

CE02-2A Series

Moistureproof Receptacle Type Conforming to MIL-C-5015



DDK's CE02-2A series provides a set of vibration-resistant, moistureproof, and oilproof receptacle connectors. This series uses synthetic rubber for its front inserts to cope with the various environments in which industrial machines are installed. The products in the CE02-2A series are compatible with those in the DMS series and comply to MIL-C-5015. They prevent the entry of water moisture, cutting oil, and other foreign matter into machines where these connectors are employed, helping enhance the reliability of the machines. Typically, their best applications are in servo motors, machine tools, and equipment relating to factory automation as well as in extremely dusty environments. For plug connectors to mate with these receptacle connectors, DDK recommends that you use the CE02-6A series or the DMS (D190) series available from DDK.

FEATURE

- The products in the CE02-2A series are interchangeable with those in the DMS series, because both are identical in installation dimensions.
- The inserts are of a three-piece design. Their contacts will not break when used under normal operating conditions.
- The inserts, which are made of silicone rubber, may be used at temperature of up to 125°C
- Coupling a receptacle connector in the CE02-2A series with a plug connector in the CE02-6A series or the DMS (D190) series allows the entire joint between the two connectors to be moistureproof.

MATERIAL/FINISH

| | |
|---------------|---|
| Shell | Aluminum alloy/Zinc plating, Olive drab chromate finish |
| Front insert | Silicone rubber |
| Middle insert | PPS resin |
| Rear insert | PPS resin |
| Contact | Copper alloy/Silver plating |
| Flange gasket | Silicone rubber |

Wire Size

| Contact Size | AWG |
|--------------|---------|
| #16 | #16-#22 |
| #12 | #12-#14 |
| #8 | #8-#10 |

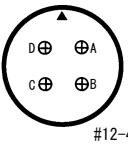
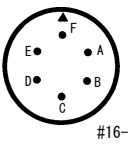
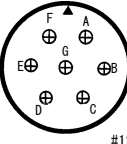
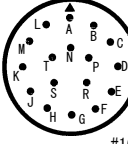
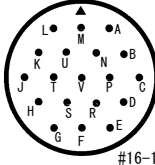
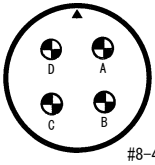
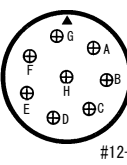
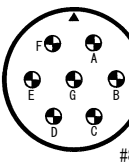
SPECIFICATION

| Current rating | Contact size | #16 | #12 | #8 |
|---------------------------------|-----------------------|------------------|--------|--------|
| | Max.value/Per contact | 13A | 23A | 26A |
| Voltage rating | AC (rms) | 250V | 350V | 350V |
| | DC | 350V | 500V | 500V |
| Dielectric withstanding voltage | AC (rms), 1minute | 1,000V | 1,500V | 1,500V |
| Contact resistance | less than $m\Omega$ | 5m Ω max. | | |
| Operating temperature | | -40°C to +125°C | | |

CE02-2A Series

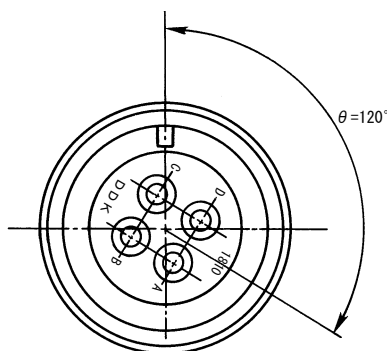
Insert Arrangements

The inserts in the CE02-2A series are identical to those in the DMS series. Only the pin inserts are shown below.

| InsertNo. | 18-10 | 18-12 | 20-15 | 22-22 |
|--------------|--|--|---|--|
| Arrangements |  |  |  |  |
| InsertNo. | 22-14 | 22-22 | 22-23 | 24-10 |
| Arrangements |  |  |  |  |

Note : Each of the inserts in the CE02 series is viewed from its coupling side; all keys are set at their standard positions.

