

# Industrial Ethernet Switch - FL SWITCH SF 8TX



2832771

<https://www.phoenixcontact.com/pc/products/2832771>

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Ethernet Switch, 8 TP RJ45 ports, automatic detection of data transmission speed of 10 or 100 Mbps (RJ45), autocrossing function

## Your advantages

- RJ45 ports support a transmission speed of 10/100 Mbps
- Fiber-optic ports support 100 Mbps
- Local diagnostic indicators with LEDs
- Security options with cable locking
- Relay contact for alarm processing of voltage states
- Auto negotiation and autocrossing detection simplifies installation and setup

## Commercial Data

Item number	2832771
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	DNN112
Catalog Page	Page 298 (C-6-2019)
GTIN	4017918952204
Weight per Piece (including packing)	430 g
Weight per Piece (excluding packing)	415 g
Customs tariff number	85176200
Country of origin	TW

## Technical Data

### Dimensions

Width	135 mm
Height	94.3 mm
Depth	30 mm

### Material specifications

Housing material	Aluminum
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### Mounting

Mounting type	DIN rail mounting
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### Interfaces

#### Ethernet (RJ45)

Connection method	RJ45
Note on the connection method	Auto negotiation and autocrossing
Transmission speed	10/100 Mbps
Transmission physics	Ethernet in RJ45 twisted pair
Transmission length	100 m (per segment)
Signal LEDs	Data receive, link status
No. of channels	8 (RJ45 ports)

#### Potential-free signaling contact

Connection method	Plug-in/screw connection via COMBICON
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### Product properties

Type	Block design
Product type	Switch
MTTF	45.9 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%)

#### Insulation characteristics

Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
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#### Switch functions

Basic functions	Unmanaged switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode
Signal contact control voltage	24 V DC (typical)
Status and diagnostic indicators	LEDs: U <sub>S1</sub> , U <sub>S2</sub> (redundant voltage supply), link and activity per port
Additional functions	Autonegotiation

#### Security functions

Basic functions	Unmanaged switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode
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## Electrical properties

Power consumption	4.8 W (nominal)
Local diagnostics	US1/2 Supply voltage Green LED
	LNK/ACT Link status/data transmission Green LED
	100 Data transmission speed Yellow LED
Maximum power dissipation for nominal condition	4.8 W
Test section	500 V DC 1 min.
Transmission medium	Copper

## Supply

Supply voltage (DC)	24 V DC (redundant)
Supply voltage range	18.5 V DC ... 30.2 V DC
Power supply connection	Via COMBICON, max. conductor cross section 2.5 mm <sup>2</sup>
Residual ripple	3.6 V <sub>PP</sub> (within the permitted voltage range)
Typical current consumption	200 mA (at U <sub>S</sub> = 24 V DC)
	95 mA (at U <sub>S</sub> = 24 V DC: ≥VC 14)

## Function

Signal contact control voltage	24 V DC (typical)
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## Connection data

Connection method	Screw connection
Conductor cross section, rigid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section, flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	24 ... 12
Stripping length	7 mm

## Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	0 °C ... 55 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C
Altitude	2000 m
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)
Vibration (operation)	in acc. with IEC 60068-2-6: 5g, 150 Hz
Air pressure (operation)	86 kPa ... 108 kPa (up to 1500 m above sea level)
Air pressure (storage/transport)	66 kPa ... 108 kPa (up to 3500 m above sea level)
Resistance to gases that may endanger the functions, in acc. with DIN 40046-36, DIN 40046-37	Sulfur dioxide (SO <sub>2</sub> ) 10 ±0.3 cm <sup>3</sup> /m <sup>3</sup> , hydrogen sulfide (H <sub>2</sub> S) 1 ±0.3 cm <sup>3</sup> /m <sup>3</sup> , at 25°C and 75% humidity and exposure of four days

## Standards and regulations

Free from substances that could impair the application of coating	In acc. with VW specification
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## Approval data

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## Conformity/Approvals

UL, USA / Canada	Class I, Div. 2, Groups A, B, C, D, T4
	UL 508 Listed

## EMC data

Conformance with EMC directives	IEC 61000-6-2 IEC 61000-4-2 (ESD) Criterion B
	IEC 61000-4-3 (immunity to radiated interference) Criterion A
	IEC 61000-4-4 (burst) Criterion B
	IEC 61000-4-5 (surge) Criterion B
	IEC 61000-4-6 (immunity to conducted interference) Criterion A
	IEC 61000-4-8 (immunity to magnetic fields) Criterion A
	EN 55022 (emitted interference) Criterion A
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2:2005

## LED signaling

Status display	LEDs: U <sub>S1</sub> , U <sub>S2</sub> (redundant voltage supply), link and activity per port
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## Approvals



