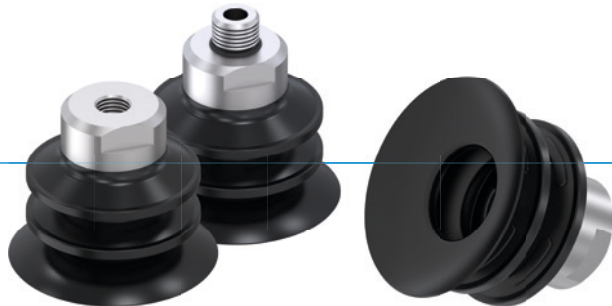


# BELLOWS SUCTION CUP

## SERIES ZBU

### ► PRODUCT ADVANTAGES



#### ► Optimum geometry

- For flat and convex surfaces
- Can be used universally
- Height compensation and damping function with 2.5 folds

#### ► Application areas

- Packaging
- Consumer goods
- Intralogistics

### ► PRODUCT KEY

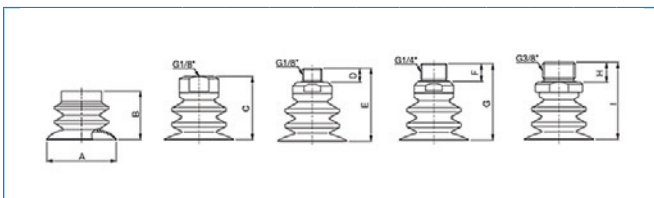
|        |          |   |          |   |               |   |             |
|--------|----------|---|----------|---|---------------|---|-------------|
| ZBU    | 35       | - | N        | - | 18F           | - | M           |
| Series | Diameter |   | Material |   | Fixing thread |   | Filter type |

### ► MATERIAL CHARACTERISTICS

| Version | Material           | Color              | Operating temperature [°C] | Shore hardness |
|---------|--------------------|--------------------|----------------------------|----------------|
| N       | NBR                | Black              | -20 ... +110               | 60             |
| PU      | Polyurethane       | Translucent orange | 0 ... +60                  | 60             |
| S       | Silicone           | Red                | -70 ... +200               | 55             |
| WS      | Silicone food-safe | Translucent white  | -70 ... +200               | 55             |

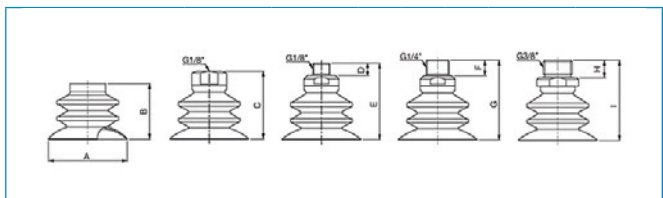
### ► DIMENSIONS

#### ZBU35



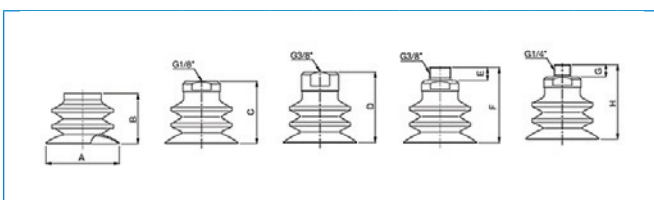
| Legend          | A    | B    | C  | D | E    | F  | G  | H | I    |
|-----------------|------|------|----|---|------|----|----|---|------|
| Dimensions [mm] | 35.4 | 24.5 | 32 | 7 | 36.8 | 10 | 39 | 7 | 36.8 |

#### ZBU45



| Legend          | A    | B  | C  | D | E    | F | G    | H  | I  |
|-----------------|------|----|----|---|------|---|------|----|----|
| Dimensions [mm] | 45.5 | 32 | 39 | 7 | 43.8 | 9 | 45.8 | 10 | 46 |

#### ZBU55



| Legend          | A    | B  | C  | D    | E  | F  | G | H  |
|-----------------|------|----|----|------|----|----|---|----|
| Dimensions [mm] | 55.6 | 38 | 47 | 53.5 | 10 | 57 | 9 | 56 |

