

Injector - INJ 1000

2703005

<https://www.phoenixcontact.com/pc/products/2703005>



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PoE injector, 30 W, two RJ45 jacks, 10/100/1000 Mbps, DIN rail mounting, IP20



Product Description

The midspan injectors connect Ethernet devices without PoE (e.g., switches) to PoE-capable end devices (e.g., IP cameras). As power sourcing equipment (PSE), the injector supplies the required power to a powered device (PD) via the data cable. The injector and end device negotiate the electrical power requirements autonomously.

Your advantages

- Extended supply voltage range of 18 V DC ... 57 V DC, redundant
- 10/100/1000 Mbps
- Mounting on a DIN rail
- Safe shield connection to ground potential

Commercial Data

Item number	2703005
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	DNC351
Catalog Page	Page 345 (C-6-2019)
GTIN	4055626462936
Weight per Piece (including packing)	396.6 g
Weight per Piece (excluding packing)	396.6 g
Customs tariff number	85176200
Country of origin	TW

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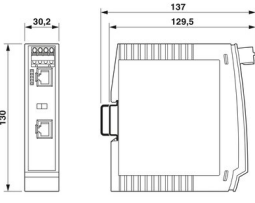
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Technical Data

Dimensions

Dimensional drawing	
Width	30.2 mm
Height	130 mm
Depth	120 mm

Notes

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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Material specifications

Color	gray
Housing material	Plastic

Mounting

Mounting type	DIN rail mounting
Mounting position	vertical

Interfaces

Basic functions	PSE/Midspan, compliant with IEEE 802.3af, at
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Data: Power over Ethernet

Serial transmission speed	10/100/1000 Mbps
Connection method	RJ45 jack
No. of channels	1
Pin assignment	1:1
Transmission length	100 m (including patch cables)
Output nominal voltage	54 V DC (PoE)
Output power	30 W

Data: Ethernet

Connection method	RJ45 CAT5e
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Product properties

Product type	Injector
MTTF	110 Years (MIL-HDBK-217F standard, temperature 25°C,

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operating cycle 100%)

Electrical properties

Supply

Supply voltage range	18 V DC ... 57 V DC (Ordinary locations)
	24 V DC ... 48 V DC (Hazardous locations)
Nominal supply voltage	24 V DC
	48 V DC
Max. current consumption	2.1 A
	1.4 A (24 V DC)
	0.7 A (48 V DC)
Power consumption	≤ 36 W
Protective circuit	Reverse polarity protection

Connection data

Supply

Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 2.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 2.5 mm ²
Conductor cross section, flexible	0.20 mm ² ... 2.50 mm ²
Conductor cross section, rigid	0.20 mm ² ... 2.50 mm ²

Ambient conditions

Degree of protection	IP20 (Non-certificated by UL)
Ambient temperature (operation)	0 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	≤ 5000 m (For restrictions, see the manufacturer's declaration for altitude operation)
	≤ 2000 m (with UL approval)
Permissible humidity (operation)	10 % ... 95 % (non-condensing)

Approval data

CE

Identification	CE-compliant
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EAC

Identification	EAC
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UL, USA / Canada

Identification	Class I, Div. 2, Groups A, B, C, D T4
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Corrosive gas test

Identification	ISA-S71.04-1985 G3 Harsh Group A
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EMC data

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Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Electrostatic discharge	
Standards/regulations	EN 61000-4-2
Electrostatic discharge	
Contact discharge	± 6 kV (Test Level 3)
Discharge in air	± 8 kV (Test Level 3)
Indirect discharge	± 6 kV
Comments	Criterion B
Electromagnetic HF field	
Standards/regulations	EN 61000-4-3
Electromagnetic HF field	
Frequency range	80 MHz ... 3 GHz (Test Level 3)
Field intensity	10 V/m
Comments	Criterion A
Fast transients (burst)	
Standards/regulations	EN 61000-4-4
Fast transients (burst)	
Input	± 2.2 kV (1 minute)
Signal	± 2.2 kV (1 minute)
Comments	Criterion B
Surge current load (surge)	
Standards/regulations	EN 61000-4-5
Surge current load (surge)	
Input	± 0.5 kV
Signal	± 1 kV (Data line, asymmetrical) ± 2 kV (I/O cable on field side only, asymmetric)
Comments	Criterion B
Conducted interference	
Standards/regulations	EN 61000-4-6
Conducted interference	
Frequency range	0.15 MHz ... 80 MHz
Comments	Criterion A
Voltage	10 V
Emitted interference	
Standards/regulations	EN 61000-6-4
Comments	Class A, industrial applications
Emitted interference	

