

# KC-0161ZE451025 - Master cable



1591241

<https://www.phoenixcontact.com/us/products/1591241>

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Master cable, application: Sensor/actuator box Plastic, number of positions: 19, slot assignment: Double, status display: no; master cable connection: M23 plug connection, PUR/PVC, cable length: 25 m, shielding: no

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1591241                        |
| Packing unit                         | 1 pc                           |
| Minimum order quantity               | 1 pc                           |
| Note                                 | Made to order (non-returnable) |
| Product key                          | ABRDCB                         |
| GTIN                                 | 4046356188944                  |
| Weight per piece (including packing) | 44.72 g                        |
| Weight per piece (excluding packing) | 44.72 g                        |
| Country of origin                    | DE                             |

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## Technical data

### Notes

|                    |  |
|--------------------|--|
| Notes on operation | The master cable is earmarked for use on the sensor/actuator boxes with an M23 plug-in connection. |
|--------------------|--|

### Product properties

|                     |                         |
|---------------------|-------------------------|
| Product type        | Master cable, assembled |
| Application         | Sensor/actuator box     |
| Number of positions | 19                      |

### Electrical properties

|                       |       |
|-----------------------|-------|
| Nominal voltage $U_N$ | 150 V |
|-----------------------|-------|

### Connection data

|                   |                  |
|-------------------|------------------|
| Connection method | Fixed connection |
|-------------------|------------------|

### Signaling

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

### Material specifications

|  |             |
|--|-------------|
| Material Housing   | PUR         |
| Material of contact, master cable side                   | CU alloy    |
| Material of the contact carrier on the master cable side | PA          |
| Material of contact surface, master cable side           | gold-plated |

### Connector

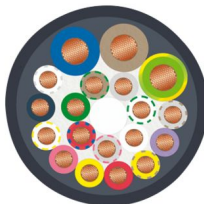
#### Connection 2

|                   |        |
|-------------------|--------|
| Head design       | Socket |
| Head cable outlet | angled |
| Head thread type  | M23    |

### Cable/line

|              |      |
|--------------|------|
| Cable length | 25 m |
|--------------|------|

#### PUR/PVC black [PUR]

|                     |  |
|---------------------|--|
| Dimensional drawing |  |
|---------------------|--|

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|   |  |
|---|--|
| Cable weight                                  | 183.7 kg/km  |
| UL AWM Style                                  | 20549 (80°C/300 V)   |
| Number of positions                           | 19   |
| Shielded                                      | no   |
| Cable type                                    | PUR/PVC black [PUR]  |
| Conductor structure signal line               | 28x 0.15 mm  |
| AWG signal line                               | 20   |
| Conductor structure, voltage supply           | 56x 0.15 mm  |
| AWG power supply                              | 17   |
| Conductor cross-section                       | 16x 0.5 mm <sup>2</sup> (Signal line)<br>3x 1 mm <sup>2</sup> (power line)   |
| Wire diameter incl. insulation                | 1.5 mm ±0.1 mm (Signal line)<br>2.1 mm ±0.1 mm (power line)  |
| External cable diameter                       | 10.50 mm ±0.2 mm   |
| Outer sheath, material                        | PUR  |
| External sheath, color                        | black RAL 9005   |
| Conductor material                            | Bare Cu litz wires   |
| Material wire insulation                      | PVC  |
| Single wire, color                            | brown, blue, green/yellow, white, green, yellow, gray, pink, red, black, violet, gray/pink, red/blue, white/green, brown/green, white/yellow, yellow/brown, white/gray, gray/brown |
| Inner sheath thickness                        | ≥ 0.15 mm  |
| Thickness, outer sheath                       | ≥ 0.76 mm  |
| Overall twist                                 | Wires twisted in layers  |
| Nominal voltage, cable                        | 300 V  |
| Test voltage                                  | 2000 V   |
| Minimum bending radius, fixed installation    | 7.5 x D  |
| Minimum bending radius, flexible installation | 10 x D   |
| Smallest bending radius, fixed installation   | 79 mm  |
| Smallest bending radius, movable installation | 105 mm   |
| Dynamic load capacity (bending)               | Max. bending cycles: 1500000, Bending radius: 10 x D, Traversing path: 2 m, Traversing rate: 2 m/s   |
| Flame resistance                              | according to DIN EN 50265  |
| Resistance to oil                             | according to VDE 0472 Part 803   |
| Other resistance                              | Highly resistant to acids, alkaline solutions and solvents   |
| Special properties                            | Silicone-free  |
| Ambient temperature (operation)               | -40 °C ... 90 °C (cable, fixed installation)<br>-5 °C ... 80 °C (Cable, flexible installation)   |

## Environmental and real-life conditions

### Ambient conditions

|                                 |                                   |
|---------------------------------|-----------------------------------|
| Degree of protection            | IP65<br>IP67                      |
| Ambient temperature (operation) | -40 °C ... 125 °C (Plug / socket) |

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## Drawings

### Schematic diagram



Pin assignment M23 socket, 19-pos., female side view

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## Environmental product compliance

### China RoHS

|  |   |
|--|---|
| Environment friendly use period (EFUP) | EFUP-50   |
|  | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |

### EU REACH SVHC

|                                     |                            |
|-------------------------------------|----------------------------|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

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