

## M8 male 0° / M12 female 90° A-cod.

PVC 3x0.25 bk UL/CSA 0.3m

Art.No.: 7000-88261-6100030

Weight: 0.025 Country of origin: US

Model designation: MSDL0-H-R610 0.3

## Advantages of our connectors:

Our connectors are versatile and specially optimised for industrial environments. All connectors are 100% tested during the manufacturing process to ensure the highest quality and reliability.

The contacts are gold-plated, which ensures optimum conductivity. Thanks to the high degree of protection, the connectors are ideal for demanding industrial environments. They are also vibration-resistant - this is ensured by the union nut with vibration protection.

Our connectors are resistant to oils and cooling lubricants, but resistance to aggressive media should be tested for each specific application. Different cable lengths available on request

If you are missing technical information? Please feel free to use our dictionary to find more technical details.

**Product details:** 

Male straight - female 90°

M8 - M12, 3-pole

M12, A-coded

Art-No. 7005 - M12/M8 Lite - (plastic hexagonal screw) on request

Further cable lengths on request.

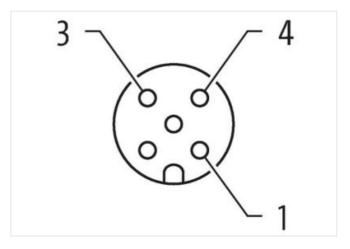
Plastic housings with good resistance against chemicals and oils.