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Standards/regulations	EN 61000-6-3
Comments	Class B, domain of use: residential and small commercial

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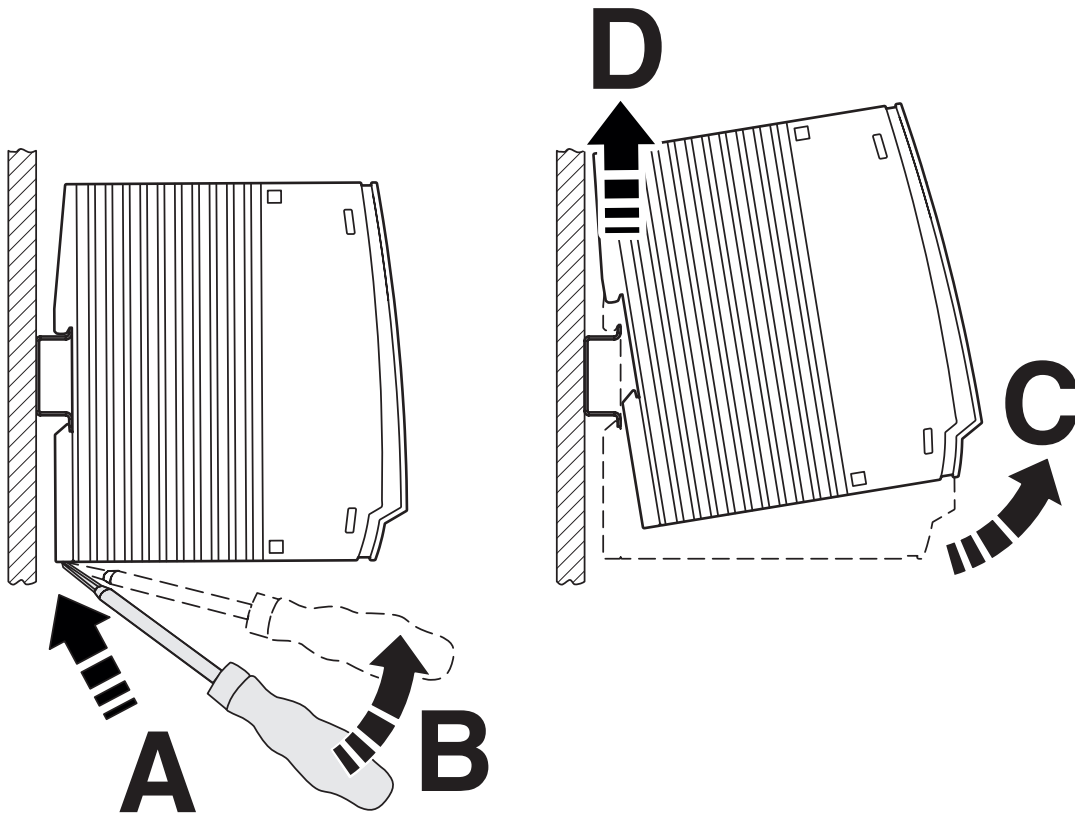
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Drawings

