

**C series**  
**Robust circular connectors**  
**for machinery**  
**and plant engineering**

Hirschmann

**CA series**  
**The main features**  
**and advantages**

**Multi-pole round-shape connectors for mains and control voltages in mechanical engineering plants, measurement, control and process technology, as well as in electrical medical equipment.**

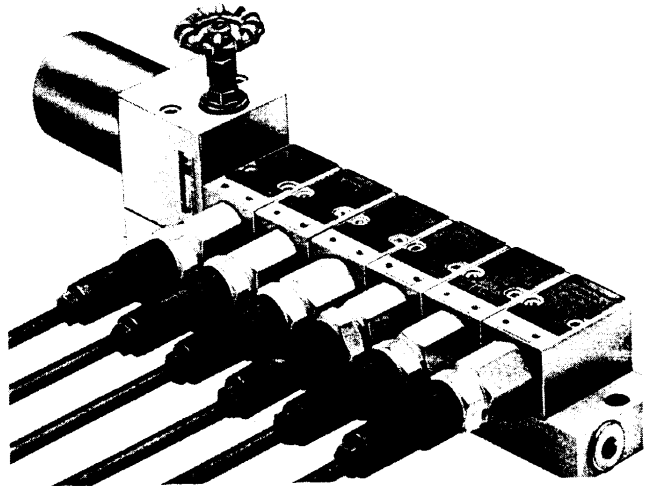
**Easy operation, low space requirement and sturdy design for unfavourable ambient conditions.**

Casing of impact-proof plastic, glass-fibre-reinforced. Vibration-proof connection thanks to simple screw connection by means of the locking ring.

**Protection class IP 65 as per DIN 40 050.** Protected against dust and splash water.

**Strain relief** by means of an internal fixing clamp or cable claw.

These circular connectors are of the same dimensions, design and contact arrangement as many other circular connector series available on the market and can be plugged into these or completely replaced.



*Actuator connection in a metering system*

**VDE expertise**

A VDE expertise with process inspection has been issued for these connectors. The design, terminals and materials comply with the regulations in DIN VDE 0627.

**UL-Recognition**

These plug connectors have been tested and approved by UL.

According to DIN VDE 0627, **plug connectors** are devices which **must not** be plugged or unplugged when used for their intended purpose (when carrying electricity).

The standard VDE regulation pursuant to DIN VDE 0100 T 410 and DIN VDE 0113 T 1 (EN 60 204 T 1) must be complied with during service.

**CM series**  
**The main features**  
**and advantages**

**Screw-in plug connector for all control lead connections in hydraulics, pneumatics and special machinery.**

Possible applications include continuous-action and proportional-action valve. To replace plug connectors in MIL series C-5015 and VG 95 342, size 14 S-2, 14 S-6 and 20-7. Can also be plugged into existing mating parts in the MIL series.

The new plug connectors in series CM can frequently be used where connectors from series MIL-C-5015 or VG 95 342 size 14 S-2, 14 S-6 or 20-7 have been used to date.

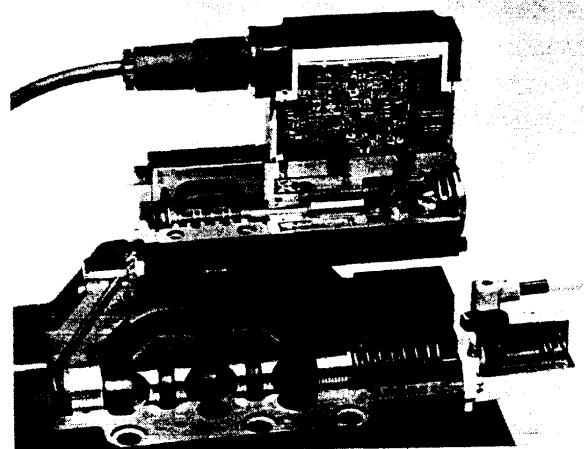
**Sturdy design**

A casing of impact-proof plastic, glass-fibre-reinforced. Also suitable for machinery and appliance engineering.

**Protection class IP 65 as per DIN 40 050**

Protected against dust and splash water.

