

FL MC 2000T SM20 SC - FO converters



2891317

<https://www.phoenixcontact.com/us/products/2891317>

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FO converter with SC duplex fiber optic connection (1300 nm), for converting 100Base-TX to single mode fiberglass with a maximum FO segment length of 20 km. Auto MDI(X) function and comprehensive link diagnostics. DIN rail mountable with wide operating temperature range.

Commercial data

Item number	2891317
Packing unit	1 pc
Sales key	DN06
Product key	DNC312
Catalog page	Page 353 (C-6-2019)
GTIN	4046356869591
Weight per piece (including packing)	310.5 g
Weight per piece (excluding packing)	302.3 g
Customs tariff number	85176200
Country of origin	TW

Technical data

Product properties

Product type	Media converter
MTTF	77.82 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%)
Signal delay	865 ns (Pass-through mode) 835 ns (Auto converter mode, 100 Mbps, static)

Electrical properties

Electrical isolation	VCC // FE // Ethernet
Maximum power dissipation for nominal condition	1.922 W
Test voltage data interface/power supply	1500 V AC (500 V AC, 1 minute)

Supply

Supply voltage range	12 V DC ... 48 V DC
Nominal supply voltage	24 V DC
Typical current consumption	110 mA (24 V DC)

Output data

Switching

Output name	Relay output
Output description	Alarm output
Number of outputs	1
Contact switching type	N/C contact
Maximum switching voltage	24 V DC
Max. switching current	100 mA

Connection data

Supply

Connection method	Plug-in screw terminal block (COMBICON), redundancy possible
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Interfaces

Signal	Ethernet
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Data: optical FO

Transmit capacity, minimum	-15 dBm
Transmit capacity, maximum	-8 dBm
Transmission length incl. 3 dB system reserve	20 km (fiberglass with F-G 9/125 0.36 dB/km)
Connection method	SC duplex
Wavelength	1310 nm
Minimum receiver sensitivity	-34 dBm
Maximum receiver sensitivity	0 dBm
Transmission medium	Single-mode fiberglass

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Data: Ethernet interface, 10/100Base-T(X) in accordance with IEEE 802.3

Data rate	10/100 Mbps
Serial transmission speed	10/100 Mbps
Connection method	RJ45 jack, shielded
No. of channels	1
Transmission length	100 m (twisted pair, shielded)
Transmission medium	Copper
Signal LEDs	LNK/ACT, 100
Auto-negotiation modes	Auto
Link through	Link fault pass through
MDI-/MDI-X switchover	Auto-MDI(X)

Dimensions

Width	28 mm
Height	110 mm
Depth	70 mm

Material specifications

Housing material	Aluminum
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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
Altitude	4850 m
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)
Shock	300 m/s ² , 11 ms (IEC 60068-2)
Air pressure (operation)	66 kPa ... 108 kPa
Air pressure (storage/transport)	66 kPa ... 108 kPa

Approvals

Conformity/Approvals

Conformance	CE-compliant
UL, USA / Canada	Class I, Div. 2, Groups A, B, C, D

EMC data

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
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Electrostatic discharge

Standards/regulations	EN 61000-4-2
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Electrostatic discharge

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Comments	Criterion B
Electromagnetic HF field	
Standards/regulations	EN 61000-4-3
Electromagnetic HF field	
Comments	Criterion A
Fast transients (burst)	
Standards/regulations	EN 61000-4-4
Fast transients (burst)	
Comments	Criterion A
Surge current load (surge)	
Standards/regulations	EN 61000-4-5
Surge current load (surge)	
Comments	Criterion B
Conducted interference	
Standards/regulations	EN 61000-4-6
Conducted interference	
Comments	Criterion A
Emitted interference	
Standards/regulations	EN 55032

Mounting

Mounting type	DIN rail mounting
Mounting position	On horizontal DIN rail NS 35 in acc. with EN 60715

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Classifications

ECLASS

ECLASS-11.0	19170411
ECLASS-12.0	19170411
ECLASS-13.0	19170411

ETIM

ETIM 9.0	EC001467
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UNSPSC

UNSPSC 21.0	43201500
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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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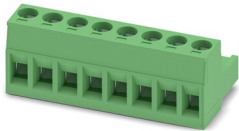
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Accessories

MSTB 2,5/ 8-ST - PCB connector

1754562

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



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Socket, 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

FL PATCH GUARD - Port Guard Security Element

2891424

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Lockable security element

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FL PATCH GUARD KEY - Key

2891521

<https://www.phoenixcontact.com/us/products/2891521>

Key for lockable security element



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

2881007

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



Surge protection in accordance with Class E_A (CAT6_A), 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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FL DIN RA - DIN rail adapter

2891053

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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.

