

# SAC-6P- 1,0-U20/MINFR - Power cable



1416591

<https://www.phoenixcontact.com/us/products/1416591>

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Power cable, 6-position, PVC, yellow, free cable end, on Socket angled 7/8"-16UNF, coding: A, cable length: 1 m

## Your advantages

- Easy and safe: 100 % electrically tested plug-in components

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1416591                        |
| Packing unit                         | 1 pc                           |
| Minimum order quantity               | 1 pc                           |
| Note                                 | Made to order (non-returnable) |
| Sales key                            | BF14                           |
| Product key                          | AF1IMB                         |
| GTIN                                 | 4055626223148                  |
| Weight per piece (including packing) | 22.22 g                        |
| Weight per piece (excluding packing) | 22.22 g                        |
| Customs tariff number                | 85444290                       |
| Country of origin                    | MX                             |

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## Technical data

### Product properties

|                      |                       |
|----------------------|-----------------------|
| Product type         | Sensor/actuator cable |
| Application          | Standard              |
| Number of positions  | 6                     |
| No. of cable outlets | 1                     |
| Shielded             | no                    |
| Coding               | A                     |

### Material specifications

|                                        |                   |
|----------------------------------------|-------------------|
| Flammability rating according to UL 94 | V0                |
| Material of grip body                  | PVC               |
| Contact material                       | CuZn              |
| Contact surface material               | Au                |
| Contact carrier material               | PVC               |
| Material for screw connection          | Anodized aluminum |

### Electrical properties

|                       |                            |
|-----------------------|----------------------------|
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Nominal voltage $U_N$ | 600 V AC/DC (UL rating)    |
|                       | 50 V AC/DC (IEC rating)    |
| Nominal current $I_N$ | 8 A                        |

### Mechanical properties

#### Mechanical data

|                             |     |
|-----------------------------|-----|
| Insertion/withdrawal cycles | 100 |
|-----------------------------|-----|

### Signaling

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

### Connection data

#### Conductor connection

|                   |                         |
|-------------------|-------------------------|
| Tightening torque | 10 lb <sub>F</sub> ·in. |
|                   | 1.12 Nm                 |

### Connector

#### Connection 1

|      |                |
|------|----------------|
| Type | free cable end |
|------|----------------|

#### Connection 2

|      |                          |
|------|--------------------------|
| Type | Socket angled 7/8"-16UNF |
|------|--------------------------|

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|                     |   |
|---------------------|---|
| Number of positions | 6 |
| Coding type         | A |

## Cable/line

|              |     |
|--------------|-----|
| Cable length | 1 m |
|--------------|-----|

### Yellow, STOOW [U20]

|                                               |                                                    |
|-----------------------------------------------|----------------------------------------------------|
| Number of positions                           | 6                                                  |
| Shielded                                      | no                                                 |
| Cable type                                    | Yellow, STOOW [U20]                                |
| Conductor structure, voltage supply           | 65 x AWG 32                                        |
| Conductor cross section                       | 6 x AWG 16                                         |
| External cable diameter                       | 13.70 mm                                           |
| Outer sheath, material                        | PVC                                                |
| External sheath, color                        | yellow                                             |
| Conductor material                            | Bare Cu litz wires                                 |
| Single wire, color                            | white 1, red 2, green 3, orange 4, black 5, blue 6 |
| Nominal voltage, cable                        | 600 V                                              |
| Minimum bending radius, fixed installation    | 4 x D                                              |
| Minimum bending radius, flexible installation | 12.5 x D                                           |
| Smallest bending radius, fixed installation   | 55 mm                                              |
| Smallest bending radius, movable installation | 172 mm                                             |
| Flame resistance                              | UL 1581, FT2                                       |
| Resistance to oil                             | Premium oil resistance (jacket and conductor)      |
| Other resistance                              | UV resistant (720 h) (UL 2556)                     |
| Ambient temperature (operation)               | -40 °C ... 105 °C (cable, fixed installation)      |
|                                               | -30 °C ... 105 °C (Cable, flexible installation)   |

