

## 8D - D38999 Stainless steel



MIL-DTL-38999 Serie III  
Stainless steel

# 8D - D38999 Stainless steel



## Connector part numbers

| Basic Series                                                                                                                                                                                                                                                                                                                                                                                                                             | 8D | 0 | - | 11 | K | 35 | P | N | ** |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---|---|----|---|----|---|---|----|
| <b>Shell style:</b><br><b>0:</b> Square flange receptacle<br><b>1:</b> In line receptacle<br><b>7:</b> Jam nut receptacle<br><b>5:</b> Plug with RFI shielding.                                                                                                                                                                                                                                                                          |    |   |   |    |   |    |   |   |    |
| <b>Type:</b><br><b>-:</b> Connectors with standard crimp contacts.<br><b>L:</b> Receptacle with long spill (male and female size #22D, #20).<br><b>C:</b> Receptacle with short spill (male and female #22D, #20, #16).<br><b>S:</b> Receptacle with specific spill (male et female #22D)<br><b>W:</b> Receptacle with male contacts #22D for wire wrap (3 wraps)<br><b>T:</b> Receptacle with male contacts #20 for wire wrap (2 wraps) |    |   |   |    |   |    |   |   |    |
| <b>Shell size:</b> 09 - 11 - 13 - 15 - 17 - 19 - 21 - 23 - 25                                                                                                                                                                                                                                                                                                                                                                            |    |   |   |    |   |    |   |   |    |
| <b>Plating:</b><br><b>K:</b> Passivated <b>S:</b> Nickel                                                                                                                                                                                                                                                                                                                                                                                 |    |   |   |    |   |    |   |   |    |
| <b>Contact layout:</b> See page 8 to 11                                                                                                                                                                                                                                                                                                                                                                                                  |    |   |   |    |   |    |   |   |    |
| <b>Contact type:</b><br><b>P:</b> Pin <b>A:</b> Connector supplied less pin contact or with specific contacts (Connector marking: A+ orientation)<br><b>S:</b> Socket <b>B:</b> Connector supplied less socket contact or with specific contacts (Connector marking: B+ orientation)                                                                                                                                                     |    |   |   |    |   |    |   |   |    |
| <b>Orientation:</b> N, A, B, C, D & E (See page 58)                                                                                                                                                                                                                                                                                                                                                                                      |    |   |   |    |   |    |   |   |    |
| <b>Spécification:</b><br><b>046:</b> Tinned straight spills<br><b>251:</b> Connector provided with power contacts (layouts with contacts #8)<br><b>022:</b> Fuel tank<br><b>L:</b> For P or S contact type only, connectors delivered without contacts, connectors marking P or S plus orientation.                                                                                                                                      |    |   |   |    |   |    |   |   |    |

## MIL-DTL 38999 part numbers\*

| Basic Series                                                                                                                                                                                                                                                                               | D38999 | 20 | K | B | 35 | P | N | L |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----|---|---|----|---|---|---|
| <b>Shell style:</b><br><b>20:</b> Square flange receptacle<br><b>24:</b> Jam nut receptacle<br><b>26:</b> Plug with RFI shielding.                                                                                                                                                         |        |    |   |   |    |   |   |   |
| <b>Plating:</b><br><b>K:</b> Passivated<br><b>S:</b> Nickel                                                                                                                                                                                                                                |        |    |   |   |    |   |   |   |
| <b>Shell size:</b> A - B - C - D - E - F - G - H - J                                                                                                                                                                                                                                       |        |    |   |   |    |   |   |   |
| <b>Contact layout:</b> See page 11 for layout according to MIL-DTL-38999                                                                                                                                                                                                                   |        |    |   |   |    |   |   |   |
| <b>Contact type:</b><br><b>P:</b> Pin. <b>A:</b> Connector supplied less pin contact or with specific contacts (connector marking: A + orientation).<br><b>S:</b> Socket. <b>B:</b> Connector supplied less socket contact or with specific contacts (connector marking: B + orientation). |        |    |   |   |    |   |   |   |
| <b>Orientation:</b> N, A, B, C, D & E (see page 58)                                                                                                                                                                                                                                        |        |    |   |   |    |   |   |   |
| <b>L:</b> For P or S contact type only, connector delivered without contacts, connector marking P or S (without L)                                                                                                                                                                         |        |    |   |   |    |   |   |   |

