubing. The outer jacket can be easily separated from the inner jacket
Outer jacket thickness	1.6 mm nom. 1.3 mm min.
Outer jacket color	Black, RAL 9005
Overall diameter	10.6 mm nom.
Surface marking	WESTERN WIRE JG202E11 2x2x24# SF/UTP 120 OHM OUTDOOR DIGITAL DATA CABLE FR IEC 60332-1 CE 2011/65/EU (RoHS-2) [Month, Year] [Batch Number] [SMM] METER

Mechanical Properties	
Operating temperature range	-20 to +70C
Bend Radius	5xD min.
Storage and operating Temp. range	-20 to +70C
Flame test	IEC 60332-1.
Pulling force	30 N max.
Total Weight	135 kg/km nom.

Electrical and Transmission Properties @ 20C	
Characteristic Impedance (Smoothed)	120 ± 15 Ohm @ 1MHz.
Capacitance	42 pF/m nom @ 1 kHz.
Capacitance unbalance (wire to ground)	1.5 pF/m max @ 1 kHz.
Attenuation	2.1 dB/100m max @ 1 MHz. 7.2 dB/100m max @ 10 MHz 10.2 dB/100m max @ 20 MHz..
Velocity of Propagation	66% nom.
Skew delay	45 nS/ 100m max @ 1 MHz
DC Resistance	96 Ohm /km max.
DC Resistance unbalance	3% max.
Voltage rating	70V rms max.
Dielectric strength	1000V/1 minute between conductors. 700V/1 minute conductors to shield.
Screening attenuation	75 dB min. @ 1 MHz.

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