

# MIL-DTL-5015 Mil-Spec Connectors

**Part Number :**

**MS3108A14S-6S**



Client Order no.:                      Item no. :  
 Order no. :                              Consignment no. :  
 Offer no. :                              Project :  
 Remarks :

## Basic Information

|                        |   |
|------------------------|---|
| Product Type:          | MIL-DTL-5015 series Mil Spec Circular Connector |
| Series:                | MS3108A 90-Degree Plug                          |
| Connector Type:        | Plug  |
| Orientation:           | Straight  |
| Contact Type:          | Socket Contacts                                 |
| Number of Contacts:    | 6 Contacts                                      |
| Contact Termination:   | Solder Cup                                      |
| Shell sizes:           | 14S   |
| Contact Arrangement:   | 14S-6   |
| Coupling Method:       | Threaded  |
| Mount Method:          | Cable Mounting                                  |
| Mount Feature:         | Not Applicable                                  |
| Wire Gauge:            | 20-16AWG  |
| Durability:            | 500 Cycles                                      |
| Alternate Position:    | N - Normal                                      |
| Shielding performance: | Unshielded                                      |
| Temperature range:     | -55°C to + 125°C                                |
| Protection degree:     | IP67  |

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### Materials and Plating

|                            |                    |
|----------------------------|--------------------|
| <b>Shell Material:</b>     | Aluminum Alloy     |
| <b>Shell Plating:</b>      | Olive Drab Cadmium |
| <b>Contact Material:</b>   | Copper Alloy       |
| <b>Contact Plating:</b>    | Gold Plating       |
| <b>Insulator Material:</b> | Hard Plastic       |

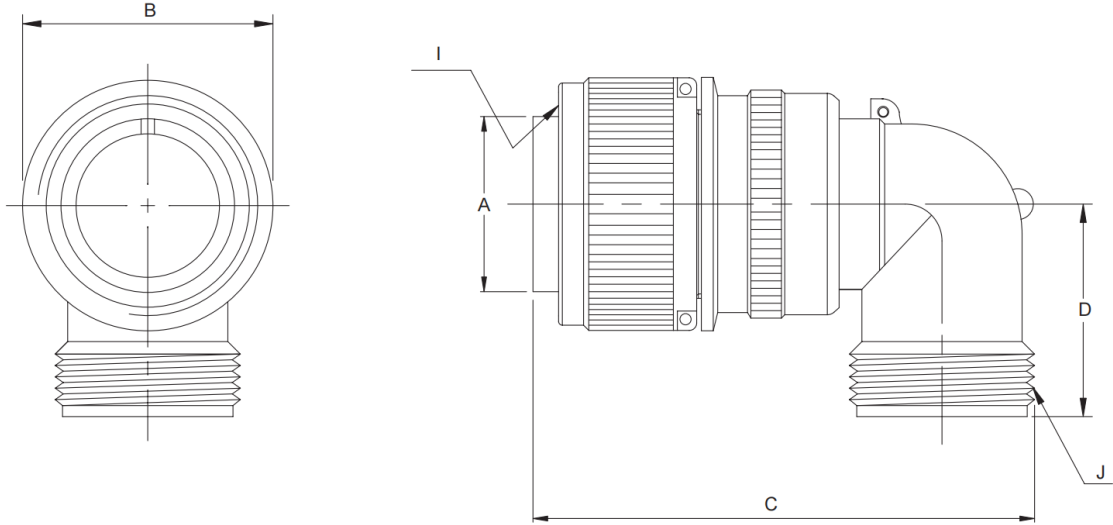
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### Electrical Performance

|                               |                                   |
|-------------------------------|-----------------------------------|
| <b>Rated voltage:</b>         | 500V                              |
| <b>Rated current:</b>         | 15A                               |
| <b>Insulation Resistance:</b> | 5,000 Mega ohms minimum (at 25°C) |
| <b>Contact resistance:</b>    | < 10 mΩ                           |

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## MS3106A Sizes



MS3108A Right Angle plugs have a solid endbell and are used when wire needs to be brought at an acute angle. Either the split or solid endbells can be rotated and locked.

