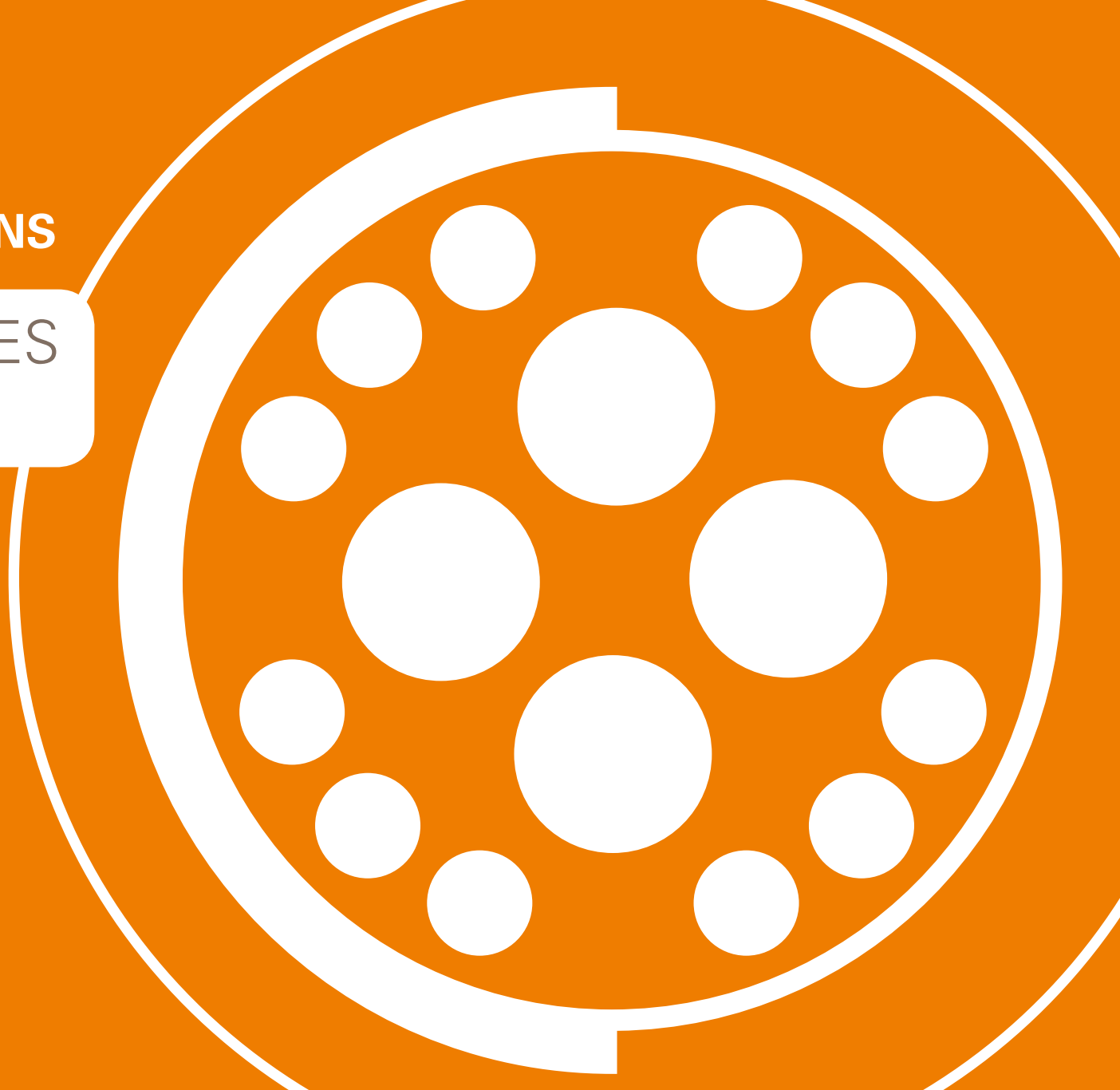


**TECHNICAL SPECIFICATIONS**

FISCHER CORE SERIES  
**PLASTIC**



FISCHER  
CORE SERIES  
**PLASTIC**





## KEY FEATURES



Specially designed to ensure maximum user safety and electric shock protection, the Fischer Core Series Plastic features fully insulated plastic connector bodies.

The plug and receptacle can be color-coded to enable easy identification and prevent incorrect mating. Convenient to use, the SureGrip plug body can be securely and easily gripped with gloves. Resistant to up to 5,000 mating cycles and sterilizable, the Fischer Core Series Plastic is ideal for medical and industrial applications.

### COMPLETELY STERILIZABLE\*

- Autoclave, Cidex, EtO, gamma radiation, Steris® or Sterrad®
- Integrated into FDA-approved medical devices

### HIGH DENSITY OF CONTACTS

- High signal density
- Highly reliable signal path

### EASY TO USE

- Clear coding facilitates easy operation
- Immediate identification of multiple connectors

### DURABILITY

- Sealed up to IP68
- Over 5,000 mating cycles
- Resistant to large temperature variations

\*Only for 405 Series.



