

1192091  
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Network cable, Ethernet CAT5e (1 Gbps), 8-position, TPE, highly flexible, turquoise, Plug straight M12, coding: A / IP65, on Plug straight RJ45 / IP20, cable length: 20 m

Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1192091                        |
| Packing unit                         | 1 pc                           |
| Minimum order quantity               | 1 pc                           |
| Note                                 | Made to order (non-returnable) |
| Sales key                            | BF15                           |
| Product key                          | BF1IHD                         |
| GTIN                                 | 4063151344252                  |
| Weight per piece (including packing) | 22.22 g                        |
| Weight per piece (excluding packing) | 22.22 g                        |
| Customs tariff number                | 85444290                       |
| Country of origin                    | US                             |

## Technical data

### Product properties

|                     |                         |
|---------------------|-------------------------|
| Product type        | Data cable preassembled |
| Application         | Standard, U.S. cables   |
| Sensor type         | Ethernet                |
| Number of positions | 8                       |
| Shielded            | yes                     |
| Coding              | A                       |

### Data management status

|                  |    |
|------------------|----|
| Article revision | 01 |
|------------------|----|

### Interfaces

|                      |                        |
|----------------------|------------------------|
| Bus system           | Ethernet               |
| Signal type/category | Ethernet CAT5e, 1 Gbps |

### Signaling

|                        |    |
|------------------------|----|
| Status display         | no |
| Status display present | No |

### Electrical properties

|                       |                                                                                              |
|-----------------------|----------------------------------------------------------------------------------------------|
| Nominal voltage $U_N$ | 48 V AC                                                                                      |
|                       | 60 V DC ()                                                                                   |
| Nominal current $I_N$ | 2 A (Plug/socket in accordance with IEC 61076-2-101, cable technical data is to be observed) |
|                       | 1.5 A (RJ45)                                                                                 |
| Transmission medium   | Copper                                                                                       |

### Connector

#### Connection 1

|                      |                                                         |
|----------------------|---------------------------------------------------------|
| Type                 | Plug straight M12 / IP65                                |
| Coding type          | A (Standard)                                            |
| Material             | CuZn (Contact)                                          |
|                      | Ni/Au (Contact surface)                                 |
|                      | TPU GF (Contact carriers)                               |
|                      | TPU, hardly inflammable, self-extinguishing (Grip body) |
|                      | Stainless steel (Screw connection)                      |
| Degree of protection | IP65                                                    |

#### Connection 2

|              |                           |
|--------------|---------------------------|
| Type         | Plug straight RJ45 / IP20 |
| Handle color | gray                      |
|              | CuSn (Contact)            |

# NBC-M12MS/20,0-94L/R4AC - Network cable



1192091

<https://www.phoenixcontact.com/us/products/1192091>

|                      |                         |
|----------------------|-------------------------|
| Material             | Ni/Au (Contact surface) |
|                      | PC (Contact carriers)   |
|                      | PA (Housing)            |
| Degree of protection | IP20                    |

## Cable/line

|              |      |
|--------------|------|
| Cable length | 20 m |
|--------------|------|

