FL CAT5 FLEX - Installation cable

2744830

https://www.phoenixcontact.com/us/products/2744830

By the meter, Installation cable, Ethernet CAT5 (100 Mbps), shielded, PUR halogen-free, water blue RAL 5021, 4-wire (2x2xAWG26/7; SF/UTP), color single wire: white/orange-orange, white/green-green, cable length: Free entry (1.0 ... 1000.0 m)

Commercial Data

Item number	2744830
Packing unit	1 m
Minimum order quantity	1 m
Note	Made to Order (non-returnable)
Sales Key	BF04
Product Key	BF1CJI
Catalog Page	Page 390 (C-8-2015)
GTIN	4017918600501
Weight per Piece (including packing)	40.24 g
Weight per Piece (excluding packing)	40.24 g
Customs tariff number	85444993
Country of origin	DE

FL CAT5 FLEX - Installation cable

2744830

https://www.phoenixcontact.com/us/products/2744830

Technical Data

Product properties

Product type	Data cable by the meter
Number of positions	4

Electrical properties

Nominal voltage U_N	48 V AC
Transmission medium	Copper
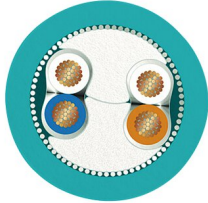
Interfaces

Signal type/category	Ethernet CAT5 (IEC 11801), 100 Mbps

Cable/line

Cable length	Free entry (1.0 ... 1000.0 m)

Ethernet [93E]

Dimensional drawing	
Cable weight	43 kg/km
Number of positions	4
Shielded	yes
Cable type	Ethernet [93E]
Conductor structure	2x2xAWG26/7; SF/UTP
Signal runtime	4.3 ns/m
Signal speed	0.77 c
Conductor structure signal line	7x 0.16 mm
AWG signal line	26
Conductor cross section	2x 2x 0.14 mm²
Wire diameter incl. insulation	1 mm -0.2 mm
External cable diameter	5.75 mm ±0.15 mm
Outer sheath, material	PUR
External sheath, color	water blue RAL 5021
Conductor material	Bare Cu litz wires
Material wire insulation	Foam-Skin PE
Single wire, color	white/orange-orange, white/green-green
Twisted pairs	2 cores to the pair
Overall twist	Two pairs with two fillers to the core

Optical shield covering	85 %
Max. conductor resistance	≤ 284 Ω/km
Insulation resistance	≥ 5 GΩ*km
Coupling resistance	≤ 5.00 mΩ/m (at 20 MHz)
Wave impedance	100 Ω ±15 % (at 1 ... 100 MHz)
Cable capacity	nom. 48 nF/km (At 800 Hz)
Nominal voltage, cable	50 V$_{rms}$
	125 V (Peak value, not for high-power applications)
Test voltage Core/Core	1000 V$_{rms}$
Test voltage Core/Shield	500 V$_{rms}$
Smallest bending radius, fixed installation	30 mm (cable, fixed installation)
Smallest bending radius, movable installation	78 mm (Cable, flexible installation)
Tensile strength	≤ 50 N (temporary)
	≤ 10 N (Permanent)
Near end crosstalk attenuation (NEXT)	66 dB/m (with 1 MHz)
	57 dB/m (at 4 MHz)
	52 dB/m (at 10 MHz)
	50 dB/m (at 16 MHz)
	47 dB/m (at 20 MHz)
	45 dB/m (at 31.25 MHz)
	40 dB/m (at 62.5 MHz)
	36 dB/m (at 100 MHz)
Crosstalk attenuation (ACR)	6.57 dB/m (with 1 MHz)
	5.64 dB/m (at 4 MHz)
	5.12 dB/m (at 10 MHz)
	4.89 dB/m (at 16 MHz)
	4.57 dB/m (at 20 MHz)
	4.34 dB/m (at 31.25 MHz)
	3.77 dB/m (at 62.5 MHz)
	3.31 dB/m (at 100 MHz)
Shield attenuation	0.028 dB/m (with 1 MHz)
	0.06 dB/m (at 4 MHz)
	0.085 dB/m (at 10 MHz)
	0.115 dB/m (at 16 MHz)
	0.128 dB/m (at 20 MHz)
	0.162 dB/m (at 31.25 MHz)
	0.23 dB/m (at 62.5 MHz)
	0.29 dB/m (at 100 MHz)
Flame resistance	according to VDE 0482 Part 265-2-1
	according to IEC 332-1
Ambient temperature (operation)	-30 °C ... 80 °C (cable, fixed installation)
Ambient temperature (installation)	-5 °C ... 60 °C

Approvals

	EAC
	Approval ID: RU D-DE.HB35.B.00395

Classifications

ECLASS

ECLASS-11.0	27061801
ECLASS-12.0	27061801
ECLASS-13.0	27061801

ETIM

ETIM 8.0	EC003249

UNSPSC

UNSPSC 21.0	26121600

Environmental Product Compliance

| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

FL CAT5 FLEX - Installation cable

2744830

https://www.phoenixcontact.com/us/products/2744830

Accessories

FL PLUG RJ45 GR/2 - RJ45 connector

2744856

https://www.phoenixcontact.com/us/products/2744856

RJ45 connector, design: RJ45, degree of protection: IP20, number of positions: 8, 1 Gbps, CAT5 (IEC 11801:2002), material: Plastic, connection method: Crimp connection, cable outlet: straight, color: green, Ethernet