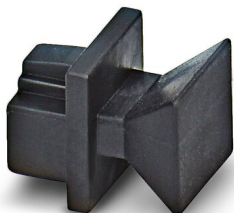


FL RJ45 PROTECT CAP - Dust protection

2832991

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Dust protection caps for RJ45 socket



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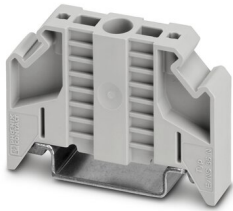
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E/NS 35 N - End bracket

0800886

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

End clamp, width: 9.5 mm, color: gray



FL CAT5 PATCH 0,5 - Patch cable

2832263

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Patch cable, CAT5, assembled, 0.5 m



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FL CAT5 PATCH 1,0 - Patch cable

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Patch cable, CAT5, assembled, 1 m



FL CAT5 PATCH 2,0 - Patch cable

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Patch cable, CAT5, assembled, 2 m



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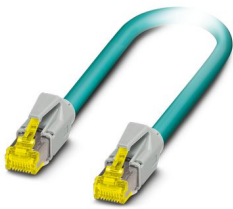
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NBC-R4AC-R4AC-IE8A/.../... - Patch cable

1411854

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

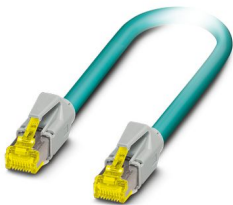


Patch cable, degree of protection: IP20, number of positions: 8, 10 Gbps, CAT6_A, cable outlet: straight, Ethernet

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

1408360

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



Patch cable, CAT6_A, 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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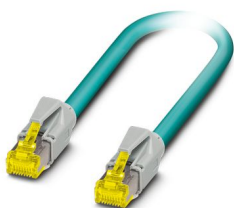
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NBC-R4AC/10G-R4AC/10G-94F/3,0 - Patch cable

1408365

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



Patch cable, CAT6_A, 4-pair, shielded, connection not crossed (line), assembled at both ends with RJ45/IP20 connectors, outer sheath material: PUR, length: 3.0 m

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

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

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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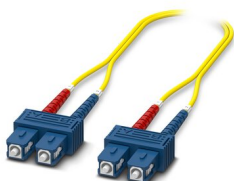
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FOC-SC:PA-SC:PA-OS2:D01/1 - FO patch cable

1115550

<https://www.phoenixcontact.com/us/products/1115550>

Single-mode OS2 duplex jumper, SC-SC, UPC polishing, length 1 m

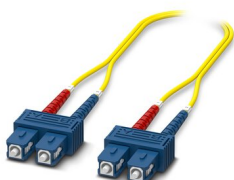


FOC-SC:PA-SC:PA-OS2:D01/2 - FO patch cable

1115548

<https://www.phoenixcontact.com/us/products/1115548>

Single-mode OS2 duplex jumper, SC-SC, UPC polishing, length 2 m



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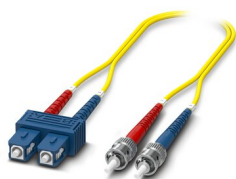
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FOC-ST:PA-SC:PA-OS2:D01/1 - FO patch cable

1115582

<https://www.phoenixcontact.com/us/products/1115582>

Single-mode OS2 duplex jumper, ST-SC, UPC polishing, length 1 m

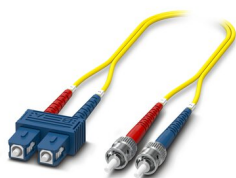


FOC-ST:PA-SC:PA-OS2:D01/2 - FO patch cable

1115581

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Single-mode OS2 duplex jumper, ST-SC, UPC polishing, length 2 m



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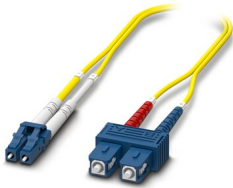
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FOC-LC:PA-SC:PA-OS2:D01/1 - FO patch cable

1115618

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Single-mode OS2 duplex jumper, LC-SC, UPC polishing, length 1 m

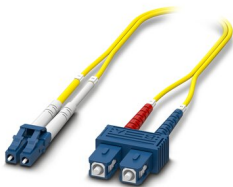


FOC-LC:PA-SC:PA-OS2:D01/2 - FO patch cable

1115617

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Single-mode OS2 duplex jumper, LC-SC, UPC polishing, length 2 m



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