Schematic diagram



Removal

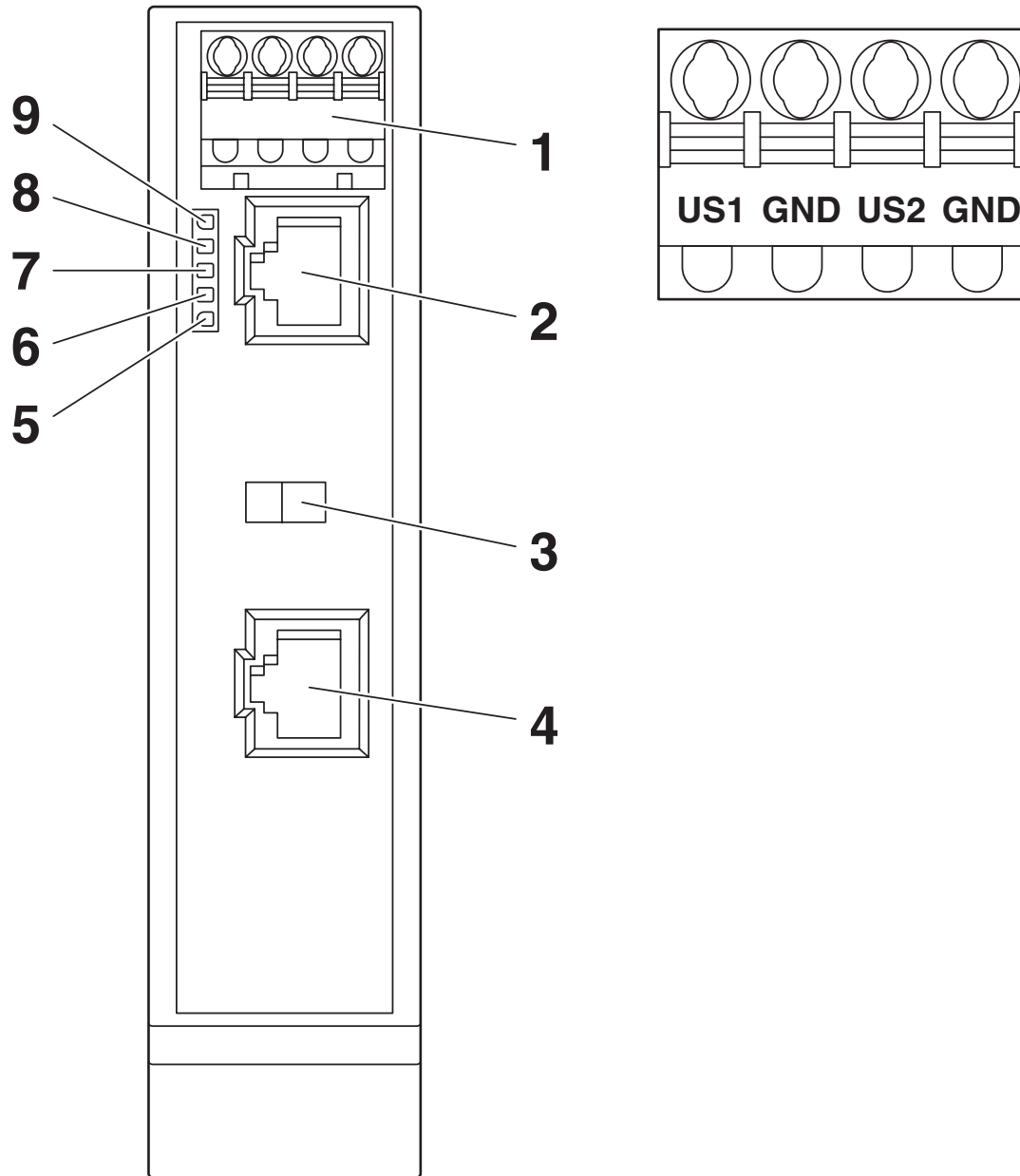
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Schematic diagram



