

# FL SWITCH SFNT 8TX - Industrial Ethernet Switch



2891005

<https://www.phoenixcontact.com/us/products/2891005>

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Wide-temperature Ethernet switch, 8 TP RJ45 ports, automatic detection of data transmission speed of 10/100 Mbps (RJ45), autocrossing function, reads QoS priority messages, accepts security frames

## Your advantages

- RJ45 ports support a transmission speed of 10/100 Mbps
- Fiber-optic ports support 100 Mbps
- QoS-prioritized (Quality of Service) messages
- Wide operating temperature range of -40 °C ... 75 °C
- Alarm contact for power supply and link status diagnostics
- The switch also offers cable locking and port blocking
- Local diagnostic indicators with LEDs
- Auto negotiation and autocrossing detection simplifies installation and setup

## Commercial data

Item number	2891005
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DN19
Product key	DNN113
Catalog page	Page 296 (C-6-2019)
GTIN	4046356457200
Weight per piece (including packing)	635.8 g
Weight per piece (excluding packing)	460 g
Customs tariff number	85176200
Country of origin	TW

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## Technical data

### Dimensions

Width	50 mm
Height	130 mm
Depth	100 mm

### Notes

#### Utilization restriction

CCCex note	Use in potentially explosive areas is not permitted in China.
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### 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
No. of channels	8 (RJ45 ports)

### Product properties

Type	Block design
Product type	Switch
Product family	Unmanaged Switch SFNT
MTTF	80.2 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%)

#### Switch functions

Basic functions	Unmanaged switch / autonegotiation, complies with IEEE 802.3, store and forward switching mode, includes QoS and alarm contact
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 / autonegotiation, complies with IEEE 802.3, store and forward switching mode, includes QoS and alarm contact
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### Electrical properties

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Local diagnostics	US Supply voltage Green LED
	LNK/ACT Link status/data transmission Green LED
	100 Data transmission speed Yellow LED
Maximum power dissipation for nominal condition	3.72 W
Transmission medium	Copper

## Supply

Supply voltage (DC)	24 V DC (redundant)
Supply voltage range	9 V DC ... 32 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)
Max. current consumption	490 mA (@9 V DC)
Typical current consumption	155 mA (at U <sub>S</sub> = 24 V DC)

## Connection data

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 ... 14
Stripping length	7 mm

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 75 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)
Air pressure (operation)	62 kPa ... 108 kPa (up to 4160 m above mean sea level)
Air pressure (storage/transport)	62 kPa ... 108 kPa (up to 4160 m above mean sea level)

## Approvals

### Conformity/Approvals

Conformance	CE-compliant
ATEX	Ⓔ II 3 G Ex nA nC IIC T4 Gc
EU-type examination certificate	DEMKO 16 ATEX 1617X
IECEX	Ex nA nC IIC T4 Gc
IECEX certificate	IECEX UL 16.0093X
UL, USA / Canada	Class I, Div. 2, Groups A, B, C, D

## EMC data

Noise immunity	EN 61000-6-2
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 61000-6-4

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## System properties

### Functionality

Basic functions	Unmanaged switch / autonegotiation, complies with IEEE 802.3, store and forward switching mode, includes QoS and alarm contact
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### 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

📄 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2891005>



**EAC**

Approval ID: RU \*-DE.A\*08.B.00739



**DNV GL**

Approval ID: TAA00002HR



**LR**

Approval ID: LR2002520TA



**NK**

Approval ID: TA20175M



**BV**

Approval ID: 22935/C0 BV



**EAC**

Approval ID: RU \*-DE.A\*30.B.01735



**UL Listed**

Approval ID: FILE E 140324



**cUL Listed**

Approval ID: FILE E 140324



**KC**

Approval ID: KCC-REI-PCK-FL289100

**BSH**

Approval ID: 627

**ABS**

Approval ID: 19-HG1928426-PDA

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**EAC**

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



**IECEx**

Approval ID: IECEx UL 16.0093X



**cUL Listed**

Approval ID: FILE E 199827



**UL Listed**

Approval ID: FILE E 199827



**ATEX**

Approval ID: DEMKO 16 ATEX 1617X

**cULus Listed**

**cULus Listed**

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## Classifications

### ECLASS

ECLASS-11.0	19170402
ECLASS-12.0	19170402
ECLASS-13.0	19170402

### ETIM

ETIM 9.0	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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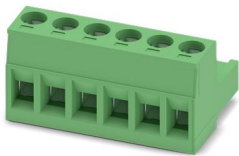
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## Accessories

### MSTB 2,5/ 6-ST - PCB connector

1754520

<https://www.phoenixcontact.com/us/products/1754520>



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, contact connection type: Socket, number of potentials: 6, number of rows: 1, number of positions: 6, number of connections: 6, 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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### DT-LAN-CAT.6+ - Surge protection device

2881007

<https://www.phoenixcontact.com/us/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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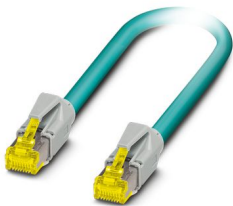
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## NBC-R4AC-R4AC-IE8A/.../... - Patch cable

1411854

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



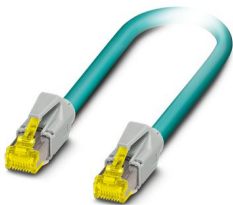
Patch cable, degree of protection: IP20, number of positions: 8, 10 Gbps, CAT6<sub>A</sub>, cable outlet: straight, Ethernet

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

1408360

<https://www.phoenixcontact.com/us/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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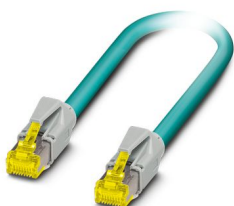
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## NBC-R4AC/10G-R4AC/10G-94F/3,0 - Patch cable

1408365

<https://www.phoenixcontact.com/us/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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## NBC-R4AC/1,0-93B/R4AC - Patch cable

1408968

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



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

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

1408969

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



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

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

1408970

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

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

2832865

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

Layer1 security elements for 4 RJ45 network connections for use with patch boxes and panels



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## FL DIN RA - DIN rail adapter

2891053

<https://www.phoenixcontact.com/us/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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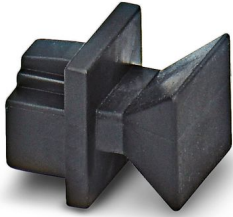
<https://www.phoenixcontact.com/us/products/2891005>

## FL RJ45 PROTECT CAP - Dust protection

2832991

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

Dust protection caps for RJ45 socket



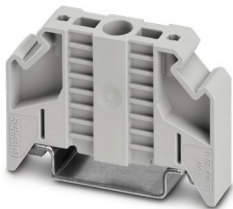
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## E/NS 35 N - End bracket

0800886

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

End clamp, width: 9.5 mm, color: gray



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## FL PA SFNT 5-8 - Mounting panel

2891012

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Mounting plate for SFNT switches



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