## **405 - PLUGS & RECEPTACLE**

### **CABLE MOUNTED PLUGS**

- Body style selection (S/SI 405).....E3

### **CABLE MOUNTED RECEPTACLE**

- Body style selection (DBP 405).....E3
- Technical dimensions.....E4
- Part numbering .....E5
- Electrical & contact configurations.....E6
- PCB hole pattern pin layout.....E7

## **4032 - PLUG & RECEPTACLES**

### **CABLE MOUNTED PLUG**

- Body style selection (S/SI 4032).....E3

### **CABLE MOUNTED RECEPTACLES**

- Body style selection (DBP/DBPO 4032) .....E3
- Technical dimensions.....E12
- Part numbering .....E13
- Electrical & contact configurations.....E14
- PCB hole pattern pin layout.....E15

### **FOR ALL PLASTIC 405**

- Accessories .....E8
- Technical information.....E10
- Cross-line technical information.....A9

### **FOR ALL PLASTIC 4032**

- Accessories .....E16
- Technical information.....E18
- Cross-line technical information.....A9



### 405 - PLUGS

#### CABLE MOUNTED



| BODY STYLES        | S 405     | SI 405    |
|--------------------|-----------|-----------|
| Locking system     | Push-pull | Push-pull |
| Sealing            | IP50/IP67 | IP50/IP67 |
| Design             | Standard  | Standard  |
| Integral shielding | Yes       | No        |

### 4032 - PLUG

#### CABLE MOUNTED



| BODY STYLE         | SI 4032   |
|--------------------|-----------|
| Locking system     | Push-pull |
| Sealing            | IP50/IP68 |
| Design             | Standard  |
| Integral shielding | No        |

### 405 - RECEPTACLE

#### PANEL MOUNTED



| BODY STYLE | DBP 405  |
|------------|----------|
| Sealing    | IP50     |
| Design     | Standard |

### 4032 - RECEPTACLES

#### PANEL MOUNTED



| BODY STYLES | DBP 4032 | DBPO 4032 |
|-------------|----------|-----------|
| Sealing     | IP50     | IP68      |
| Design      | Standard | Standard  |

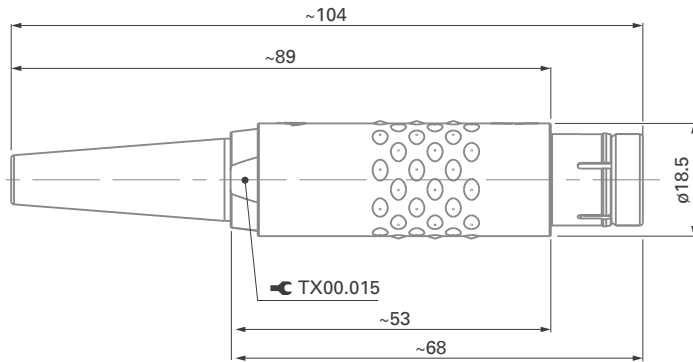


### 405 - PLUGS

#### CABLE MOUNTED

##### S/SI 405

##### BODY STYLES

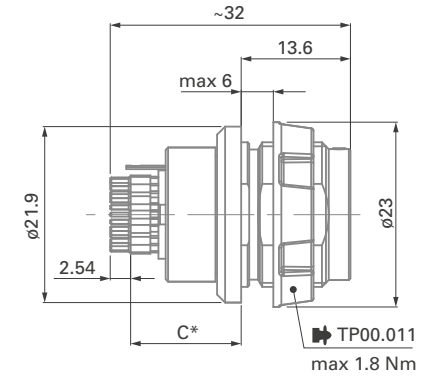


### 405 - RECEPTACLE

#### PANEL MOUNTED

##### DBP 405

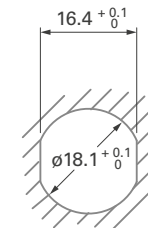
##### BODY STYLE



\* See contact configurations page E 6.

