

**M12 male 0° / M12 female 90° A-cod. shielded**

RADOX EM 104 4x0.5 shielded bk 1.5m

Male straight – female 90°

M12 – M12, 4-pole

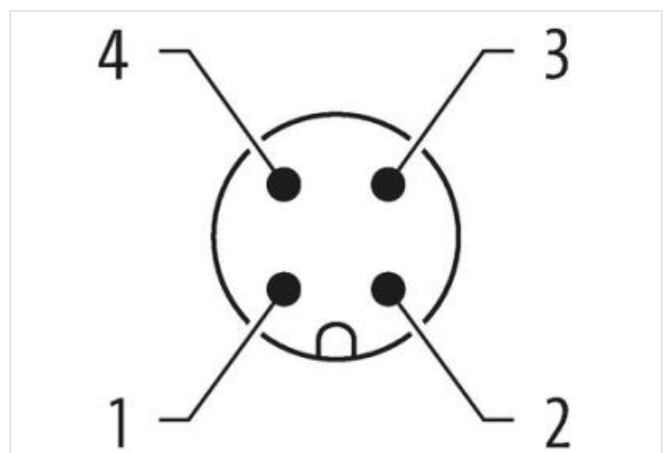
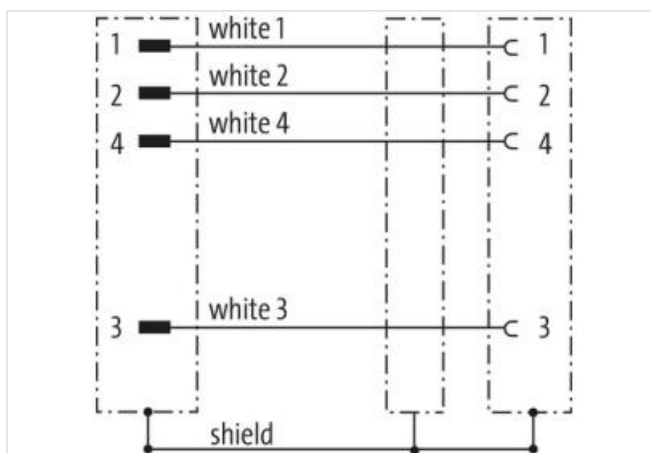
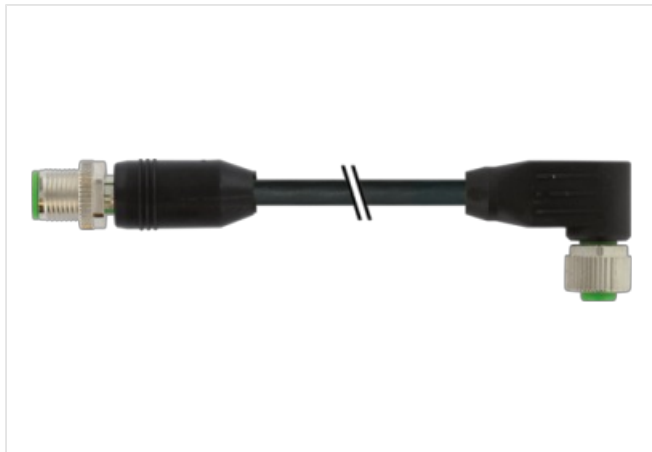
shielded

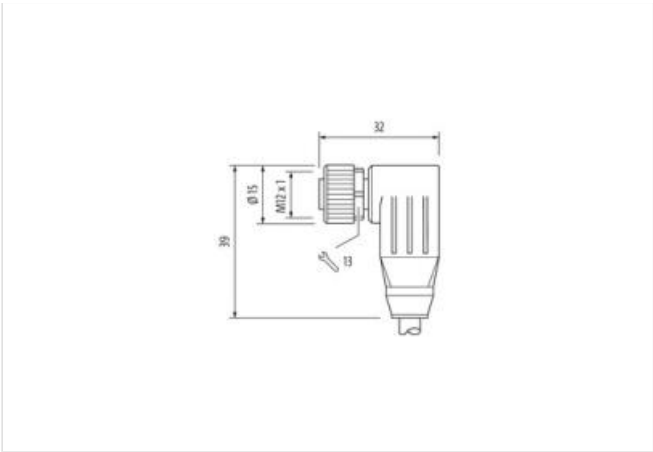
with cable sleeves

Plastic housings with good resistance against chemicals and oils.

The resistance to aggressive media should be individually tested for your application. Further details on request.

Further cable lengths on request.