**Strain relief** by means of an internal fixing clamp or clamping cage.



*Sectional model of a proportional-action hydraulic valve*

**Application examples**

**CA series**

- ☐ Mains and control voltage connections in mechanical engineering.
- ☐ Mains and control voltage connections in measurement, control and process technology.
- ☐ Mains and control voltage connections in electrical medical equipment.
- ☐ Applications for which a VDE-

**CM series**

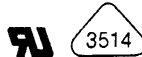
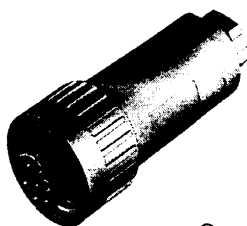
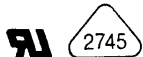
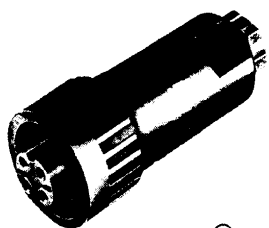
- ☐ Connection of continuous-action and proportional-action valves.
- ☐ Mating dimensions of series MIL-C-5015 size 14 S-2, 14 S-6 and 20-7.
- ☐ Control lead connections for appliances, for machinery and devices subject to unfavourable ambient conditions.

**We will gladly advise** if you have any questions concerning the potential applications, technical data or special designs.

CA series

3-pole + ⊕

6-pole + ⊕



#### Program survey

|                                  |                             |                                           |
|----------------------------------|-----------------------------|-------------------------------------------|
| Cable socket, angled             | CA 3 LDW 09 ZK              |                                           |
| Cable socket, straight           | CA 3 LD 09 ZS/CA 3 LD 13 ZK | CA 6 LD 09 ZS/CA 6 LD 11 ZS/CA 6 LD 13 ZK |
| Cable connector, straight        | CA 3 LS 09 ZS/CA 3 LS 13 ZK | CA 6 LS 09 ZS/CA 6 LS 11 ZS/CA 6 LS 13 ZK |
| Surf.-mounted conn. with flange  | CA 3 GS                     | CA 6 GS                                   |
| Surf.-mounted socket with flange | CA 3 GD                     | CA 6 GD                                   |
| Cap                              | CA 00 SD 3/CA 00 SD 4       | CA 00 SD 1/CA 00 SD 2                     |

#### Technical data

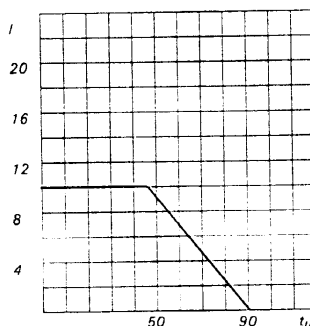
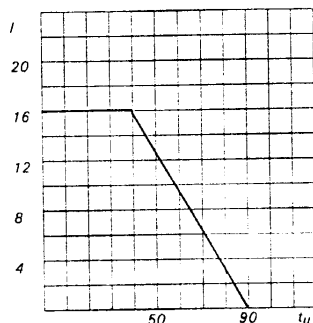
|                                          |                             |                              |
|------------------------------------------|-----------------------------|------------------------------|
| Number of poles                          | 3 + ⊕                       | 6 + ⊕                        |
| Operating voltage                        | 250 V UC (≈) 380 V AC (~)   | 150 V UC (≈) 250 V UC (≈)    |
| Insulation group DIN VDE 0110            | C                           | C B                          |
| Continuous load current                  | 16 A AC/10 A DC             | 10 A                         |
| Contact resistance                       | 3 mΩ                        | 5 mΩ                         |
| Pin diameter                             | 2 mm                        | 1.5 mm                       |
| Contact material/surface                 | CuZn/silver-plated          | CuZn/silver-plated           |
| Type of connection                       | screw                       | solder                       |
| Cable gland                              | Pg 9, Pg 13.5               | Pg 9, Pg 11, Pg 13.5         |
| Outer lead diameter                      | 6...12 mm <sup>1)</sup>     | 6...12 mm <sup>1)</sup>      |
| Max. lead cross-section                  | 1.5 mm <sup>2</sup> /AWG 16 | 0.75 mm <sup>2</sup> /AWG 19 |
| Materials:                               |                             |                              |
| Contact bearer                           | PA 66-GF 25                 | PA 66-GF 25                  |
| Casing                                   | PA 66-GF 25                 | PA 66-GF 25                  |
| Sealing ring                             | NBR                         | NBR                          |
| Flammability, UL standard                | 94 V - 0                    | 94 V - 0                     |
| Protection class DIN 40 050              | IP 65                       | IP 65                        |
| Ambient temperature range t <sub>u</sub> | -40°C...90°C                | -40°C...90°C                 |