Front view

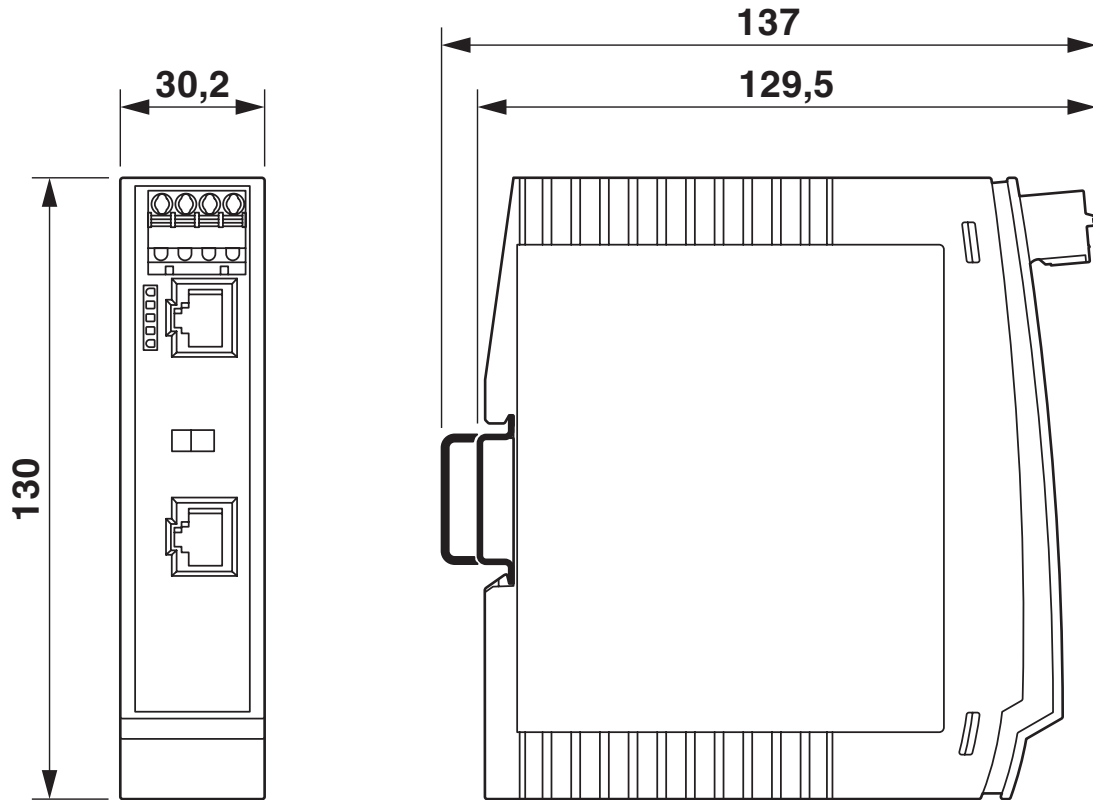
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Dimensional drawing



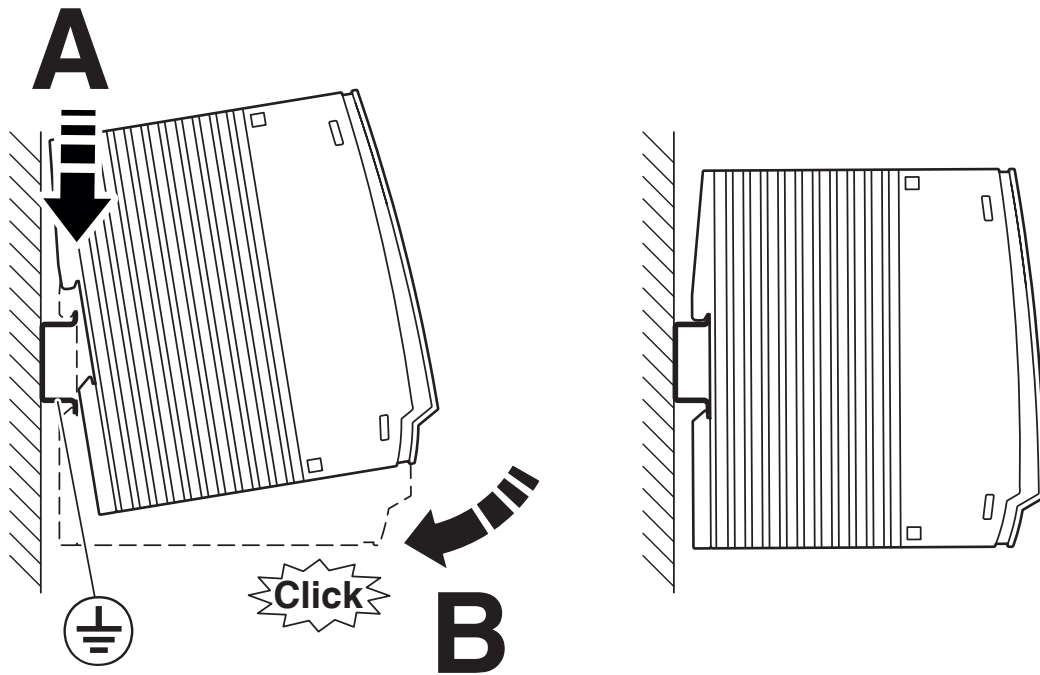
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Schematic diagram



Mounting

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Approvals



EAC

Approval ID: RU *-DE.A*30.B.03171



UL Listed

Approval ID: FILE E 238705



cUL Listed

Approval ID: FILE E 238705



cUL Listed

Approval ID: FILE E 196811



UL Listed

Approval ID: FILE E 196811

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Classifications

ECLASS

ECLASS-9.0	19170112
ECLASS-10.0.1	19170112
ECLASS-11.0	19170112

ETIM

ETIM 8.0	EC002697
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UNSPSC

UNSPSC 21.0	43223300
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 10;
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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Accessories