## ► TECHNICAL DATA

| Installation size                      | ZBU35 | ZBU45  | ZBU55  |
|----------------------------------------|-------|--------|--------|
| Lifting force parallel at -20 kPa [N]  |       |        |        |
| Lifting force parallel at -60 kPa [N]  |       |        |        |
| Lifting force parallel at -90 kPa [N]  |       |        |        |
| Lifting force vertical at -20 kPa [N]  | 22.17 | 40.02  | 73.58  |
| Lifting force vertical at -60 kPa [N]  | 41.99 | 71.61  | 96.14  |
| Lifting force vertical at -90 kPa [N]  | 56.41 | 98.1   | 118.21 |
| Lifting force parallel at -20 kPa [kg] |       |        |        |
| Lifting force parallel at -60 kPa [kg] |       |        |        |
| Lifting force parallel at -90 kPa [kg] |       |        |        |
| Lifting force vertical at -20 kPa [kg] | 2.260 | 4.080  | 7.500  |
| Lifting force vertical at -60 kPa [kg] | 4.280 | 7.300  | 9.800  |
| Lifting force vertical at -90 kPa [kg] | 5.750 | 10.000 | 12.050 |
| Volume [cm³]                           | 6.200 | 12.500 | 28.000 |

| Order no.        | ► Technical data |                    |                |             |
|------------------|------------------|--------------------|----------------|-------------|
|                  | Diameter [mm]    | Material           | Fixing thread  | Filter type |
| ZBU35-N          | 35               | NBR                |                |             |
| ZBU35-N-18F      | 35               | NBR                | G1/8" internal |             |
| ZBU35-N-18F-M    | 35               | NBR                | G1/8" internal | Mesh filter |
| ZBU35-N-18M      | 35               | NBR                | G1/8" external |             |
| ZBU35-N-38M      | 35               | NBR                | G3/8" external |             |
| ZBU35-PU         | 35               | Polyurethane       |                |             |
| ZBU35-PU-14M     | 35               | Polyurethane       | G1/4" external |             |
| ZBU35-PU-14M-M   | 35               | Polyurethane       | G1/4" external | Mesh filter |
| ZBU35-PU-18F     | 35               | Polyurethane       | G1/8" internal |             |
| ZBU35-PU-18F-M   | 35               | Polyurethane       | G1/8" internal | Mesh filter |
| ZBU35-PU-18M     | 35               | Polyurethane       | G1/8" external |             |
| ZBU35-PU-18M-M   | 35               | Polyurethane       | G1/8" external | Mesh filter |
| ZBU35-PU-38M     | 35               | Polyurethane       | G3/8" external |             |
| ZBU35-PU-38M-F   | 35               | Polyurethane       | G3/8" external | Disc filter |
| ZBU35-S          | 35               | Silicone           |                |             |
| ZBU35-S-14MB2    | 35               | Silicone           | G1/4" external |             |
| ZBU35-S-14MB2-M  | 35               | Silicone           | G1/4" external | Mesh filter |
| ZBU35-S-18FB2    | 35               | Silicone           | G1/8" internal |             |
| ZBU35-S-18FB2-M  | 35               | Silicone           | G1/8" internal | Mesh filter |
| ZBU35-S-18MB2    | 35               | Silicone           | G1/8" external |             |
| ZBU35-S-18MB2-F  | 35               | Silicone           | G1/8" external | Disc filter |
| ZBU35-S-18MB2-M  | 35               | Silicone           | G1/8" external | Mesh filter |
| ZBU35-S-38MB2    | 35               | Silicone           | G3/8" external |             |
| ZBU35-S-38MB2-M  | 35               | Silicone           | G3/8" external | Mesh filter |
| ZBU35-WS         | 35               | Silicone food-safe |                |             |
| ZBU35-WS-14MB2   | 35               | Silicone food-safe | G1/4" external |             |
| ZBU35-WS-18FB2   | 35               | Silicone food-safe | G1/8" internal |             |
| ZBU35-WS-38MB2   | 35               | Silicone food-safe | G3/8" external |             |
| ZBU35-WS-38MB2-M | 35               | Silicone food-safe | G3/8" external | Mesh filter |
| ZBU45-N          | 45               | NBR                |                |             |
| ZBU45-N-18F      | 45               | NBR                | G1/8" internal |             |
| ZBU45-N-18F-M    | 45               | NBR                | G1/8" internal | Mesh filter |
| ZBU45-PU         | 45               | Polyurethane       |                |             |
| ZBU45-PU-14M     | 45               | Polyurethane       | G1/4" external |             |
| ZBU45-PU-14M-M   | 45               | Polyurethane       | G1/4" external | Mesh filter |
| ZBU45-PU-18F     | 45               | Polyurethane       | G1/8" internal |             |
| ZBU45-PU-18F-M   | 45               | Polyurethane       | G1/8" internal | Mesh filter |
| ZBU45-PU-18M     | 45               | Polyurethane       | G1/8" external |             |
| ZBU45-PU-18M-M   | 45               | Polyurethane       | G1/8" external | Mesh filter |
| ZBU45-PU-38M     | 45               | Polyurethane       | G3/8" external |             |
| ZBU45-S          | 45               | Silicone           |                |             |
| ZBU45-S-14MB2    | 45               | Silicone           | G1/4" external |             |

