**Product data sheet**

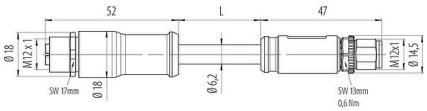
# Automation technology - Data transmission

| | |
|---|---|
| Product description | **M12 Connecting cable male cable connector - female cable connector, Contacts: 8, shielded, moulded on the cable, IP67, M12x1.0, E-beam X-FRNCL/LSNH, blue, 2 m** |
| Area | **M12-X** |
| Coding | **X-coded** |
| Series | **876** |
| Part no. | **77 4506 4505 90708-0200** |

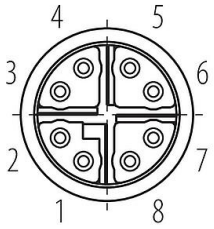
## Illustration (may vary)



## Scale drawing



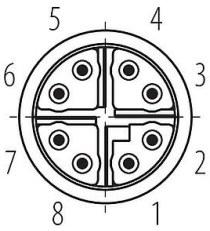

## Contact arrangement (Plug-in side)




1 white-orange
2 orange
3 white-green
4 green
5 white-brown
6 brown
7 white-blue
8 blue

shield on housing

## Contact arrangement (Plug-in side)




1 white-orange
2 orange
3 white-green
4 green
5 white-brown
6 brown
7 white-blue
8 blue

shield on housing

## Cable length tolerance

| cable length | tolerance |
|---|---|
| ≥ 0,10 m | + 0,03 m |
| ≥ 0,20 m | + 0,04 m |
| ≥ 0,50 m | + 0,07 m |
| ≥ 1,00 m | + 0,10 m |
| ≥ 2,00 m | + 0,15 m |
| ≥ 5,00 m | + 0,20 m |
| ≥ 10,0 m | + 0,25 m |
| ≥ 20,0 m | + 0,35 m |

## Technical data

### General features

| | |
|---|---|
| Part no. | 77 4506 4505 90708-0200 |
| Connector design | Connecting cable male cable connector - female cable connector |
| Coding | X-coded |
| Cable length | 2 m |
| Version | Double ended cordsets |
| Connector locking system | screw |

**Product data sheet**

# Automation technology - Data transmission

| | |
|---|---|
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| Part no. | **77 4506 4505 90708-0200** |

| | |
|---|---|
| Termination | moulded on the cable |
| Degree of protection | IP67 |
| Connection cross-section | AWG 24/19 |
| Temperature range from/to | -40 °C / 85 °C |
| Mechanical operation | > 100 Mating cycles |
| Weight (g) | 261 |
| Customs tariff number | 85444290 |
| Country of Origin | DE |

## Electrical parameters

| | |
|---|---|
| Rated voltage | 50 V (AC) / 60 V (DC) |
| Rated impulse voltage | 800 V |
| Rated current | 0.5 A |
| Insulation resistance | > $10^{8}$ Ω |
| Pollution degree | 3 |
| Transmission rate | CAT 7 |
| Insulating material group | II |
| EMC compliance | shielded |

## Material

| | |
|---|---|
| Housing material | Zinc die-cast nickel-plated |
| Contact body material | Polymid |
| Contact material | CuZn (brass) / CuSn (bronze) |
| Contact plating | Au (gold) |
| Locking material | Zinc die-cast nickel-plated |
| REACH SVHC | CAS 7439-92-1 (Lead) |
| SCIP number | 2fa64594-2eb8-46fd-b3f5-93fe34a569ac |

## Cable data - Structure of the cable

| | |
|---|---|
| Cable diameter | 8.1 mm |
| Sheath material | E-beam X-FRNCL/LSNH |
| Cable color | blue |

## Cable data - Thermal properties

| | |
|---|---|
| Temperature range cable in move from/to | -40 °C / 90 °C |
| Temperature range cable fixed from/to | -40 °C / 90 °C |

## Cable data - Other features

| | |
|---|---|
| Flame resistance | IEC 60332-1-2<br>IEC 60332-3-25 cat D |

## Authorization/approvals

| | |
|---|---|
| Norms and regulations | DIN EN 61373 |

**Product data sheet**

# Automation technology - Data transmission

| | |
|---|---|
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| Part no. | **77 4506 4505 90708-0200** |

## Security notices

The connector must not be plugged or unplugged under load. Non-observance and improper use can result in personal injury.

The connectors have been developed for applications in plant engineering, control and electrical equipment construction. The user is responsible for checking whether the connectors can also be used in other areas of application.

Connectors which are used in circuits with voltages dangerous to the touch may only be installed and used by, or under the supervision of, persons with electrical engineering training, taking into account the applicable regulations and standards.

The user must take suitable safety precautions to ensure that the connector cannot be accidentally disconnected.

Plug connectors with enclosure protection IP67 and IP68 are not suitable for use under water. When used outdoors, the plug connectors must be protected separately against corrosion. For further information on the IP protection classes, please refer to the "Technical Information" download centre.

Please observe the pollution degree and the overvoltage category. For further information, please refer to the download center "Technical Information".