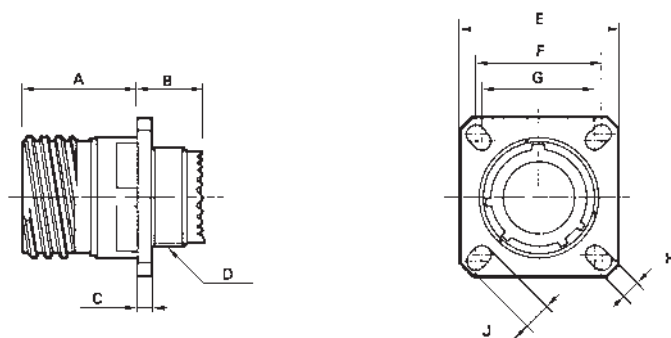
\* **Note:** To place an order of MIL connectors delivered without MIL removable crimp contacts and keep P or S plus orientation marking, it must be specify clearly on the order (by adding a suffix L at the end of the P / N or specified in comment).

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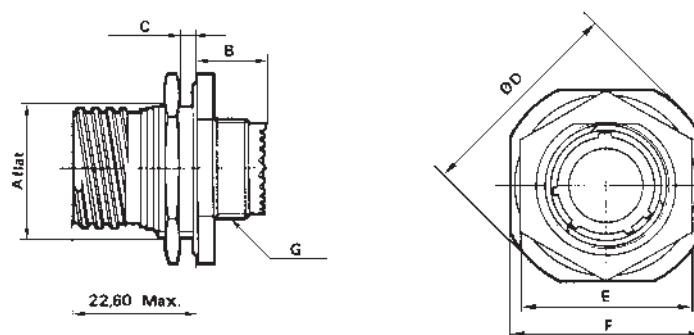
## Dimensions

### Receptacle type 0



| Shell size | A Max. | B Max. | C Max. | D thread   | E $\pm 0,30$ | F     | G     | H $\pm 0,20$ | J $\pm 0,20$ |
|------------|--------|--------|--------|------------|--------------|-------|-------|--------------|--------------|
| 09 (A)     | 20.90  | 10.60  | 2.50   | M12 x 1-6g | 23.80        | 18.26 | 15.09 | 3.25         | 5.49         |
| 11 (B)     | 20.90  | 10.60  | 2.50   | M15 x 1-6g | 26.20        | 20.62 | 18.26 | 3.25         | 4.93         |
| 13 (C)     | 20.90  | 10.60  | 2.50   | M18 x 1-6g | 28.60        | 23.01 | 20.62 | 3.25         | 4.93         |
| 15 (D)     | 20.90  | 10.60  | 2.50   | M22 x 1-6g | 31.00        | 24.61 | 23.01 | 3.25         | 4.93         |
| 17 (E)     | 20.90  | 10.60  | 2.50   | M25 x 1-6g | 33.30        | 26.97 | 24.61 | 3.25         | 4.93         |
| 19 (F)     | 20.90  | 10.60  | 2.50   | M28 x 1-6g | 36.50        | 29.36 | 26.97 | 3.25         | 4.93         |
| 21 (G)     | 20.10  | 11.40  | 3.20   | M31 x 1-6g | 39.70        | 31.75 | 29.36 | 3.25         | 4.93         |
| 23 (H)     | 20.10  | 11.40  | 3.20   | M34 x 1-6g | 42.90        | 34.93 | 31.75 | 3.91         | 6.15         |
| 25 (J)     | 20.10  | 11.40  | 3.20   | M37 x 1-6g | 46.00        | 38.10 | 34.93 | 3.91         | 6.15         |

