

# Industrial Ethernet Switch - FL SWITCH SF 7TX/FX ST



2832577

<https://www.phoenixcontact.com/pc/products/2832577>

Please be informed that the data shown in this PDF document is generated from our Online Catalog. Please find the complete data in the user documentation. Our General Terms of Use for Downloads are valid.



Ethernet Switch, 7 TP RJ45 ports, 1 FO port, 100 Mbps full duplex in ST-D format, 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
- Security options with cable locking
- Relay contact for alarm processing of voltage states
- Local diagnostic indicators with LEDs
- Auto negotiation and autocrossing detection simplifies installation and setup

## Commercial Data

Item number	2832577
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	DNN112
Catalog Page	Page 299 (C-6-2019)
GTIN	4046356044073
Weight per Piece (including packing)	418.5 g
Weight per Piece (excluding packing)	425 g
Customs tariff number	85176200
Country of origin	TW

## Technical Data

### Dimensions

Width	135 mm
Height	115.3 mm
Depth	30 mm

### Material specifications

Housing material	Aluminum
------------------	----------

### Mounting

Mounting type	DIN rail mounting
---------------	-------------------

### 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	7 (RJ45 ports)

#### Fiber optic interface

Connection method	ST
Transmission speed	100 Mbps (full duplex)
Transmission physics	multi-mode fiberglass
Transmission length	2000 m (Fiberglass 50/125)
Wavelength	1300 nm
No. of channels	1 (ST multi-mode)

#### Potential-free signaling contact

Connection method	Plug-in/screw connection via COMBICON
-------------------	---------------------------------------

### Product properties

Type	Block design
Product type	Switch
	Unmanaged Switch SF
MTTF	46.5 Years (MIL-HDBK-217F standard, temperature 25°C)

#### Insulation characteristics

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

#### Switch functions

Basic functions	Unmanaged switch / auto negotiation, complies with IEEE 802.3,
-----------------	--

2832577

<https://www.phoenixcontact.com/pc/products/2832577>

	store and forward switching mode
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

## Electrical properties

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	5.28 W
Test section	500 V DC 1 min.
Transmission medium	Copper
	FO

## 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	220 mA (at U <sub>S</sub> = 24 V DC)

## 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

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	0 °C ... 55 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C
Permissible humidity (operation)	30 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	30 % ... 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

2832577

<https://www.phoenixcontact.com/pc/products/2832577>

## EMC data

Conformance with EMC directives	IEC 61000-6-2 IEC 61000-4-2 (ESD) Criterion B
	IEC 61000-6-2 IEC 61000-4-3 (immunity to radiated interference) Criterion A
	IEC 61000-6-2 IEC 61000-4-4 (burst) Criterion A
	IEC 61000-6-2 IEC 61000-4-5 (surge) Criterion A
	IEC 61000-6-2 IEC 61000-4-6 (immunity to conducted interference) Criterion A
	IEC 61000-6-2 IEC 61000-4-8 (immunity to magnetic fields) Criterion A
	IEC 61000-6-2 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
----------------	--

2832577

<https://www.phoenixcontact.com/pc/products/2832577>

## Approvals



**EAC**

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



**UL Listed**

Approval ID: FILE E 140324



**cUL Listed**

Approval ID: FILE E 140324



**cUL Listed**

Approval ID: FILE E 199827



**UL Listed**

Approval ID: FILE E 199827

**cULus Listed**

**cULus Listed**

2832577

<https://www.phoenixcontact.com/pc/products/2832577>

## Classifications

### ECLASS

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

### ETIM

ETIM 8.0	EC000734
----------	----------

### UNSPSC

UNSPSC 21.0	43222600
-------------	----------

2832577

<https://www.phoenixcontact.com/pc/products/2832577>

## 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"

2832577

<https://www.phoenixcontact.com/pc/products/2832577>

## 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

---

### 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.



# Industrial Ethernet Switch - FL SWITCH SF 7TX/FX ST



2832577

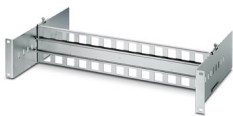
<https://www.phoenixcontact.com/pc/products/2832577>

## 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.



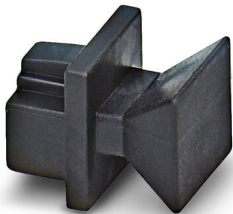
---

## Dust protection

Dust protection - FL RJ45 PROTECT CAP - 2832991

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

Dust protection caps for RJ45 socket



2832577

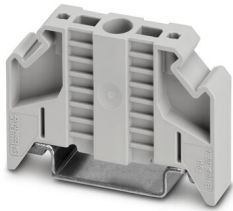
<https://www.phoenixcontact.com/pc/products/2832577>

