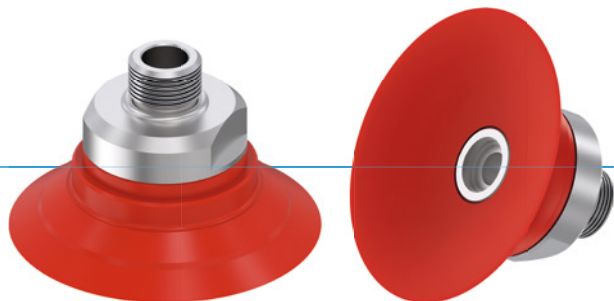


# VENTOSA PLANA

## SERIE ZU

### ► VENTAJAS DE PRODUCTO



► **Diámetro: 1,5 mm-80 mm**

► **Geometría óptima**

- Para una manipulación eficiente también de las piezas de trabajo más pequeñas
- Uso universal

► **Campos de aplicación**

- Semiconductores
- Intralogística
- Papel e impresión

### ► CLAVE DE PRODUCTO

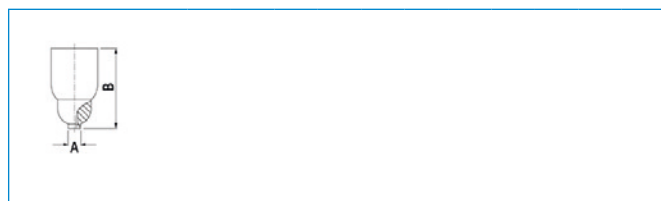
|       |          |   |          |   |                   |   |                |
|-------|----------|---|----------|---|-------------------|---|----------------|
| ZU    | 25       | - | S        | - | M5F18M            | - | M              |
| Serie | Diámetro |   | Material |   | Rosca de conexión |   | Tipo de filtro |

### ► PROPIEDADES DE LOS MATERIALES

| versión | Material                     | Color              | Temperatura de servicio [°C] | Dureza Shore |
|---------|------------------------------|--------------------|------------------------------|--------------|
| N       | NBR                          | Negro              | -20 ... +110                 | 60           |
| S       | silicona                     | Rojo               | -70 ... +200                 | 55           |
| WS      | silicona apta para alimentos | Blanco translúcido | -70 ... +200                 | 55           |

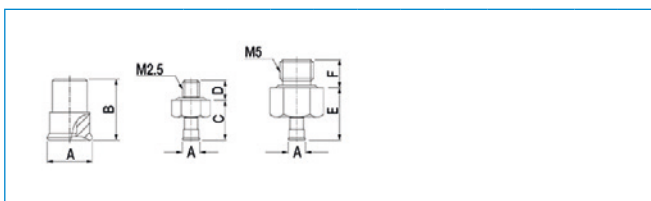
### ► DIMENSIONES

#### ZU1.5



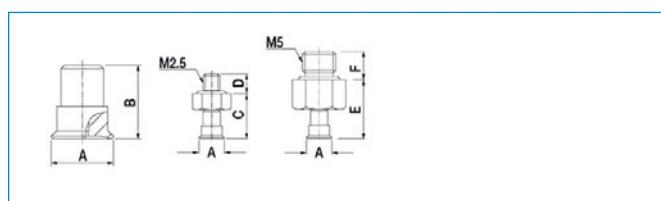
| Leyenda      | A   | B  |
|--------------|-----|----|
| Medidas [mm] | 1.9 | 12 |

#### ZU2



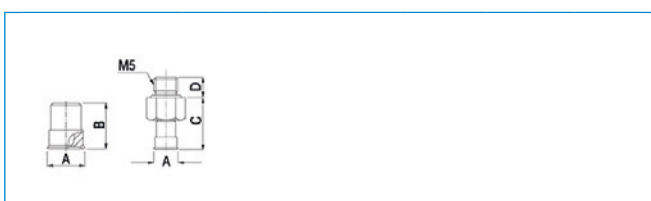
| Leyenda      | A   | B   | C | D | E   | F   |
|--------------|-----|-----|---|---|-----|-----|
| Medidas [mm] | 2.6 | 3.5 | 6 | 3 | 8.1 | 4.2 |