#### PANEL CUT-OUT

Figure 1





405

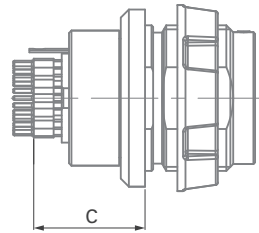
|                              | Housing design  |     |   |     |   | Standard options |   |   |   |   |
|------------------------------|---|-----|---|-----|---|------------------|---|---|---|---|
|                              | S   | 405 | A | 087 | - | B                | 3 | L | 2 | R |
| <b>Body style</b>            | <ul style="list-style-type: none"> <li>■ Plug, with integral shielding = <b>S</b></li> <li>■ Plug, without integral shielding = <b>SI</b></li> <li>■ Receptacle, rear panel mounted = <b>DBP</b></li> </ul>                       |     |   |     |   |                  |   |   |   |   |
| <b>Series</b>                | <ul style="list-style-type: none"> <li>■ <b>405</b></li> </ul>  |     |   |     |   |                  |   |   |   |   |
| <b>Contact polarity</b>      | <ul style="list-style-type: none"> <li>■ Plugs have pins. Receptacles have sockets = <b>A</b></li> <li>■ Plugs have sockets. Receptacles have pins = <b>Z</b></li> </ul>  |     |   |     |   |                  |   |   |   |   |
| <b>Contact configuration</b> | <ul style="list-style-type: none"> <li>■ See page E 6</li> </ul>  |     |   |     |   |                  |   |   |   |   |
| <b>Body color</b>            | <ul style="list-style-type: none"> <li>■ Beige = <b>B</b></li> <li>■ Anthracite = <b>C</b></li> </ul>   |     |   |     |   |                  |   |   |   |   |
| <b>Insulator material</b>    | <ul style="list-style-type: none"> <li>■ PEEK = <b>3</b></li> </ul>   |     |   |     |   |                  |   |   |   |   |
| <b>Contact type</b>          | <ul style="list-style-type: none"> <li>■ Solder = <b>J</b></li> <li>■ Crimp = <b>K</b></li> <li>■ PCB = <b>L</b></li> </ul>   |     |   |     |   |                  |   |   |   |   |
| <b>Color coding</b>          | <ul style="list-style-type: none"> <li>■ Anthracite = <b>2</b></li> <li>■ Green = <b>3</b></li> <li>■ Blue = <b>4</b></li> <li>■ Yellow = <b>5</b></li> <li>■ Beige = <b>8</b></li> </ul>   |     |   |     |   |                  |   |   |   |   |
| <b>Bend relief material</b>  | <ul style="list-style-type: none"> <li>■ None = <b>R</b></li> <li>■ Silicone (6.5 dia.) = <b>S</b></li> <li>■ TPE (6.5 dia.) = <b>T</b></li> <li>■ Silicone (3.5 dia.) = <b>U</b></li> <li>■ TPE (3.5 dia.) = <b>W</b></li> </ul> |     |   |     |   |                  |   |   |   |   |

PLASTIC



**405**

Figure 1



| References                          | Pin layout | Number of contacts |    | Contact types |       |      | Insulating material | Contact $\varnothing$ [mm]                             | Wire size  |                 | PCB<br>Pin diameter [mm] | C [mm]<br>see Figure 1 | Test voltage [kV] in mated position |                    |                 |                    | Current <sup>1)</sup> [A] |
|-------------------------------------|------------|--------------------|----|---------------|-------|------|---------------------|--|--|-----------------|--------------------------|------------------------|-------------------------------------|--------------------|-----------------|--------------------|---------------------------|
|                                     |            |                    |    | Solder        | Crimp | PCB  |                     |  | Solder contacts  | Crimp contacts  |                          |                        | AC r.m.s                            |                    | DC              |                    |                           |
|                                     |            |                    |    |               |       |      |                     |  |  |                 |                          |                        | Contact to body                     | Contact to contact | Contact to body | Contact to contact |                           |
| 405 <sup>A</sup> / <sub>Z</sub> 087 |            | 2                  |    |               |       | PEEK | 3.0                 | max $\varnothing$ 3.13mm<br>AWG9 [1]<br>AWG10 [105/30] | -  | -               | -                        | -                      | 1.2                                 | 1.6                | 2.3             | 3.0                | 30                        |
| 405 <sup>A</sup> / <sub>Z</sub> 052 |            | 3                  |    |               |       | PEEK | 2.0                 | max $\varnothing$ 2.03mm<br>AWG13 [1]<br>AWG14 [7/22]  | -  | -               | -                        | -                      | 2.0                                 | 2.5                | 3.0             | 3.5                | 23                        |
| 405 <sup>A</sup> / <sub>Z</sub> 054 |            | 7                  | 1  |               |       | PEEK | 2.0                 | max $\varnothing$ 2.03mm<br>AWG13 [1]<br>AWG14 [7/22]  | -  | --              | -                        | -                      | 3.0                                 | 2.0                | 4.0             | 3.0                | 25                        |
|                                     |            |                    | 6  |               |       |      | 1.3                 | max $\varnothing$ 1.18mm<br>AWG17 [1]<br>AWG18 [16/30] | -  | --              | -                        | 1.8                    | 1.5                                 | 2.5                | 2.0             | 7.0                |                           |
| 405 <sup>A</sup> / <sub>Z</sub> 101 |            | 9                  | 1  |               |       | PEEK | 2.0                 | max $\varnothing$ 2.03mm<br>AWG13 [1]<br>AWG14 [7/22]  | -  | A: 0.50<br>Z: - | A: 10.8<br>Z: -          | -                      | 3.0                                 | 2.0                | 4.0             | 3.0                | 25                        |
|                                     |            |                    | 8  |               |       |      | 1.3                 | max $\varnothing$ 1.18mm<br>AWG17 [1]<br>AWG18 [16/30] | -  | A: 0.50<br>Z: - | A: 10.8<br>Z: -          | 1.8                    | 1.5                                 | 2.5                | 2.0             | 5.0                |                           |
| 405 <sup>A</sup> / <sub>Z</sub> 069 |            | 12                 |    |               |       | PEEK | 1.3                 | max $\varnothing$ 1.18mm<br>AWG17 [1]<br>AWG18 [16/30] | -  | A: 0.50<br>Z: - | A: 13.8<br>Z: -          | -                      | 1.4                                 | 1.5                | 1.8             | 2.0                | 8.0                       |
| 405 <sup>A</sup> / <sub>Z</sub> 104 |            | 13                 | 3  |               |       | PEEK | 1.3                 | max $\varnothing$ 1.18mm<br>AWG17 [1]<br>AWG18 [16/30] | -  | A: 0.50<br>Z: - | A: 13.8<br>Z: -          | -                      | 2.5                                 | 1.5                | 3.8             | 2.2                | 14                        |
|                                     |            |                    | 10 |               |       |      | 0.7                 | max $\varnothing$ 0.79mm<br>AWG21 [1]<br>AWG22 [7/30]  | -  | A: 0.50<br>Z: - | A: 13.8<br>Z: -          | 1.3                    | 1.5                                 | 1.8                | 2.2             | 1.0                |                           |
| 405 <sup>A</sup> / <sub>Z</sub> 110 |            | 16                 | 4  |               |       | PEEK | 1.6                 | max $\varnothing$ 1.86mm<br>AWG13 [1]<br>AWG14 [7/22]  | -  | A: 0.50<br>Z: - | A: 13.8<br>Z: -          | -                      | 1.6                                 | 1.3                | 2.8             | 2.1                | 14                        |
|                                     |            |                    | 12 |               |       |      | 0.7                 | max $\varnothing$ 0.79mm<br>AWG21 [1]<br>AWG22 [7/30]  | -  | A: 0.50<br>Z: - | A: 13.8<br>Z: -          | 1.0                    | 1.2                                 | 1.5                | 2.0             | 1.0                |                           |
| 405 <sup>A</sup> / <sub>Z</sub> 038 |            | 18                 |    |               |       | PEEK | 0.9                 | max $\varnothing$ 0.79mm<br>AWG21 [1]<br>AWG22 [7/30]  | max $\varnothing$ 0.83mm<br>min $\varnothing$ 0.38mm<br>AWG22-26 | A: 0.50<br>Z: - | A: 13.3<br>Z: -          | -                      | 1.4                                 | 1.6                | 1.8             | 2.2                | 4.5                       |
| 405 <sup>A</sup> / <sub>Z</sub> 102 |            | 27                 |    |               |       | PEEK | 0.7                 | max $\varnothing$ 0.79mm<br>AWG21 [1]<br>AWG22 [7/30]  | max $\varnothing$ 0.62mm<br>min $\varnothing$ 0.38mm<br>AWG24-28 | A: 0.50<br>Z: - | A: 13.8<br>Z: -          | -                      | 1.2                                 | 1.5                | 1.5             | 2.0                | 3.0                       |