#### Derating curve

(Current carrying curve)

I = continuous load current

t<sub>u</sub> = ambient temperature in °C

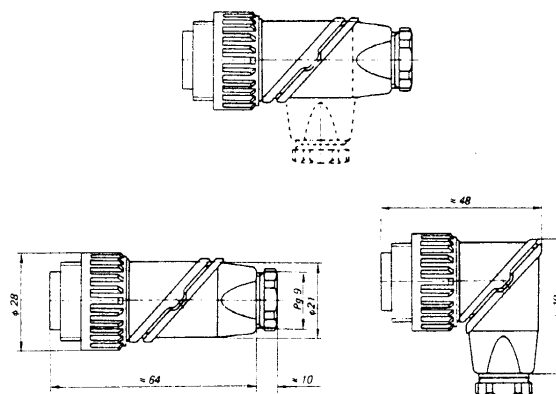
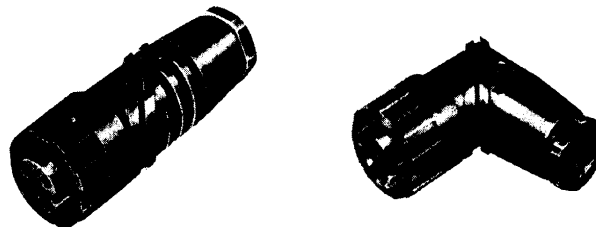


**C series**  
**Robust circular connectors**  
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**Hirschmann**

**CA series**  
**3-pole + Ⓢ**

**CA 3 LDW 09 ZK**



**Technical data**

| Design/<br>Description | Angled cable socket<br>strain relief by means of<br>clamping cage                                                 | Angled cable socket<br>strain relief by means of<br>clamping cage                                                   | Angled cable socket<br>strain relief by means of<br>clamping cage                                                   |
|------------------------|-------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Number of poles        | 3 + Ⓢ                                                                                                             | 3 + Ⓢ                                                                                                               | 3 + Ⓢ                                                                                                               |
| Type of connection     | Screw                                                                                                             | Screw                                                                                                               | Screw                                                                                                               |
| Scope of supply        | 1 cable socket, not assembled,<br>in polyth. bag with assembly<br>instructions, sealing ring for<br>diameter 6 mm | 1 cable socket, not assembled,<br>in polyth. bag with assembly<br>instructions, sealing ring for<br>diameter 7.5 mm | 1 cable socket, not assembled,<br>in polyth. bag with assembly<br>instructions, sealing ring for<br>diameter 9.6 mm |
| Colour of casing       | black                                                                                                             | black                                                                                                               | black                                                                                                               |
| Can be plugged into    | CA 3 GS, CA 3 LS...                                                                                               | CA 3 GS, CA 3 LS...                                                                                                 | CA 3 GS, CA 3 LS...                                                                                                 |
| Cable gland            | Pg 9                                                                                                              | Pg 9                                                                                                                | Pg 9                                                                                                                |
| Outer lead diameter    | 4 to 6 mm                                                                                                         | 5 to 7.5 mm                                                                                                         | 7 to 9.6 mm                                                                                                         |

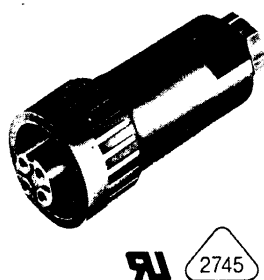
**Order data**

| Type                              | CA 3 LDW 09 ZK | CA 3 LDW 09 ZK | CA 3 LDW 09 ZK |
|-----------------------------------|----------------|----------------|----------------|
| Order no. (with strain relief)    | 932 431-100    | 932 431-200    | 932 431-300    |
| Type                              |                |                |                |
| Order no. (without strain relief) |                |                |                |
| Quantity boxed                    | 100 each       | 100 each       | 100 each       |

