

## CIRCULAR CONNECTORS

Series 92 offers customers a wide range of circular connectors suitable for the vast majority of industrial and commercial applications.

Integral to the overall Series 92 design concept are a number of key features and benefits for users:

- A comprehensive range of planforms and configurations, which allow customers to select the most effective connector for their needs.
- Available in solder or crimp termination (for certain planforms only).
- A robust design which ensures efficiency and reliability wherever the connectors are used.
- Design features which conform to IP-67 [IEC 625] or greater, on request.
- A functional design which is both simple and easy to use.

Completely compatible with our earlier ranges (61, 83 and 85), Series 92 offers outstanding design characteristics combined with the quality and reliability you would expect from a company with CEEP's experience in the connector field.

### TECHNICAL DATA

#### Mechanical

Shell \_\_\_\_\_ Aluminium alloy  
 Protection \_\_\_\_\_ Electroless nickel  
 Insulator \_\_\_\_\_ Thermoset (Standard version, except...)  
                                           Neoprene (222P/CD, 337P/CD)  
                                           Thermoplastic (19CD, 23CD,  
                                           28CD, 319CD, 419CD, 434CD)  
                                           PPS (419CD only)  
 Contact \_\_\_\_\_ Machined brass  
 Plating \_\_\_\_\_ Gold over nickel

|                                 | SOLDER       |              |             |            |
|---------------------------------|--------------|--------------|-------------|------------|
|                                 | •            | ○            | ◐           | ⊕          |
| Ø Male contact (mm)             | 1            | 1.5          | 3           | 5          |
| Working current (A)             | 7.5          | 10           | 25          | 50         |
| Wire section (mm <sup>2</sup> ) | 0.75<br>max. | 1.75<br>max. | 5.1<br>max. | 13<br>max. |
| Contact resistance (mΩ)         | ≤ 0.005      |              |             |            |

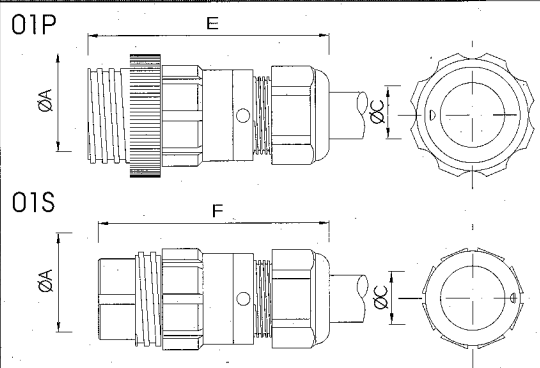
|                                 | CRIMP   |                    |                 |
|---------------------------------|---------|--------------------|-----------------|
|                                 | •       | ○                  | ◐               |
| Ø Male contact (mm)             | 1       | 1.5                | 3               |
| Working current (A)             | 7.5     | 10                 | 25              |
| Wire section (mm <sup>2</sup> ) | 0.75    | 0.75<br>1.5<br>2.5 | 1.5<br>2.5<br>4 |
| Contact resistance (mΩ)         | ≤ 0.005 |                    |                 |

#### Climatic

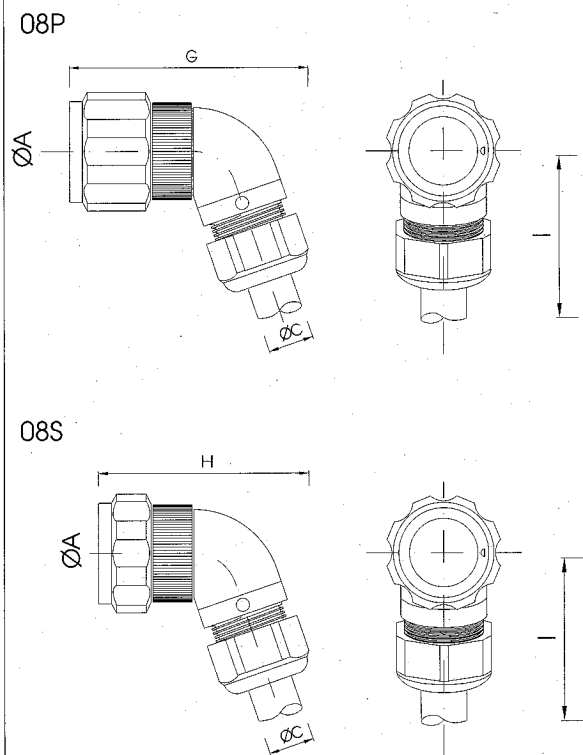
Resistant to saline atmosphere 96h IEC 68-2-11  
 Working Temperatures: Thermoplastic -35- + 85°C  
                                           Neoprene -40°C + 120°C  
                                           Thermoset -40°C + 120°C  
 Conforms to technical specifications CCTU 08.07 and IP67