<sup>1)</sup> Current per contact at 40°C temperature rise measured on the basic curve according to IEC 60512-5-2-5b. For the max. operating current a reduction factor must be used and limitations due to the size of the wires and the permissible upper temperature limit of the materials employed must be taken into account. See page A17 for details.





405 - PCB LAYOUT

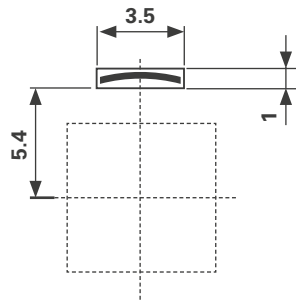
S/SI 405

DBP 405

BODY STYLES



Minimum clearance for ground contact



View from F - Number of contacts (reference)

| Polarity | 2 (087) | 3 (052) | 7 (054) | 9 (101) | 12 (069) |
|----------|---------|---------|---------|---------|----------|
| A        |         |         |         |         |          |
| Z        |         |         |         |         |          |

| Polarity | 13 (104) | 16 (110) | 18 (038) | 27 (102) |
|----------|----------|----------|----------|----------|
| A        |          |          |          |          |
| Z        |          |          | -        |          |

All dimensions and images shown are in millimeters and are for reference only.

**405 - CABLE CLAMP SETS****UNSHIELDED METAL**

| Cable O.D. (mm) | Use with PEEK Insulators |
|-----------------|--------------------------|
| 2.5 - 3.5       | E3 105.6/3.5             |
| 3.5 - 4.5       | E3 105.6/4.5             |
| 4.5 - 5.5       | E3 105.6/5.5             |
| 5.5 - 6.5       | E3 105.6/6.5             |
| 6.5 - 7.5       | E3 105.6/7.5             |
| 7.5 - 8.5       | E3 105.6/8.5             |
| 8.5 - 9.5       | E3 105.6/9.5             |
| 9.5 - 10.5      | E3 105.6/10.5            |

For use with unshielded cable or when shield is not carried through connector body.

**SHIELDED METAL**

| Cable O.D. (mm) | Use with PEEK insulators |
|-----------------|--------------------------|
| 3.2 - 4.2       | E3 105.1/4.2 + B         |
| 4.2 - 5.2       | E3 105.1/5.2 + B         |
| 5.2 - 6.2       | E3 105.1/6.2 + B         |
| 6.2 - 7.2       | E3 105.1/7.2 + B         |
| 7.2 - 8.2       | E3 105.1/8.2 + B         |
| 8.2 - 9.2       | E3 105.1/9.2 + B         |
| 9.2 - 10.0      | E3 105.1/10.0 + B        |
| 10.0 - 10.7     | E3 105.1/10.7 + B        |

For use with shielded cable when shield is to be carried through connector body.