Alternate Insert Positions

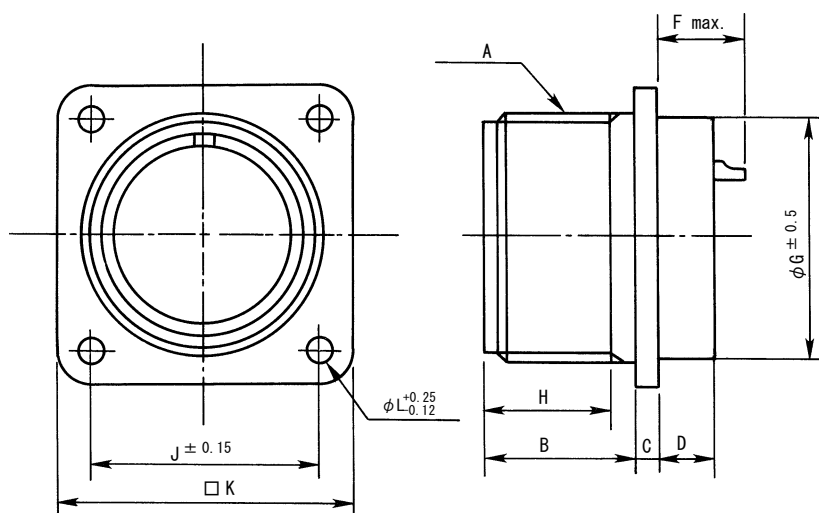
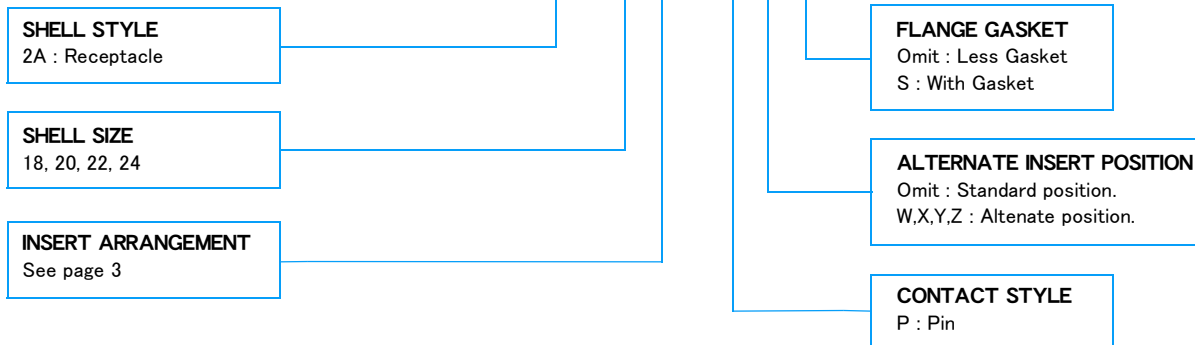


Front View of Pin Insert
(for Model CE2-2A18-10P □)

| Insert No. | Contact Size/ No of Contact | Non-standard key positions θ | | | |
|------------|--------------------------------|-------------------------------------|------|------|------|
| | | W | X | X | Z |
| 18-10P | #12/4 | — | 120° | 240° | — |
| 18-12P | #16/6 | 80° | — | — | 280° |
| 20-15P | #12/7 | 80° | — | — | 280° |
| 20-29P | #16/17 | 80° | — | — | 280° |
| 22-14P | #16/19 | 80° | 110° | 250° | 280° |
| 22-22P | #8/4 | — | 110° | 250° | — |
| 22-23P | #12/8 | 35° | — | 250° | — |
| 24-10P | #8/7 | 80° | — | — | 280° |

When more than one connector (of the same model) is used in a single device, the key positions should be changed as shown in order to prevent the wrong connectors from being coupled together.

CE02-2A 20-29PWS



| Part Number | Threads A | B | C | D | F | G | H | J | K | L |
|---------------|-----------------|------|------|------|------|------|-------|-------|------|------|
| CE02-2A18-10P | 1 1/8-18UNEF-2A | 19.2 | 3.35 | 7.44 | 13.8 | 25.4 | 15.88 | 26.97 | 34.9 | 3.05 |
| CE02-2A18-12P | | | | | 11.5 | | | | | |
| CE02-2A20-15P | 1 1/4-18UNEF-2A | 19.2 | 3.35 | 7.44 | 13.8 | 28.6 | 15.88 | 29.36 | 38.1 | 3.05 |
| CE02-2A20-29P | | | | | 11.5 | | | | | |
| CE02-2A22-14P | 1 3/8-18UNEF-2A | 19.2 | 3.35 | 7.44 | 11.5 | 31.8 | 15.88 | 31.75 | 41.3 | 3.05 |
| CE02-2A22-22P | | | | | 16.9 | | | | | |
| CE02-2A22-23P | | | | | 13.8 | | | | | |
| CE02-2A24-10P | 1 1/2-18UNEF-2A | 20.8 | 3.35 | 7.44 | 15.4 | 34.9 | 15.88 | 34.93 | 44.4 | 3.73 |