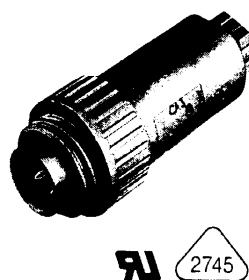
**Accessories — must be ordered separately**

Can

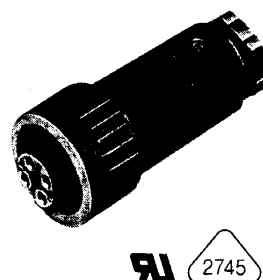
CA 3 LD 09 ZS



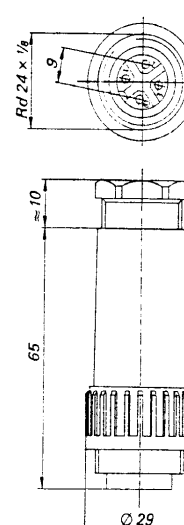
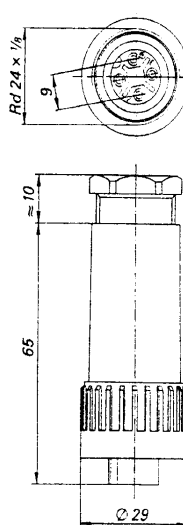
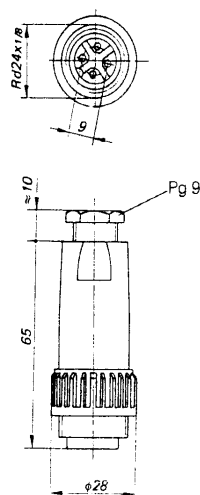
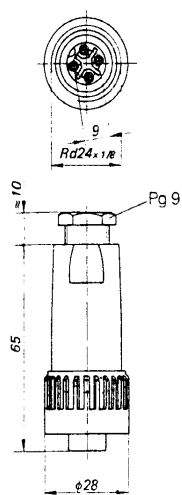
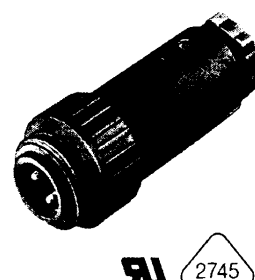
CA 3 LS 09 ZS



CA 3 LD 13 ZK



CA 3 LS 13 ZK

**Technical data**

| Straight cable socket<br>strain relief by means of clamp                         | Straight cable connector<br>strain relief by means of clamp                         | Straight cable socket<br>strain relief by means of<br>clamping cage              | Straight cable connector<br>strain relief by means of<br>clamping cage              |
|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 3 +                                                                              | 3 +                                                                                 | 3 +                                                                              | 3 +                                                                                 |
| screw                                                                            | screw                                                                               | screw                                                                            | screw                                                                               |
| 1 cable socket, not assembled,<br>in polythene bag with<br>assembly instructions | 1 cable connector, not<br>assembled, in polythene bag<br>with assembly instructions | 1 cable socket, not assembled,<br>in polythene bag with<br>assembly instructions | 1 cable connector, not<br>assembled, in polythene bag<br>with assembly instructions |
| black                                                                            | black                                                                               | black                                                                            | black                                                                               |
| CA 3 LS                                                                          | CA 3 LD...                                                                          | CA 3 LS...                                                                       | CA 3 LD...                                                                          |
| Pg 9                                                                             | Pg 9                                                                                | Pg 13.5                                                                          | Pg 13.5                                                                             |
| 6 - 9.5 mm                                                                       | 6 - 9.5 mm                                                                          | 10 - 12 mm                                                                       | 10 - 12 mm                                                                          |

**Order data**

| CA 3 LD 09 ZS | CA 3 LS 09 ZS | CA 3 LD 13 ZK | CA 3 LS 13 ZK |
|---------------|---------------|---------------|---------------|
| 932 362-100   | 932 365-100   | 932 821-100   | 932 822-100   |
| CA 3 LD 09    | CA 3 LS 09    |               |               |
| 932 555-100   | 932 556-100   |               |               |
| 100 each      | 100 each      | 100 each      | 100 each      |