### Receptacle type 7

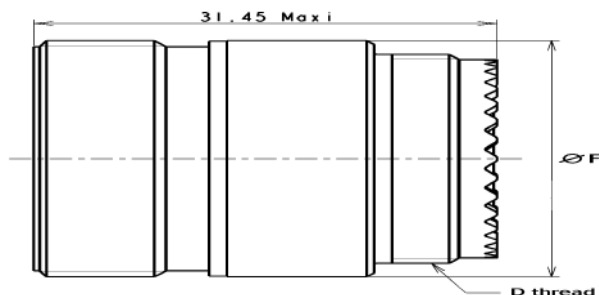


| Shell size | A + 0.10 - 0.15 | B Max. | C Max. | D Max. | E Max. | F $\pm 0.4$ | G thread   |
|------------|-----------------|--------|--------|--------|--------|-------------|------------|
| 09 (A)     | 16.53           | 9.90   | 3.20   | 30.50  | 23.00  | 27.00       | M12 x 1-6g |
| 11 (B)     | 19.07           | 9.90   | 3.20   | 35.20  | 26.00  | 31.80       | M15 x 1-6g |
| 13 (C)     | 23.82           | 9.90   | 3.20   | 38.40  | 31.00  | 34.90       | M18 x 1-6g |
| 15 (D)     | 26.97           | 9.90   | 3.20   | 41.60  | 34.00  | 38.10       | M22 x 1-6g |
| 17 (E)     | 30.15           | 9.90   | 3.20   | 44.80  | 37.00  | 41.30       | M25 x 1-6g |
| 19 (F)     | 33.32           | 9.90   | 3.20   | 49.50  | 41.00  | 46.00       | M28 x 1-6g |
| 21 (G)     | 36.50           | 9.90   | 3.20   | 52.70  | 46.00  | 49.20       | M31 x 1-6g |
| 23 (H)     | 39.67           | 9.90   | 3.20   | 55.90  | 47.00  | 52.40       | M34 x 1-6g |
| 25 (J)     | 42.85           | 9.90   | 3.20   | 59.00  | 52.00  | 55.60       | M37 x 1-6g |

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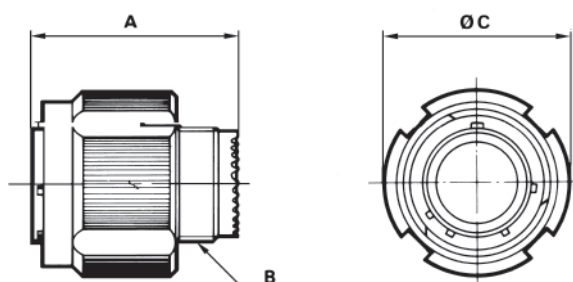


## In line receptacle type 1



| Shell size | D thread   | Ø F   |
|------------|------------|-------|
| 09 (A)     | M12 x 1-6g | 15.90 |
| 11 (B)     | M15 x 1-6g | 19.05 |
| 13 (C)     | M18 x 1-6g | 22.25 |
| 15 (D)     | M22 x 1-6g | 25.40 |
| 17 (E)     | M25 x 1-6g | 30.15 |
| 19 (F)     | M28 x 1-6g | 31.75 |
| 21 (G)     | M31 x 1-6g | 34.75 |
| 23 (H)     | M34 x 1-6g | 37.10 |
| 25 (J)     | M37 x 1-6g | 41.30 |

## Plug type 5



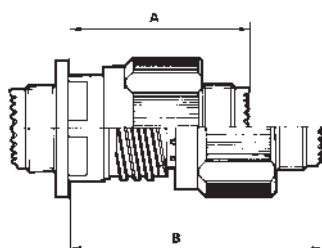
| Shell size | A Max. | B thread   | C Max. |
|------------|--------|------------|--------|
| 09 (A)     | 31.00  | M12 x 1-6g | 21.80  |
| 11 (B)     | 31.00  | M15 x 1-6g | 25.00  |
| 13 (C)     | 31.00  | M18 x 1-6g | 29.40  |
| 15 (D)     | 31.00  | M22 x 1-6g | 32.50  |
| 17 (E)     | 31.00  | M25 x 1-6g | 35.70  |
| 19 (F)     | 31.00  | M28 x 1-6g | 38.50  |
| 21 (G)     | 31.00  | M31 x 1-6g | 41.70  |
| 23 (H)     | 31.00  | M34 x 1-6g | 44.90  |
| 25 (J)     | 31.00  | M37 x 1-6g | 48.00  |