**ENVIRONMENTAL**

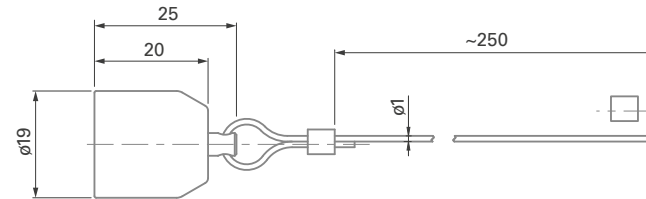
| Cable O.D. (mm) | Use with PEEK insulators |
|-----------------|--------------------------|
| 3.2 - 4.2       | E31 105.2/4.2 + B        |
| 4.2 - 5.2       | E31 105.2/5.2 + B        |
| 5.2 - 6.2       | E31 105.2/6.2 + B        |
| 6.2 - 7.2       | E31 105.2/7.2 + B        |
| 7.2 - 8.2       | E31 105.2/8.2 + B        |
| 8.2 - 9.2       | E31 105.2/9.2 + B        |
| 9.2 - 10.0      | E31 105.2/10.0 + B       |
| 10.0 - 10.7     | E31 105.2/10.7 + B       |

For use when sealing shielded or unshielded cable to plug body.



## 405 - SEALING CAPS

### FOR PLUGS



| Cap material | Stainless steel cable covering material | Part number      |
|--------------|---|------------------|
| PEI          | FEP -Teflon®                            | 105.2740 (beige) |

Crimp ferrule (300.637) is included.



## 405 - ENVIRONMENTAL & MECHANICAL DATA

| Characteristic      | Product type        |                                 | Value |
|---------------------|---------------------|---------------------------------|-------|
| Sealing performance | Plug (S or SI)      | with sealed cable clamp and cap | IP67  |
|                     |                     |                                 | IP50  |
|                     | Receptacle (DBP)    |                                 | IP50  |
| Endurance           | 5,000 mating cycles |                                 |       |

### OPERATING TEMPERATURE RANGE

| Component           | Material              | Operating temperatures |
|---------------------|-----------------------|------------------------|
| Body                | PEI                   | -65°C to +200°C        |
| Insulator           | PEEK                  | -65°C to +200°C        |
| Plastic Cable Clamp | POM (Delrin®)         | -40°C to +100°C        |
| Cable clamp seal    | TPE                   | -70°C to +130°C        |
| Cable strain relief | TPE                   | -60°C to +100°C        |
|                     | VMQ - Silicone rubber | -60°C to +180°C        |
| Sealing cap         | PEI with FPM O-ring   | -20°C to +200°C        |

0°C



## 405 - METAL PARTS

| Parts  |                      | Material    |             |                                      | Finish                |                                      |
|--|----------------------|-------------|-------------|--------------------------------------|-----------------------|--------------------------------------|
|  |                      | Designation | ISO         | Standard                             | Designation           | Standard                             |
| <b>Metal parts (except contacts), inner body shell of S plug</b> |                      | Brass       | CuZn39Pb3   | CW614N<br>UNS C 38500                | Nickel                | SAE-AMS-QQ-N-290<br>SAE-AMS2404      |
| <b>Contacts</b>  | Male (solder)        | Brass       | CuZn39Pb3   | CW614N<br>UNS C 38500                | 1 µm Gold over Nickel | MIL-DTL-45204D<br>Type 1 + ASTM B488 |
|  | Female, male (crimp) | Bronze      | CuSn4Zn4Pb4 | CW456K<br>ASTM B 139,<br>UNS C 54400 |                       |                                      |

## 405 - PLASTIC PARTS

| Parts  | International symbol          | Flammability |
|--|-------------------------------|--------------|
| <b>Body shell, sealing cap, back nut, mounting nut</b> | PEI                           | UL 94 V-O    |
| <b>Insulator</b>                                       | PEEK - PTFE                   | UL 94 V-O    |
| <b>O-ring in sealing cap</b>                           | FPM (Viton®)                  | -            |
| <b>Plastic cable clamps</b>                            | POM (Delrin®)                 | UL 94 HB     |
| <b>Bend relief</b>                                     | TPE-S - VMQ - Silicone Rubber | UL 94 HB     |

