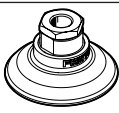
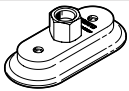
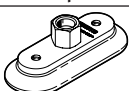
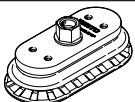


## Suction cups with connection OGVM

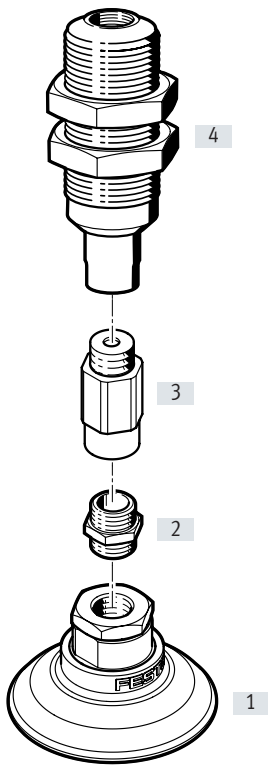
**FESTO**



## Product range overview

| Suction cup shape                                                                   | Suction cup design                                                                  |                       | Suction cup ø or suction cup size [mm]             | Vacuum connection  | Materials |      | → Page/<br>Internet |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------|----------------------------------------------------|--------------------|-----------|------|---------------------|
|                                                                                     |                                                                                     |                       |                                                    |                    | NBR       | HNBR |                     |
| Round                                                                               | Flat                                                                                |                       |                                                    |                    |           |      |                     |
|                                                                                     |    | OGVM-....S            | 30, 40, 50, 60, 80, 100, 125                       | Female thread G1/4 | ■         | –    | 2                   |
|                                                                                     | Bell-shaped                                                                         |                       |                                                    |                    |           |      |                     |
|                                                                                     |    | OGVM-....G            | 20, 30, 45, 60, 80                                 | Female thread G1/4 | ■         | –    | 2                   |
|                                                                                     | Bellows, 1.5 convolutions                                                           |                       |                                                    |                    |           |      |                     |
|    | OGVM-....A                                                                          | 20, 30, 40, 50, 100   | Female thread G1/4                                 | ■                  | ■         | 2    |                     |
|                                                                                     |                                                                                     | 60, 80, 125           | Female thread G1/4                                 | ■                  | –         |      |                     |
| Oval                                                                                | Flat                                                                                |                       |                                                    |                    |           |      |                     |
|                                                                                     |    | OGVM-....SV           | 16x55, 20x65, 30x95, 40x85, 50x105, 60x125, 70x145 | Female thread G1/4 | ■         | –    | 2                   |
|                                                                                     | Bell-shaped                                                                         |                       |                                                    |                    |           |      |                     |
|                                                                                     |  | OGVM-....GV           | 20x60, 30x80, 40x90                                | Female thread G1/4 | ■         | –    | 2                   |
|                                                                                     | Bellows, 1.5 convolutions                                                           |                       |                                                    |                    |           |      |                     |
|  | OGVM-....AV                                                                         | 30x65                 | Female thread G1/4                                 | ■                  | ■         | 2    |                     |
|                                                                                     |                                                                                     | 40x85, 55x115, 70x145 | Female thread G1/4                                 | ■                  | –         |      |                     |

## Peripherals overview



| Accessories |                                   | Description                                                                                                                                         | → Page/Internet |
|-------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| [1]         | Suction cups with connection OGVM |                                                                                                                                                     | –               |
| [2]         | Double nipple NPFC-D              |                                                                                                                                                     | 3               |
| [3]         | Vacuum security valve ISV         | The vacuum security valve is suitable for maintaining the vacuum in applications where several vacuum suction cups are used and one or more fail.   | 3               |
| [4]         | Length compensator VAL            | Gentle handling of the workpieces by compensating for any excess stroke of the handling device or tolerance differences in the workpiece thickness. | 3               |

## Type codes

| 001    | Series               |  |
|--------|----------------------|--|
| OGVM   | Suction cup complete |  |
| 002    | Suction cup size     |  |
| 20     | 20 mm diameter       |  |
| 30     | 30 mm diameter       |  |
| 40     | 40 mm diameter       |  |
| 45     | 45 mm diameter       |  |
| 50     | 50 mm diameter       |  |
| 60     | 60 mm diameter       |  |
| 80     | 80 mm diameter       |  |
| 100    | 100 mm diameter      |  |
| 125    | 125 mm diameter      |  |
| 16x55  | 16x55 mm             |  |
| 20x60  | 20x60 mm             |  |
| 20x65  | 20x65 mm             |  |
| 30x65  | 30x65 mm             |  |
| 30x80  | 30x80 mm             |  |
| 30x95  | 30x95 mm             |  |
| 40x85  | 40x85 mm             |  |
| 40x90  | 40x90 mm             |  |
| 50x105 | 50x105 mm            |  |
| 55x115 | 55x115 mm            |  |
| 60x125 | 60x125 mm            |  |
| 70x145 | 70x145 mm            |  |

| 003 | Suction cup shape                |  |
|-----|----------------------------------|--|
| S   | Round, standard                  |  |
| G   | Round, bell shape                |  |
| A   | Round, bellows, 1.5 convolutions |  |
| SV  | Oval, standard                   |  |
| GV  | Oval, bell-shaped                |  |
| AV  | Oval, bellows, 1.5 convolutions  |  |

| 004 | Material                                |  |
|-----|-----------------------------------------|--|
| N   | Nitrile rubber                          |  |
| HN  | Hydrated acrylonitrile butadiene rubber |  |