Patch panels

Patch panels - PP-RJ-RJ - 2703015

<https://www.phoenixcontact.com/pc/products/2703015>



Patch panel, two RJ45 jacks, 10/100/1000 MBps, DIN rail adapter, IP20

Patch panels

Patch panels - PP-RJ-SC - 2703016

<https://www.phoenixcontact.com/pc/products/2703016>



Patch panel, RJ45 jack on screw terminal blocks, 10/100/1000 Mbps, DIN rail adapter, IP20, shield contacting with strain relief

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Patch panels

Patch panels - PP-RJ-SCC - 2703018

<https://www.phoenixcontact.com/pc/products/2703018>



Patch panel, RJ45 jack on Push-in terminal blocks, 10/100/1000 Mbps, DIN rail adapter, IP20, shield contacting with strain relief

Patch panels

Patch panels - PP-RJ-IDC - 2703019

<https://www.phoenixcontact.com/pc/products/2703019>



Patch panel, RJ45 jack on IDC terminal blocks, 10/100/1000 Mbps, DIN rail adapter, IP20, shield contacting with strain relief

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Patch panels

Patch panels - PP-RJ-RJ-F - 2703020

<https://www.phoenixcontact.com/pc/products/2703020>



Patch panel, two RJ45 jacks, 10/100/1000 MBps, DIN rail adapter, IP20, shield current monitoring, surge protection

Patch panels

Patch panels - PP-RJ-SC-F - 2703021

<https://www.phoenixcontact.com/pc/products/2703021>



Patch panel, RJ45 jack on screw terminal blocks, 10/100/1000 Mbps, DIN rail adapter, IP20, shield contacting with strain relief, shield current monitoring, surge protection

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Patch panels

Patch panels - PP-RJ-SCC-F - 2703022

<https://www.phoenixcontact.com/pc/products/2703022>



Patch panel, RJ45 jack on Push-in terminal blocks, 10/100/1000 Mbps, DIN rail adapter, IP20, shield contacting with strain relief, shield current monitoring, surge protection

Patch panels

Patch panels - PP-RJ-IDC-F - 2703023

<https://www.phoenixcontact.com/pc/products/2703023>



Patch panel, RJ45 jack on IDC terminal blocks, 10/100/1000 Mbps, DIN rail adapter, IP20, shield contacting with strain relief, shield current monitoring, surge protection

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Assembly tool

Assembly tool - FL CRIMPTOOL - 2744869

<https://www.phoenixcontact.com/pc/products/2744869>

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



Network cable

Network cable - FL CAT5 HEAVY - 2744814

<https://www.phoenixcontact.com/pc/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 mm², solid conductor, shielded, outer sheath: 7.8 mm diameter, inner sheath: 5.75 mm ± 0.15 mm diameter



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Network cable

Network cable - FL CAT5 HEAVY CONF/ - 2744827

<https://www.phoenixcontact.com/pc/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 mm², 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

Installation cable

Installation cable - FL CAT5 FLEX - 2744830

<https://www.phoenixcontact.com/pc/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)

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Network cable

Network cable - FL CAT5 FLEX CONF/ - 2744843

<https://www.phoenixcontact.com/pc/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 mm², stranded, shielded, outer sheath: 5.75 mm ± 0.15 mm diameter, preassembled on both sides with RJ45 plug, crossover or line assignment

Network isolator

Network isolator - FL ISOLATOR 100-RJ/SC - 2313928

<https://www.phoenixcontact.com/pc/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.

Injector - INJ 1000

2703005

<https://www.phoenixcontact.com/pc/products/2703005>



Network isolator

Network isolator - FL ISOLATOR 100-RJ/RJ - 2313931

<https://www.phoenixcontact.com/pc/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.

Network isolator

Network isolator - FL ISOLATOR 1000-RJ/RJ - 2313915

<https://www.phoenixcontact.com/pc/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.

Injector - INJ 1000

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<https://www.phoenixcontact.com/pc/products/2703005>



Network isolator

Network isolator - FL ISOLATOR 100-M12 - 2902985

<https://www.phoenixcontact.com/pc/products/2902985>



Passive network isolator for electrical isolation in Ethernet networks. For the protection of Ethernet devices against potential differences of up to 4 kV. Can be used for transmission speeds of up to 100 Mbps. Ethernet connection via two M12 sockets (D-coded).