### Highly flexible Ethernet CAT5e [94L]

|                                                 |                                                                                    |
|-------------------------------------------------|------------------------------------------------------------------------------------|
| Dimensional drawing                             |  |
| UL AWM Style                                    | 2463 (80 °C / 600 V)                                                               |
| Number of positions                             | 8                                                                                  |
| Shielded                                        | yes                                                                                |
| Cable type                                      | Highly flexible Ethernet CAT5e [94L]                                               |
| Conductor structure                             | 4x2xAWG24/7; SF/UTP                                                                |
| Conductor structure signal line                 | 7x 0.20 mm (7x32)                                                                  |
| AWG signal line                                 | 24                                                                                 |
| Conductor cross section                         | 4x 2x 0.2 mm <sup>2</sup>                                                          |
| Wire diameter incl. insulation                  | 1.2 mm                                                                             |
| External cable diameter                         | 7.40 mm ±0.25 mm                                                                   |
| Outer sheath, material                          | TPE                                                                                |
| External sheath, color                          | turquoise                                                                          |
| Conductor material                              | Tin-plated Cu litz wires                                                           |
| Material wire insulation                        | PE                                                                                 |
| Single wire, color                              | white/blue-blue, white/orange-orange, white/green-green, white/brown-brown         |
| Twisted pairs                                   | 2 cores to the pair                                                                |
| Overall twist                                   | 4 pairs for core                                                                   |
| Optical shield covering                         | 75 %                                                                               |
| Wave impedance                                  | 100 Ω ±15 Ω (at 100 MHz)                                                           |
| Cable impedance                                 | 100 Ω ±15 Ω (at 1 ... 100 MHz)                                                     |
| Nominal voltage, cable                          | 600 V                                                                              |
| Test voltage                                    | 2000 V                                                                             |
| Max. bending cycles                             | 1000000                                                                            |
| Minimum bending radius, drag chain applications | 10 x D                                                                             |
| Traversing path                                 | 0.23 m                                                                             |
| Traversing rate                                 | 1.5 m/s                                                                            |

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|                                                 |                                                             |
|-------------------------------------------------|-------------------------------------------------------------|
| Acceleration                                    | 20.5 m/s <sup>2</sup>                                       |
| Max. bending cycles                             | 10000000 (126 cycles/min. at 20 °C)                         |
| Minimum bending radius, drag chain applications | 20 X D                                                      |
| Torsion force                                   | 360 °/m (1 lb. load)                                        |
| Torsion cycles                                  | 4800000                                                     |
| Torsional frequency                             | 71 (cycles/min)                                             |
| Ambient temperature (operation)                 | 20 °C                                                       |
| Near end crosstalk attenuation (NEXT)           | 50 dB (with 100 MHz (IEC 62153-4-9))                        |
| Return attenuation (RL)                         | 20 dB (at 10 MHz (+6LOG))                                   |
|                                                 | 26 dB (at 20 MHz)                                           |
|                                                 | 26 dB (at 100 MHz (-5LOG))                                  |
| Flame resistance                                | VW-1                                                        |
| Other resistance                                | Resistant to welding splashes (Abrasion and oil resistance) |
|                                                 | UV resistant (CMX outdoor)                                  |
| Ambient temperature (operation)                 | -40 °C ... 80 °C (Cable, flexible installation)             |

## Environmental and real-life conditions

### Ambient conditions

|                                 |                                  |
|---------------------------------|----------------------------------|
| Degree of protection            | IP65                             |
| Ambient temperature (operation) | -25 °C ... 85 °C (M12 connector) |

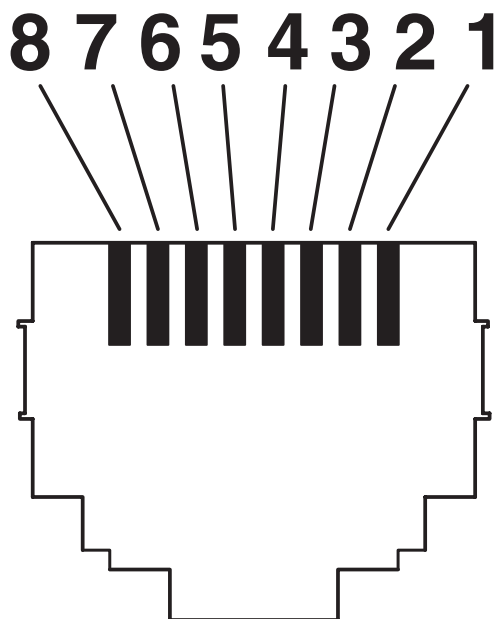
## Standards and regulations

### M12

|                          |                 |
|--------------------------|-----------------|
| Standard designation     | M12 connector   |
| Standards/specifications | IEC 61076-2-101 |