#### ZU3



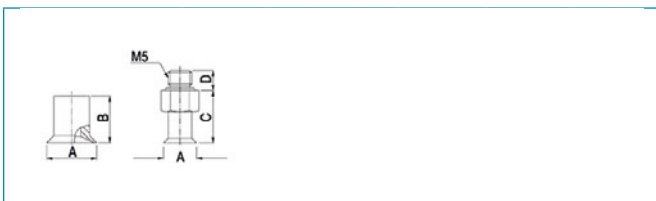
| Leyenda      | A   | B   | C | D | E   | F   |
|--------------|-----|-----|---|---|-----|-----|
| Medidas [mm] | 3.8 | 4.5 | 7 | 3 | 9.1 | 4.2 |

#### ZU4



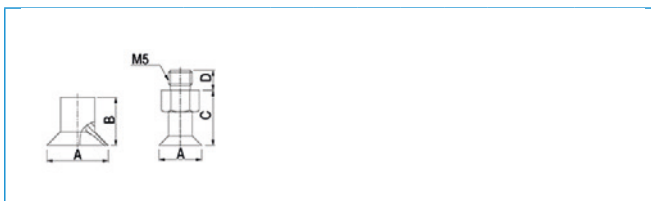
| Leyenda      | A | B   | C    | D   |
|--------------|---|-----|------|-----|
| Medidas [mm] | 5 | 6.1 | 10.7 | 4.2 |

# ZU6



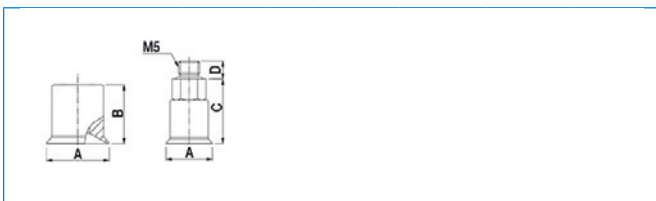
| Leyenda      | A | B   | C    | D   |
|--------------|---|-----|------|-----|
| Medidas [mm] | 7 | 6.5 | 11.1 | 4.2 |

# ZU8



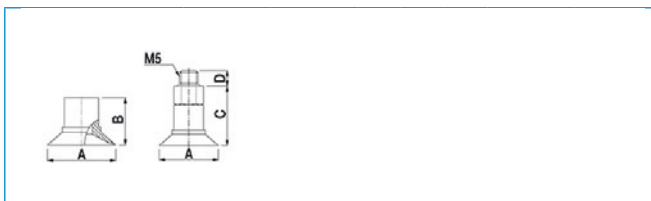
| Leyenda      | A | B | C    | D   |
|--------------|---|---|------|-----|
| Medidas [mm] | 9 | 7 | 11.6 | 4.2 |

# ZU10



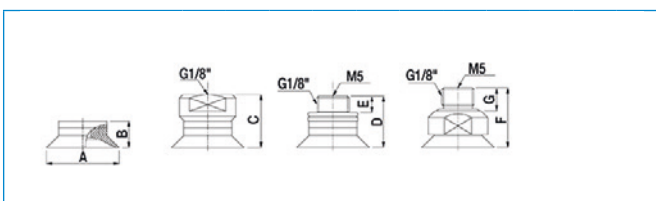
| Leyenda      | A  | B    | C    | D   |
|--------------|----|------|------|-----|
| Medidas [mm] | 11 | 10.2 | 15.2 | 4.2 |

# ZU15



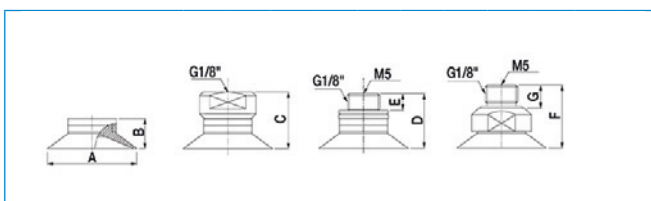
| Leyenda      | A  | B  | C  | D   |
|--------------|----|----|----|-----|
| Medidas [mm] | 16 | 11 | 16 | 4.2 |

