



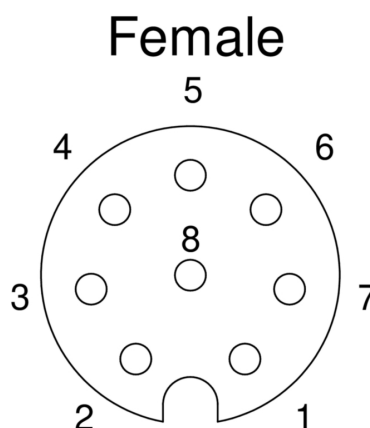
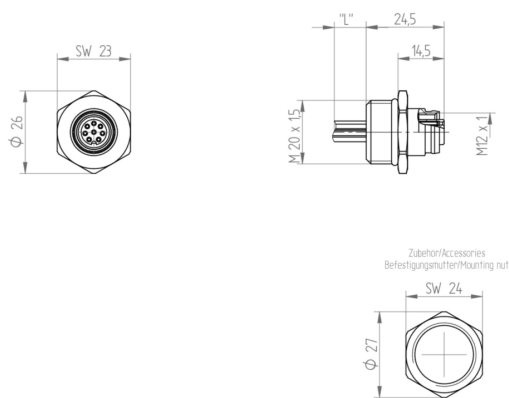
**Product:** [RKFM 8/20 M](#)

M12 Standard Sensor/Actuator Receptacle Connector: Female, front mount, M12 - mating side, stranded wires - connecting side, 8-pin, A-coded, unshielded, metallic grey housing, 30 V AC/DC, 2 A

### Product Description

M12 Standard Sensor/Actuator Receptacle Connector: Female, front mount, M12 - mating side, stranded wires - connecting side, 8-pin, A-coded, unshielded, metallic grey housing, 30 V AC/DC, 2 A

### Technical Drawing



### Technical Specifications

#### Face View

| Pin 1 | Pin 2 | Pin 3 | Pin 4  | Pin 5 | Pin 6 | Pin 7 | Pin 8 |
|-------|-------|-------|--------|-------|-------|-------|-------|
| white | brown | green | yellow | grey  | pink  | blue  | red   |

#### Technical Data

|                           |                              |
|---------------------------|------------------------------|
| Product Family:           | Sensor / Actuator Connectors |
| Product Sub Family:       | M12 Standard                 |
| Mating Side:              | M12                          |
| Connecting Side:          | Stranded Wires               |
| Brand:                    | Lumberg Automation           |
| Connector Type:           | Receptacle                   |
| Type of Contact / Gender: | Female                       |
| Connector Design:         | Front Mount                  |
| Number of Pins:           | 8                            |
| Coding:                   | A                            |
| Attachment Type:          | Screw-Locking                |
| Rated Voltage:            | 30 V                         |
| Rated Voltage (UL):       | 30 V ac/dc                   |
| Rated Impulse Voltage:    | 0.8 kV                       |
| Operating Voltage:        | 30 V AC/DC                   |
| Rated Current*:           | 2 A                          |

|                                   |                                         |
|-----------------------------------|-----------------------------------------|
| Rated Current (UL)*:              | 2 A                                     |
| Contact Resistance:               | ≤ 10 mOhm                               |
| Insulation Resistance:            | > 10 <sup>9</sup> Ohm                   |
| Mating Cycles:                    | ≤ 100                                   |
| Type of Connection:               | Crimp                                   |
| Thread Size:                      | M20x1.5                                 |
| Ambient Temperature (Operation)*: | - 25 °C - + 85 °C                       |
| Operating Temperature (UL):       | max. + 50 °C                            |
| Protection Degree / IP Rating**:  | IP65, IP67                              |
| Design Standard:                  | IEC 61076-2-101                         |
| Pollution Degree:                 | 3 acc. to DIN EN 60664-1 (VDE 0110-1)   |
| Clearance / Creepage Distance:    | DIN EN 60664-1 (2008/01); VDE 0110-1    |
| Overvoltage Category:             | III acc. to DIN EN 60664-1 (VDE 0110-1) |

Materials

|                                      |               |
|--------------------------------------|---------------|
| Contact Base Material:               | CuZn          |
| Contact Plating:                     | Cu/Au         |
| Contact Bearer Material:             | TPU           |
| Contact Bearer Color:                | Black         |
| Flammability Class (Contact Bearer): | UL 94 HB      |
| Potted:                              | Yes           |
| Housing Material:                    | CuZn          |
| Housing Plating:                     | Nickel-plated |
| Housing Color:                       | Silver        |
| Attachment Material:                 | CuZn          |
| Attachment Plating:                  | Nickel-plated |
| O-Ring Material:                     | FKM           |

Additional Technical Data

|                                  |                                  |
|----------------------------------|----------------------------------|
| Fastening Torque (Attachment):   | M 12x1: (50-60) Ncm, hand-tight  |
| Accessories to Order Separately: | 000-025-048 Mounting Nut M20x1.5 |

Cable Data

|                                           |                                                                    |
|-------------------------------------------|--------------------------------------------------------------------|
| Cable Number:                             | 908 44                                                             |
| Conductor Size:                           | 0.227 mm²                                                          |
| Number of Wires:                          | 8                                                                  |
| Conductor material:                       | Cu                                                                 |
| Wire Insulation Material:                 | PVC                                                                |
| Insulated Wire Diameter:                  | ø 1.45 mm ± 0.1 mm                                                 |
| Ambient Temperature (Fixed Installation): | - 40 °C - + 90 °C                                                  |
| Ambient Temperature (Flex Installation):  | - 20 °C - + 90 °C                                                  |
| UL Cable Type:                            | AWM: 1007                                                          |
| Flammability Class (Cable Jacket):        | DIN EN 60332-1-2, VDE 0482-332-1-2, IEC 60332-1-2, UL-VW1, CSA-FT1 |
| Core Colors:                              | blue, brown, red, green, yellow, pink, grey, white                 |

Approvals

|          |         |
|----------|---------|
| UL-File: | E315587 |
| UL:      | cURus   |

Safety & Environmental Compliance

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

Notes

|                                     |                                                                                                                                                                                                               |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Note Derating:                      | * Notice derating                                                                                                                                                                                             |
| Protection Degree / IP Rating Note: | * only if mounted and locked in combination with Hirschmann / Lumberg connector. On the installation side tightness has to be assured by taking proper measures.                                              |
| Note:                               | The receptacle connector is constructively intended for usage in IP67-products. To realise this protection class, the estimated location has to be designed accordingly. Further details see IEC 61076-2-101. |

|          |                                                                                                                                                                                                              |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| UL Note: | The receptacle connector is constructively intended for usage in IP67-products. To realise this protection class, the estimated location has to be designed accordingly. Further details see IEC 61076-2-101 |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Variants**

| Item # | Item Description | Cable Length |
|--------|------------------|--------------|
| 50616  | RKFM 8/20/0,5 M  | 0.5 m        |

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