## Drawings

### Schematic diagram



Connector pin assignment plug RJ45

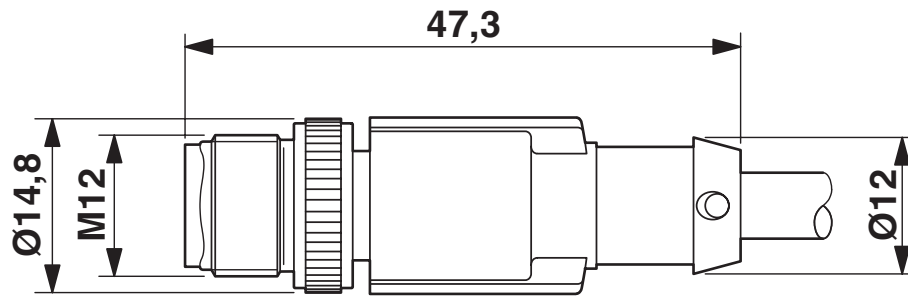
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1192091

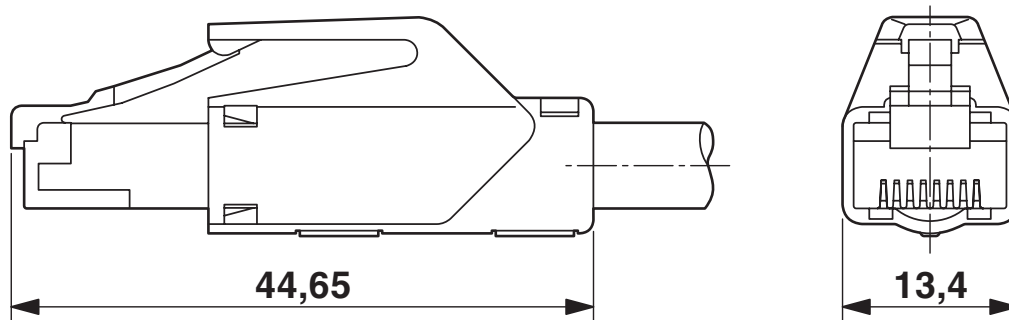
<https://www.phoenixcontact.com/us/products/1192091>

