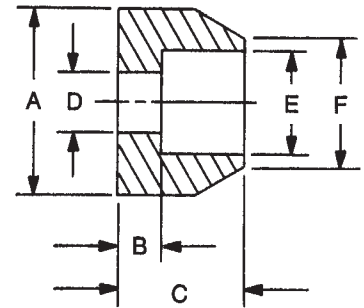


# HANDLE FERRULES

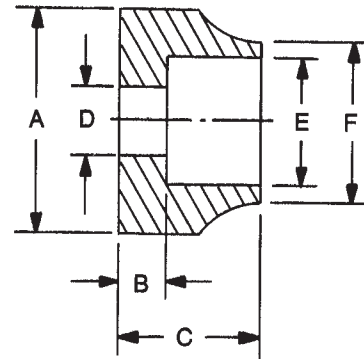
## Style 1

| PART NO. | A<br>± .2 | B<br>± .2 | C<br>± .2 | D<br>± .2 | E<br>± .2 | F<br>± .4 |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| M6955    | 6.3       | 1.2       | 3.2       | 3         | 3.5       | 5.2       |
| M6956    | 6.3       | 1.2       | 3.2       | 3         | 4.1       | 5.2       |
| M6957    | 8         | 1.6       | 3.2       | 3.6       | 5.2       | 6.7       |
| M6958    | 9.5       | 1.6       | 3.2       | 3.6       | 6.6       | 8         |
| M6959    | 9.5       | 1.6       | 4.8       | 5.2       | 6.6       | 8         |
| M6960    | 11        | 1.6       | 4.8       | 5.2       | 6.6       | 8         |
| M6961    | 11.9      | 1.6       | 6.3       | 5.2       | 6.6       | 8.7       |
| M6962    | 12.7      | 1.6       | 6.3       | 5.6       | 8.1       | 10.3      |
| M6963    | 14.3      | 1.6       | 6.3       | 5.6       | 8.1       | 10.3      |
| M6964    | 16        | 2.3       | 9.5       | 6.3       | 9.8       | 11.9      |
| M6965    | 19        | 2.3       | 9.5       | 8         | 13.1      | 15.5      |



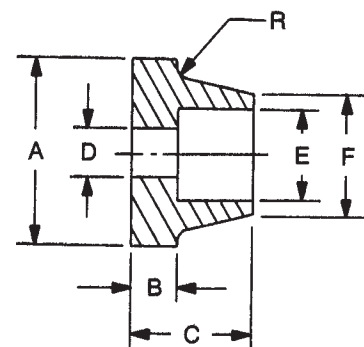
## Style 2

| PART NO. | A<br>± .2 | B<br>± .2 | C<br>± .2 | D<br>± .2 | E<br>± .2 | F<br>± .4 |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| M6966    | 6.3       | 1.2       | 3.2       | 2.8       | 4.1       | 5.2       |
| M6967    | 8         | 1.6       | 3.2       | 3.6       | 5.2       | 6.7       |
| M6968    | 9.5       | 1.6       | 4.8       | 5.2       | 6.6       | 8         |
| M6969    | 14.3      | 1.6       | 6.3       | 5.6       | 8.1       | 10.3      |
| M6970    | 19        | 1.6       | 8         | 5         | 8.1       | 10.3      |
| M6971    | 22.2      | 2.4       | 8         | 5         | 9.8       | 14.3      |
| M6972    | 22.2      | 2.4       | 8         | 5.6       | 9.8       | 14.3      |
| M6973    | 22.2      | 4.8       | 14.3      | 7         | 13        | 16        |

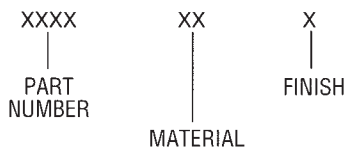


## Style 3

| PART NO. | A<br>± .2 | B<br>± .2 | C<br>± .2 | D<br>± .2 | E<br>± .2 | F<br>± .4 |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| M6974    | 16        | 1.6       | 9.5       | 5.1       | 6.5       | 8.3       |
| M6975    | 19        | 1.6       | 9.5       | 5.1       | 8.2       | 9.9       |
| M6976    | 19        | 1.6       | 9.5       | 5.1       | 9.8       | 11.5      |



### ORDERING CODE



| MATERIAL        | CODE | RoHS |
|-----------------|------|------|
| Aluminum        | AL   | YES  |
| Brass           | B    | YES  |
| Stainless Steel | SS   | YES  |

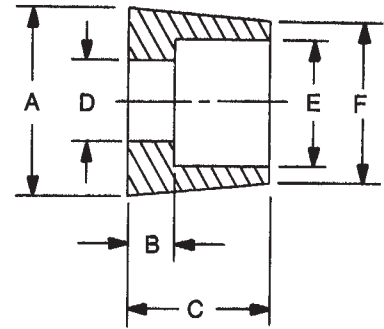
See page 6M for finish codes  
For non-standard parts contact Sales Office



# HANDLE FERRULES

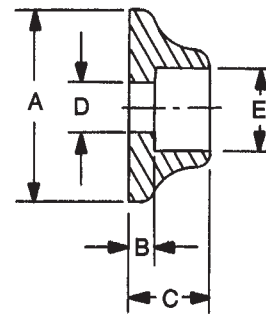
**Style 4**

| PART NO. | A<br>± .2 | B<br>± .2 | C<br>± .2 | D<br>± .2 | E<br>± .2 | F<br>± .4 |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| M6977    | 14.3      | 2.3       | 8         | 5.3       | 8.2       | 11        |
| M6978    | 16        | 3.2       | 11        | 7.2       | 10        | 11        |
| M6979    | 19        | 4.8       | 14.3      | 8.3       | 13        | 15.1      |