Patch cable

Patch cable - FL CAT5 PATCH 0,3 - 2832250

<https://www.phoenixcontact.com/pc/products/2832250>



Patch cable, CAT5, assembled, 0.3 m

Injector - INJ 1000

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<https://www.phoenixcontact.com/pc/products/2703005>



Patch cable

Patch cable - FL CAT5 PATCH 0,5 - 2832263

<https://www.phoenixcontact.com/pc/products/2832263>



Patch cable, CAT5, assembled, 0.5 m

Patch cable

Patch cable - FL CAT5 PATCH 1,0 - 2832276

<https://www.phoenixcontact.com/pc/products/2832276>



Patch cable, CAT5, assembled, 1 m

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<https://www.phoenixcontact.com/pc/products/2703005>



Patch cable

Patch cable - FL CAT5 PATCH 1,5 - 2832221

<https://www.phoenixcontact.com/pc/products/2832221>



Patch cable, CAT5, assembled, 1.5 m

Patch cable

Patch cable - FL CAT5 PATCH 2,0 - 2832289

<https://www.phoenixcontact.com/pc/products/2832289>



Patch cable, CAT5, assembled, 2 m

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<https://www.phoenixcontact.com/pc/products/2703005>



Patch cable

Patch cable - FL CAT5 PATCH 3,0 - 2832292

<https://www.phoenixcontact.com/pc/products/2832292>



Patch cable, CAT5, assembled, 3 m

Patch cable

Patch cable - FL CAT6 PATCH 0,3 - 2891181

<https://www.phoenixcontact.com/pc/products/2891181>



Patch cable, CAT6, pre-assembled, 0.3 m

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Patch cable

Patch cable - FL CAT6 PATCH 0,5 - 2891288

<https://www.phoenixcontact.com/pc/products/2891288>

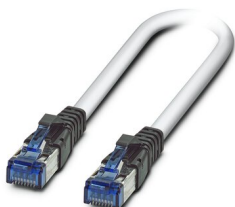


Patch cable, CAT6, pre-assembled, 0.5 m

Patch cable

Patch cable - FL CAT6 PATCH 1,0 - 2891385

<https://www.phoenixcontact.com/pc/products/2891385>



Patch cable, CAT6, pre-assembled, 1.0 m

Injector - INJ 1000

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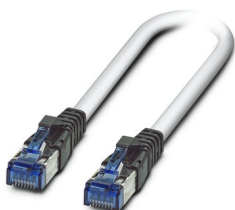
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Patch cable

Patch cable - FL CAT6 PATCH 1,5 - 2891482

<https://www.phoenixcontact.com/pc/products/2891482>

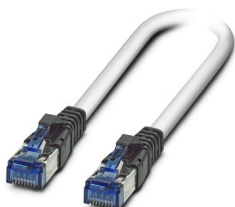


Patch cable, CAT6, pre-assembled, 1.5 m

Patch cable

Patch cable - FL CAT6 PATCH 2,0 - 2891589

<https://www.phoenixcontact.com/pc/products/2891589>



Patch cable, CAT6, pre-assembled, 2.0 m

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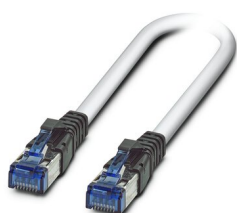
<https://www.phoenixcontact.com/pc/products/2703005>



Patch cable

Patch cable - FL CAT6 PATCH 3,0 - 2891686

<https://www.phoenixcontact.com/pc/products/2891686>



Patch cable, CAT6, pre-assembled, 3.0 m

Patch cable

Patch cable - FL CAT6 PATCH 5,0 - 2891783

<https://www.phoenixcontact.com/pc/products/2891783>



Patch cable, CAT6, pre-assembled, 5.0 m

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Patch cable

Patch cable - FL CAT6 PATCH 7,5 - 2891880

<https://www.phoenixcontact.com/pc/products/2891880>

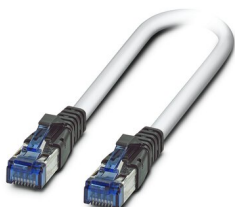


Patch cable, CAT6, pre-assembled, 7.5 m

Patch cable

Patch cable - FL CAT6 PATCH 10 - 2891877

<https://www.phoenixcontact.com/pc/products/2891877>



Patch cable, CAT6, pre-assembled, 10 m

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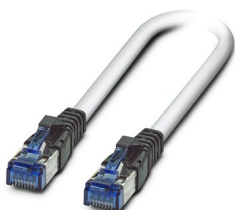
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Patch cable