## Environmental and real-life conditions

### Ambient conditions

|                                                                   |                                                  |
|-------------------------------------------------------------------|--------------------------------------------------|
| Degree of protection                                              | IP68                                             |
| Ambient temperature (operation) (male connector/female connector) | -20 °C ... 105 °C (Plug / socket)                |
| Ambient temperature (operation) (Cable, fixed installation)       | -40 °C ... 105 °C (cable, fixed installation)    |
| Ambient temperature (operation) (Cable, flexible installation)    | -30 °C ... 105 °C (Cable, flexible installation) |

# SAC-6P- 1,0-U20/MINFR - Power cable

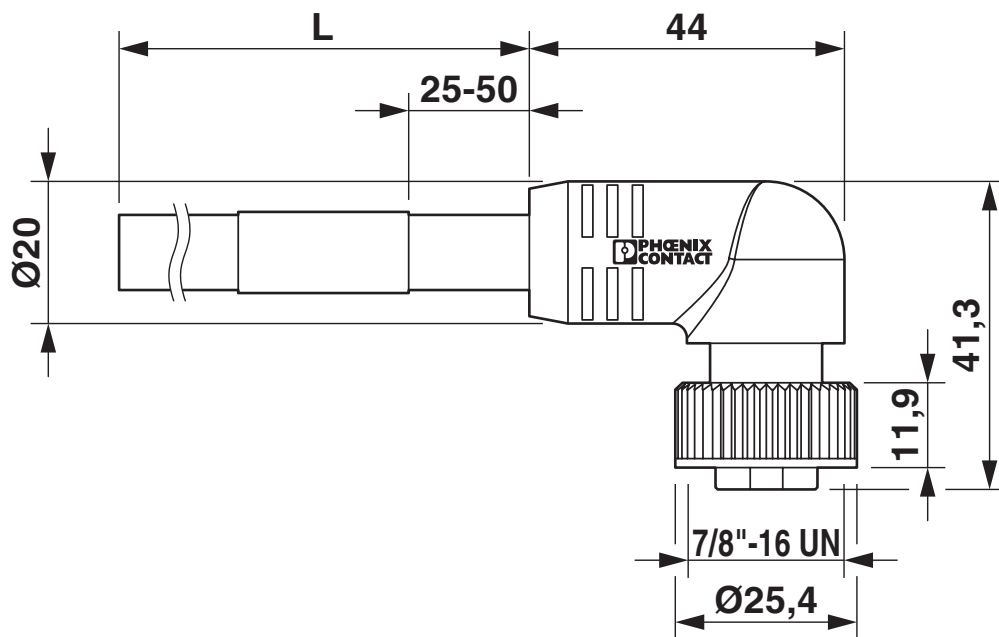


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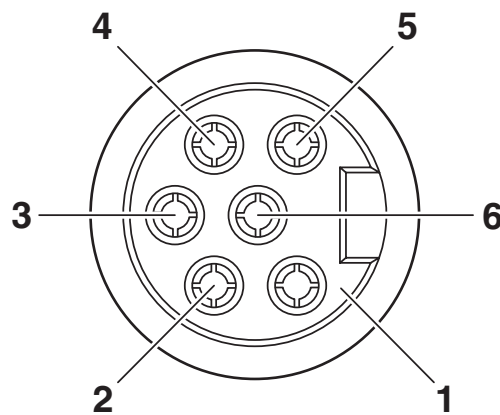
## Drawings

Dimensional drawing



7/8\"-16UNF socket, angled

Schematic diagram



Pin assignment, socket, 7/8\"-16UNF, 6-pos., view of female side

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Circuit diagram



Contact assignment of 7/8" socket

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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27060311 |
| ECLASS-15.0 | 27060311 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC001855 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 31251501 |
|-------------|----------|

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## Environmental product compliance

### EU RoHS

|                                         |                    |
|-----------------------------------------|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|-----------------------------------------|--------------------|

### China RoHS

|                                        |                                          |
|----------------------------------------|------------------------------------------|
| Environment friendly use period (EFUP) | EFUP-E                                   |
|                                        | No hazardous substances above the limits |

### EU REACH SVHC

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

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