[Link to Product](#)**Illustration**



Product may differ from Image

|                                    |                   |
|------------------------------------|-------------------|
| Cable length                       | 1,5 m             |
| Side 1                             |                   |
| Tightening torque                  | 0,6 Nm            |
| Mounting method                    | inserted, screwed |
| Family construction form           | M12               |
| Thread                             | M12 x 1           |
| Coding                             | A                 |
| No. of poles                       | 4                 |
| Width across flats                 | SW13              |
| Side 2                             |                   |
| Tightening torque                  | 0,6 Nm            |
| Mounting method                    | inserted, screwed |
| Family construction form           | M12               |
| Thread                             | M12 x 1           |
| Coding                             | A                 |
| No. of poles                       | 4                 |
| Commercial data                    |                   |
| ECLASS-6.0                         | 27279218          |
| ECLASS-7.0                         | 27279218          |
| ECLASS-8.0                         | 27279218          |
| ECLASS-9.0                         | 27060311          |
| ECLASS-10.1                        | 27060311          |
| ECLASS-11.1                        | 27060311          |
| ECLASS-12.0                        | 27060311          |
| ETIM-5.0                           | EC001855          |
| customs tariff number              | 85444290          |
| GTIN                               | 4048879691321     |
| Packaging unit                     | 1                 |
| Electrical data   Supply           |                   |
| Operating voltage AC max.          | 60 V              |
| Operating voltage DC max.          | 60 V              |
| Current operating per contact max. | 4 A               |
| Diagnostics                        |                   |
| Status indication LED              | no                |
| Device protection   Electrical     |                   |
| Pollution Degree                   | 3                 |

|   |   |
|---|---|
| Rated surge voltage                             | 1,5 kV  |
| Material group (IEC 60664-1)                    | I   |
| <b>Mechanical data</b>                          |   |
| Contour for corrugated hose                     | without   |
| <b>Mechanical data   Material data</b>          |   |
| Coating locking                                 | Nickeled  |
| Material housing                                | PUR   |
| Locking material                                | Zinc die-casting  |
| <b>Mechanical data   Mounting data</b>          |   |
| Mounting method                                 | inserted, screwed, Shaking protection   |
| <b>Environmental characteristics   Climatic</b> |   |
| Operating temperature min.                      | -25 °C  |
| Operating temperature max.                      | 85 °C   |
| Additional condition temperature range          | depending on cable quality  |
| <b>Important installation notes</b>             |   |
| Note on strain relief                           | Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.   |
| Note on bending radius                          | <b>Attention:</b> Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces. |
| <b>Conformity</b>                               |   |
| Product standard                                | DIN EN 61076-2-101 (M12)  |
| <b>Installation   Cable</b>                     |   |
| Cable identification                            | R13   |
| Printing color of wire insulation               | black (white isolation)   |
| Printing spacing of wire insulation             | 15 mm   |
| Jacket Color                                    | black   |
| Amount stranding                                | 1   |
| Stranding                                       | 4 wires twisted   |
| Cable shielding (type)                          | copper braid, tinned  |
| Banding   | Fleece, Foil  |
| wire arrangement                                | white 1, white 2, white 3, white 4  |
| Cable weight                                    | 67,1 g/m  |
| Material jacket                                 | Radox EM 104  |
| Freedom from ingredients (jacket)               | lead-free, CFC-free, halogen-free   |
| Outer-diameter (jacket)                         | 5,4 mm  |
| Tolerance outer diameter (sheath)               | ± 5 %   |
| Material wire insulation                        | Radox EI 303  |
| Amount wires                                    | 4   |
| Outer diameter insulation                       | 1,42 mm   |
| Outer diameter tolerance core insulation        | ± 5 %   |
| Ingredient freeness wire insulation             | lead-free, CFC-free, halogen-free   |
| Printing color of wire insulation               | black (white isolation)   |
| Printing spacing of wire insulation             | 15 mm   |
| Amount strands (wire)                           | 19  |
| Diameter of single wires                        | 0,18 mm   |
| Conductor crosssection (wire)                   | 0,5 mm²   |
| Material conductor wire                         | copper stranded wire, tinned  |
| Conductor type (wire)                           | Strand class 5  |
| Max. rated voltage (conductor - conductor)      | 1000 V  |
| Max. rated voltage (conductor - ground)         | 600 V   |
| Current load capacity (standard)                | to DIN VDE 0298-4   |
| Current load capacity min. wire                 | 7,2 A   |
| Electrical resistance line constant wire        | 40,1 Ω/km @ 20 °C   |

The information in this Product-PDF has been compiled with the utmost care.

Liability for the correctness completeness and topicality of the information is restricted to gross negligence. Version: 2024-05-20

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|   |  |
|---|--|
| AC withstand voltage (wire - wire)                | 3,5 kV @ 60 s  |
| Power frequency withstand voltage (wire - jacket) | 3,5 kV @ 60 s  |
| AC withstand voltage (wire - shield)              | 3,5 kV @ 60 s  |
| Min. operating temperature (static)               | -50 °C   |
| Max. operating temperature (fixed)                | 120 °C   |
| Operating temperature min. (dynamic)              | -25 °C   |
| Operating temperature max. (dynamic)              | 90 °C  |
| UV resistance                                     | DIN EN ISO 4892-2 A                                  |
| Flame resistance                                  | UL 1581 § 1090   UL 1581 § 1100 FT2   IEC 60332-2-2  |
| chemical resistance                               | Good, application-related testing                    |
| Gasoline resistance                               | Good, application-related testing                    |
| Oil resistance                                    | Good, application-related testing   DIN EN 60811-404 |
| Bending radius (fixed)                            | 3 x Outer diameter                                   |
| Bending radius (dynamic)                          | 4 x Outer diameter                                   |