FL PLUG RJ45 GN/2 - RJ45 connector

2744571

https://www.phoenixcontact.com/us/products/2744571

RJ45 connector, design: RJ45, degree of protection: IP20, number of positions: 8, 1 Gbps, CAT5 (IEC 11801:2002), material: Plastic, connection method: Crimp connection, cable outlet: straight, color: green, Ethernet

FL CAT5 FLEX - Installation cable

2744830

https://www.phoenixcontact.com/us/products/2744830

FL CRIMPTOOL - Assembly tool

2744869

https://www.phoenixcontact.com/us/products/2744869

Crimping pliers, for assembling the RJ45 plugs FL PLUG RJ45..., for assembly on site

FL-PP-RJ45-SCC - Patch panels

2901642

https://www.phoenixcontact.com/us/products/2901642

Patch panel, one RJ45 jack to 8 spring-force connection terminal blocks (1:1 assignment), CAT5e, 10/100/1000 Mbps, DIN rail adapter, IP20, option of shield contacting to the DIN rail via jumpers

FL CAT5 FLEX - Installation cable

2744830

https://www.phoenixcontact.com/us/products/2744830

FL-PP-RJ45-SC - Patch panels

2901643

https://www.phoenixcontact.com/us/products/2901643

Patch panel, one RJ45 jack to 8 screw connection terminal blocks (1:1 assignment), CAT5e, 10/100/1000 Mbps, DIN rail adapter, IP20, option of shield contacting to the DIN rail via jumpers

FL-PP-RJ45-LSA - Patch panels

2901645

https://www.phoenixcontact.com/us/products/2901645

Patch panel, one RJ45 jack to 8 LSA connection terminal blocks (1:1 assignment), CAT5e, 10/100/1000 Mbps, DIN rail adapter, IP20, option of shield contacting to the DIN rail via bridges

FL CAT5 FLEX - Installation cable

2744830

https://www.phoenixcontact.com/us/products/2744830

FL-PP-RJ45/RJ45 - Patch panels

2901646

https://www.phoenixcontact.com/us/products/2901646

Patch panel, two RJ45 jacks (1:1 assignment), CAT5e, 10/100/1000 Mbps, DIN rail adapter, IP20, option of shield contacting to the DIN rail via jumpers

FL ISOLATOR 100-RJ/RJ - Network isolator

2313931

https://www.phoenixcontact.com/us/products/2313931

Passive network isolator for electrical isolation in Ethernet networks. This protects Ethernet devices from potential differences of up to 4 kV. Can be used for transmission speeds of up to 100 Mbps. Possible to connect two RJ45 plugs.

FL CAT5 FLEX - Installation cable

2744830

https://www.phoenixcontact.com/us/products/2744830

FL ISOLATOR 100-RJ/SC - Network isolator

2313928

https://www.phoenixcontact.com/us/products/2313928

Passive network isolator for electrical isolation in Ethernet networks. This protects Ethernet devices from potential differences of up to 4 kV. Can be used for transmission speeds of up to 100 Mbps. Connection using RJ45 and COMBICON plug-in screw terminal block.

FL ISOLATOR 1000-RJ/RJ - Network isolator

2313915

https://www.phoenixcontact.com/us/products/2313915

Passive network isolator for electrical isolation in Ethernet networks. This protects Ethernet devices from potential differences of up to 4 kV. Can be used for transmission speeds of up to 1 Gbps. Possible to connect two RJ45 plugs.
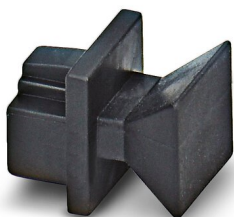
FL CAT5 FLEX - Installation cable

2744830

https://www.phoenixcontact.com/us/products/2744830

FL RJ45 PROTECT CAP - Dust protection

2832991

https://www.phoenixcontact.com/us/products/2832991

Dust protection caps for RJ45 socket

FL CAT5 HEAVY CONF/ - Network cable

2744827

https://www.phoenixcontact.com/us/products/2744827

CAT5-SF/UTP cable (J-02YS(ST)C HP 2 x 2 x 24 AWG), heavy-duty installation cable, 2 x 2 x 0.22 mm^2, solid conductor, shielded, outer sheath: 7.8 mm diameter, inner sheath: 5.75 mm ± 0.15 mm diameter, preassembled on both sides with RJ45 plug, crossover or line

FL CAT5 FLEX - Installation cable

2744830

https://www.phoenixcontact.com/us/products/2744830

FL CAT5 HEAVY - Data cable

2744814

https://www.phoenixcontact.com/us/products/2744814

CAT5-SF/UTP cable (J-02YS(ST)C HP 2 x 2 x 24 AWG), heavy-duty installation cable, 2 x 2 x 0.22 mm^2, solid conductor, shielded, outer sheath: 7.8 mm diameter, inner sheath: 5.75 mm ± 0.15 mm diameter

FL CAT5 FLEX CONF/ - Network cable

2744843

https://www.phoenixcontact.com/us/products/2744843

CAT5-SF/UTP cable (J-LI02YS(ST)C H 2 x 2 x 26 AWG), light-duty, flexible installation cable 2 x 2 x 0.14 mm^2, stranded, shielded, outer sheath: 5.75 mm ± 0.15 mm diameter, preassembled on both sides with RJ45 plug, crossover or line assignment

FL CAT5 FLEX - Installation cable

2744830

https://www.phoenixcontact.com/us/products/2744830

FL CAT5 TERMINAL BOX - Patch panels

2744610

https://www.phoenixcontact.com/us/products/2744610

Patch panel, one RJ45 jack to 4 screw connection terminal blocks (assignment 1, 2, 3, 6), CAT5e, 10/100 Mbps, DIN rail adapter, IP20, shield contacting on DIN rail