# ZU20



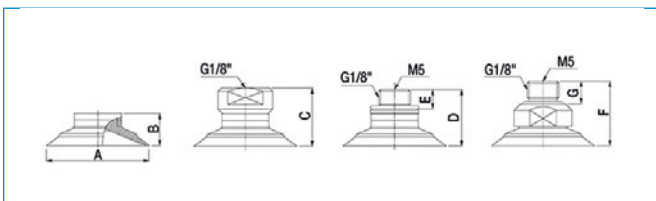
| Leyenda      | A  | B | C  | D    | E | F  | G |
|--------------|----|---|----|------|---|----|---|
| Medidas [mm] | 22 | 8 | 16 | 15.5 | 6 | 18 | 7 |

# ZU25



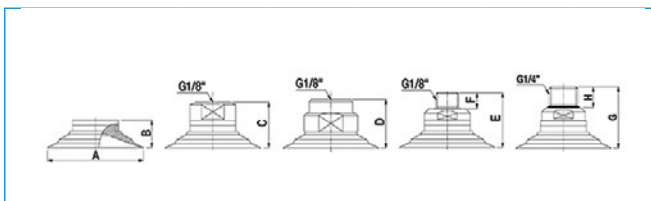
| Leyenda      | A  | B | C  | D    | E | F  | G |
|--------------|----|---|----|------|---|----|---|
| Medidas [mm] | 27 | 9 | 17 | 16.5 | 6 | 19 | 7 |

# ZU30



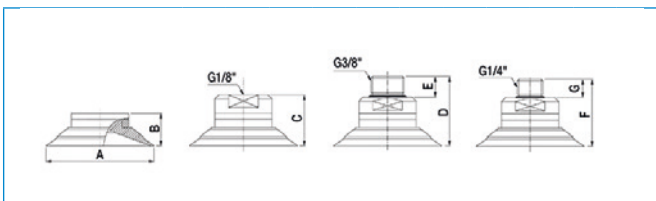
| Leyenda      | A  | B  | C  | D    | E | F  | G |
|--------------|----|----|----|------|---|----|---|
| Medidas [mm] | 32 | 10 | 18 | 17.5 | 6 | 20 | 7 |

# ZU40



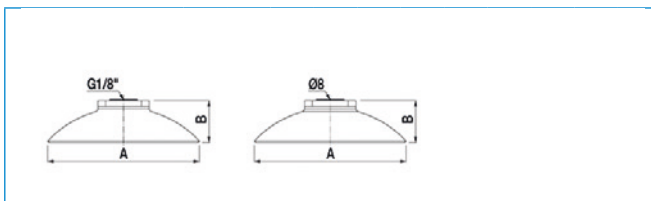
| Leyenda      | A  | B  | C  | D    | E  | F | G    | H |
|--------------|----|----|----|------|----|---|------|---|
| Medidas [mm] | 42 | 12 | 20 | 21.2 | 24 | 7 | 26.8 | 9 |

# ZU50



| Leyenda      | A  | B    | C    | D    | E  | F    | G |
|--------------|----|------|------|------|----|------|---|
| Medidas [mm] | 53 | 15.9 | 24.9 | 33.9 | 10 | 32.9 | 9 |

# ZU80



| Leyenda      | A  | B  |
|--------------|----|----|
| Medidas [mm] | 80 | 22 |

# VENTOSA PLANA

## SERIE ZU

### ► DATOS TÉCNICOS

| Tamaño constructivo                         | ZU1.5 | ZU2   | ZU3   | ZU3   | ZU4   | ZU6   | ZU8   | ZU10  |
|---------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Fuerza de elevación paralela a -20 kPa [kg] |       |       |       |       | 0.020 | 0.030 | 0.100 | 0.150 |
| Fuerza de elevación paralela a -60 kPa [kg] |       |       |       |       | 0.080 | 0.150 | 0.290 | 0.440 |
| Fuerza de elevación paralela a -90 kPa [kg] |       |       |       |       | 0.100 | 0.200 | 0.340 | 0.500 |
| Fuerza de elevación vertical a -20 kPa [kg] | 0.001 | 0.003 | 0.009 | 0.014 | 0.020 | 0.050 | 0.100 | 0.150 |
| Fuerza de elevación vertical a -60 kPa [kg] | 0.003 | 0.010 | 0.040 | 0.060 | 0.090 | 0.170 | 0.290 | 0.440 |
| Fuerza de elevación vertical a -90 kPa [kg] | 0.004 | 0.015 | 0.060 | 0.090 | 0.130 | 0.250 | 0.390 | 0.700 |
| Volumen [cm³]                               | 0.002 | 0.003 | 0.005 | 0.018 | 0.030 | 0.050 | 0.100 | 0.180 |

