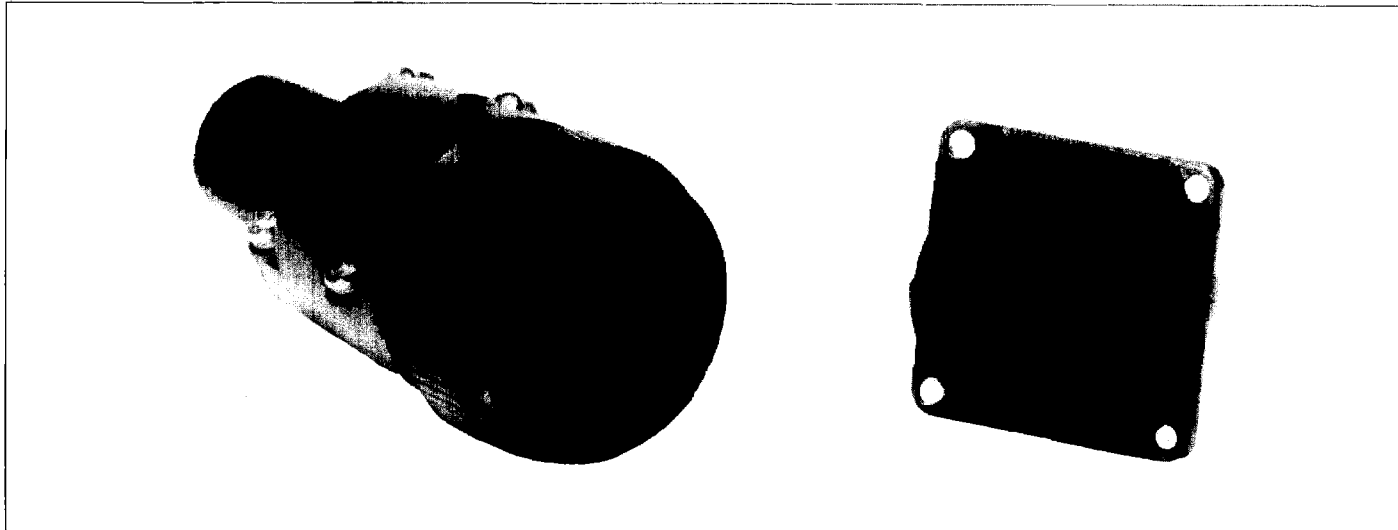


# EB Series



## Moistureproof Type Bayonet Lock Coupling



### SUMMARY

EB series connectors meet the performance criteria of most factory automation applications. They withstand exposure to moisture, oil and vibration. Resilient insulator provides improved environmental sealing.