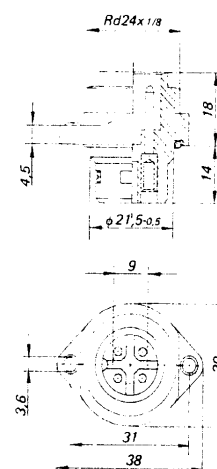
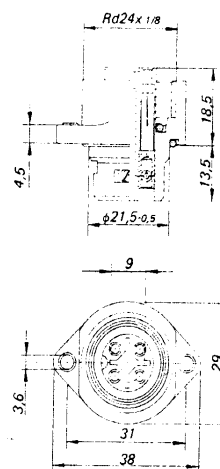
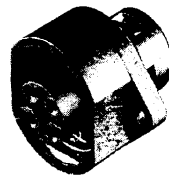
**Accessories – must be ordered separately**

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| CA 00 SD 3  | CA 00 SD 1  | CA 00 SD 3  | CA 00 SD 1  |
| 831 532-100 | 831 530-100 | 831 532-300 | 831 530-300 |

**CA series**  
**3-pole + ⊕**

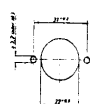
**CA 3 GD**

**CA 3 GS**

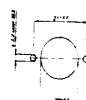


**Technical data**

| Design/<br>Description | Surface-mounted socket<br>with flange                            | Surface-mounted connector<br>with flange                                 |
|------------------------|------------------------------------------------------------------|--------------------------------------------------------------------------|
| Number of poles        | 3 + ⊕                                                            | 3 + ⊖                                                                    |
| Type of connection     | screw                                                            | screw                                                                    |
| Scope of supply        | 1 surface-mounted socket<br>with round seal, in polythene<br>bag | 1 surface-mounted socket<br>with round sealing ring, in<br>polythene bag |
| Colour of casing       | black                                                            | black                                                                    |
| Can be plugged into    | CA 3 LS...                                                       | CA 3 LD...                                                               |
| Cable gland            |                                                                  |                                                                          |
| Outer lead diameter    |                                                                  |                                                                          |



Sectional view



Sectional view

**Order data**

| Type                              | CA 3 GD     | CA 3 GS     |
|-----------------------------------|-------------|-------------|
| Order no. (with strain relief)    | 932 321-100 | 932 322-100 |
| Type                              |             |             |
| Order no. (without strain relief) |             |             |
| Quantity boxed                    | 100 each    | 100 each    |

**Accessories – must be ordered separately**

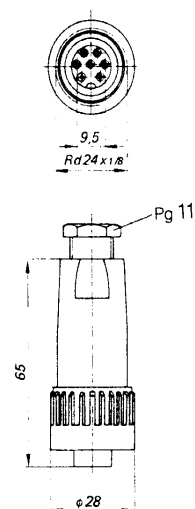
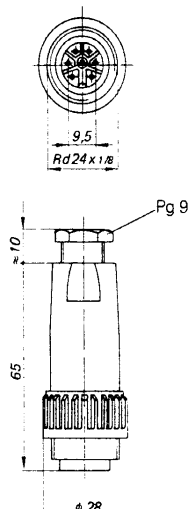
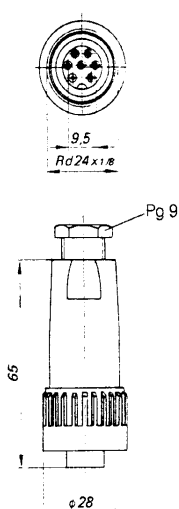
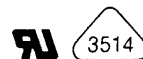
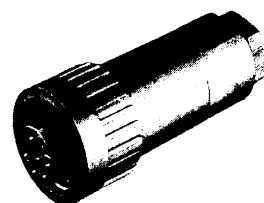
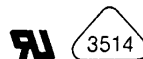
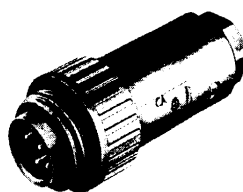
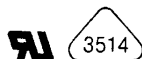
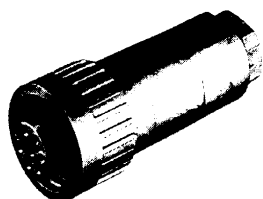
|      |            |            |
|------|------------|------------|
| Cap  |            |            |
| Type | CA 00 SD 4 | CA 00 SD 2 |