# BELLOWS SUCTION CUP

## SERIES ZBU

| Order no.        | ► Technical data |                    |                |             |
|------------------|------------------|--------------------|----------------|-------------|
|                  | Diameter [mm]    | Material           | Fixing thread  | Filter type |
| ZBU45-S-14MB2-M  | 45               | Silicone           | G1/4" external | Mesh filter |
| ZBU45-S-18FB2    | 45               | Silicone           | G1/8" internal |             |
| ZBU45-S-18FB2-M  | 45               | Silicone           | G1/8" internal | Mesh filter |
| ZBU45-S-18MB2    | 45               | Silicone           | G1/8" external |             |
| ZBU45-S-18MB2-M  | 45               | Silicone           | G1/8" external | Mesh filter |
| ZBU45-S-38MB2    | 45               | Silicone           | G3/8" external |             |
| ZBU45-S-38MB2-M  | 45               | Silicone           | G3/8" external | Mesh filter |
| ZBU45-WS         | 45               | Silicone food-safe |                |             |
| ZBU55-N          | 55               | NBR                |                |             |
| ZBU55-N-14M-M    | 55               | NBR                | G1/4" external | Mesh filter |
| ZBU55-N-18F      | 55               | NBR                | G1/8" internal |             |
| ZBU55-N-18F-M    | 55               | NBR                | G1/8" internal | Mesh filter |
| ZBU55-N-38M      | 55               | NBR                | G3/8" external |             |
| ZBU55-PU         | 55               | Polyurethane       |                |             |
| ZBU55-PU-14M     | 55               | Polyurethane       | G1/4" external |             |
| ZBU55-PU-14M-F   | 55               | Polyurethane       | G1/4" external | Disc filter |
| ZBU55-PU-14M-M   | 55               | Polyurethane       | G1/4" external | Mesh filter |
| ZBU55-PU-18F     | 55               | Polyurethane       | G1/8" internal |             |
| ZBU55-PU-18F-F   | 55               | Polyurethane       | G1/8" internal | Disc filter |
| ZBU55-PU-18F-M   | 55               | Polyurethane       | G1/8" internal | Mesh filter |
| ZBU55-PU-38M     | 55               | Polyurethane       | G3/8" external |             |
| ZBU55-PU-38M-M   | 55               | Polyurethane       | G3/8" external | Mesh filter |
| ZBU55-S          | 55               | Silicone           |                |             |
| ZBU55-S-14MB2    | 55               | Silicone           | G1/4" external |             |
| ZBU55-S-14MB2-M  | 55               | Silicone           | G1/4" external | Mesh filter |
| ZBU55-S-18FB2    | 55               | Silicone           | G1/8" internal |             |
| ZBU55-S-38MB2    | 55               | Silicone           | G3/8" external |             |
| ZBU55-S-38MB2-M  | 55               | Silicone           | G3/8" external | Mesh filter |
| ZBU55-WS         | 55               | Silicone food-safe |                |             |
| ZBU55-WS-18FB2-M | 55               | Silicone food-safe | G1/8" internal | Mesh filter |
| ZBU55-WS-38MB2   | 55               | Silicone food-safe | G3/8" external |             |