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

## **Link to Product**

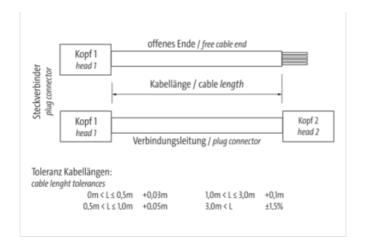
## Illustration

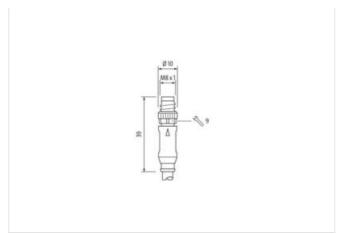


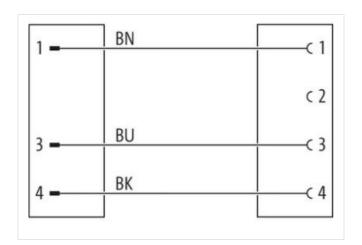


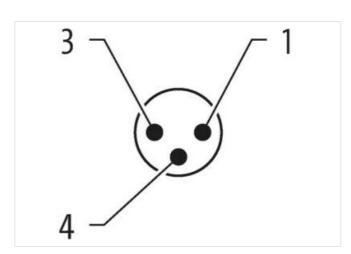


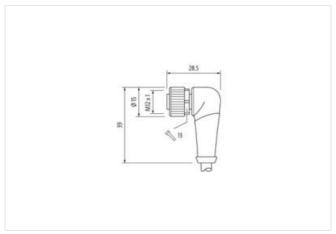
stay connected











Product may differ from Image











Cable length

0,3 m

Side 1

**Tightening torque** 

0,4 Nm



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| Mounting method                           | inserted, screwed       |
|---|-------------------------|
| Coating contact                           | gold plated             |
| Family construction form                  | M8                      |
| Thread                                    | M8 x 1                  |
| suitable for corrugated tube (internal Ø) | 6,5 mm                  |
| Coding                                    | A                       |
| Material contact                          | Copper alloy            |
| No. of poles                              | 3                       |
| Width across flats                        | SW9                     |
| Side 2                                    |                         |
| Tightening torque                         | 0,6 Nm                  |
| Mounting method                           | inserted, screwed       |
| Coating contact                           | gold plated             |
| Family construction form                  | M12                     |
| Thread                                    | M12 x 1                 |
| suitable for corrugated tube (internal Ø) | 10 mm                   |
| Coding                                    | A                       |
| Material contact                          | Copper alloy            |
| No. of poles                              | 3                       |
| Width across flats                        | SW13                    |
| Commercial data                           |                         |
| ECLASS-6.0                                | 27279218                |
| ECLASS-6.1                                | 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                |
| customs tariff number                     | 85444290                |
| EAN                                       | 4048879122788           |
| EAN                                       | 4048879122788           |
| Packaging unit                            | 1                       |
| Packaging unit                            | 1                       |
| Electrical data   Supply                  |                         |
| Operating voltage AC max.                 | 50 V                    |
| Operating voltage DC max.                 | 60 V                    |
| Current operating per contact max.        | 4 A                     |
| Diagnostics                               |                         |
| Status indication LED                     | no                      |
|   |                         |
| Device protection   Electrical            |                         |
| Degree of protection (EN IEC 60529)       | IP65, IP67, IP68, IP66K |
| Additional condition protection degree    | inserted, screwed       |
| Pollution Degree                          | 3                       |
| Rated surge voltage                       | 1,5 kV                  |
| Material group (IEC 60664-1)              | I                       |
| Mechanical data   Material data           |                         |
| Material housing                          | PUR                     |
| Coating locking                           | Nickeled                |
| Material gasket                           | FKM                     |
| · · · · · · · · · · · · · · · · · · ·     |                         |