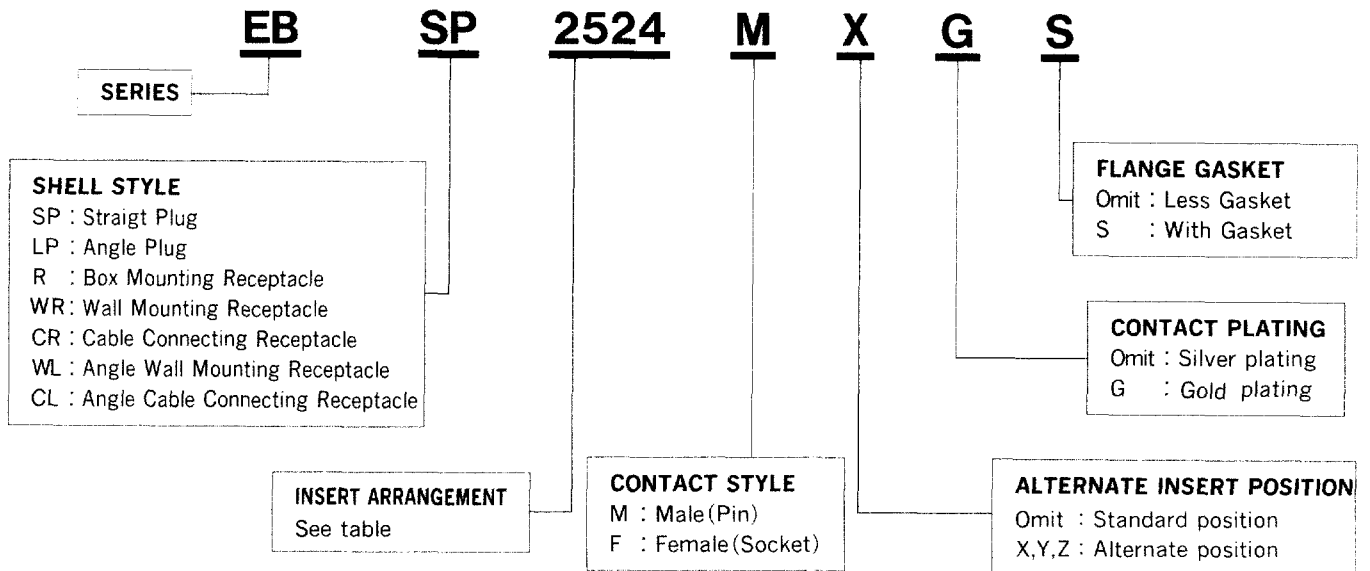
### MATERIAL/FINISH

Insulator.....Chloroprene synthetic rubber/Black  
 Contact .....Copper alloy/Silver or Gold plating  
 Shell .....Zinc alloy/Olive drab chromate finish  
 Hood .....Aluminum alloy/Olive drab chromate finish  
 Bushing .....Chloroprene synthetic rubber/Black  
 Cap.....Chloroprene synthetic rubber/Black  
 or Metal/Olive drab chromate finish

### Specification

|                                 | Contact size                    |                 |                 |
|---------------------------------|---------------------------------|-----------------|-----------------|
|                                 | #20                             | #16             |                 |
| Voltage rating (max.)           | 250V AC(rms), 350V DC           |                 |                 |
| Current rating (max.)           | 5A                              | 10A             |                 |
| Operating temperature           | -25°C to +85°C                  |                 |                 |
| Insulation resistance           | 1000MΩ min. at 500V DC          |                 |                 |
| Dielectric withstanding voltage | 1000V AC(rms) at sea level      |                 |                 |
| Contact resistance              | 5mΩ max. at 1A                  |                 |                 |
| Vibration                       | 10-55Hz, Amplitude: 1.5mm(.059) |                 |                 |
| Shock                           | Acceleration 50G                |                 |                 |
| Durability                      | 500 cycles                      |                 |                 |
| Humidity (Steady state)         | 40°C, 90 to 95%, 96 hours       |                 |                 |
| Tempertaure cycle               | -40°C to +100°C, 5 cycles       |                 |                 |
| Salt spray                      | 5%, 35°C, 48 hours              |                 |                 |
| Wire size                       | Contact                         | AWG #20         | AWG #16         |
|                                 | Wire size                       | AWG #20 or Less | AWG #16 or Less |

## Ordering Information

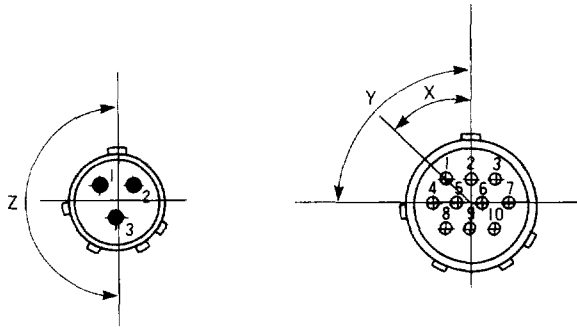


## Insert Arrangements (Front view of male insert)

|                 |        |        |        |        |        |
|-----------------|--------|--------|--------|--------|--------|
| Insert No.      | 1303   | 1307   | 1607   | 1610   | 2110   |
| Arrangements    |        |        |        |        |        |
| No. of Contacts | #16-3  | #20-7  | #16-7  | #20-10 | #16-10 |
| Shell Size      | 13     | 13     | 16     | 16     | 21     |
| Insert No.      | 2119   | 2516   | 2524   | 2532   |        |
| Arrangements    |        |        |        |        |        |
| No. of Contacts | #20-19 | #16-16 | #20-24 | #20-32 |        |
| Shell Size      | 21     | 25     | 25     | 25     |        |