## Maximum coupling torque on panel for jam nut receptacle (type 7)

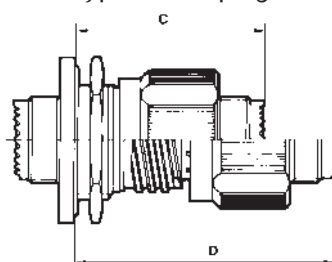
| Shell                 | 09 (A) | 11 (B) | 13 (C) | 15 (D) | 17 (E) | 19 (F) | 21 (G) | 23 (H) | 25 (J) |
|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Coupling torque (N.m) | 6      | 8      | 10     | 13     | 20     | 23     | 25     | 26     | 28     |

## Mated connectors dimensions

Type 0 with plug



Type 7 with plug



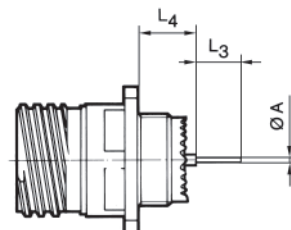
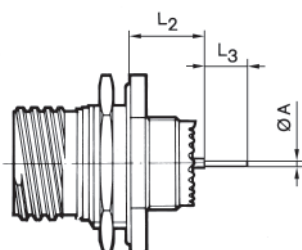
| Shell size | A Max. | B Max. | C Max. | D Max. |
|------------|--------|--------|--------|--------|
| 09 (A)     | 37.00  | 52.30  | 38.30  | 53.60  |
| 11 (B)     | 37.00  | 52.30  | 38.30  | 53.60  |
| 13 (C)     | 37.00  | 52.30  | 38.50  | 53.80  |
| 15 (D)     | 37.00  | 52.30  | 38.50  | 53.80  |
| 17 (E)     | 37.00  | 52.30  | 38.50  | 53.80  |
| 19 (F)     | 37.00  | 52.30  | 38.50  | 53.80  |
| 21 (G)     | 36.00  | 51.30  | 38.50  | 53.80  |
| 23 (H)     | 36.00  | 51.30  | 38.50  | 53.80  |
| 25 (J)     | 36.00  | 51.30  | 38.50  | 53.80  |

Dimensions in millimeters

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## Receptacle with straight spill contacts