CA series  
6-pole + ⊕

CA 6 LD 09 ZS

CA 6 LS 09 ZS

CA 6 LD 11 ZS



#### Technical data

| Design/<br>Description | Straight cable socket<br>strain relief by means of clamp                         | Straight cable connector<br>strain relief by means of clamp                      | Straight cable socket<br>strain relief by means of clamp                         |
|------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Number of poles        | 6 + ⊕                                                                            | 6 + ⊕                                                                            | 6 + ⊕                                                                            |
| Type of connection     | solder                                                                           | solder                                                                           | solder                                                                           |
| Scope of supply        | 1 cable socket, not assembled,<br>in polythene bag with<br>assembly instructions | 1 cable socket, not assembled,<br>in polythene bag with<br>assembly instructions | 1 cable socket, not assembled,<br>in polythene bag with<br>assembly instructions |
| Colour of casing       | black                                                                            | black                                                                            | black                                                                            |
| Can be plugged into    | CA 6 LS...                                                                       | CA 6 LD...                                                                       | CA 6 LS...                                                                       |
| Cable gland            | Pg 9                                                                             | Pg 9                                                                             | Pg 11                                                                            |
| Outer lead diameter    | 6 - 9.5 mm                                                                       | 6 - 9.5 mm                                                                       | 8 - 11 mm                                                                        |

#### Order data

| Type                              | CA 6 LD 09 ZS | CA 6 LS 09 ZS | CA 6 LD 11 ZS |
|-----------------------------------|---------------|---------------|---------------|
| Order no. (with strain relief)    | 932 383-100   | 932 384-100   | 932 509-100   |
| Type                              | CA 6 LD 09    | CA 6 LS 09    | CA 6 LD 11    |
| Order no. (without strain relief) | 932 574-100   | 932 576-100   | 932 575-100   |
| Quantity boxed                    | 100 each      | 100 each      | 100 each      |

#### Accessories – must be ordered separately

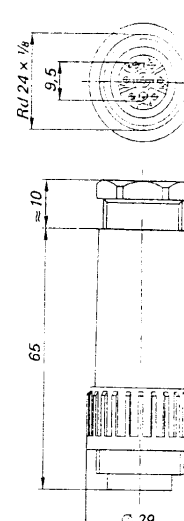
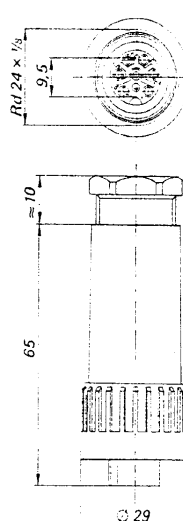
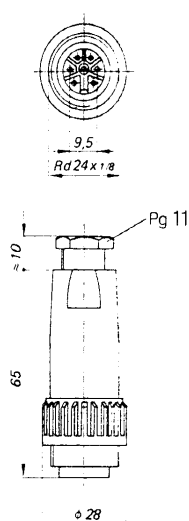
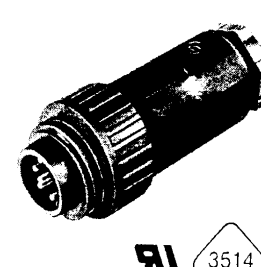
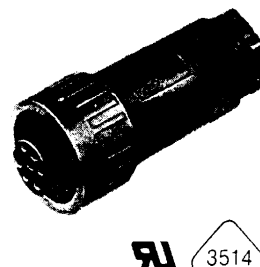
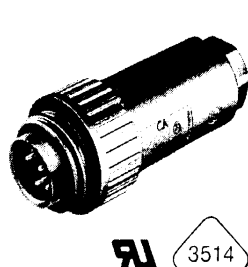
| Cap       |             |             |             |
|-----------|-------------|-------------|-------------|
| Type      | CA 00 SD 3  | CA 00 SD 1  | CA 00 SD 3  |
| Order no. | 831 532-100 | 831 530-100 | 831 532-200 |