## Alternate Insert Positions

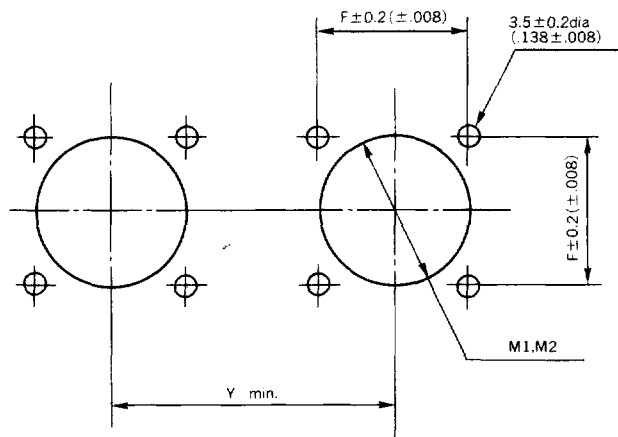
Unit : mm (inch)



Front view of pin insert

| Insert No. | Contact Size/<br>No. of Contacts | X   | Y   | Z    |
|------------|----------------------------------|-----|-----|------|
| 1303       | #16/3                            | —   | —   | 180° |
| 1307       | #20/7                            | —   | 90° | —    |
| 1607       | #16/7                            | 30° | —   | —    |
| 1610       | #20/10                           | 45° | 90° | —    |
| 2110       | #20/10                           | 45° | 90° | —    |
| 2119       | #20/19                           | 45° | 90° | —    |
| 2516       | #16/16                           | 45° | 90° | —    |
| 2524       | #20/24                           | 45° | 90° | —    |
| 2532       | #20/32                           | 45° | 90° | —    |

## Panel Cutout (for EBR/EBWR/EBWL)



| Shell Size | F             | M <sub>1</sub> | M <sub>2</sub> | Y             |
|------------|---------------|----------------|----------------|---------------|
| 13         | 20<br>(.787)  | 17<br>(.669)   | 19<br>(.748)   | 42<br>(1.654) |
| 16         | 23<br>(.906)  | 21<br>(.827)   | 23<br>(.906)   | 46<br>(1.811) |
| 21         | 26<br>(1.024) | 25<br>(.984)   | 27<br>(1.063)  | 50<br>(1.969) |
| 25         | 29<br>(1.142) | 29<br>(1.142)  | 31<br>(1.220)  | 54<br>(2.126) |

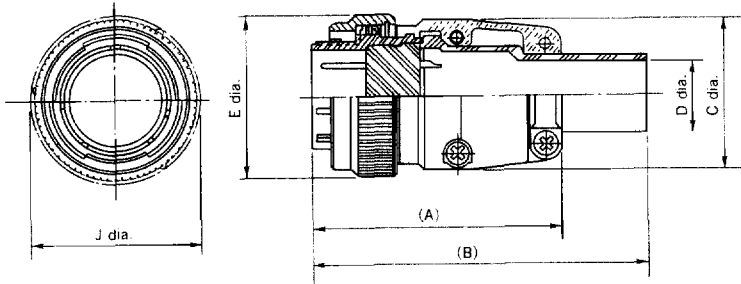
M<sub>1</sub> : Front mounting holes dia. (Shell style "R" only)  
M<sub>2</sub> : Rear mounting holes dia.

# EB Series



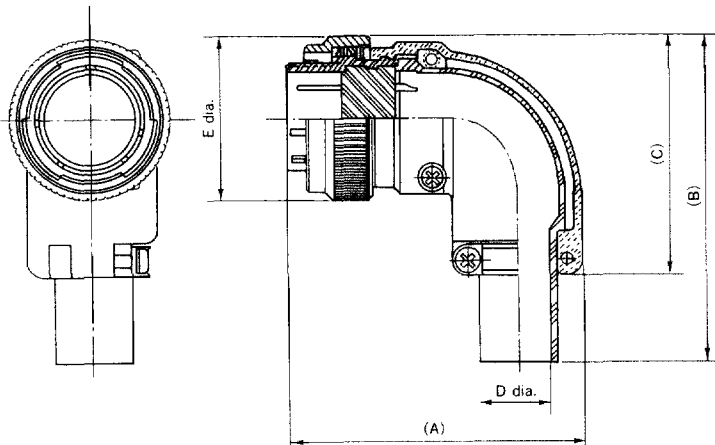
Unit : mm (inch)