|    |      | Shell size   |              |            | 09<br>(A) | 11<br>(B) | 13<br>(C) | 15<br>(D) | 17<br>(E) | 19<br>(F) | 21<br>(G) | 23<br>(H) | 25<br>(J) |
|----|------|--------------|--------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|    |      | Contact size | Contact type | Spill type |           |           |           |           |           |           |           |           |           |
| A  |      | # 22D        | M & F        | L & C      | 0,70      |           |           |           |           |           |           |           |           |
|    |      | # 22D        | M & F        | S          | 0.50      |           |           |           |           |           |           |           |           |
|    |      | # 20         | M & F        | C          | 0.70      |           |           |           |           |           |           |           |           |
|    |      | # 16         | M & F        | C          | 1.15      |           |           |           |           |           |           |           |           |
| L2 | Min. | # 22D        | M            | L & C      | 10.52     | 10.34     |           |           |           |           |           |           |           |
|    | Max. | # 22D        | M            | L & C      | 11.46     | 11.28     |           |           |           |           |           |           |           |
|    | Min. | # 22D        | F            | L & C      | 10.19     | 10.01     |           |           |           |           |           |           |           |
|    | Max. | # 22D        | F            | L & C      | 11.46     | 11.28     |           |           |           |           |           |           |           |
|    | Min. | # 22D        | M            | S          | 10.69     | 10.51     |           |           |           |           |           |           |           |
|    | Max. | # 22D        | M            | S          | 11.63     | 11.45     |           |           |           |           |           |           |           |
|    | Min. | # 22D        | F            | S          | 10.36     | 10.18     |           |           |           |           |           |           |           |
|    | Max. | # 22D        | F            | S          | 11.63     | 11.45     |           |           |           |           |           |           |           |
|    | Min. | # 20         | M            | C          | 10.69     | 10.51     |           |           |           |           |           |           |           |
|    | Max. | # 20         | M            | C          | 11.63     | 11.45     |           |           |           |           |           |           |           |
|    | Min. | # 20         | F            | C          | 10.69     | 10.51     |           |           |           |           |           |           |           |
|    | Max. | # 20         | F            | C          | 11.63     | 11.45     |           |           |           |           |           |           |           |
|    | Min. | # 16         | M            | C          | 10.69     | 10.51     |           |           |           |           |           |           |           |
|    | Max. | # 16         | M            | C          | 11.63     | 11.45     |           |           |           |           |           |           |           |
|    | Min. | # 16         | F            | C          | 10.69     | 10.51     |           |           |           |           |           |           |           |
|    | Max. | # 16         | F            | C          | 11.63     | 11.45     |           |           |           |           |           |           |           |
| L3 |      | # 22D        | M & F        | L          | 8.50      |           |           |           |           |           |           |           |           |
|    |      | # 22D        | M & F        | C          | 4.00      |           |           |           |           |           |           |           |           |
|    |      | # 22D        | M & F        | S          | 5.10      |           |           |           |           |           |           |           |           |
|    |      | # 20         | M & F        | C          | 5.10      |           |           |           |           |           |           |           |           |
|    |      | # 16         | M & F        | C          | 5.10      |           |           |           |           |           |           |           |           |
| L4 | Min. | # 22D        | M            | L & C      | 9.48      |           |           |           |           |           |           |           | 9.59      |
|    | Max. | # 22D        | M            | L & C      | 10.58     |           |           |           |           |           |           |           | 10.69     |
|    | Min. | # 22D        | F            | L & C      | 9.15      |           |           |           |           |           |           |           | 9.26      |
|    | Max. | # 22D        | F            | L & C      | 10.58     |           |           |           |           |           |           |           | 10.69     |
|    | Min. | # 22D        | M            | S          | 9.65      |           |           |           |           |           |           |           | 9.76      |
|    | Max. | # 22D        | M            | S          | 10.75     |           |           |           |           |           |           |           | 10.86     |
|    | Min. | # 22D        | F            | S          | 9.15      |           |           |           |           |           |           |           | 9.26      |
|    | Max. | # 22D        | F            | S          | 10.75     |           |           |           |           |           |           |           | 10.86     |
|    | Min. | # 20         | M            | C          | 9.65      |           |           |           |           |           |           |           | 9.76      |
|    | Max. | # 20         | M            | C          | 10.75     |           |           |           |           |           |           |           | 10.86     |
|    | Min. | # 20         | F            | C          | 9.65      |           |           |           |           |           |           |           | 9.76      |
|    | Max. | # 20         | F            | C          | 10.75     |           |           |           |           |           |           |           | 10.86     |
|    | Min. | # 16         | M            | C          | 9.65      |           |           |           |           |           |           |           | 9.76      |
|    | Max. | # 16         | M            | C          | 10.75     |           |           |           |           |           |           |           | 10.86     |
|    | Min. | # 16         | F            | C          | 9.65      |           |           |           |           |           |           |           | 9.76      |
|    | Max. | # 16         | F            | C          | 10.75     |           |           |           |           |           |           |           | 10.86     |

