

# FL MC 1000 SC - FO converters



2891320

<https://www.phoenixcontact.com/us/products/2891320>

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FO converter with SC duplex fiber optic connection (1300 nm), for converting 100Base-TX to multi-mode fiberglass. Auto MDI(X) function and comprehensive link diagnostics. DIN rail mountable.

## Product description

The FL MC 1000 SC media converter comes with one 10/100 Mbps twisted-pair RJ45 port and one 100 Mbps multimode fiber optics port with an SC-duplex connector

## Your advantages

- Auto MDI/MDI-X switch-over
- Data transfer rates of 100 Mbps
- Link fault pass through (LFPT) function for easy connection monitoring

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 2891320       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | DN06          |
| Product key                          | DNC312        |
| GTIN                                 | 4046356869614 |
| Weight per piece (including packing) | 278.8 g       |
| Weight per piece (excluding packing) | 278.8 g       |
| Customs tariff number                | 85176200      |
| Country of origin                    | TW            |

## Technical data

### Notes

#### Note on application

|                     |                         |
|---------------------|-------------------------|
| Note on application | Only for industrial use |
|---------------------|-------------------------|

### Product properties

|              |                                                                              |
|--------------|------------------------------------------------------------------------------|
| Product type | Media converter                                                              |
| MTTF         | 95.85 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%) |
| Signal delay | ± 1.3 µs (Store and Forward mode, 10/100 Mbps, depending on the frame size)  |

### Electrical properties

|                                          |                                |
|------------------------------------------|--------------------------------|
| Electrical isolation                     | VCC // FE // Ethernet          |
| 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 | 73 mA (24 V DC)     |

### Connection data

#### Supply

|                                         |                                               |
|-----------------------------------------|-----------------------------------------------|
| Connection method                       | Plug-in/screw connection via COMBICON         |
| Conductor cross-section, flexible       | 0.20 mm <sup>2</sup> ... 2.50 mm <sup>2</sup> |
| Conductor cross-section, rigid          | 0.20 mm <sup>2</sup> ... 2.50 mm <sup>2</sup> |
| Conductor cross-section, flexible [AWG] | 24 ... 12                                     |
| Conductor cross-section AWG             | 24 ... 12                                     |
| Tightening torque                       | 5 Nm ... 7 Nm                                 |

### Interfaces

|        |          |
|--------|----------|
| Signal | Ethernet |
|--------|----------|

#### Data: optical FO

|                                               |                                                      |
|-----------------------------------------------|------------------------------------------------------|
| Transmit capacity, minimum                    | -19 dBm                                              |
| Transmit capacity, maximum                    | -14 dBm                                              |
| Transmission length incl. 3 dB system reserve | 8 km (fiberglass with F-G 62.5/125 0.7 dB/km F1000)  |
|                                               | 3.3 km (fiberglass with F-G 62.5/125 2.6 dB/km F600) |
|                                               | 9.6 km (fiberglass with F-G 50/125 0.7 dB/km F1200)  |
|                                               | 5.3 km (fiberglass with F-G 50/125 1.6 dB/km F800)   |
| Connection method                             | SC duplex                                            |
| Wavelength                                    | 1310 nm                                              |
| Minimum receiver sensitivity                  | -34 dBm                                              |

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|                              |                       |
|------------------------------|-----------------------|
| Maximum receiver sensitivity | -14 dBm               |
| Transmission medium          | Multi-mode fiberglass |
|                              | GI-HCS fiber          |

Data: Ethernet interface, 100Base-Tx in acc. with IEEE 802.3u

|                           |                                |
|---------------------------|--------------------------------|
| 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  |

## Mechanical tests

|                                                             |                                            |
|-------------------------------------------------------------|--------------------------------------------|
| Vibration (operation) in accordance with IEC 60068-2-6:1982 | : Operation: 5g, 150 Hz, criterion A       |
| Shock in accordance with IEC 60068-2-27:1997                | : 30g, 11 ms period, half-sine shock pulse |

## Environmental and real-life conditions

### Ambient conditions

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

## 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 |
|-------------------------------|-------------------------------------------|

## Mounting

|                   |                                                    |
|-------------------|----------------------------------------------------|
| Mounting type     | DIN rail: 35 mm                                    |
| Mounting position | on horizontal DIN rail NS 35 in acc. with EN 60715 |

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## Classifications

### ECLASS

ECLASS-13.0

19170411

### ETIM

ETIM 9.0

EC001467

### UNSPSC

UNSPSC 21.0

43201500

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## Environmental product compliance

### EU RoHS

|                                         |                    |
|-----------------------------------------|--------------------|
| Fulfills EU RoHS substance requirements | Yes                |
| Exemption                               | 6(c), 7(a), 7(c)-I |

### China RoHS

|                                        |                                                                                                                                                                                                                                   |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Environment friendly use period (EFUP) | EFUP-10                                                                                                                                                                                                                           |
|                                        | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |

### EU REACH SVHC

|                                     |                      |
|-------------------------------------|----------------------|
| REACH candidate substance (CAS No.) | Lead(CAS: 7439-92-1) |
|-------------------------------------|----------------------|

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