## EBSP (Straight Plug)



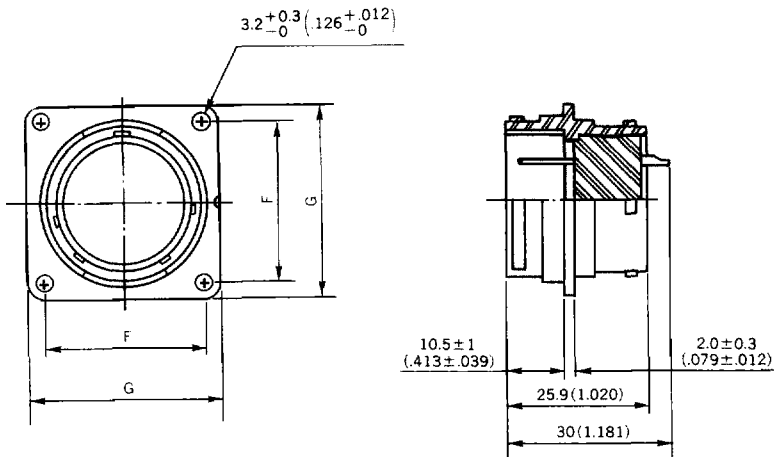
| Shell Size | A               | B               | C               | D              | E               | J               |
|------------|-----------------|-----------------|-----------------|----------------|-----------------|-----------------|
| 13         | 51.6<br>(2.031) | 71.6<br>(2.819) | 23.5<br>(.925)  | 8.2<br>(.323)  | 25.5<br>(1.004) | 27<br>(1.063)   |
| 16         | 53.6<br>(2.110) | 73.6<br>(2.898) | 27.4<br>(1.079) | 9.2<br>(.362)  | 29.5<br>(1.161) | 31<br>(1.220)   |
| 21         | 55.6<br>(2.189) | 75.6<br>(2.976) | 31.6<br>(1.244) | 12.2<br>(.480) | 33.5<br>(1.319) | 35.5<br>(1.398) |
| 25         | 57.6<br>(2.268) | 77.6<br>(3.055) | 34.8<br>(1.370) | 15<br>(.591)   | 37.4<br>(1.472) | 38.7<br>(1.524) |

## EBLP (Angle Plug)



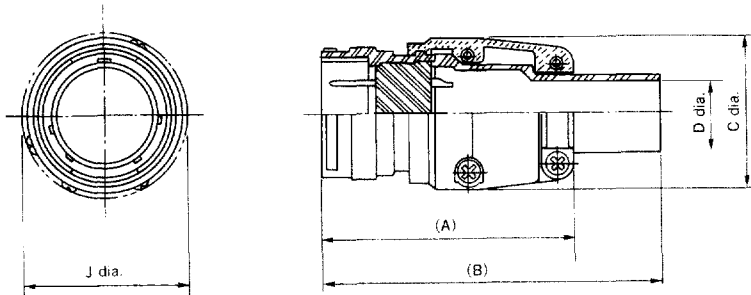
| Shell Size | A               | B               | C               | D              | E               |
|------------|-----------------|-----------------|-----------------|----------------|-----------------|
| 13         | 55.5<br>(2.185) | 63.1<br>(2.484) | 43.1<br>(1.697) | 8.2<br>(.323)  | 25.5<br>(1.004) |
| 16         | 60<br>(2.362)   | 67.1<br>(2.642) | 47.1<br>(1.854) | 9.2<br>(.362)  | 29.5<br>(1.161) |
| 21         | 63.8<br>(2.512) | 71.1<br>(2.799) | 51.1<br>(2.012) | 12.2<br>(.480) | 33.5<br>(1.319) |
| 25         | 68<br>(2.677)   | 74.7<br>(2.941) | 54.7<br>(2.154) | 15<br>(.591)   | 37.4<br>(1.472) |

## EBR (Box Mounting Receptacle)



| Shell Size | F             | G             |
|------------|---------------|---------------|
| 13         | 20<br>(.787)  | 26<br>(1.024) |
| 16         | 23<br>(.906)  | 29<br>(1.142) |
| 21         | 26<br>(1.024) | 32<br>(1.260) |
| 25         | 29<br>(1.142) | 35<br>(1.378) |