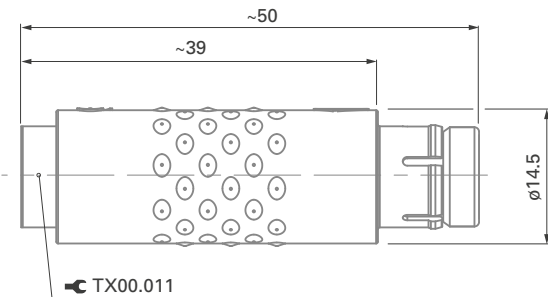


### 4032 - PLUG

#### CABLE MOUNTED

SI 4032

BODY STYLE

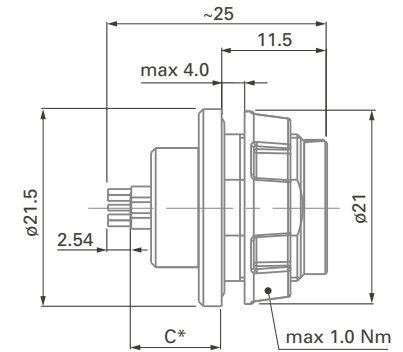


### 4032 - RECEPTACLES

#### PANEL MOUNTED

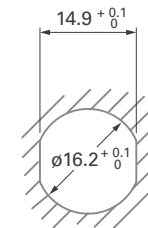
DBP / DBPO 4032

BODY STYLES



\* See contact configurations page E 14.

PANEL CUT-OUT  
Figure 1





**4032**

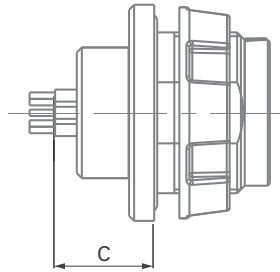
|                              | Housing design  |      |   |     |   | Standard options |   |   |   |   |
|------------------------------|---|------|---|-----|---|------------------|---|---|---|---|
|                              | SI  | 4032 | A | 051 | - | D                | 3 | L | 1 | R |
| <b>Body style</b>            | <ul style="list-style-type: none"> <li>■ Plug = <b>SI</b></li> <li>■ Receptacle, rear panel mounted = <b>DBP</b></li> <li>■ Receptacle, rear panel mounted, sealed when mated (IP68) = <b>DBPO</b></li> </ul>                             |      |   |     |   |                  |   |   |   |   |
| <b>Series</b>                | <ul style="list-style-type: none"> <li>■ <b>4032</b></li> </ul>   |      |   |     |   |                  |   |   |   |   |
| <b>Contact polarity</b>      | <ul style="list-style-type: none"> <li>■ Plugs have pins. Receptacles have sockets = <b>A</b></li> <li>■ Plugs have sockets. Receptacles have pins = <b>Z</b></li> </ul>  |      |   |     |   |                  |   |   |   |   |
| <b>Contact configuration</b> | <ul style="list-style-type: none"> <li>■ See page E-14</li> </ul>   |      |   |     |   |                  |   |   |   |   |
| <b>Body material</b>         | <ul style="list-style-type: none"> <li>■ PBT = <b>D</b></li> </ul>  |      |   |     |   |                  |   |   |   |   |
| <b>Insulator material</b>    | <ul style="list-style-type: none"> <li>■ PEEK = <b>3</b></li> </ul>   |      |   |     |   |                  |   |   |   |   |
| <b>Contact type</b>          | <ul style="list-style-type: none"> <li>■ Solder = <b>J</b></li> <li>■ Crimp = <b>K</b></li> <li>■ PCB = <b>L</b></li> </ul>   |      |   |     |   |                  |   |   |   |   |
| <b>Color coding</b>          | <ul style="list-style-type: none"> <li>■ White = <b>1</b></li> <li>■ Black = <b>2</b></li> <li>■ Green = <b>3</b></li> <li>■ Blue = <b>4</b></li> <li>■ Yellow = <b>5</b></li> <li>■ Red = <b>6</b></li> <li>■ Grey = <b>7</b></li> </ul> |      |   |     |   |                  |   |   |   |   |
| <b>Bend relief material</b>  | <ul style="list-style-type: none"> <li>■ None = <b>R</b></li> </ul>   |      |   |     |   |                  |   |   |   |   |