| Tamaño constructivo                         | ZU15  | ZU20  | ZU25  | ZU30  | ZU40  | ZU50   | ZU80   |
|---------------------------------------------|-------|-------|-------|-------|-------|--------|--------|
| Fuerza de elevación paralela a -20 kPa [kg] | 0.350 | 0.600 | 0.700 | 0.790 | 1.420 | 2.040  | 4.530  |
| Fuerza de elevación paralela a -60 kPa [kg] | 0.550 | 0.890 | 0.950 | 1.000 | 2.240 | 3.770  | 12.700 |
| Fuerza de elevación paralela a -90 kPa [kg] | 0.600 | 1.000 | 1.050 | 1.120 | 2.800 | 4.480  | 16.940 |
| Fuerza de elevación vertical a -20 kPa [kg] | 0.350 | 0.600 | 0.910 | 1.220 | 2.040 | 3.570  | 7.770  |
| Fuerza de elevación vertical a -60 kPa [kg] | 0.850 | 1.220 | 1.980 | 2.550 | 3.970 | 7.440  | 19.800 |
| Fuerza de elevación vertical a -90 kPa [kg] | 1.120 | 1.630 | 2.500 | 3.060 | 5.000 | 9.380  | 25.210 |
| Volumen [cm³]                               | 0.500 | 1.000 | 1.500 | 2.000 | 5.500 | 12.000 | 32.000 |

| Referencia   | ► Datos técnicos |                              |                   |                |
|--------------|------------------|------------------------------|-------------------|----------------|
|              | Diámetro [mm]    | Material                     | Rosca de conexión | Tipo de filtro |
| ZU1.5X-N     | 1.5              | NBR                          |                   |                |
| ZU1.5X-S     | 1.5              | silicona                     |                   |                |
| ZU1.5X-WS    | 1.5              | silicona apta para alimentos |                   |                |
| ZU2-N        | 2                | NBR                          |                   |                |
| ZU2-N-M2.5M  | 2                | NBR                          | M2.5 exterior     |                |
| ZU2-N-M5M    | 2                | NBR                          | M5 exterior       |                |
| ZU2-S        | 2                | silicona                     |                   |                |
| ZU2-S-M2.5M  | 2                | silicona                     | M2.5 exterior     |                |
| ZU2-S-M5M    | 2                | silicona                     | M5 exterior       |                |
| ZU2-WS-M2.5M | 2                | silicona apta para alimentos | M2.5 exterior     |                |
| ZU2-WS-M5M   | 2                | silicona apta para alimentos | M5 exterior       |                |
| ZU3-N        | 3                | NBR                          |                   |                |
| ZU3-N-M2.5M  | 3                | NBR                          | M2.5 exterior     |                |
| ZU3-N-M5M    | 3                | NBR                          | M5 exterior       |                |
| ZU3-S        | 3                | silicona                     |                   |                |
| ZU3-S-M2.5M  | 3                | silicona                     | M2.5 exterior     |                |
| ZU3-S-M5M    | 3                | silicona                     | M5 exterior       |                |
| ZU3-WS       | 3                | silicona apta para alimentos |                   |                |
| ZU3-WS-M2.5M | 3                | silicona apta para alimentos | M2.5 exterior     |                |
| ZU3-WS-M5M   | 3                | silicona apta para alimentos | M5 exterior       |                |
| ZU4-N        | 4                | NBR                          |                   |                |
| ZU4-N-M5M    | 4                | NBR                          | M5 exterior       |                |
| ZU4-S        | 4                | silicona                     |                   |                |
| ZU4-S-M5M    | 4                | silicona                     | M5 exterior       |                |
| ZU4-WS       | 4                | silicona apta para alimentos |                   |                |
| ZU4-WS-M5M   | 4                | silicona apta para alimentos | M5 exterior       |                |
| ZU6-N        | 6                | NBR                          |                   |                |
| ZU6-N-M5M    | 6                | NBR                          | M5 exterior       |                |
| ZU6-S        | 6                | silicona                     |                   |                |
| ZU6-S-M5M    | 6                | silicona                     | M5 exterior       |                |
| ZU6-WS       | 6                | silicona apta para alimentos |                   |                |
| ZU6-WS-M5M   | 6                | silicona apta para alimentos | M5 exterior       |                |
| ZU8-N        | 8                | NBR                          |                   |                |
| ZU8-N-M5M    | 8                | NBR                          | M5 exterior       |                |
| ZU8-S        | 8                | silicona                     |                   |                |
| ZU8-S-M5M    | 8                | silicona                     | M5 exterior       |                |
| ZU8-WS       | 8                | silicona apta para alimentos |                   |                |
| ZU8-WS-M5M   | 8                | silicona apta para alimentos | M5 exterior       |                |
| ZU10-N       | 10               | NBR                          |                   |                |