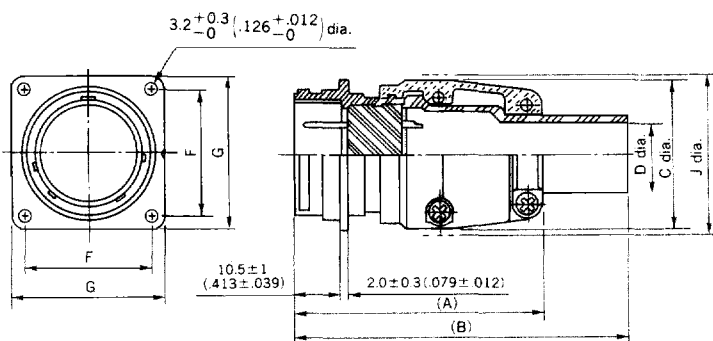
## EBCR (Cable Connecting Receptacle)



| Shell Size | A               | B               | C               | D              | J               |
|------------|-----------------|-----------------|-----------------|----------------|-----------------|
| 13         | 51.6<br>(2.031) | 71.6<br>(2.819) | 23.5<br>(.925)  | 8.2<br>(.323)  | 27<br>(1.063)   |
| 16         | 53.6<br>(2.110) | 73.6<br>(2.898) | 27.4<br>(1.079) | 9.2<br>(.362)  | 31<br>(1.220)   |
| 21         | 55.6<br>(2.189) | 75.6<br>(2.976) | 31.6<br>(1.244) | 12.2<br>(.480) | 33.5<br>(1.398) |
| 25         | 57.6<br>(2.268) | 77.6<br>(3.055) | 34.8<br>(1.370) | 15<br>(.591)   | 38.7<br>(1.524) |

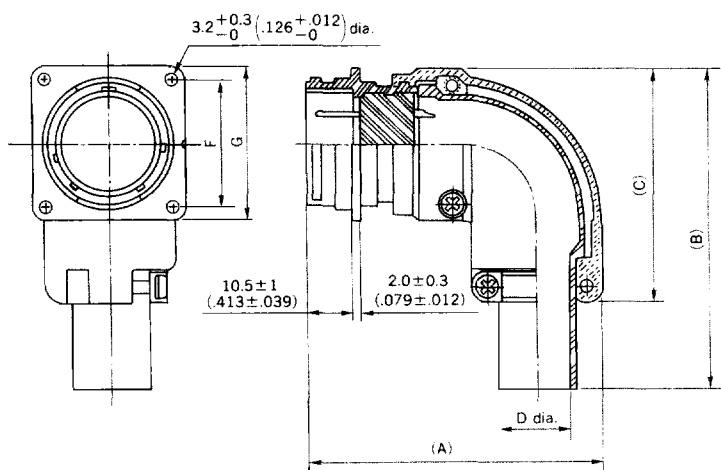
## EBWR (Wall Mounting Receptacle)

Unit : mm (inch)



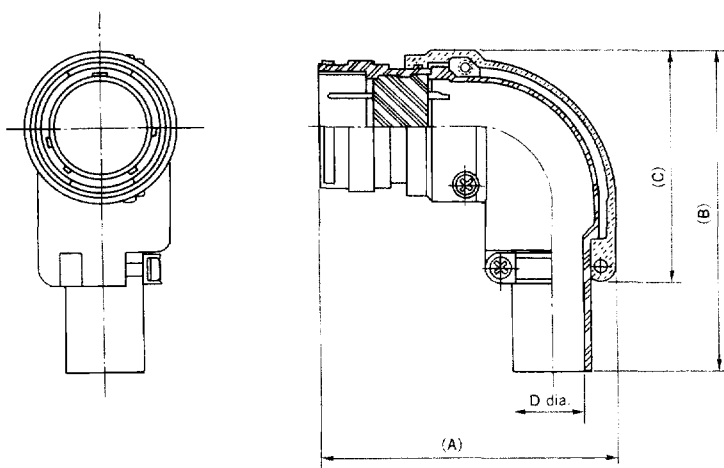
| Shell Size | A               | B               | C               | D              | F             | G             | J               |
|------------|-----------------|-----------------|-----------------|----------------|---------------|---------------|-----------------|
| 13         | 51.6<br>(2.031) | 71.6<br>(2.819) | 23.5<br>(.925)  | 8.2<br>(.323)  | 20<br>(.787)  | 26<br>(1.024) | 27<br>(1.063)   |
| 16         | 53.6<br>(2.110) | 73.6<br>(2.898) | 27.4<br>(1.079) | 9.2<br>(.362)  | 23<br>(.906)  | 29<br>(1.142) | 31<br>(1.220)   |
| 21         | 55.6<br>(2.189) | 75.6<br>(2.976) | 31.6<br>(1.244) | 12.2<br>(.480) | 26<br>(1.024) | 32<br>(1.260) | 35.5<br>(1.398) |
| 25         | 57.6<br>(2.268) | 77.6<br>(3.055) | 34.8<br>(1.370) | 15<br>(.591)   | 29<br>(1.142) | 35<br>(1.378) | 38.7<br>(1.524) |