PLASTIC



**4032**

Figure 1



| References                                    | Pin layout | Number of contacts | Contact types |       |     | Insulating material | Contact $\phi$ [mm] | Wire size                                       |  | PCB                |                     | Test voltage [kV] in mated position |                    |                 |                    | Current <sup>1)</sup> [A] |
|---|------------|--------------------|---------------|-------|-----|---------------------|---------------------|---|--|--------------------|---------------------|-------------------------------------|--------------------|-----------------|--------------------|---------------------------|
|   |            |                    | Solder        | Crimp | PCB |                     |                     | Solder contacts                                 | Crimp contacts                                     | Pin diameter [mm]  | C [mm] see Figure 1 | AC r.m.s                            |                    | DC              |                    |                           |
|   |            |                    |               |       |     |                     |                     |   |  |                    |                     | Contact to body                     | Contact to contact | Contact to body | Contact to contact |                           |
| 4032 $\begin{matrix} A \\ Z \end{matrix}$ 051 |            | 2                  | ●             | ●     | -   | PEEK                | 1.3                 | max $\phi$ 1.18mm<br>AWG17 [1]<br>AWG18 [16/30] | max $\phi$ 1.18mm<br>min $\phi$ 0.58mm<br>AWG18-24 | --                 | -                   | 1.5                                 | 2.2                | 2.2             | 3.0                | 13                        |
| 4032 $\begin{matrix} A \\ Z \end{matrix}$ 052 |            | 3                  | ●             | -     | -   | PEEK                | 1.3                 | max $\phi$ 1.18mm<br>AWG17 [1]<br>AWG18 [16/30] | -  | -                  | -                   | 1.2                                 | 1.5                | 1.8             | 2.0                | 12                        |
| 4032 $\begin{matrix} A \\ Z \end{matrix}$ 053 |            | 4                  | ●             | -     | ●   | PEEK                | 0.9                 | max $\phi$ 0.79mm<br>AWG21 [1]<br>AWG22 [7/30]  | -  | A: 0.63<br>Z: 0.63 | A: 9.9<br>Z: 10.0   | 1.2                                 | 1.6                | 2.0             | 2.4                | 7.0                       |
| 4032 $\begin{matrix} A \\ Z \end{matrix}$ 054 |            | 5                  | ●             | ●     | ●   | PEEK                | 0.9                 | max $\phi$ 0.79mm<br>AWG21 [1]<br>AWG22 [7/30]  | max $\phi$ 0.83mm<br>min $\phi$ 0.48mm<br>AWG22-26 | A: 0.63<br>Z: -    | A: 9.9<br>Z: -      | 1.1                                 | 1.4                | 1.9             | 2.2                | 6.8                       |
| 4032 $\begin{matrix} A \\ Z \end{matrix}$ 056 |            | 6                  | ●             | ●     | -   | PEEK                | 0.7                 | max $\phi$ 0.79mm<br>AWG21 [1]<br>AWG22 [7/30]  | max $\phi$ 0.62mm<br>min $\phi$ 0.38mm<br>AWG24-28 | -                  | -                   | 1.0                                 | 1.3                | 2.0             | 2.0                | 5.2                       |
| 4032 $\begin{matrix} A \\ Z \end{matrix}$ 057 |            | 7                  | ●             | ●     | -   | PEEK                | 0.7                 | max $\phi$ 0.79mm<br>AWG21 [1]<br>AWG22 [7/30]  | max $\phi$ 0.62mm<br>min $\phi$ 0.38mm<br>AWG24-28 | --                 | -                   | 1.0                                 | 1.3                | 2.0             | 2.0                | 5.0                       |
| 4032 $\begin{matrix} A \\ Z \end{matrix}$ 010 |            | 10                 | ●             | ●     | ●   | PEEK                | 0.7                 | max $\phi$ 0.79mm<br>AWG21 [1]<br>AWG22 [7/30]  | max $\phi$ 0.62mm<br>min $\phi$ 0.38mm<br>AWG24-28 | A: 0.50<br>Z: -    | A: 8.9<br>Z: -      | 1.4                                 | 1.5                | 2.0             | 2.2                | 4.5                       |
| 4032 $\begin{matrix} A \\ Z \end{matrix}$ 012 |            | 12                 | ●             | ●     | ●   | PEEK                | 0.7                 | max $\phi$ 0.79mm<br>AWG21 [1]<br>AWG22 [7/30]  | max $\phi$ 0.62mm<br>min $\phi$ 0.38mm<br>AWG24-28 | A: 0.50<br>Z: -    | A: 8.9<br>Z: -      | 1.4                                 | 1.5                | 2.0             | 2.2                | 4.2                       |
| 4032 $\begin{matrix} A \\ Z \end{matrix}$ 019 |            | 19                 | ●             | ●     | ●   | PEEK                | 0.5                 | max $\phi$ 0.43mm<br>AWG26 [1]<br>AWG28 [19/40] | max $\phi$ 0.43mm<br>min $\phi$ 0.20mm<br>AWG28-32 | A: 0.40<br>Z: -    | A: 8.9<br>Z: -      | 1.2                                 | 0.9                | 2.0             | 1.5                | 2.5                       |

<sup>1)</sup>Current per contact at 40°C temperature rise measured on the basic curve according to IEC 60512-5-2-5b. For the max. operating current a reduction factor must be used and limitations due to the size of the wires and the permissible upper temperature limit of the materials employed must be taken into account. See page A17 for details.





SI 4032

DBP/DBPO 4032

BODY STYLES



View from F - Number of contacts (reference)

| Polarity | 2 (051) | 3 (052) | 4 (053) | 5 (054) | 6 (056) |
|----------|---------|---------|---------|---------|---------|
| A        |         |         |         |         |         |
| Z        |         |         |         |         |         |

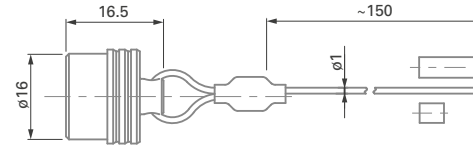
| Polarity | 7 (057) | 10 (010) | 12 (012) | 19 (019) |
|----------|---------|----------|----------|----------|
| A        |         |          |          |          |
| Z        |         |          |          |          |

All dimensions and images shown are in millimeters and are for reference only.