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| Locking material  | Zinc die-casting  |
|---|---|
| Mechanical data   Mounting data   |   |
| Mounting method   | inserted, screwed, Shaking protection   |
| Environmental characteristics   Climatic  |   |
| Operating temperature min.  | -30 °C  |
| Operating temperature max.  | 85 °C   |
| Additional condition temperature range  | depending on cable quality  |
|   | asponding on subis quanty   |
| Important installation notes  |   |
| 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  | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  |
| Conformity  |   |
| Product standard  | DIN EN 61076-2-101 (M12), DIN EN 61076-2-114 (M8)   |
| Installation   Cable  |   |
| wire arrangement  | brown, black, blue  |
| Cable identification  | 610   |
| Cable Type  | 1   |
| Jacket Color  | black   |
| Type of Certificate   | cURus   |
| Amount stranding  | 1   |
| Stranding   | 3 wires twisted   |
| wire arrangement  | brown, black, blue  |
| Cable weigth  | 29,37 g/m   |
| Material jacket   | PVC   |
| Shore hardness jacket   | 85 ± 5 Shore A  |
| Freedom from ingredients (jacket)   | lead-free, cadmium-free, CFC-free, silicone-free  |
| Outer-diameter (jacket)   | 4.5 mm  |
|   | ·,• ······  |
| Tolerance outer diameter (sheath)   | +5%   |
| Tolerance outer diameter (sheath)  Material wire insulation   | ±5%<br>PVC  |
| Material wire insulation  | PVC   |
| Material wire insulation Amount wires   | PVC<br>3  |
| Material wire insulation Amount wires Outer diameter insulation   | PVC<br>3<br>1,25 mm   |
| Material wire insulation  Amount wires  Outer diameter insulation  Outer diameter tolerance core insulation   | PVC<br>3<br>1,25 mm<br>± 5 %  |
| Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation   | PVC 3 1,25 mm ± 5 % 45 ± 5 Shore D  |
| Material wire insulation  Amount wires  Outer diameter insulation  Outer diameter tolerance core insulation   | PVC<br>3<br>1,25 mm<br>± 5 %  |
| Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation   | PVC 3 1,25 mm ± 5 % 45 ± 5 Shore D  |
| Material wire insulation  Amount wires  Outer diameter insulation  Outer diameter tolerance core insulation  Shore hardness wire insulation  Material properties wire insulation  | PVC  3  1,25 mm  ± 5 %  45 ± 5 Shore D  good machinability  |
| Material wire insulation  Amount wires  Outer diameter insulation  Outer diameter tolerance core insulation  Shore hardness wire insulation  Material properties wire insulation  Ingredient freeness wire insulation   | PVC  3  1,25 mm  ± 5 %  45 ± 5 Shore D  good machinability  lead-free, cadmium-free, CFC-free, silicone-free  |
| Material wire insulation  Amount wires  Outer diameter insulation  Outer diameter tolerance core insulation  Shore hardness wire insulation  Material properties wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  | PVC  3  1,25 mm  ± 5 %  45 ± 5 Shore D  good machinability  lead-free, cadmium-free, CFC-free, silicone-free  14  |
| Material wire insulation  Amount wires  Outer diameter insulation  Outer diameter tolerance core insulation  Shore hardness wire insulation  Material properties wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  | PVC  3  1,25 mm  ± 5 %  45 ± 5 Shore D  good machinability  lead-free, cadmium-free, CFC-free, silicone-free  14  0,15 mm   |
| Material wire insulation  Amount wires  Outer diameter insulation  Outer diameter tolerance core insulation  Shore hardness wire insulation  Material properties wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)   | PVC  3  1,25 mm  ± 5 %  45 ± 5 Shore D  good machinability  lead-free, cadmium-free, CFC-free, silicone-free  14  0,15 mm  0,25 mm²   |
| Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Material properties wire insulation Ingredient freeness wire insulation Amount strands (wire) Diameter of single wires Conductor crosssection (wire) Material conductor wire  | PVC  3  1,25 mm  ± 5 %  45 ± 5 Shore D  good machinability  lead-free, cadmium-free, CFC-free, silicone-free  14  0,15 mm  0,25 mm²  Stranded copper wire, bare   |
| Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Material properties wire insulation Ingredient freeness wire insulation Amount strands (wire) Diameter of single wires Conductor crosssection (wire) Material conductor wire Conductor type (wire)  | PVC  3  1,25 mm  ± 5 %  45 ± 5 Shore D  good machinability  lead-free, cadmium-free, CFC-free, silicone-free  14  0,15 mm  0,25 mm²  Stranded copper wire, bare  Strand class 5   |
| Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Material properties wire insulation Ingredient freeness wire insulation Amount strands (wire) Diameter of single wires Conductor crosssection (wire) Material conductor wire Conductor type (wire) Nominal voltage AC max.  | PVC  3  1,25 mm  ± 5 %  45 ± 5 Shore D  good machinability  lead-free, cadmium-free, CFC-free, silicone-free  14  0,15 mm  0,25 mm²  Stranded copper wire, bare  Strand class 5  300 V  |
| Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Material properties wire insulation Ingredient freeness wire insulation Amount strands (wire) Diameter of single wires Conductor crosssection (wire) Material conductor wire Conductor type (wire) Nominal voltage AC max. Current load capacity (standard)   | PVC  3  1,25 mm  ± 5 %  45 ± 5 Shore D  good machinability  lead-free, cadmium-free, CFC-free, silicone-free  14  0,15 mm  0,25 mm²  Stranded copper wire, bare  Strand class 5  300 V  to DIN VDE 0298-4   |
| Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Material properties wire insulation Ingredient freeness wire insulation Amount strands (wire) Diameter of single wires Conductor crosssection (wire) Material conductor wire Conductor type (wire) Nominal voltage AC max. Current load capacity (standard) Current load capacity min. wire   | PVC  3  1,25 mm  ± 5 %  45 ± 5 Shore D  good machinability  lead-free, cadmium-free, CFC-free, silicone-free  14  0,15 mm  0,25 mm²  Stranded copper wire, bare  Strand class 5  300 V  to DIN VDE 0298-4  4,5 A  |
| Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Material properties wire insulation Ingredient freeness wire insulation Amount strands (wire) Diameter of single wires Conductor crosssection (wire) Material conductor wire Conductor type (wire) Nominal voltage AC max. Current load capacity (standard) Current load capacity min. wire Electrical resistance line constant wire  | PVC  3  1,25 mm ± 5 %  45 ± 5 Shore D  good machinability  lead-free, cadmium-free, CFC-free, silicone-free  14  0,15 mm  0,25 mm²  Stranded copper wire, bare  Strand class 5  300 V  to DIN VDE 0298-4  4,5 A  79 Ω/km @ 20 °C                              |
| Material wire insulation  Amount wires  Outer diameter insulation  Outer diameter tolerance core insulation  Shore hardness wire insulation  Material properties wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)  Nominal voltage AC max.  Current load capacity (standard)  Current load capacity min. wire  Electrical resistance line constant wire  AC withstand voltage (wire - wire)  Power frequency withstand voltage (wire -  | PVC  3  1,25 mm ± 5 %  45 ± 5 Shore D  good machinability  lead-free, cadmium-free, CFC-free, silicone-free  14  0,15 mm  0,25 mm²  Stranded copper wire, bare  Strand class 5  300 V  to DIN VDE 0298-4  4,5 A  79 Ω/km @ 20 °C  2 kV @ 60 s                 |
| Material wire insulation  Amount wires  Outer diameter insulation  Outer diameter tolerance core insulation  Shore hardness wire insulation  Material properties wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)  Nominal voltage AC max.  Current load capacity (standard)  Current load capacity min. wire  Electrical resistance line constant wire  AC withstand voltage (wire - wire)  Power frequency withstand voltage (wire - jacket)  | PVC  3  1,25 mm  ± 5 %  45 ± 5 Shore D  good machinability  lead-free, cadmium-free, CFC-free, silicone-free  14  0,15 mm  0,25 mm²  Stranded copper wire, bare  Strand class 5  300 V  to DIN VDE 0298-4  4,5 A  79 Ω/km @ 20 °C  2 kV @ 60 s                |
| Material wire insulation  Amount wires  Outer diameter insulation  Outer diameter tolerance core insulation  Shore hardness wire insulation  Material properties wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)  Nominal voltage AC max.  Current load capacity (standard)  Current load capacity min. wire  Electrical resistance line constant wire  AC withstand voltage (wire - wire)  Power frequency withstand voltage (wire - jacket)  Min. operating temperature (static)                                     | PVC  3  1,25 mm  ± 5 %  45 ± 5 Shore D  good machinability  lead-free, cadmium-free, CFC-free, silicone-free  14  0,15 mm  0,25 mm²  Stranded copper wire, bare  Strand class 5  300 V  to DIN VDE 0298-4  4,5 A  79 Ω/km @ 20 °C  2 kV @ 60 s  2 kV @ 60 s   |
| Material wire insulation  Amount wires  Outer diameter insulation  Outer diameter tolerance core insulation  Shore hardness wire insulation  Material properties wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)  Nominal voltage AC max.  Current load capacity (standard)  Current load capacity min. wire  Electrical resistance line constant wire  AC withstand voltage (wire - wire)  Power frequency withstand voltage (wire - jacket)  Min. operating temperature (static)  Max. operating temperature (fixed) | PVC 3 1,25 mm ± 5 % 45 ± 5 Shore D good machinability lead-free, cadmium-free, CFC-free, silicone-free 14 0,15 mm 0,25 mm² Stranded copper wire, bare Strand class 5 300 V to DIN VDE 0298-4 4,5 A 79 Ω/km @ 20 °C 2 kV @ 60 s 2 kV @ 60 s -30 °C 80 °C       |
| Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation Material properties wire insulation Ingredient freeness wire insulation Amount strands (wire) Diameter of single wires Conductor crosssection (wire) Material conductor wire Conductor type (wire) Nominal voltage AC max. Current load capacity (standard) Current load capacity min. wire Electrical resistance line constant wire AC withstand voltage (wire - wire) Power frequency withstand voltage (wire - jacket) Min. operating temperature (static) Max. operating temperature min. (dynamic)             | PVC 3 1,25 mm ± 5 % 45 ± 5 Shore D good machinability lead-free, cadmium-free, CFC-free, silicone-free 14 0,15 mm 0,25 mm² Stranded copper wire, bare Strand class 5 300 V to DIN VDE 0298-4 4,5 A 79 Ω/km @ 20 °C 2 kV @ 60 s 2 kV @ 60 s -30 °C 80 °C -5 °C |



| Flame resistance         | UL 1581 § 1090   IEC 60332-2-2   UL 1581 § 1100 FT2  |
|--------------------------|--|
| 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)   | 5 x Outer diameter                                   |
| Bending radius (dynamic) | 10 x Outer diameter                                  |