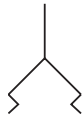
| 005 | Vacuum connection |  |
|-----|-------------------|--|
| G14 | G1/4              |  |

| 006 | Thread type   |  |
|-----|---------------|--|
| F   | Female thread |  |

**Note**

The ordering data include possible combinations.

## Data sheet



-  - Diameter  
30 ... 125 mm
-  - Temperature range  
-20 ... +80°C



| General technical data                               |                    |                    |      |     |     |     |     |     |
|------------------------------------------------------|--------------------|--------------------|------|-----|-----|-----|-----|-----|
| Suction cup ø                                        | [mm]               | 30                 | 40   | 50  | 60  | 80  | 100 | 125 |
| Vacuum connection                                    |                    | Female thread G1/4 |      |     |     |     |     |     |
| Nominal width                                        | [mm]               | 4                  |      | 7   | 8   |     |     |     |
| Suction cup shape                                    |                    | Round, flat        |      |     |     |     |     |     |
| Type of mounting                                     |                    | Via vacuum port    |      |     |     |     |     |     |
| Connection position                                  |                    | Top                |      |     |     |     |     |     |
| Mounting position                                    |                    | Any                |      |     |     |     |     |     |
| Min. workpiece radius                                | [mm]               | 35                 | 37.5 | 45  | 70  | 70  | 100 | 135 |
| Suction cup volume                                   | [cm <sup>3</sup> ] | 1.8                | 4.4  | 8.4 | 15  | 35  | 68  | 132 |
| Holding force at nominal operating pressure -0.6 bar | [N]                | 36                 | 53   | 90  | 120 | 225 | 351 | 606 |
| Lateral force at nominal operating pressure -0.6 bar | [N]                | 35                 | 53   | 64  | 99  | 113 | 140 | 429 |

| Operating and environmental conditions |       |                                                 |  |  |  |  |  |  |
|----------------------------------------|-------|-------------------------------------------------|--|--|--|--|--|--|
| Operating pressure                     | [MPa] | -95 ... 0 kPa                                   |  |  |  |  |  |  |
|                                        | [bar] | -0.95 ... 0 bar                                 |  |  |  |  |  |  |
|                                        | [psi] | -13.775 ... 0 psi                               |  |  |  |  |  |  |
| Nominal operating pressure             | [MPa] | -60 kPa                                         |  |  |  |  |  |  |
|                                        | [bar] | -0.6 bar                                        |  |  |  |  |  |  |
| Operating medium                       |       | Atmospheric air based on ISO 8573-1:2010 [7:::] |  |  |  |  |  |  |
| PWIS conformity                        |       | VDMA24364-A1-L                                  |  |  |  |  |  |  |
| Ambient temperature                    | [°C]  | -20 ... +80                                     |  |  |  |  |  |  |
| Corrosion resistance CRC <sup>1)</sup> |       | 2                                               |  |  |  |  |  |  |

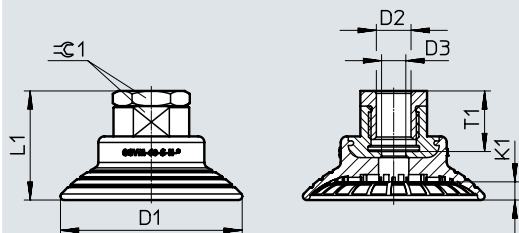
1) Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

| Materials         |  |                         |  |  |  |  |  |  |
|-------------------|--|-------------------------|--|--|--|--|--|--|
| Shore hardness    |  | 60 ±5                   |  |  |  |  |  |  |
| Suction cup       |  | NBR                     |  |  |  |  |  |  |
|                   |  | Colour: black           |  |  |  |  |  |  |
| Screwed trunnion  |  | Wrought aluminium alloy |  |  |  |  |  |  |
| Note on materials |  | RoHS-compliant          |  |  |  |  |  |  |