M : Male contact

F: Female contact

L: Long spill

C : Short spill

S: Specific spill

Dimensions in millimeters

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## Connectors weight

|       | With contacts    |        |                        |        |                        |        | Without contact  |        |                        |        |                        |        |
|-------|------------------|--------|------------------------|--------|------------------------|--------|------------------|--------|------------------------|--------|------------------------|--------|
|       | Plug<br>(type 5) |        | Receptacle<br>(type 0) |        | Receptacle<br>(type 7) |        | Plug<br>(type 5) |        | Receptacle<br>(type 0) |        | Receptacle<br>(type 7) |        |
|       | Male             | Female | Male                   | Female | Male                   | Female | Male             | Female | Male                   | Female | Male                   | Female |
| 09-35 | 30.63            | 32.21  | 23.93                  | 25.51  | 33.93                  | 35.51  | 30.21            | 30.71  | 23.51                  | 24.01  | 33.51                  | 34.01  |
| 09-98 | 30.63            | 31.93  | 23.93                  | 25.23  | 33.93                  | 35.23  | 30.21            | 30.73  | 23.51                  | 24.03  | 33.51                  | 34.03  |
| 11-01 | 38.13            | 41.07  | 29.53                  | 32.47  | 42.43                  | 45.37  | 37.47            | 39.47  | 28.87                  | 30.87  | 41.77                  | 43.77  |
| 11-02 | 37.76            | 40.30  | 39.36                  | 30.12  | 46.98                  | 49.52  | 37.14            | 38.74  | 28.56                  | 30.16  | 46.36                  | 47.96  |
| 11-04 | 37.95            | 41.01  | 29.35                  | 32.41  | 42.25                  | 45.31  | 37.39            | 39.41  | 28.79                  | 30.81  | 41.69                  | 43.71  |
| 11-05 | 37.98            | 41.19  | 29.38                  | 32.59  | 42.04                  | 45.49  | 37.28            | 39.19  | 28.68                  | 30.59  | 41.58                  | 43.49  |
| 11-22 | 37.48            | 39.54  | 28.90                  | 130.86 | 46.70                  | 48.76  | 37.34            | 39.04  | 28.76                  | 30.36  | 46.56                  | 48.26  |
| 11-35 | 37.88            | 41.35  | 29.28                  | 32.75  | 41.94                  | 45.65  | 36.97            | 38.10  | 28.37                  | 29.50  | 41.27                  | 42.40  |
| 11-80 | 38.12            | 44.84  | 29.73                  | 36.26  | 47.78                  | 54.06  | 34.86            | 37.84  | 26.45                  | 29.26  | 44.51                  | 47.06  |
| 11-98 | 37.85            | 40.61  | 29.25                  | 32.01  | 42.15                  | 44.91  | 37.01            | 38.21  | 28.41                  | 29.61  | 41.31                  | 42.51  |
| 11-99 | 38.02            | 41.24  | 29.44                  | 32.66  | 47.24                  | 50.46  | 37.04            | 38.44  | 28.46                  | 29.86  | 46.26                  | 47.66  |
| 13-04 | 53.34            | 57.12  | 37.94                  | 41.72  | 56.24                  | 60.02  | 52.10            | 54.00  | 36.70                  | 38.60  | 55.00                  | 56.90  |
| 13-08 | 53.72            | 58.90  | 38.32                  | 43.50  | 56.62                  | 61.80  | 52.60            | 55.70  | 37.20                  | 40.30  | 55.50                  | 58.60  |
| 13-26 | 54.09            | 59.74  | 38.69                  | 44.34  | 56.99                  | 62.64  | 52.35            | 55.04  | 36.95                  | 39.64  | 55.25                  | 57.94  |
| 13-35 | 53.52            | 59.29  | 38.12                  | 43.89  | 56.42                  | 62.19  | 51.98            | 53.79  | 36.58                  | 38.39  | 54.88                  | 56.69  |
| 13-98 | 53.38            | 58.00  | 37.98                  | 42.60  | 56.28                  | 60.90  | 51.98            | 54.00  | 36.58                  | 38.60  | 54.88                  | 56.90  |