## OUTLINE DIMENSIONS

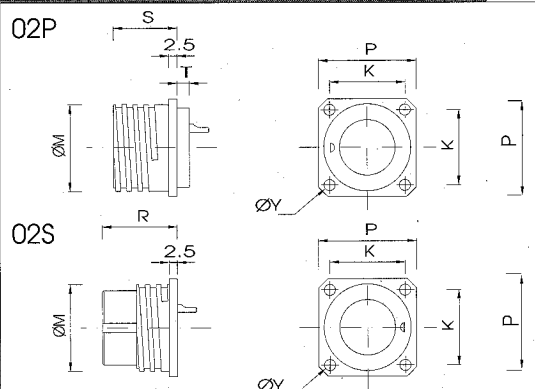
### EXTENDER



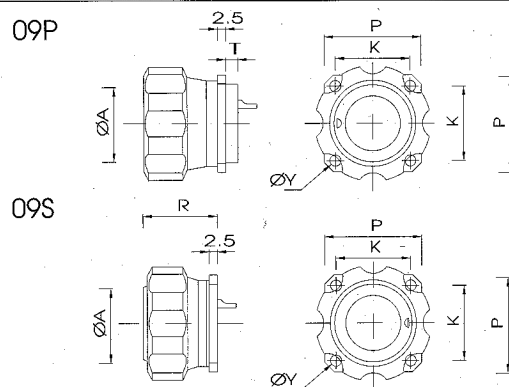
### ANGLED CONNECTOR



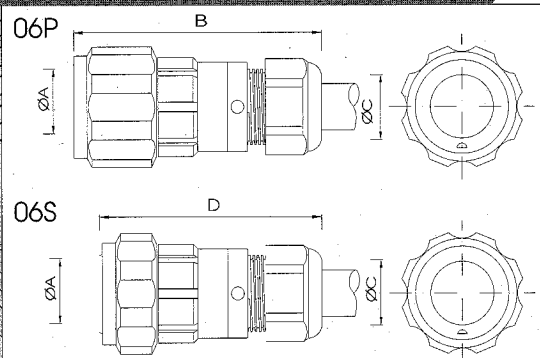
### RECEPTACLE



### RECEPTACLE WITH COUPLING NUT



### STRAIGHT PLUG



|      | PG | A    | B    | ØC                 | D    | E    | F    | G     | H    | I    | K  | M  | P  | R  | S    | T | Y   |
|------|----|------|------|--------------------|------|------|------|-------|------|------|----|----|----|----|------|---|-----|
| T-10 | 11 | 27.5 | 65   | 5 a 10             | 56.4 | 58   | 62   | 58.8  | 51.8 | 38.8 | 19 | 21 | 25 | 23 | 22.5 | 5 | 3.2 |
| T-20 | 16 | 36.5 | 74.3 | 7 a 12<br>10 a 14  | 66.7 | 71.3 | 68.3 | 73.8  | 68.2 | 46.8 | 24 | 28 | 31 | 24 | 24.5 | 4 | 3.5 |
| T-30 | 29 | 52   | 85.8 | 13 a 20<br>18 a 25 | 78.2 | 83   | 81   | 89.5  | 83.8 | 63   | 34 | 42 | 46 | 24 | 24.5 | 4 | 3.5 |
| T-40 | 29 | 64.5 | 96.5 | 13 a 20<br>18 a 25 | 89   | 93.5 | 91.5 | 95.5  | 89.8 | 76.9 | 41 | 52 | 56 | 24 | 24.5 | 4 | 3.5 |
|      | 36 | 64.5 | 96.5 | 22 a 32            | 89   | 93.5 | 91.5 | 101.8 | 94.2 | 68.4 | 41 | 52 | 56 | 24 | 24.5 | 4 | 3.5 |

