



Technical Specification

Cable Type: **Nx0.5mm PVC Insulated and Jacketed Unshielded Intercom Control Cables**

Western Wire Part Number: **AU7xxE20**

Revision: **02/23** Date: **27 January 2023**



Basic wires

Conductors	Solid bare annealed copper, 0.50 mm nom.
Insulation type	SR-PVC compound
Insulation thickness	0.21 mm nom., 0.15 mm min.
Insulation OD	0.94 mm nom.

Color Code

Core no.	Insulation color	Core no.	Insulation color	Core no.	Insulation color
1	Black	7	Orange	13	Purple
2	Red	8	Grey	14	Light-Gray
3	Green	9	Yellow	15	Ivory
4	White	10	Light-blue	16	Light-Brown
5	Brown	11	Light-Green		Light-Purple
6	Blue	12	Pink		

Individual Cable Specifications & Ordering information

Cable P/N	No. of Cores	Conductor arrangement	Jacket thickness	Overall diameter	Total weight
AU702E20	2	Cabled together concentrically	0.5 mm min.	3.0 mm nom.	10.4 kg/km nom.
AU704E20	4	Cabled together concentrically	0.5 mm min.	3.5 mm nom.	16.4 kg/km nom.
AU705E20	5	Cabled together concentrically	0.5 mm min.	3.8 mm nom.	19.7 kg/km nom.
AU706E20	6	Concentrically (1+5)	0.5 mm min.	4.0 mm nom.	22.8 kg/km nom.
AU708E20	8	Concentrically (2+6)	0.5 mm min.	4.2mm nom.	28.6 kg/km nom.
AU712E20	12	Concentrically (3+9)	0.5 mm min.	5.0 mm nom.	40.6 kg/km nom.
AU716E20	16	Concentrically (5+11)	0.5 mm min.	5.5 mm nom.	52.1 kg/km nom.

Note: Other constructions are available upon demand. Fillers may be used for a round circular cable. All dimensional and weight values are calculated nom. values and may vary.

Cable Buildup

Core wrap	Polyester tape, providing 100% coverage
Jacket material	FR-PVC compound for indoor use
Jacket color	White, RAL 9003
Surface marking	WESTERN WIRE AU7xxE20 Nx0.5mm 60V CONTROL CABLE FR IEC 60332-1 CE 2011/65/EU (RoHS-2) [Month, Year] [Batch Number] [Sequential Meter Mark] METER
Surface marking-example	WESTERN WIRE AU712E20 12x0.5 mm 60V CONTROL CABLE FR IEC 60332-1 CE 2011/65/EU (RoHS-2) 11/2020 GB1234 0001 METER
Notes	The jacket is easily removable, Other jacket colors available upon demand

Mechanical Properties

Minimum bend radius	20 x D
Storage temperature	-0 to +60°C
Operating temperature	-15 to +70°C
Flame test	IEC 60332-1

Electrical Properties @ 20°C

DC Resistance of conductors	96.0 Ohm/km max.
Insulation resistance	100 MOhm km min.
Velocity of propagation	55% nom. @ 1 kHz
Dielectric strength	1500 V rms min/ 1 minute (between conductors)
Voltage rating	60V rms max.

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