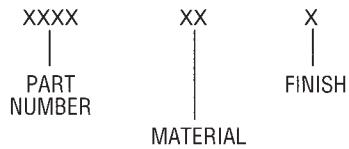


**Style 5**

| PART NO. | A<br>± .2 | B<br>± .2 | C<br>± .2 | D<br>± .2 | E<br>± .2 |
|----------|-----------|-----------|-----------|-----------|-----------|
| M6980    | 19        | 2.3       | 8         | 5         | 8.1       |



**ORDERING CODE**



| MATERIAL        | CODE | RoHS |
|-----------------|------|------|
| Aluminum        | AL   | YES  |
| Brass           | B    | YES  |
| Stainless Steel | SS   | YES  |

See page 6M for finish codes  
For non-standard parts contact Sales Office



# MATERIALS

| MATERIAL ROD & BAR      | ORDERING CODE | MATERIAL SPECIFICATIONS                            | RoHS COMPLIANT |
|-------------------------|---------------|--|----------------|
| Aluminum                | AL            | QQ-A-225/3D, QQ-A-225/6A, QQ-A-225/8B, QQ-A-200/9D | YES            |
| Aluminum (Handles Only) | A             | QQ-A-225/8B - QQ-A-200/9D                          | YES            |
| Brass                   | B             | ASTM-B-16  | YES            |
| Nylon                   | N             | LP-410A  | YES            |
| Steel                   | S             | ASTM-A108-07                                       | YES            |
| Stainless Steel         | SS            | ASTM-A-581, A-582                                  | YES            |

\* Non RoHS Compliant Finish

## FINISH CODES

|    |  |    |  |
|----|--|----|--|
| *1 | Cadmium (Commercial) (Special Order Only)  | 25 | Black Oxide, Brass MIL-F-495E  |
| *2 | Cadmium QQ-P-416F-Class 2<br>Type-1 (Clear Chromate) (Special Order Only)        | 26 | Black Oxide, Stainless Steel, Steel<br>Mil-DTL-13924D, Class 1 and 4 |
| *3 | Cadmium QQ-P-416F-Class 2<br>Type-2 (Yellow Chromate) (Special Order Only)       | 27 | Electro Tin Solder (60/40)<br>per M222-MIL-F-14072D                  |
| 4  | Chrome Over Nickel   | 28 | Zinc Plate .0002 ASTM-B-633<br>(Yellow Chromate)                     |
| 5  | Nickel QQ-N-290 Class 1 Grade G  | 29 | Brushed Finish – Handles Only  |
| *6 | Iridite #14 (Gold) MIL-DTL-5541F   | 30 | Brushed Finish – Clear Lacquer – Handles Only                        |
| 7  | Iridite (Clear) MIL-DTL-5541F  | 31 | Brushed Satin – Handles Only   |
| *9 | Alodine 1200   | 32 | Brushed Satin – Clear Anodize – Handles Only                         |
| 10 | Chrome QQ-C-320B Class 1 Type I (Bright Finish)                                  | 33 | Brushed Satin – Black Anodize – Handles Only                         |
| 11 | Chrome QQ-C-320B Class 1 Type II (Satin Finish)                                  | 34 | Satin Finish – Clear Anodize   |
| 12 | Zinc .0002 ASTM-B-633 (Clear Chromate)   | 35 | Satin Finish – Black Anodize   |
| 13 | Bright Dip – Brass   | 36 | Anodize MIL-A-8625F Black High Luster                                |
| 14 | Bright Tin ASTM B545 over Copper Flash<br>Mil-C-14550                            | 37 | Ductile Nickel   |
| 15 | Hot Tin Dip MIL-T-10727C Type II   | 38 | Polished Nickel – Handles Only                                       |
| 16 | Electro Tin ASTM B545 Class A, B or C  | 39 | Caustic Etch and Lacquer   |
| 19 | Caustic Etch   | 40 | Semi-Frost Anodize (Clear)   |
| 20 | Passivate MIL-F-14072E   | 41 | Semi-Frost Anodize (Black)   |
| 21 | Anodize MIL-A-8625F – Type II Class 2<br>(Sulfuric) Chemical Seal (Dark Grey)    | 42 | Black Zinc   |
| 22 | Anodize MIL-A-8625F – Type II Class 1<br>(Sulfuric) Hot Water Seal (Clear)       | 43 | Blue Zinc  |
| 23 | Anodize MIL-A-8625F – Type II Class 2<br>(Sulfuric) Chemical Seal (Yellow Green) | 44 | Electro Tin with Nickel Undercoat<br>Per Mil-T-10727C                |
| 24 | Anodize MIL-A-8625F – Type II Class 2<br>(Sulfuric) Chemical Seal (Black)        | 45 | Passivate QQ-P-35C Type VI   |
|    |  | 46 | Passivate ASTM A 967 Nitric 1  |
|    |  | 47 | Passivate ASTM A 380-96  |
|    |  | 48 | Passivate AMS 2700 Type 2  |

### STANDOFFS & SPACERS MANUFACTURING TOLERANCES

LENGTHS:           ± .13mm up to 100mm  
                               ± .20mm from 100mm to 150mm  
                               ± .25mm over 150mm