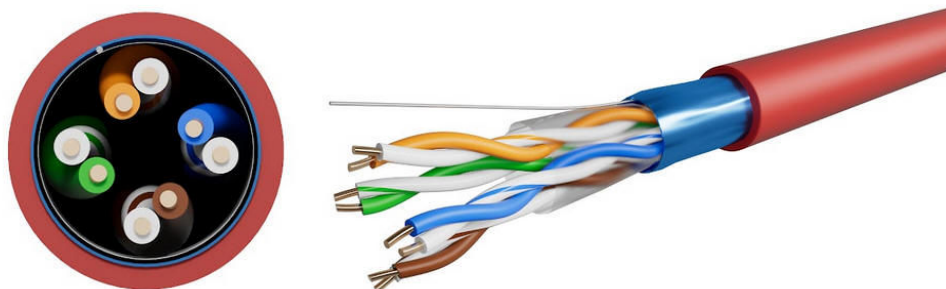


Technical Specification

Cable Type: 4x2x24# F/UTP Category 5e 100 Ohm PVC Indoor Horizontal Cable

P/N: FF804Exx

Revision: 02/25 Date: 13/01/2025



Category 5e F/UTP indoor cable, conforming to ISO/IEC-11801 and EN 50173-1 (permanent link, class D).

The cable contains 4 twisted pairs cabled together, overall shielded with aluminum foil and jacketed with PVC compound for indoor use.

Physical Description

Basic conductor	Solid 24AWG, Soft annealed bare copper wire, 0.50±0.01 mm
Insulation	HDPE, 0.25mm nom. thickness, 1.0±0.05 mm
Total number of insulated conductors	8 wires , twisted in 4 pairs. Lay length 38 mm max.
Pairs Color code	Blue x White/Blue, Orange x White/Orange, Green x White/Green, Brown x White/Brown
Core assembly	The 4 pairs are cabled together. Lay length 120 mm max., 4.5±0.5 mm
Inner tape warp	Polyester tape, providing 100% coverage with 25% overlap
Drain wire	Solid 0.45 TCCAM wire, laid in close contact under the aluminum foil
Overall shield	Polyester-aluminum foil, providing 100% coverage with 25% overlap, aluminum face in
Rip cord	Yes, between the outer sheath and the shield
Outer jacket	PVC compound for indoor use
Color	See Table below
Jacket thickness	0.5 mm nom.
Jacket diameter	6.0±0.5
Surface marking	WESTERN WIRE FF804Exx 4x2x24 AWG F/UTP CATEGORY 5e LAN CABLE FR IEC 60332-1 CE 2011/65/
	EU (RoHS-2) [Batch Number] [Sequential Meter Mark] METER

Ordering information

Cable P/N	Jacket Color
FF804E20	White, RAL 9003
FF804E40	Blue, RAL 5015
FF804E80	Purple, RAL 4005
FF804E92	Gray, RAL 7032
FF804E98	Dark Gray, RAL 7013

Mechanical Properties

Bend Radius	8xD min.
Operating temperature range	-20 to +60°C
Installation temperature range	-0 to +60°C
Pulling force	78 N max.
Flame test	IEC 60332-1
Total weight	37 kg/km nom.

Electrical Properties

Characteristic Impedance	100±5 Ohm@100 MHz
DC Resistance	9.5 Ohm/100m max.
Insulation resistance	5000 MegaOhm•Km min. @ 500 Vdc/1m
Capacitance	5.6 nF/100m nom.
Resistance unbalance (core to core)	2% max.
Nominal Velocity of Propagation (NVP)	67%
Dielectric strength	1000 Vdc/1m
Voltage rating	72 Vdc max

Transmission Properties - Conforming to Category 5e ISO/IEC 11801 PL Class D & EN 50173-1

Propagation delay	491 ns/100m max. @ 100 MHz
Delay SKEW	44 ns/100m max.

FREQ.	RL	Insertion Loss	NEXT	PS NEXT	ACR-F
MHz	dB	dB/100m	dB	dB	dB/100m
	Min	Max	Min	Min	Min
1.0	19.0	4.0	60.0	57.0	58.6
4.0	19.0	4.0	54.8	51.8	46.6
10.0	19.0	6.1	48.5	45.5	38.6
16.0	19.0	7.7	45.2	42.2	34.5
20.0	19.0	8.7	43.7	40.7	32.6
31.25	17.1	10.9	40.5	37.5	28.7
62.5	14.0	15.8	35.7	32.7	22.7
100	12.0	20.4	32.3	29.3	18.6

The cable passes ISO/IEC PL fluke test at 15 meter & 90 meter length

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