Dimensional drawing



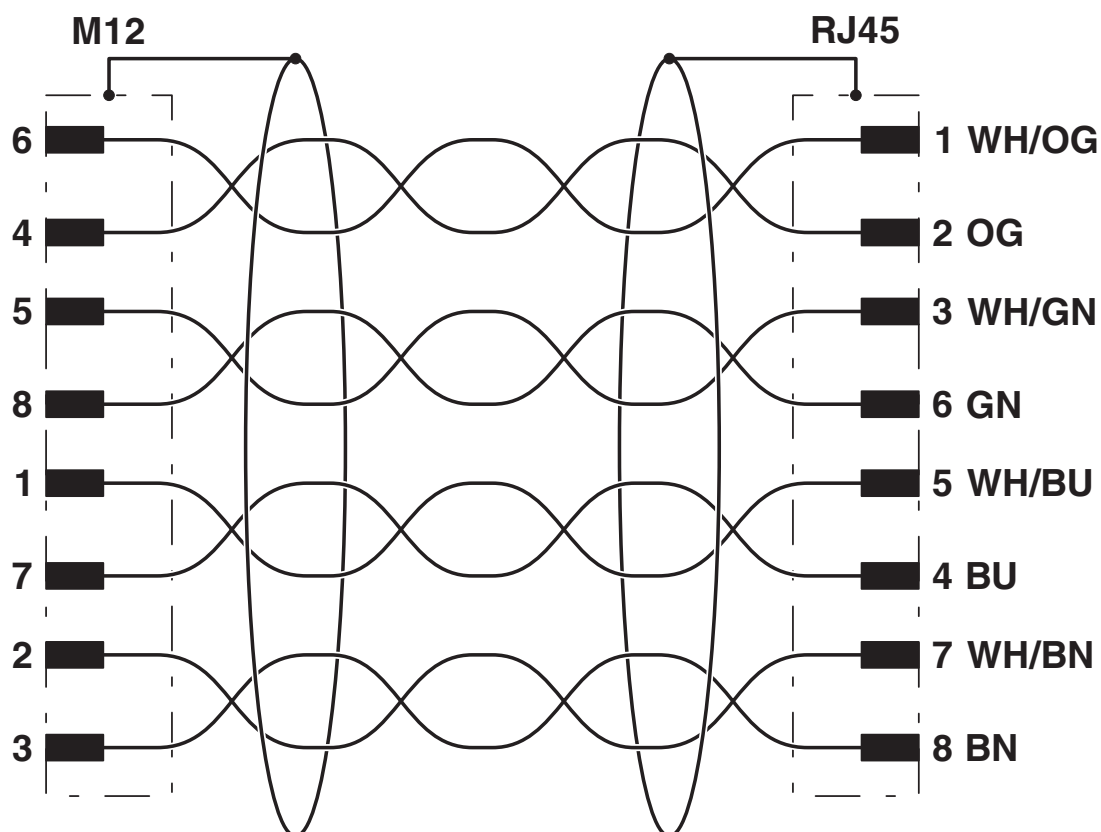
Plug, M12 x 1, straight, shielded

Dimensional drawing

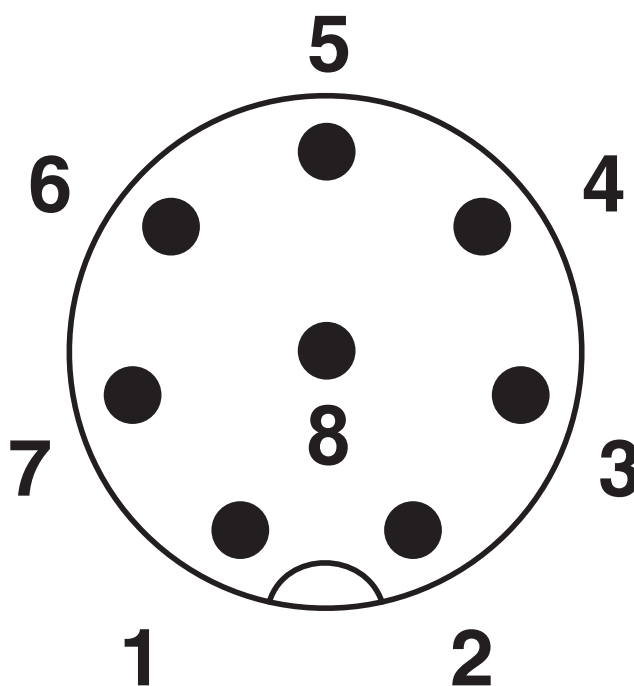


RJ45 connector, IP20

Circuit diagram



Schematic diagram



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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1192091>

|  |                                               |                                |                   |                               |
|--|-----------------------------------------------|--------------------------------|-------------------|-------------------------------|
|  | <b>UL Listed</b><br>Approval ID: File E335024 |                                |                   |                               |
|  | Nominal voltage U <sub>N</sub>                | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
|  | 60 V                                          | 0.5 A                          | -                 | -                             |

|  |                                                |                                |                   |                               |
|--|------------------------------------------------|--------------------------------|-------------------|-------------------------------|
|  | <b>cUL Listed</b><br>Approval ID: File E335024 |                                |                   |                               |
|  | Nominal voltage U <sub>N</sub>                 | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
|  | 60 V                                           | 0.5 A                          | -                 | -                             |

|                     |  |  |  |  |
|---------------------|--|--|--|--|
| <b>cULus Listed</b> |  |  |  |  |
|---------------------|--|--|--|--|



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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27060307 |
| ECLASS-12.0 | 27060307 |
| ECLASS-13.0 | 27060307 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC001855 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 26121600 |
|-------------|----------|

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## Environmental product compliance

|                                         |                            |
|-----------------------------------------|----------------------------|
| EU RoHS                                 |                            |
| Fulfills EU RoHS substance requirements | Yes, No exemptions         |
| EU REACH SVHC                           |                            |
| REACH candidate substance (CAS No.)     | No substance above 0.1 wt% |

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