## 4032 - SEALING CAPS

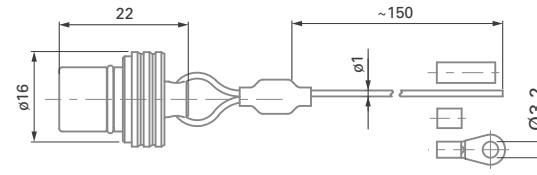
### FOR PLUGS



| Cap Material  | Stainless steel cable covering material | Part number |
|---------------|---|-------------|
| POM (Delrin®) | FEP -Teflon®                            | 4032.703    |

Crimp ferrule (300.922) and heat shrink tube (300.930) are included.

### FOR RECEPTACLES



| Cap Material  | Stainless steel cable covering material | Part number |
|---------------|---|-------------|
| POM (Delrin®) | FEP -Teflon®                            | 4032.701    |

Crimp ferrule (300.922), crimp lug (300.299) and heat shrink tube (300.930) are included.



## 4032 - CABLE CLAMP SETS

### UNSHIELDED PLASTIC

| Cable O.D. (mm) | Part number |
|-----------------|-------------|
| 2.2 - 3.7       | 4032.1003   |
| 3.7 - 5.2       | 4032.1002   |
| 5.2 - 6.7       | 4032.1001   |

For unshielded and unsealed applications.

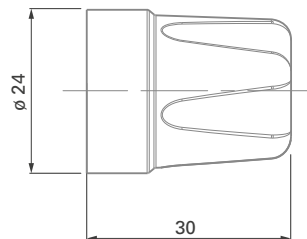
## 4032 - CABLE CLAMP SETS

### ENVIRONMENTAL

| Cable O.D. (mm) | Part number   |
|-----------------|---------------|
| 2.2 - 2.7       | E3 1031.2/2.7 |
| 2.7 - 3.2       | E3 1031.2/3.2 |
| 3.2 - 3.7       | E3 1031.2/3.7 |
| 3.7 - 4.2       | E3 1031.2/4.2 |
| 4.2 - 4.7       | E3 1031.2/4.7 |
| 4.7 - 5.2       | E3 1031.2/5.2 |
| 5.2 - 5.7       | E3 1031.2/5.7 |
| 5.7 - 6.2       | E3 1031.2/6.2 |
| 6.2 - 6.7       | E3 1031.2/6.7 |

For use when sealing shielded or unshielded cable to plug body.

## TOOLING - 4032 - NUT DRIVER



| Cap material | Part number |
|--------------|-------------|
| ABS          | TH00.001    |

All dimensions and images shown are in millimeters and are for reference only.



## 4032 - ENVIRONMENTAL & MECHANICAL DATA

| Characteristic      | Product type              |  | Value |
|---------------------|---------------------------|--|-------|
| Sealing performance | Plug (SI)                 | - with sealed cable clamp<br>- with cap or mated with sealed receptacle (DBPO) | IP68  |
|                     |                           |  | IP50  |
|                     | Sealed receptacle (DBPO)  | Mated with sealed plug or with cap   | IP68  |
|                     | Unsealed receptacle (DBP) |  | IP50  |
| Endurance           | 5,000 mating cycles       |  |       |

### OPERATING TEMPERATURE RANGE

| Component              | Material                      | Operating temperatures |
|------------------------|-------------------------------|------------------------|
| Body                   | PBT                           | -65°C to +135°C        |
| Insulator              | PEEK                          | -65°C to +200°C        |
| O-rings - receptacle   | NBR                           | -30°C to +110°C        |
| Unshielded cable clamp | POM (Delrin®)                 | -40°C to +100°C        |
| Cable clamp seal       | TPE                           | -70°C to +130°C        |
| Sealing cap for plug   | POM (Delrin®) with O-ring     | -60°C to +100°C        |
| Sealing cap receptacle | POM (Delrin®) with NBR O-ring | -20°C to +100°C        |

0°C



## 4032 - METAL PARTS

| Parts                         |                      | Material    |             |                                      | Finish                |                                      |
|-------------------------------|----------------------|-------------|-------------|--------------------------------------|-----------------------|--------------------------------------|
|                               |                      | Designation | ISO         | Standard                             | Designation           | Standard                             |
| Metal parts (except contacts) |                      | Brass       | CuZn39Pb3   | CW614N<br>UNS C 38500                | Nickel                | SAE-AMS-QQ-N-290<br>SAE-AMS2404      |
| Contacts                      | Male (solder)        | Brass       | CuZn39Pb3   | CW614N<br>UNS C 38500                | 1 µm gold over nickel | MIL-DTL-45204D<br>Type 1 + ASTM B488 |
|                               | Female, male (crimp) | Bronze      | CuSn4Zn4Pb4 | CW456K<br>ASTM B 139,<br>UNS C 54400 |                       |                                      |

## 4032 - INSULATOR & SEALING

| Parts   | International symbol | Flammability |
|---|----------------------|--------------|
| Body shell, sealing cap, back nut, mounting nut         | PBT                  | UL 94 HB     |
| Insulator   | PEEK                 | UL 94 V-O    |
| O-rings on receptacles and sealing caps for receptacles | NBR                  | -            |
| O-ring on sealing cap for plug                          | FPM (Viton®)         | -            |
| Unshielded cable clamps, sealing cap bodies             | POM (Delrin®)        | UL 94 HB     |