**CA series**  
**6-pole + ⊕**

**CA 6 LS 11 ZS**

**CA 6 LD 13 ZK**

**CA 6 LS 13 ZK**



**Technical data**

| Design/<br>Description | <b>Straight cable connector</b><br>strain relief by means of clamp                  | <b>Straight cable socket</b><br>strain relief by means of<br>clamping cage       | <b>Straight cable connector</b><br>strain relief by means of<br>clamping cage       |
|------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Number of poles        | 6 + ⊕                                                                               | 6 + ⊕                                                                            | 6 + ⊕                                                                               |
| Type of connection     | solder                                                                              | solder                                                                           | solder                                                                              |
| Scope of supply        | 1 cable connector, not<br>assembled, in polythene bag<br>with assembly instructions | 1 cable socket, not assembled,<br>in polythene bag with<br>assembly instructions | 1 cable connector, not<br>assembled, in polythene bag<br>with assembly instructions |
| Colour of casing       | black                                                                               | black                                                                            | black                                                                               |
| Can be plugged into    | CA 6 LD...                                                                          | CA 6 LS...                                                                       | CA 6 LD...                                                                          |
| Cable gland            | Pg 11                                                                               | Pg 13.5                                                                          | Pg 13.5                                                                             |
| Outer lead diameter    | 8 – 11 mm                                                                           | 10 – 12 mm                                                                       | 10 – 12 mm                                                                          |

**Order data**

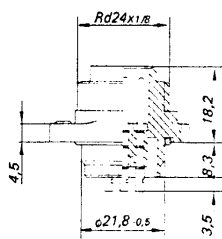
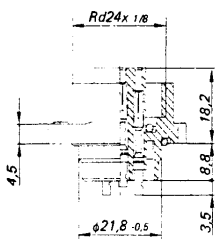
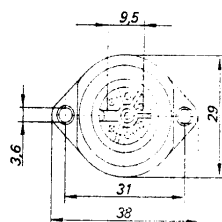
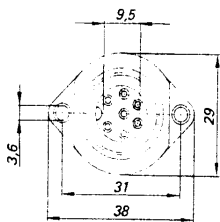
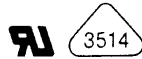
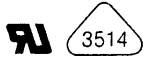
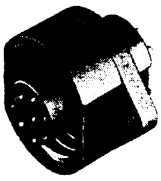
| Type                              | <b>CA 6 LS 11 ZS</b> | <b>CA 6 LD 13 ZK</b> | <b>CA 6 LS 13 ZK</b> |
|-----------------------------------|----------------------|----------------------|----------------------|
| Order no. (with strain relief)    | <b>932 510-100</b>   | <b>932 604-100</b>   | <b>932 606-100</b>   |
| Type                              | <b>CA 6 LS 11</b>    |                      |                      |
| Order no. (without strain relief) | <b>932 577-100</b>   |                      |                      |
| Quantity boxed                    | 100 each             | 100 each             | 100 each             |

**Accessories – must be ordered separately**

| Cap       |             |             |             |
|-----------|-------------|-------------|-------------|
| Type      | CA 00 SD 1  | CA 00 SD 3  | CA 00 SD 1  |
| Order no. | 831 530-200 | 831 532-200 | 831 530-200 |

CA 6 GD

CA 6 GS



#### Technical data

**Surface-mounted socket**  
with flange

**Surface-mounted connector**  
with flange

6 +  $\ominus$

6 +  $\oplus$

solder

solder

1 surface-mounted socket  
with round sealing ring,  
in polythene bag

1 surface-mounted connector  
with round sealing ring,  
in polythene bag

black

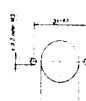
black

CA 6 LS...

CA 6 LD...