| Referencia      | ► Datos técnicos |                              |                            |                 |
|-----------------|------------------|------------------------------|----------------------------|-----------------|
|                 | Diámetro [mm]    | Material                     | Rosca de conexión          | Tipo de filtro  |
| ZU10-N-M5M      | 10               | NBR                          | M5 exterior                |                 |
| ZU10-S          | 10               | silicona                     |                            |                 |
| ZU10-S-M5M      | 10               | silicona                     | M5 exterior                |                 |
| ZU10-WS         | 10               | silicona apta para alimentos |                            |                 |
| ZU10-WS-M5M     | 10               | silicona apta para alimentos | M5 exterior                |                 |
| ZU15-N          | 15               | NBR                          |                            |                 |
| ZU15-N-M5M      | 15               | NBR                          | M5 exterior                |                 |
| ZU15-S          | 15               | silicona                     |                            |                 |
| ZU15-S-M5M      | 15               | silicona                     | M5 exterior                |                 |
| ZU15-WS         | 15               | silicona apta para alimentos |                            |                 |
| ZU15-WS-M5M     | 15               | silicona apta para alimentos | M5 exterior                |                 |
| ZU20-N          | 20               | NBR                          |                            |                 |
| ZU20-N-M5F18M   | 20               | NBR                          | M5 interior-G1/8" exterior |                 |
| ZU20-N-M5F18M-M | 20               | NBR                          | M5 interior-G1/8" exterior |                 |
| ZU20-S          | 20               | silicona                     |                            |                 |
| ZU20-S-18F      | 20               | silicona                     | G1/8" interior             |                 |
| ZU20-S-18F-M    | 20               | silicona                     | G1/8" interior             | Filtro de malla |
| ZU20-S-M5F18M   | 20               | silicona                     | M5 interior-G1/8" exterior |                 |
| ZU20-S-M5M      | 20               | silicona                     | M5 exterior                |                 |
| ZU20-WS         | 20               | silicona apta para alimentos |                            |                 |
| ZU20-WS-18F     | 20               | silicona apta para alimentos | G1/8" interior             |                 |
| ZU20-WS-M5F18M  | 20               | silicona apta para alimentos | M5 interior-G1/8" exterior |                 |
| ZU25-N          | 25               | NBR                          |                            |                 |
| ZU25-N-18F      | 25               | NBR                          | G1/8" interior             |                 |
| ZU25-N-M5F18M   | 25               | NBR                          | M5 interior-G1/8" exterior |                 |
| ZU25-S          | 25               | silicona                     |                            |                 |
| ZU25-S-18F      | 25               | silicona                     | G1/8" interior             |                 |
| ZU25-S-M5F18M   | 25               | silicona                     | M5 interior-G1/8" exterior |                 |
| ZU25-S-M5F18M-M | 25               | silicona                     | M5 interior-G1/8" exterior | Filtro de malla |
| ZU25-WS         | 25               | silicona apta para alimentos |                            |                 |
| ZU25-WS-M5F18M  | 25               | silicona apta para alimentos | M5 interior-G1/8" exterior |                 |
| ZU30-N          | 30               | NBR                          |                            |                 |
| ZU30-N-18F      | 30               | NBR                          | G1/8" interior             |                 |
| ZU30-N-M5F18M   | 30               | NBR                          | M5 interior-G1/8" exterior |                 |
| ZU30-N-M5F18M-M | 30               | NBR                          | M5 interior-G1/8" exterior | Filtro de malla |
| ZU30-S          | 30               | silicona                     |                            |                 |
| ZU30-S-18F      | 30               | silicona                     | G1/8" interior             |                 |
| ZU30-S-M5F18M   | 30               | silicona                     | M5 interior-G1/8" exterior |                 |
| ZU30-WS         | 30               | silicona apta para alimentos |                            |                 |
| ZU30-WS-18F     | 30               | silicona apta para alimentos | G1/8" interior             |                 |
| ZU30-WS-M5F18M  | 30               | silicona apta para alimentos | M5 interior-G1/8" exterior |                 |
| ZU40-N          | 40               | NBR                          |                            |                 |
| ZU40-N-14M      | 40               | NBR                          | G1/4" exterior             |                 |
| ZU40-N-14M-M    | 40               | NBR                          | G1/4" exterior             | Filtro de malla |
| ZU40-N-18F      | 40               | NBR                          | G1/8" interior             |                 |
| ZU40-N-18F-M    | 40               | NBR                          | G1/8" interior             | Filtro de malla |
| ZU40-N-18M      | 40               | NBR                          | G1/8" exterior             |                 |
| ZU40-N-18M-M    | 40               | NBR                          | G1/8" exterior             | Filtro de malla |
| ZU40-S          | 40               | silicona                     |                            |                 |
| ZU40-S-14M      | 40               | silicona                     | G1/4" exterior             |                 |
| ZU40-S-14M-M    | 40               | silicona                     | G1/4" exterior             | Filtro de malla |
| ZU40-S-18F      | 40               | silicona                     | G1/8" interior             |                 |
| ZU40-S-18F-M    | 40               | silicona                     | G1/8" interior             | Filtro de malla |
| ZU40-S-18M      | 40               | silicona                     | G1/8" exterior             |                 |
| ZU40-WS         | 40               | silicona apta para alimentos |                            |                 |
| ZU40-WS-18F     | 40               | silicona apta para alimentos | G1/8" interior             |                 |
| ZU50-N          | 50               | NBR                          |                            |                 |
| ZU50-N-14M      | 50               | NBR                          | G1/4" exterior             |                 |
| ZU50-N-14M-M    | 50               | NBR                          | G1/4" exterior             | Filtro de malla |
| ZU50-N-18F      | 50               | NBR                          | G1/8" interior             |                 |