## CONTACT PLANFORMS

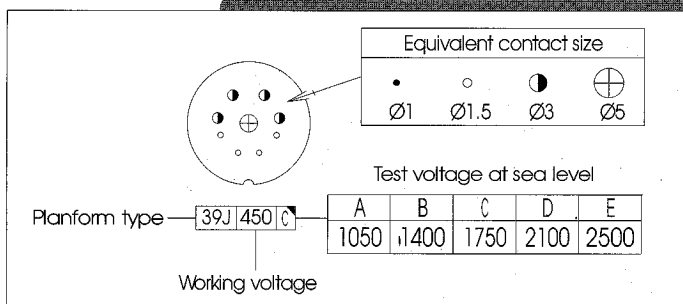
### SOLDER CONTACTS

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                    |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| T-10 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 13U 270 B<br>14V 225 B<br>17P 150 A                                                                                |
| T-20 |          | 22B 490 D<br>23C 440 B<br>23AL 540 C<br>25D 370 B<br>25S 370 B<br>26R 300 B<br>27E 370 B<br>27X 300 B<br>28T 270 B |
|      |                                                                                                                                                                                                                                                                                                                                                   | 29AE 280 B<br>210AO 280 A<br>212AF 270 A<br>213AN 125 A<br>222P 150 A                                              |
| T-30 |                                                                                                                                                                              | 32F 525 C<br>34H 490 C<br>37Y 470 C<br>39J 450 C<br>315K 355 C<br>319L 390 C<br>337P 175 D                         |
| T-40 |                                                                                                                                                                                                                                                                                                                                       | 47M 420 E<br>48M 420 E<br>413AB 420 C<br>419AR 400 C<br>422AC 355 C                                                |
|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 424AA 355 C<br>439R 270 C<br>443AP 300 C                                                                           |

### CRIMP CONTACTS

|      |                                                                                                                                                                                                                                                                  |                                         |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| T-10 |                                                                                                                                                                              | 19CD 150 A                              |
| T-20 |    | 23CD 440 B<br>28CD 270 B<br>222CD 150 A |
| T-30 |                                                                                         | 319CD 390 C<br>337CD 175 D              |
| T-40 |                                                                                         | 419CD 400 C<br>434CD 355 C              |

### EXPLANATION CHART

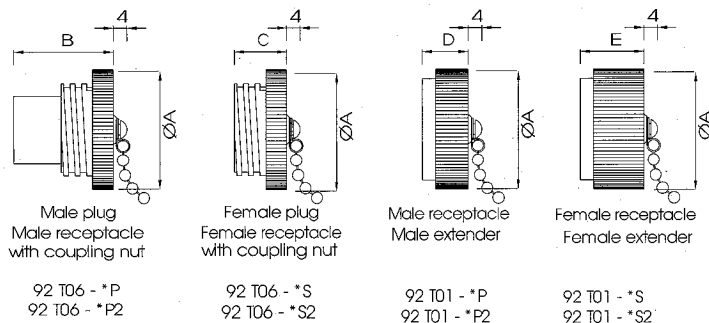


## ACCESSORIES

### CONTACT AND CRIMP TOOLS

| Planform type | Wire Section         | Crimp contact |          | Crimp tools |                 |            |                |                 |
|---------------|----------------------|---------------|----------|-------------|-----------------|------------|----------------|-----------------|
|               |                      | Male          | Female   | Simple tool | Adjustable tool | Positioner | Insertion tool | Extraction tool |
| 19CD          | AWG 20-24            | PX C-12       | SX C-10  | 2613-1      | AFM8            | K-613      | 701            | 702/3           |
|               | AWG 26-28            | PX C-12       | SX C-10  | 2613-2      |                 |            |                |                 |
| 28CD          | 0.75 mm <sup>2</sup> | PX C-115      | SX C-114 | —           | M-309           | SH-480     | DAK-289        | DRK-289         |
| 319CD         | 1.5 mm <sup>2</sup>  | PX C-89       | SX C-88  |             |                 |            |                |                 |
| 434CD         | 2.5 mm <sup>2</sup>  | PX C-91       | SX C-90  |             |                 |            |                |                 |
| 222CD         | AWG 20-28            | PX C-615      | SX C-614 | —           | AFM8            | 11051      | 701            | 702/3           |
| 337CD         | AWG 20-28            | PX C-148      | SX C-149 | —           | AFM8            | 11051      | T3-293         | 702/3           |
| 23CD<br>419CD | 1.5 mm <sup>2</sup>  | PX C-86       | SX C-85  | —           | M-309           | SH-480     | DAK-290        | DRK-290-12      |
|               | 2.5 mm <sup>2</sup>  | PX C-82       | SX C-81  |             |                 |            |                |                 |
|               | 4 mm <sup>2</sup>    | PX C-140      | SX C-139 |             |                 |            |                |                 |

