



**Product:** [RKT 5-RKT 5-228](#) 

Sensor/Actuator Double-Ended Cordset: Female straight A-coded translucent 5-pin M12 Standard connector to female straight A-coded translucent 5-pin M12 Standard connector, 50 V AC / 60 V DC, 4 A; PUR black cable, 5-wires, 0.50 mm<sup>2</sup>

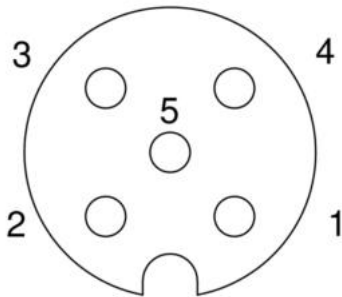
**Product Description**

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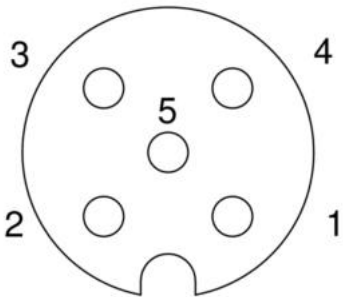
**Technical Drawing**



Female



Female



**Technical Specifications**

Face View Side 1

| Pin 1 | Pin 2 | Pin 3 | Pin 4 | Pin 5        |
|-------|-------|-------|-------|--------------|
| brown | white | blue  | black | green-yellow |

Face View Side 2

| Pin 1 | Pin 2 | Pin 3 | Pin 4 | Pin 5        |
|-------|-------|-------|-------|--------------|
| brown | white | blue  | black | green-yellow |

Product Description

|                        |                              |
|------------------------|------------------------------|
| Product Family:        | Sensor / Actuator Connectors |
| Brand:                 | Lumberg Automation           |
| Connector Type:        | Cordset, double ended        |
| Shielding:             | Unshielded                   |
| Rated Voltage:         | 60 V                         |
| Rated Voltage (UL):    | 30 V AC/DC                   |
| Rated Impulse Voltage: | 1.5 kV                       |
| Operating Voltage:     | 50 V AC / 60 V DC            |
| Rated Current*:        | 4 A                          |
| Rated Current (UL)*:   | 4 A                          |

Technical Data Side 1

|                                      |                                          |
|--------------------------------------|------------------------------------------|
| Product Sub Family:                  | M12 Standard                             |
| Type of Contact / Gender:            | Female                                   |
| Connector Design:                    | Straight                                 |
| Attachment Type:                     | Coupling Nut                             |
| Number of Pins:                      | 5                                        |
| Coding:                              | A                                        |
| Contact Resistance:                  | ≤ 10 mOhm                                |
| Insulation Resistance:               | > 10 <sup>9</sup> Ohm                    |
| Mating Cycles:                       | ≤ 100                                    |
| Ambient Temperature (Operation)*:    | - 40 °C - + 90 °C                        |
| Operating Temperature (UL):          | max. + 50 °C                             |
| Protection Degree / IP Rating**:     | IP65, IP67, IP68 (1 m / 24 h), IP69K     |
| Design Standard:                     | IEC 61076-2-101                          |
| Pollution Degree:                    | 3 acc. to DIN EN 60664-1 (VDE 0110-1)    |
| Overvoltage Category:                | III acc. to DIN EN 60664-1 (VDE 0110-1)  |
| Contact Base Material:               | CuSn                                     |
| Contact Plating:                     | Cu/Au                                    |
| Contact Bearer Material:             | TPU                                      |
| Contact Bearer Color:                | Orange                                   |
| Flammability Class (Contact Bearer): | UL 94 HB                                 |
| Molded Body Material:                | TPU                                      |
| Molded Body Color:                   | Translucent                              |
| Flammability Class (Molded Body):    | UL 94 HB                                 |
| Attachment Material:                 | CuZn                                     |
| Attachment Plating:                  | Nickel-plated                            |
| O-Ring Material:                     | FKM, green                               |
| Fastening Torque (Attachment):       | M 12x1: (50-60) Ncm, hand-tight          |
| Note:                                | Do not connect or disconnect under load. |

Cable Data

|                                         |                               |
|-----------------------------------------|-------------------------------|
| Cable Number:                           | 228                           |
| Conductor Size:                         | 0.5 mm²                       |
| Number of Wires:                        | 5                             |
| Minimal Bending Radius (Fixed Inst):    | > 5 x D                       |
| Minimal Bending Radius (Flexible Inst): | > 10 x D                      |
| Cycles (Bending):                       | > 5 M                         |
| Cycles (Torsion):                       | > 5 M @ ± 360 °/1 m           |
| Conductor material:                     | Cu                            |
| Cable Jacket Material:                  | PUR                           |
| Cable Jacket Color:                     | black matt similarly RAL 9005 |
| Cable Diameter D:                       | ø 5.40 ± 0.20 mm              |
| Wire Insulation Material:               | PP                            |
| Insulated Wire Diameter:                | ø 1.50 ± 0.05 mm              |