Patch cable - FL CAT6 PATCH 12,5 - 2891369

<https://www.phoenixcontact.com/pc/products/2891369>

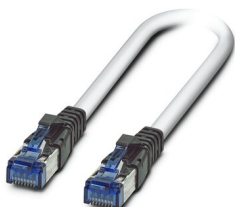


Patch cable, CAT6, pre-assembled, 12.5 m

Patch cable

Patch cable - FL CAT6 PATCH 15,0 - 2891372

<https://www.phoenixcontact.com/pc/products/2891372>



Patch cable, CAT6, pre-assembled, 15.0 m

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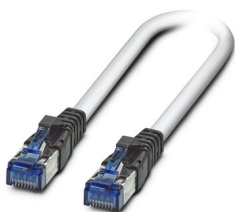
<https://www.phoenixcontact.com/pc/products/2703005>



Patch cable

Patch cable - FL CAT6 PATCH 20,0 - 2891576

<https://www.phoenixcontact.com/pc/products/2891576>



Patch cable, CAT6, pre-assembled, 20.0 m

Stripping tool

Stripping tool - VS-CABLE-STRIP-VARIO - 1657407

<https://www.phoenixcontact.com/pc/products/1657407>



Stripping tool, for the multi-level stripping of shielded cables

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RJ45 connector

RJ45 connector - VS-08-RJ45-5-Q/IP20 - 1656725

<https://www.phoenixcontact.com/pc/products/1656725>



RJ45 connector, degree of protection: IP20, number of positions: 8, 1 Gbps, CAT5 (IEC 11801:2002), material: PA, connection method: IDC fast connection, connection cross section: AWG 26- 23, cable outlet: straight, color: traffic grey A RAL 7042, Ethernet

RJ45 connector

RJ45 connector - VS-08-RJ45-5-Q/IP20 BK - 1658008

<https://www.phoenixcontact.com/pc/products/1658008>



RJ45 connector, type: RJ45, degree of protection: IP20, number of positions: 8, 1 Gbps, CAT5 (IEC 11801:2002), material: PA, connection method: IDC fast connection, connection cross section: AWG 26- 23, cable outlet: straight, color: black, Ethernet

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Screwdriver

Screwdriver - SZF 0-0,4X2,5 - 1204504

<https://www.phoenixcontact.com/pc/products/1204504>



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.4 x 2.5 x 75 mm, 2-component grip, with non-slip grip

Diagonal cutter

Diagonal cutter - MICROFOX-SP - 1212488

<https://www.phoenixcontact.com/pc/products/1212488>



Electronic diagonal cutter, tapered head, angled (21°), without chamfer, with opening spring

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Network cable

Network cable - VS-OE-OE-94F/... - 1417359

<https://www.phoenixcontact.com/pc/products/1417359>



Network cable, Ethernet CAT6_A (10 Gbps), 8-position halogen-free, shielded, free cable end, on free cable end, cable length: Free entry (0.5 ... 400 m)

Power supply unit

Power supply unit - UNO-PS/1AC/24DC/ 60W - 2902992

<https://www.phoenixcontact.com/pc/products/2902992>



Primary-switched UNO POWER power supply for DIN rail mounting, input: 1-phase, output: 24 V DC/60 W

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Power supply unit

Power supply unit - TRIO-PS-2G/1AC/24DC/3/C2LPS - 2903147

<https://www.phoenixcontact.com/pc/products/2903147>



Primary-switched TRIO POWER power supply with push-in connection for DIN rail mounting, input: 1-phase, output: 24 V DC/3 A C2LPS

Power supply unit

Power supply unit - QUINT4-PS/1AC/24DC/2.5/PT - 2909576

<https://www.phoenixcontact.com/pc/products/2909576>



Primary-switched power supply unit, QUINT POWER, Push-in connection, DIN rail mounting, input: 1-phase, output: 24 V DC / 2.5 A

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