## EBWL (Angle Wall Mounting Receptacle)



| Shell Size | A               | B               | C               | D              |
|------------|-----------------|-----------------|-----------------|----------------|
| 13         | 55.5<br>(2.185) | 61.9<br>(2.437) | 41.9<br>(1.650) | 8.2<br>(.323)  |
| 16         | 60<br>(2.362)   | 66<br>(2.598)   | 46<br>(1.811)   | 9.2<br>(.362)  |
| 21         | 63.8<br>(2.512) | 70.2<br>(2.764) | 50.2<br>(1.976) | 12.2<br>(.480) |
| 25         | 68<br>(2.677)   | 73.4<br>(2.890) | 53.4<br>(2.102) | 15<br>(.591)   |

## EBCL (Angle Cable Connecting Receptacle)

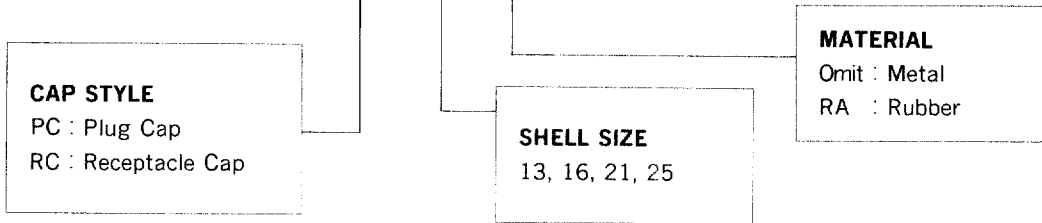


| Shell Size | A               | B               | C               | D              |
|------------|-----------------|-----------------|-----------------|----------------|
| 13         | 55.5<br>(2.185) | 61.9<br>(2.437) | 41.9<br>(1.650) | 8.2<br>(.323)  |
| 16         | 60<br>(2.362)   | 66<br>(2.598)   | 46<br>(1.811)   | 9.2<br>(.362)  |
| 21         | 63.8<br>(2.512) | 70.2<br>(2.764) | 50.2<br>(1.975) | 12.2<br>(.480) |
| 25         | 68<br>(2.677)   | 73.4<br>(2.890) | 53.4<br>(2.102) | 15<br>(.591)   |

## CAP Ordering Information

Unit : mm (inch)

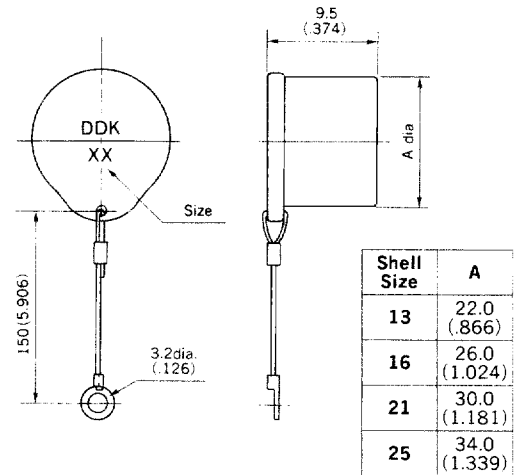
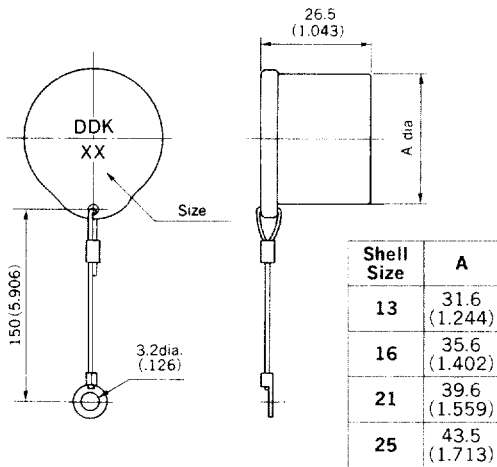
### EB PC 25 RA



### Rubber type

- EBPCXXRA (Plug Cap)

- EBRCXXRA (Receptacle Cap)



### Metal type

- EBPCXX (Plug Cap)

- EBRC-XX (Receptacle Cap)