### METAL CAPS



| *SIZE | ØA | B    | C  | D    | E  |
|-------|----|------|----|------|----|
| 10    | 25 | 27   | 14 | 12.8 | 19 |
| 20    | 32 | 30.6 | 16 | 13.5 | 19 |
| 30    | 47 |      |    |      |    |
| 40    | 57 |      |    |      |    |

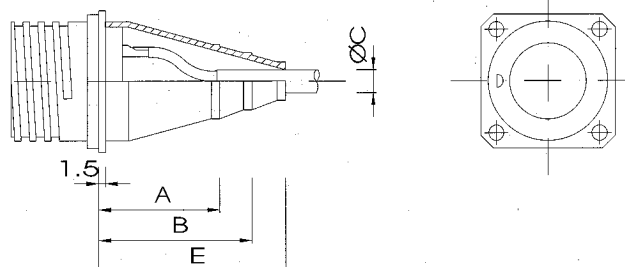
Standard Finish  
Black Finish

Part Numbers

NB 92 T06 P/S suitable for T08 & T09 requirements

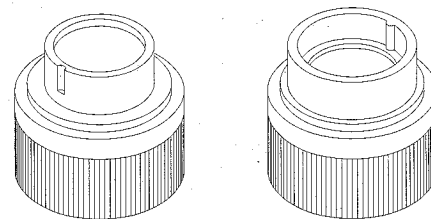
92 T01 P/S suitable for T02 requirements

### WATERPROOF RUBBER BOOT FOR RECEPTACLES



|      | Ref.      | ØD | ØC   |      |      |    |      |     |
|------|-----------|----|------|------|------|----|------|-----|
|      |           |    | A    | B    | E    | A  | B    | E   |
| T-10 | 120T1-233 | 18 | 19.5 | 22.8 | 26   | 9  | 7.25 | 5.5 |
| T-20 | 120T2-491 | 27 | 27   | 34.5 | 42   | 14 | 10   | 6   |
| T-30 | 120T3-327 | 37 | 40   | 46.5 | 53   | 17 | 13.5 | 10  |
| T-40 | 120T4-420 | 47 | 34.5 | 49.5 | 64.5 | 30 | 22   | 14  |

### PLUG ASSEMBLY TOOLS



Male

Female

|      | Tool references   |                     |
|------|-------------------|---------------------|
|      | to assemble males | to assemble females |
| T-10 | SC102530          | SC101530            |
| T-20 | SC202530          | SC201530            |
| T-30 | SC302530          | SC301530            |
| T-40 | SC402530          | SC401530            |



## GENERAL DATA

## PART NUMBERS

92

SERIES

06

CONNECTOR TYPE

- 01 Extender
- 02 Receptacle
- 06 Straight plug
- 08 Angled connector
- 09 Receptacle with coupling nut

CONTACT PLANFORM

Please see chart for contact planforms on page 5

CONTACT GENDER

- S Socket
- P Plug

419AR

S

B

2

FINISH

- Standard
- 2 Black

### CABLE CLAMP

| Connector size | Pg | Cable Ø in mm      | Ref.   |
|----------------|----|--------------------|--------|
| 10             | 11 | 5 a 10             | D      |
| 20             | 16 | 7 a 12<br>10 a 14  | A<br>B |
| 30             | 16 | 7 a 12<br>10 a 14  | A<br>B |
|                | 29 | 13 a 20<br>18 a 25 | C<br>D |
| 40             | 29 | 13 a 20<br>18 a 25 | A<br>B |
|                | 36 | 22 a 32            | D      |