

# Industrial Ethernet Switch - FL SWITCH SFN 6TX/2FX-NF - 2891024

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Ethernet switch, 6 TP RJ45 ports, 2 FO ports, 100 Mbps full duplex in SC-D format, automatic detection of data transmission speed of 10 or 100 Mbps (RJ45), autocrossing function, flow control disabled

## Your advantages

- ✓ Auto negotiation and autocrossing detection simplifies installation and setup
- ✓ Local diagnostic indicators with LEDs
- ✓ The switch also offers cable locking and port blocking
- ✓ RJ45 ports support a transmission speed of 10/100 Mbps; fiber optic ports support 100 Mbps
- ✓ QoS-prioritized (Quality of Service) messages

## Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 500098
GTIN	4046356500098

## Technical data

### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
-------------------------	---------------------------------------------------------------------------

### Dimensions

Width	50 mm
Height	120 mm
Depth	70 mm

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	0 °C ... 60 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C
Permissible humidity (operation)	5 % ... 95 % (non-condensing)

# Industrial Ethernet Switch - FL SWITCH SFN 6TX/2FX-NF - 2891024

## Technical data

### Ambient conditions

Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)
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)

### Interfaces

Interface	Ethernet (RJ45)
No. of ports	6 (RJ45 ports)
Note on the connection method	Auto negotiation and autocrossing
Transmission physics	Ethernet in RJ45 twisted pair
Transmission speed	10/100 Mbps
Interface	Fiber optic interface
No. of ports	2 (SC multi-mode)
Transmission physics	multi-mode fiberglass
Transmission speed	100 Mbps (full duplex)
Transmission length	2000 m (Fiberglass 50/125)
	2000 m (Fiberglass 62.5/125)
Wavelength	1300 nm

### Function

Basic functions	Unmanaged switch / autonegotiation, complies with IEEE 802.3, store and forward switching mode, no flow control
Additional functions	Autonegotiation
Status and diagnostic indicators	LEDs: U <sub>s</sub> , link and activity per port

### Network expansion parameters

Cascading depth	Network, linear, and star structure: any
Maximum conductor length (twisted pair)	100 m

### Supply voltage

Supply voltage	24 V DC
Residual ripple	3.6 V <sub>PP</sub> (within the permitted voltage range)
Supply voltage range	18.5 V DC ... 30.2 V DC
Typical current consumption	230 mA (at U <sub>s</sub> = 24 V DC)

### General

Mounting type	DIN rail
Type AX	Block design
Net weight	505 g
Housing material	Aluminum
MTTF	61.9 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%)

### Standards and Regulations

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

# Industrial Ethernet Switch - FL SWITCH SFN 6TX/2FX-NF - 2891024

## Technical data

### Standards and Regulations

Noise immunity	EN 61000-6-2:2005
Vibration (storage/transport)	5g, 150 Hz, in acc. with IEC 60068-2-6
Free from substances that could impair the application of coating	In acc. with VW specification
Vibration (operation)	in acc. with IEC 60068-2-6: 5g, 150 Hz

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 10;
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Classifications

### eCl@ss

eCl@ss 10.0.1	19170402
eCl@ss 4.0	24010500
eCl@ss 4.1	24010500
eCl@ss 5.0	19030100
eCl@ss 5.1	19030100
eCl@ss 6.0	19170100
eCl@ss 7.0	19170106
eCl@ss 8.0	19170106
eCl@ss 9.0	19170106

### ETIM

ETIM 3.0	EC000734
ETIM 4.0	EC000734
ETIM 5.0	EC000734
ETIM 6.0	EC000734
ETIM 7.0	EC000734

### UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201410
UNSPSC 13.2	43222612
UNSPSC 18.0	43222612
UNSPSC 19.0	43222612
UNSPSC 20.0	43222612
UNSPSC 21.0	43222612

# Industrial Ethernet Switch - FL SWITCH SFN 6TX/2FX-NF - 2891024

## Approvals

### Approvals

#### Approvals

UL Listed / cUL Listed / EAC / UL Listed / cUL Listed

#### Ex Approvals

UL Listed / cUL Listed / cULus Listed

### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140324
-----------	--	-------------------------------------------------------------------------------------------------------------------------------------------------------	---------------

cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140324
------------	--	-------------------------------------------------------------------------------------------------------------------------------------------------------	---------------

EAC			RU*- DE.*.B.00741/19
-----	--	--	-------------------------

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
-----------	--	-------------------------------------------------------------------------------------------------------------------------------------------------------	---------------

cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
------------	--	-------------------------------------------------------------------------------------------------------------------------------------------------------	---------------

## Accessories

### Accessories

Data cable preassembled

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



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

## Industrial Ethernet Switch - FL SWITCH SFN 6TX/2FX-NF - 2891024

### Accessories

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

---

Patch cable - NBC-R4AC/10G-R4AC/10G-94F/3,0 - 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 - NBC-R4AC/1,0-93B/R4AC - 1408968