| 15-05 | 64.49            | 69.83  | 45.69                  | 51.03  | 67.59                  | 72.93  | 62.94            | 65.93  | 44.14                  | 47.13  | 66.04                  | 69.03  |
| 15-15 | 65.29            | 72.45  | 46.49                  | 53.65  | 68.39                  | 75.55  | 63.02            | 66.07  | 44.22                  | 47.27  | 66.12                  | 69.17  |
| 15-18 | 65.50            | 74.38  | 46.70                  | 55.58  | 68.60                  | 77.48  | 62.98            | 67.18  | 44.18                  | 48.38  | 66.08                  | 70.28  |
| 15-19 | 65.03            | 72.76  | 46.23                  | 53.96  | 68.13                  | 75.86  | 62.37            | 65.16  | 43.57                  | 46.36  | 65.47                  | 68.26  |
| 15-35 | 65.13            | 74.37  | 46.33                  | 55.57  | 68.23                  | 77.47  | 62.54            | 65.12  | 43.74                  | 46.32  | 65.64                  | 68.22  |
| 15-97 | 64.96            | 72.01  | 46.16                  | 53.21  | 68.06                  | 75.11  | 62.60            | 65.69  | 43.80                  | 46.89  | 65.70                  | 68.79  |
| 17-02 | 77.80            | 92.64  | 72.89                  | 87.73  | 104.09                 | 118.95 | 74.53            | 86.09  | 69.62                  | 81.18  | 100.82                 | 112.38 |
| 17-06 | 69.07            | 78.67  | 64.17                  | 73.77  | 87.27                  | 96.87  | 65.11            | 69.07  | 60.21                  | 64.17  | 83.31                  | 87.27  |
| 17-08 | 68.06            | 76.79  | 63.16                  | 71.89  | 86.26                  | 94.99  | 65.58            | 70.55  | 60.68                  | 65.65  | 83.78                  | 88.75  |
| 17-26 | 68.64            | 79.43  | 63.74                  | 74.53  | 86.84                  | 97.63  | 65.00            | 69.03  | 60.10                  | 64.13  | 83.20                  | 87.23  |
| 17-35 | 68.88            | 82.43  | 63.98                  | 77.53  | 87.08                  | 100.63 | 65.03            | 68.68  | 60.13                  | 63.78  | 83.23                  | 86.88  |
| 17-75 | 74.48            | 85.77  | 69.58                  | 80.87  | 92.68                  | 103.97 | 65.48            | 71.77  | 60.58                  | 66.87  | 83.68                  | 89.97  |
| 17-99 | 68.69            | 79.25  | 63.79                  | 74.35  | 86.89                  | 97.45  | 65.13            | 69.29  | 60.23                  | 64.39  | 83.33                  | 87.49  |
| 19-11 | 87.04            | 100.63 | 67.69                  | 81.28  | 97.59                  | 111.18 | 83.63            | 92.05  | 64.28                  | 73.45  | 94.18                  | 103.35 |
| 19-32 | 86.25            | 99.65  | 66.90                  | 80.30  | 96.80                  | 110.20 | 81.77            | 86.85  | 62.42                  | 67.50  | 92.32                  | 97.40  |
| 19-35 | 86.56            | 103.01 | 67.21                  | 83.66  | 97.11                  | 113.56 | 81.94            | 86.51  | 62.59                  | 67.16  | 92.49                  | 97.06  |
| 21-11 | 99.71            | 119.55 | 81.81                  | 101.65 | 111.81                 | 131.65 | 92.45            | 101.95 | 74.55                  | 84.05  | 104.55                 | 114.05 |
| 21-16 | 96.81            | 112.09 | 78.91                  | 94.19  | 108.91                 | 124.19 | 91.85            | 99.61  | 73.95                  | 81.71  | 103.95                 | 111.71 |
| 21-35 | 97.09            | 117.75 | 79.19                  | 99.85  | 109.19                 | 129.85 | 91.56            | 98.00  | 73.66                  | 80.10  | 103.66                 | 110.10 |
| 21-39 | 98.47            | 118.80 | 80.57                  | 100.90 | 110.57                 | 130.90 | 92.67            | 102.44 | 74.77                  | 84.54  | 104.77                 | 114.54 |