(mm)

| Shell Size | $\varnothing A$<br>+0.00<br>-0.38 | $\varnothing B$<br>Max | C<br>Max | D<br>Max | I<br>Thread-2B<br>(UNEF) | J<br>Thread-2A<br>(UNEF) |
|------------|-----------------------------------|------------------------|----------|----------|--------------------------|--------------------------|
| 10SL       | 11.33                             | 24.61                  | 46.02    | 25.40    | 5/8-24 NEF               | 5/8-24 NEF               |
| 12S*       | 14.10                             | 26.97                  | 50.80    | 26.90    | 3/4-20 NEF               | 5/8-24 NEF               |
| 12         | 14.10                             | 26.97                  | 57.15    | 26.90    | 3/4-20 NEF               | 5/8-24 NEF               |
| 14S        | 17.15                             | 29.36                  | 53.97    | 28.50    | 7/8-20 NEF               | 3/4-20 NEF               |
| 14         | 17.15                             | 29.36                  | 58.72    | 28.50    | 7/8-20 NEF               | 3/4-20 NEF               |
| 16S        | 20.45                             | 31.75                  | 60.32    | 30.10    | 1-20 NEF                 | 7/8-20 NEF               |
| 16         | 20.45                             | 31.75                  | 65.07    | 30.10    | 1-20 NEF                 | 7/8-20 NEF               |
| 18         | 23.62                             | 34.13                  | 68.27    | 33.30    | 1 1/8-18 NEF             | 1-20 NEF                 |
| 20         | 26.67                             | 37.71                  | 76.98    | 34.90    | 1 1/4-18 NEF             | 1 3/16-18 NEF            |
| 22         | 29.85                             | 40.48                  | 76.98    | 34.90    | 1 3/8-18 NEF             | 1 3/16-18 NEF            |
| 24         | 33.02                             | 43.66                  | 86.51    | 39.60    | 1 1/2-18 NEF             | 1 7/16-18 NEF            |
| 28         | 38.61                             | 50.01                  | 86.51    | 39.60    | 1 3/4-18 NS              | 1 7/16-18 NEF            |
| 32         | 44.96                             | 56.36                  | 95.25    | 47.60    | 2-18 NS                  | 1 3/4-18 NS              |
| 36         | 50.29                             | 62.71                  | 100.02   | 52.30    | 2 1/4-16 UN              | 2-18 NS                  |

\* No Tooling

## How to Order

| Part Number Example  | MS | 3102 | A | 18 | -10 | P | W | XXX |
|--|----|------|---|----|-----|---|---|-----|
| <b>Connector Type:</b>   |    |      |   |    |     |   |   |     |
| MS - designates Military Standard  |    |      |   |    |     |   |   |     |
| DS - Europe use  |    |      |   |    |     |   |   |     |
| <b>Connector Style</b>   |    |      |   |    |     |   |   |     |
| 3100 - wall mounting receptacle  |    |      |   |    |     |   |   |     |
| 3101 - cable connecting plug   |    |      |   |    |     |   |   |     |
| 3102 - box mounting receptacle   |    |      |   |    |     |   |   |     |
| 3106 - straight plug   |    |      |   |    |     |   |   |     |
| 3108 - 90° Right angle plug  |    |      |   |    |     |   |   |     |
| <b>Service Class:</b>  |    |      |   |    |     |   |   |     |
| A - General purpose, Solid Endbell   |    |      |   |    |     |   |   |     |
| E - Environmental resisting, with grommet seal & strain relief back shell  |    |      |   |    |     |   |   |     |
| F - Environmental resistance with grommet seal & strain relief back shell, 3106F, and 3108E style include a front 'O' ring seal  |    |      |   |    |     |   |   |     |
| R - Environmental resisting with grommet seal, lightweight and shorter, overall length 310R style includes a front 'O' ring seal |    |      |   |    |     |   |   |     |
| <b>Shell Size:</b> 10SL/12S/14S/16S/16/18/20/22/24/28/32/36  |    |      |   |    |     |   |   |     |
| <b>Insert Arrangement:</b> (See catalog)   |    |      |   |    |     |   |   |     |
| <b>Contact Types:</b>  |    |      |   |    |     |   |   |     |
| P - designates pin contact, (+) Male   |    |      |   |    |     |   |   |     |
| S - designates socket contact, (-) Female  |    |      |   |    |     |   |   |     |
| <b>Insert Rotation:</b> (See catalog)  |    |      |   |    |     |   |   |     |
| <b>Plating Information:</b>  |    |      |   |    |     |   |   |     |
| No suffix - Olive Drab Zinc  |    |      |   |    |     |   |   |     |
| CD - Cadmium   |    |      |   |    |     |   |   |     |
| C1 - Cobalt (Without +6 Cr)  |    |      |   |    |     |   |   |     |
| 621 - Black Zinc   |    |      |   |    |     |   |   |     |
| 689 - Electro-less Nickel  |    |      |   |    |     |   |   |     |
| 426 - Electro-less Nickel & gold flash contacts  |    |      |   |    |     |   |   |     |

Learn more about this connector on [Metabee's MIL-DTL-5015 connector catalog](#).