## End clamp

End clamp - E/NS 35 N - 0800886

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

End clamp, width: 9.5 mm, color: gray



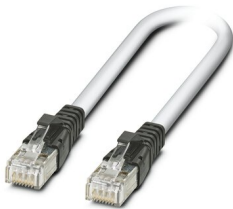
---

## Patch cable

Patch cable - FL CAT5 PATCH 0,5 - 2832263

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

Patch cable, CAT5, assembled, 0.5 m



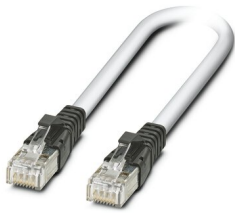
2832577

<https://www.phoenixcontact.com/pc/products/2832577>

## Patch cable

Patch cable - FL CAT5 PATCH 1,0 - 2832276

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



Patch cable, CAT5, assembled, 1 m

---

## Patch cable

Patch cable - FL CAT5 PATCH 2,0 - 2832289

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



Patch cable, CAT5, assembled, 2 m

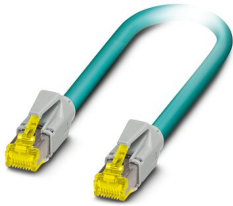
2832577

<https://www.phoenixcontact.com/pc/products/2832577>

## Patch cable

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

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



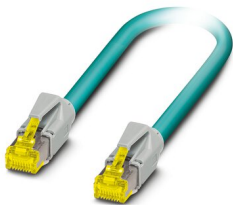
Patch cable, degree of protection: IP20, number of positions: 8, 10 Gbps, CAT6<sub>A</sub>, cable outlet: straight, Ethernet

---

## 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

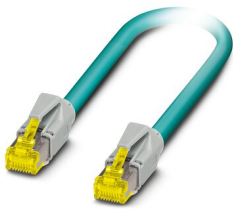
2832577

<https://www.phoenixcontact.com/pc/products/2832577>

## 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

---

## Patch cable

Patch cable - NBC-R4AC/1,0-93B/R4AC - 1408968

<https://www.phoenixcontact.com/pc/products/1408968>



Patch cable, degree of protection: IP20, cable length: 1 m, number of positions: 4, 100 Mbps, CAT5, material: PA 6.6, PROFINET

# Industrial Ethernet Switch - FL SWITCH SF 7TX/FX ST



2832577

<https://www.phoenixcontact.com/pc/products/2832577>

## Patch cable

Patch cable - NBC-R4AC/2,0-93B/R4AC - 1408969

<https://www.phoenixcontact.com/pc/products/1408969>



Patch cable, degree of protection: IP20, cable length: 2 m, number of positions: 4, 100 Mbps, CAT5, material: PA 6.6, PROFINET

---

## Patch cable

Patch cable - NBC-R4AC/5,0-93B/R4AC - 1408970

<https://www.phoenixcontact.com/pc/products/1408970>



Patch cable, degree of protection: IP20, cable length: 5 m, number of positions: 4, 100 Mbps, CAT5, material: PA 6.6, PROFINET

# Industrial Ethernet Switch - FL SWITCH SF 7TX/FX ST



2832577

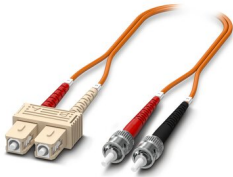
<https://www.phoenixcontact.com/pc/products/2832577>

## FO patch cable

FO patch cable - FOC-ST:PA-SC:PA-OM2:D01/1 - 1115574

<https://www.phoenixcontact.com/pc/products/1115574>

Multi-mode OM2 duplex jumper, ST-SC, UPC polishing, length 1 m



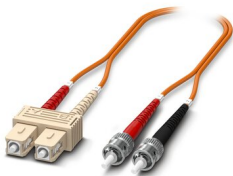
---

## FO patch cable

FO patch cable - FOC-ST:PA-SC:PA-OM2:D01/2 - 1115573

<https://www.phoenixcontact.com/pc/products/1115573>

Multi-mode OM2 duplex jumper, ST-SC, UPC polishing, length 2 m



2832577

<https://www.phoenixcontact.com/pc/products/2832577>

## FO patch cable

FO patch cable - FOC-ST:PA-ST:PA-OM2:D01/1 - 1115560

<https://www.phoenixcontact.com/pc/products/1115560>

Multi-mode OM2 duplex jumper, ST-ST, UPC polishing, length 1 m



---

## FO patch cable

FO patch cable - FOC-ST:PA-ST:PA-OM2:D01/2 - 1115557

<https://www.phoenixcontact.com/pc/products/1115557>

Multi-mode OM2 duplex jumper, ST-ST, UPC polishing, length 2 m





2832577

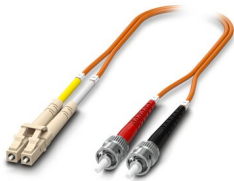
<https://www.phoenixcontact.com/pc/products/2832577>

## Fiber optic cable

Fiber optic cable - FOC-LC:PA-ST:PA-OM2:D01/1 - 1115588

<https://www.phoenixcontact.com/pc/products/1115588>

Multi-mode OM2 duplex jumper, LC-ST, UPC polishing, length 1 m



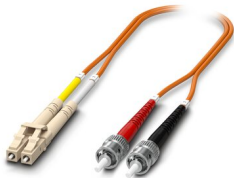
---

## Fiber optic cable

Fiber optic cable - FOC-LC:PA-ST:PA-OM2:D01/2 - 1115587

<https://www.phoenixcontact.com/pc/products/1115587>

Multi-mode OM2 duplex jumper, LC-ST, UPC polishing, length 2 m



---

Phoenix Contact 2023 © - all rights reserved  
<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstraße 8  
D-32825 Blomberg  
+49 (0) 5235-3 00  
[info@phoenixcontact.com](mailto:info@phoenixcontact.com)