Sectional view



Sectional view

#### Order data

CA 6 GD

CA 6 GS

932 325-100

932 326-100

100 each

100 each

**Accessories - must be ordered separately**

CA 00 SD 4

CA 00 SD 2

831 531-100

831 529-100

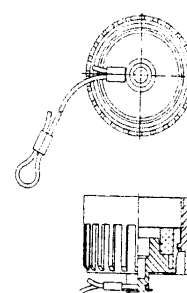
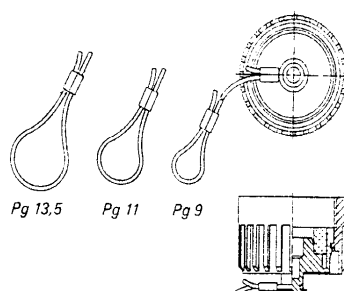


**CA series**  
**Accessories**

**CA 00 SD 1**



**CA 00 SD 2**

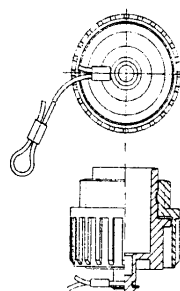
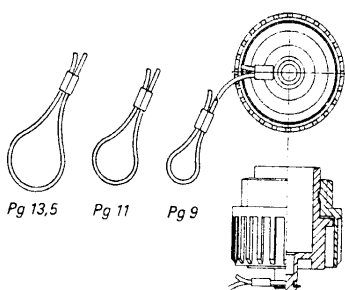
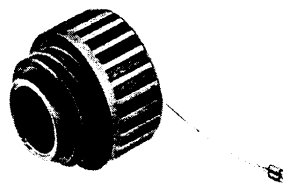
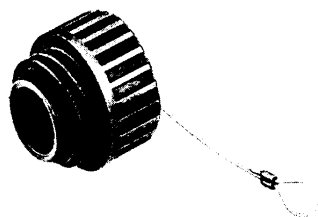


| Technical data         |                                                                              |                                              |                                                   |
|------------------------|------------------------------------------------------------------------------|----------------------------------------------|---------------------------------------------------|
| Design/<br>Description | Cap<br>for cable connector                                                   |                                              | Cap for<br>surface-mounted connector              |
| Number of poles        | For 3 + ⊕ and 6 + ⊕                                                          |                                              | For 3 + ⊕ and 6 + ⊕                               |
| Type of connection     |                                                                              |                                              |                                                   |
| Scope of supply        | 1 cap<br>with female thread,<br>nylon loop                                   |                                              | 1 cap<br>with female thread,<br>nylon loop        |
| Colour of casing       | black                                                                        |                                              | black                                             |
| Can be plugged into    | <b>Pg 9</b><br>CA 3 LS 09,<br>CA 3 LS 09 ZS,<br>CA 6 LS 09,<br>CA 6 LS 09 ZS | <b>Pg 11</b><br>CA 6 LS 11,<br>CA 6 LS 11 ZS | <b>Pg 13.5</b><br>CA 3 LS 13 ZK,<br>CA 6 LS 13 ZK |
|                        |                                                                              |                                              | CA 3 GS, CA 6 GS                                  |

| <b>Order data</b> |                   |  |                    |
|-------------------|-------------------|--|--------------------|
| Type              | <b>CA 00 SD 1</b> |  | <b>CA 00 SD 2</b>  |
| Order no.         |                   |  | <b>831 529-100</b> |
| Loop for Pg 9     | 831 530-100       |  |                    |
| Loop for Pg 11    | 831 530-200       |  |                    |
| Loop for Pg 13.5  | 831 530-300       |  |                    |
| Quantity boxed    | 100 each          |  | 100 each           |

CA 00 SD 3

CA 00 SD 4



# Technical Data

## Cap

for cable socket

For 3 + ⊕ and 6 + ⊕

1 cap  
with external thread,  
nylon loop

black

**Pg 9**

CA 3 LD 09,  
CA 3 LD 09 ZS,  
CA 6 LD 09,  
CA 6 LD 09 ZS

**Pg 11**

CA 6 LD 11,  
CA 6 LD 11 ZS

**Pg 13.5**

CA 3 LD 13 ZK,  
CA 6 LD 13 ZK

## Cap

for surface-mounted sockets

For 3 + ⊕ and 6 + ⊕

1 cap  
with external thread,  
nylon loop

black

CA 3 GD, CA 6 GD

# Order Data

CA 00 SD 3

CA 00 SD 4

831 531-100

831 532-100

831 532-200

831 532-300

100 each

100 each