# VENTOSA PLANA

## SERIE ZU

| Referencia    | ► Datos técnicos |                              |                   |                 |
|---------------|------------------|------------------------------|-------------------|-----------------|
|               | Diámetro [mm]    | Material                     | Rosca de conexión | Tipo de filtro  |
| ZU50-N-18F-M  | 50               | NBR                          | G1/8" interior    | Filtro de malla |
| ZU50-N-38M    | 50               | NBR                          | G3/8" exterior    |                 |
| ZU50-S        | 50               | silicona                     |                   |                 |
| ZU50-S-14M    | 50               | silicona                     | G1/4" exterior    |                 |
| ZU50-S-14M-M  | 50               | silicona                     | G1/4" exterior    | Filtro de malla |
| ZU50-S-18F    | 50               | silicona                     | G1/8" interior    |                 |
| ZU50-S-18F-M  | 50               | silicona                     | G1/8" interior    | Filtro de malla |
| ZU50-WS       | 50               | silicona apta para alimentos |                   |                 |
| ZU50-WS-14M   | 50               | silicona apta para alimentos | G1/4" exterior    |                 |
| ZU50-WS-14M-M | 50               | silicona apta para alimentos | G1/4" exterior    | Filtro de malla |
| ZU80-N-18F    | 80               | NBR                          | G1/8" interior    |                 |
| ZU80-S-18F    | 80               | silicona                     | G1/8" interior    |                 |
| ZU80-WS-18F   | 80               | silicona apta para alimentos | G1/8" interior    |                 |