|                                           |                                                                                                                                                                                |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient Temperature (Fixed Installation): | - 50 °C - + 105 °C (UL: + 80 °C)                                                                                                                                               |
| Ambient Temperature (Flex Installation):  | - 25 °C - + 105 °C (UL: + 80 °C)                                                                                                                                               |
| Ambient Temperature (Drag Chain Inst):    | - 25 °C - + 60 °C                                                                                                                                                              |
| UL Cable Type:                            | AWM: 20549                                                                                                                                                                     |
| Flammability Class (Cable Jacket):        | DIN EN 60332-2-2, VDE 0482-332-2-2, IEC 60332-2-2, CSA FT-2                                                                                                                    |
| Cable Characteristics:                    | Good microbes and hydrolysis resistance; Mainly plasticizer diffusion free; Exclusion of PVC and silicone; Free of lacquer wetting disturbing substances; Coldness flexibility |

Technical Data
 Side 2

|                                              |                                         |
|----------------------------------------------|-----------------------------------------|
| Product Sub Family, Side 2:                  | M12 Standard                            |
| Type of Contact / Gender, Side 2:            | Female                                  |
| Connector Design, Side 2:                    | Straight                                |
| Attachment Type, Side 2:                     | Coupling Nut                            |
| Number of Pins, Side 2:                      | 5                                       |
| Coding, Side 2:                              | A                                       |
| Contact Resistance, Side 2:                  | ≤ 10 mOhm                               |
| Insulation Resistance, Side 2:               | > 10^9 Ohm                              |
| Mating Cycles, Side 2:                       | ≤ 100                                   |
| Ambient Temperature (Operation), Side 2*:    | - 40 °C - + 90 °C                       |
| Operating Temperature (UL), Side 2:          | max. + 50 °C                            |
| Protection Degree / IP Rating, Side 2**:     | IP65, IP67, IP68 (1 m / 24 h), IP69K    |
| Design Standard, Side 2:                     | IEC 61076-2-101                         |
| Pollution Degree, Side 2:                    | 3 acc. to DIN EN 60664-1 (VDE 0110-1)   |
| Overvoltage Category, Side 2:                | III acc. to DIN EN 60664-1 (VDE 0110-1) |
| Contact Base Material, Side 2:               | CuSn                                    |
| Contact Plating, Side 2:                     | Cu/Au                                   |
| Contact Bearer Material, Side 2:             | TPU                                     |
| Contact Bearer Color, Side 2:                | Orange                                  |
| Flammability Class (Contact Bearer), Side 2: | UL 94 HB                                |
| Molded Body Material, Side 2:                | TPU                                     |
| Molded Body Color, Side 2:                   | Translucent                             |
| Flammability Class (Molded Body), Side 2:    | UL 94 HB                                |
| Attachment Material, Side 2:                 | CuZn                                    |
| Attachment Plating, Side 2:                  | Nickel-plated                           |
| O-Ring Material, Side 2:                     | FKM, green                              |
| Fastening Torque (Attachment), Side 2:       | M 12x1: (50-60) Ncm, hand-tight         |

Approvals

|          |                |
|----------|----------------|
| UL-File: | E315587        |
| UL:      | UL 2238; cURus |

Safety & Environmental Compliance

|                 |     |
|-----------------|-----|
| RoHS Compliant: | yes |
|-----------------|-----|

Resistances

|                 |                                                 |
|-----------------|-------------------------------------------------|
| Halogenfree:    | DIN EN 50267-2-1, IEC 60754-1, VDE 0482-267-2-1 |
| Oil Resistance: | IEC 60811:404                                   |

Notes

|                                     |                                                                                              |
|-------------------------------------|----------------------------------------------------------------------------------------------|
| Protection Degree / IP Rating Note: | ** only if mounted and locked in combination with Hirschmann / Lumberg Automation connector. |
| Note Derating:                      | Notice derating                                                                              |

Variants

| Item # | Item Description      | Cable Length |
|--------|-----------------------|--------------|
| 6772   | RKT 5-RKT 5-228/0,1 M | 0.1 m        |
| 84565  | RKT 5-RKT 5-228/0,5 M | 0.5 m        |
| 30084  | RKT 5-RKT 5-228/10 M  | 10 m         |
| 104423 | RKT 5-RKT 5-228/15 M  | 15 m         |

|       |                       |       |
|-------|-----------------------|-------|
| 30086 | RKT 5-RKT 5-228/2 M   | 2 m   |
| 3940  | RKT 5-RKT 5-228/3,5 M | 3.5 m |
| 30088 | RKT 5-RKT 5-228/5 M   | 5 m   |
| 30089 | RKT 5-RKT 5-228/7,5 M | 7.5 m |

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