**EAC**

Approval ID: RU\*-DE.\*.B.00741/19



**UL Listed**

Approval ID: FILE E 140324



**cUL Listed**

Approval ID: FILE E 140324



**KC**

Approval ID: KCC-REI-PCK- FL28327



**cUL Listed**

Approval ID: FILE E 199827



**UL Listed**

Approval ID: FILE E 199827

**cULus Listed**

**cULus Listed**

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## Classifications

### ECLASS

ECLASS-9.0	19170106
ECLASS-10.0.1	19170402
ECLASS-11.0	19170402

### ETIM

ETIM 8.0	EC000734
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### UNSPSC

UNSPSC 21.0	43222600
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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

### PCB connector

PCB connector - MSTB 2,5/ 8-ST - 1754562

<https://www.phoenixcontact.com/pc/products/1754562>



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 8, number of rows: 1, number of positions: 8, number of connections: 8, product range: MSTB 2,5/...-ST, pitch: 5 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

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### Surge protection device

Surge protection device - DT-LAN-CAT.6+ - 2881007

<https://www.phoenixcontact.com/pc/products/2881007>



Surge protection in accordance with Class E<sub>A</sub> (CAT6<sub>A</sub>), for Gigabit Ethernet (up to 10 Gbps), token ring, FDDI/CDDI, ISDN, and DS1. Suitable for Power over Ethernet (PoE++ / 4PPoE) "Mode A" and "Mode B". RJ45 attachment plug with separate grounding cable and ground connection snap-on foot for NS 35 DIN rails.



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## Patch cable

Patch cable - FL CAT5 PATCH 0,5 - 2832263

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

Patch cable, CAT5, assembled, 0.5 m



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## 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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## Patch cable

Patch cable - FL CAT5 PATCH 2,0 - 2832289

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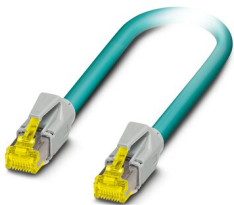
Patch cable, CAT5, assembled, 2 m

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## Patch cable

Patch cable - NBC-R4AC-R4AC-IE8A/.../... - 1411854

<https://www.phoenixcontact.com/pc/products/1411854>



Patch cable, degree of protection: IP20, number of positions: 8, 10 Gbps, CAT6<sub>A</sub>, cable outlet: straight, Ethernet

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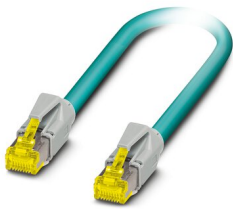
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## Patch cable

Patch cable - NBC-R4AC/10G-R4AC/10G-94F/2,0 - 1408360

<https://www.phoenixcontact.com/pc/products/1408360>



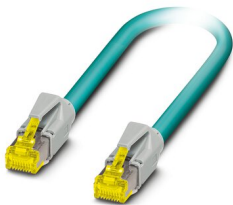
Patch cable, CAT6<sub>A</sub>, 4-pair, shielded, connection not crossed (line), assembled at both ends with RJ45/IP20 connectors, outer sheath material: PUR, length: 2.0 m

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## Patch cable

Patch cable - NBC-R4AC/10G-R4AC/10G-94F/3,0 - 1408365

<https://www.phoenixcontact.com/pc/products/1408365>



Patch cable, CAT6<sub>A</sub>, 4-pair, shielded, connection not crossed (line), assembled at both ends with RJ45/IP20 connectors, outer sheath material: PUR, length: 3.0 m

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## Port Guard Security Element

Port Guard Security Element - FL SEC PAC 4TX - 2832865

<https://www.phoenixcontact.com/pc/products/2832865>

Layer1 security elements for four RJ45 network connections for use with patch boxes and panels



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## DIN rail adapter

DIN rail adapter - FL DIN RA - 2891053

<https://www.phoenixcontact.com/pc/products/2891053>

The FL DIN RA is installed in a standard, 19-inch rack (EIA-310-D, IEC 60297-3-100) to allow DIN rail mounted equipment to be rack mounted.



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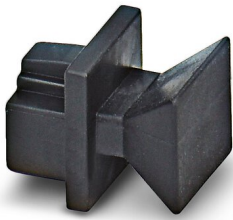
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## Dust protection

Dust protection - FL RJ45 PROTECT CAP - 2832991

<https://www.phoenixcontact.com/pc/products/2832991>



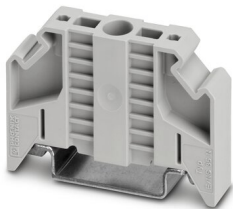
Dust protection caps for RJ45 socket

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## End clamp

End clamp - E/NS 35 N - 0800886

<https://www.phoenixcontact.com/pc/products/0800886>



End clamp, width: 9.5 mm, color: gray

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