PROFINET patch cable, shielded, star-quad, 22 AWG stranded (7-wire), green, straight RJ45 male connector/IP20 to straight RJ45 male connector/IP20, length: 1.0 m

---

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



PROFINET patch cable, shielded, star quad, 22 AWG stranded (7-wire), green, straight RJ45 plug/IP20, to straight RJ45 plug/IP20, length: 2 m

---

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



PROFINET patch cable, shielded, star quad, 22 AWG stranded (7-wire), green, straight RJ45 plug/IP20 to straight RJ45 plug/IP20, length: 5 m

---

## Industrial Ethernet Switch - FL SWITCH SFN 6TX/2FX-NF - 2891024

### Accessories

FO patch cable - FOC-LC:PA-SC:PA-OM2:D01/1 - 1115607



FO patch cable - FOC-LC:PA-SC:PA-OM2:D01/2 - 1115605



FO patch cable - FOC-SC:PA-SC:PA-OM2:D01/1 - 1115536



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

FO patch cable - FOC-SC:PA-SC:PA-OM2:D01/2 - 1115535



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

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



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

## Industrial Ethernet Switch - FL SWITCH SFN 6TX/2FX-NF - 2891024

### Accessories

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



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

---

FO patch cable - FOC-LC:PA-SC:PA-OM4:D01/1 - 1115601



Multi-mode OM4 duplex jumper, LC-SC, UPC polishing, length 1 m

---

FO patch cable - FOC-LC:PA-SC:PA-OM4:D01/2 - 1115600



Multi-mode OM4 duplex jumper, LC-SC, UPC polishing, length 2 m

---

FO patch cable - FOC-SC:PA-SC:PA-OM4:D01/1 - 1115424



Multi-mode OM4 duplex jumper, SC-SC, UPC polishing, length 1 m

---

FO patch cable - FOC-SC:PA-SC:PA-OM4:D01/2 - 1115423



Multi-mode OM4 duplex jumper, SC-SC, UPC polishing, length 2 m

---

End block

# Industrial Ethernet Switch - FL SWITCH SFN 6TX/2FX-NF - 2891024

## Accessories

End clamp - E/NS 35 N - 0800886



End clamp, width: 9.5 mm, color: gray

---

## Mounting rail adapter

DIN rail adapter - FL DIN RA - 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.

---

## Patch cable

Patch cable - FL CAT5 PATCH 0,5 - 2832263



Patch cable, CAT5, assembled, 0.5 m

---

Patch cable - FL CAT5 PATCH 1,0 - 2832276



Patch cable, CAT5, assembled, 1 m

---

Patch cable - FL CAT5 PATCH 2,0 - 2832289



Patch cable, CAT5, assembled, 2 m

---

## PCB plug



# Industrial Ethernet Switch - FL SWITCH SFN 6TX/2FX-NF - 2891024

## Accessories

Printed-circuit board connector - MSTB 2,5/ 4-ST - 1754481

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 4, pitch: 5 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin



---

## Protective cap

Dust protection - FL RJ45 PROTECT CAP - 2832991



Dust protection caps for RJ45 socket

---

## Safety locking

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

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



---

## Surge protection for information technology

Surge protection device - DT-LAN-CAT.6+ - 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+) "Mode A" and "Mode B". RJ45 attachment plug with separate grounding cable and ground connection snap-on foot for NS 35 DIN rails.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Ethernet Modules](#) category:*

*Click to view products by [Phoenix Contact](#) manufacturer:*

Other Similar products are found below :

[TDKEZW3](#) [V23993-USB1029A](#) [100-POE4](#) [I210T1BLK](#) [FC6A-PH1](#) [W4S105C](#) [X520QDA1](#) [BCM84794A1KFSBG](#) [X520DA2OCP](#) [808-38157](#) [7506GX2](#) [TC EXTENDER 2001](#) [ETH-2S](#) [105FX-SC-MDR](#) [110FX2-SC](#) [BCM54291B0IQLEG](#) [7000-P3201-P050150](#) [750-1415](#) [750-1515](#) [750-494](#) [750-495](#) [750-612](#) [750-643](#) [750-652](#) [750-940](#) [753-650/003-000](#) [852-1322](#) [852-1328](#) [852-1812](#) [852-1813](#) [852-1816](#) [LANTICK PE-0-16](#) [LANTICK PE-16-0](#) [RBMTXLITE-L4X2.X.X.X.X.](#) [USR-TCP232-T2](#) [2017008](#) [EKI-7708E-4F-AE](#) [EKI-7708E-4FP-AE](#) [EKI-7708G-4FP-AE](#) [2352903-2](#) [EGU-0702-SFP-T](#) [EKI-2706G-1GFPI-BE](#) [SW-125](#) [SW-525](#) [SW-725](#) [1005957](#) [1006191](#) [304TX-N](#) [WIZ107SR\\_TTL](#) [ES-320](#) [TDKEZW5](#)