| 21-41 | 97.01            | 114.38 | 79.11                  | 126.48 | 109.11                 | 126.48 | 91.27            | 97.98  | 73.37                  | 80.08  | 103.37                 | 80.08  |
| 21-48 | 103.84           | 123.82 | 85.93                  | 105.91 | 126.02                 | 146.02 | 90.72            | 97.62  | 72.81                  | 79.71  | 112.92                 | 119.82 |
| 21-75 | 108.72           | 125.62 | 90.81                  | 107.71 | 130.92                 | 147.82 | 90.72            | 97.62  | 72.81                  | 79.71  | 112.92                 | 119.82 |
| 23-21 | 108.81           | 132.06 | 90.61                  | 113.86 | 122.81                 | 146.06 | 102.30           | 115.68 | 84.10                  | 97.48  | 116.30                 | 129.68 |
| 23-35 | 107.17           | 133.32 | 88.97                  | 115.12 | 121.17                 | 147.32 | 100.17           | 108.32 | 81.97                  | 90.12  | 114.17                 | 122.32 |
| 23-53 | 107.23           | 129.42 | 89.03                  | 111.22 | 121.23                 | 143.42 | 99.81            | 108.22 | 81.61                  | 90.02  | 113.81                 | 122.22 |
| 23-55 | 107.98           | 131.05 | 89.78                  | 112.85 | 121.98                 | 145.05 | 100.28           | 109.05 | 82.08                  | 90.85  | 114.28                 | 123.05 |
| 25-07 | 133.3            | 157.7  | 115.5                  | 172.25 | 160.06                 | 172.25 | 108.51           | 119.45 | 90.71                  | 101.65 | 135.27                 | 101.65 |
| 25-11 | 132.31           | 152.31 | 114.51                 | 134.51 | 159.71                 | 179.07 | 111.51           | 124.51 | 93.71                  | 106.71 | 138.91                 | 151.27 |
| 25-19 | 122.14           | 154.15 | 104.34                 | 136.35 | 136.74                 | 168.75 | 109.60           | 123.75 | 91.80                  | 105.95 | 124.20                 | 138.35 |
| 25-24 | 121.64           | 153.00 | 103.84                 | 135.20 | 136.24                 | 167.60 | 110.00           | 124.44 | 92.20                  | 106.64 | 124.60                 | 139.04 |
| 25-29 | 119.96           | 148.93 | 102.16                 | 131.13 | 134.56                 | 163.53 | 110.97           | 126.31 | 93.17                  | 108.51 | 125.57                 | 140.91 |
| 25-35 | 117.75           | 150.58 | 99.95                  | 132.78 | 132.35                 | 165.18 | 108.79           | 118.58 | 90.99                  | 100.78 | 123.39                 | 133.18 |
| 25-37 | 119.98           | 148.26 | 102.18                 | 162.67 | 146.74                 | 162.67 | 108.51           | 119.40 | 90.71                  | 101.60 | 135.27                 | 101.60 |
| 25-44 | 140.35           | 164.98 | 122.55                 | 179.58 | 167.11                 | 179.71 | 106.81           | 117.08 | 89.01                  | 99.28  | 133.57                 | 99.41  |
| 25-43 | 120.00           | 150.68 | 102.20                 | 132.88 | 134.60                 | 165.28 | 110.58           | 125.88 | 92.78                  | 108.08 | 125.18                 | 140.48 |
| 25-46 | 122.30           | 146.14 | 104.50                 | 128.34 | 136.90                 | 160.74 | 107.66           | 117.82 | 89.86                  | 100.02 | 122.26                 | 132.42 |
| 25-61 | 117.05           | 143.80 | 99.25                  | 126.00 | 131.65                 | 158.40 | 108.51           | 119.40 | 90.71                  | 101.60 | 123.11                 | 155.51 |
| 25-08 | 143.38           | 175.21 | 125.58                 | 157.41 | 157.98                 | 189.81 | 107.38           | 119.21 | 89.58                  | 101.41 | 121.98                 | 133.81 |
| 25-20 | 128.40           | 158.62 | 110.60                 | 140.82 | 143.00                 | 173.22 | 106.83           | 117.08 | 89.03                  | 99.28  | 121.43                 | 131.68 |
| 25-04 | 120.80           | 150.65 | 103.00                 | 132.85 | 135.40                 | 165.25 | 111.60           | 125.21 | 93.80                  | 107.41 | 126.20                 | 139.81 |

Weight in gram