## Data sheet

## Dimensions

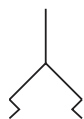
Download CAD data → [www.festo.com](http://www.festo.com)

| Type     | D1<br>Ø | D2   | D3<br>Ø | K1   | L1 | T1 | ☞ 1 |
|----------|---------|------|---------|------|----|----|-----|
| OGVM-30  | 30      | G1/4 | 4       | 3    | 20 | 12 | 17  |
| OGVM-40  | 40      | G1/4 | 4       | 4    | 22 | 12 | 17  |
| OGVM-50  | 50      | G1/4 | 7       | 5    | 33 | 20 | 22  |
| OGVM-60  | 60      | G1/4 | 8       | 6    | 36 | 20 | 22  |
| OGVM-80  | 80      | G1/4 | 8       | 7.6  | 40 | 20 | 22  |
| OGVM-100 | 100     | G1/4 | 8       | 9.5  | 41 | 20 | 22  |
| OGVM-125 | 125     | G1/4 | 8       | 12.5 | 48 | 20 | 22  |

## Ordering data

| Suction cup Ø<br>[mm] | Suction cup height compensator<br>[mm] | Weight<br>[g] | Part no. | Type              |
|-----------------------|----------------------------------------|---------------|----------|-------------------|
| <b>Nitrile rubber</b> |                                        |               |          |                   |
| 30                    | 3                                      | 8             | 8073816  | OGVM-30-S-N-G14F  |
| 40                    | 4                                      | 10            | 8073817  | OGVM-40-S-N-G14F  |
| 50                    | 5                                      | 30            | 8073818  | OGVM-50-S-N-G14F  |
| 60                    | 6                                      | 40            | 8073819  | OGVM-60-S-N-G14F  |
| 80                    | 7.6                                    | 65            | 8073820  | OGVM-80-S-N-G14F  |
| 100                   | 9.5                                    | 100           | 8073821  | OGVM-100-S-N-G14F |
| 125                   | 12.5                                   | 151           | 8073822  | OGVM-125-S-N-G14F |

## Data sheet



-  - Diameter  
20 ... 80 mm
-  - Temperature range  
-20 ... +80°C

**General technical data**

| Suction cup ø                                        | [mm]               | 20                 | 30   | 45  | 60   | 80  |
|------------------------------------------------------|--------------------|--------------------|------|-----|------|-----|
| Vacuum connection                                    |                    | Female thread G1/4 |      |     |      |     |
| Nominal width                                        | [mm]               | 3                  |      | 4   | 6    | 7   |
| Suction cup shape                                    |                    | Round, bell-shaped |      |     |      |     |
| Type of mounting                                     |                    | Via vacuum port    |      |     |      |     |
| Connection position                                  |                    | Top                |      |     |      |     |
| Mounting position                                    |                    | Any                |      |     |      |     |
| Min. workpiece radius                                | [mm]               | 12.5               | 17.5 | 25  | 27.5 | 45  |
| Suction cup volume                                   | [cm <sup>3</sup> ] | 1.2                | 2.6  | 9.4 | 22   | 48  |
| Holding force at nominal operating pressure -0.6 bar | [N]                | 18                 | 32   | 77  | 143  | 220 |
| Lateral force at nominal operating pressure -0.6 bar | [N]                | 28                 | 62   | 117 | 216  | 241 |

**Operating and environmental conditions**

|                                        |       |                                                 |
|----------------------------------------|-------|-------------------------------------------------|
| Operating pressure                     | [MPa] | -95 ... 0 kPa                                   |
|                                        | [bar] | -0.95 ... 0 bar                                 |
|                                        | [psi] | -13.775 ... 0 psi                               |
| Nominal operating pressure             | [MPa] | -60 kPa                                         |
|                                        | [bar] | -0.6 bar                                        |
| Operating medium                       |       | Atmospheric air based on ISO 8573-1:2010 [7:::] |
| PWIS conformity                        |       | VDMA24364-A1-L                                  |
| Ambient temperature                    | [°C]  | -20 ... +80                                     |
| Corrosion resistance CRC <sup>1)</sup> |       | 2                                               |

1) Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

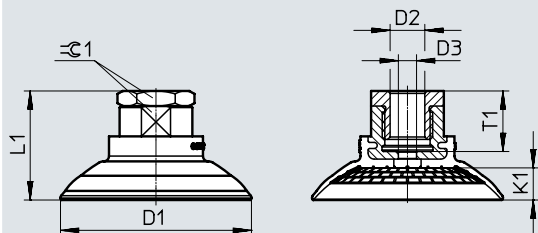
**Materials**

|                   |                         |
|-------------------|-------------------------|
| Shore hardness    | 60 ±5                   |
| Suction cup       | NBR                     |
|                   | Colour: black           |
| Screwed trunnion  | Wrought aluminium alloy |
| Note on materials | RoHS-compliant          |

## Data sheet

### Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)



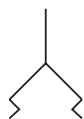
| Type    | D1<br>Ø | D2   | D3<br>Ø | K1   | L1   | T1 | ☞ 1 |
|---------|---------|------|---------|------|------|----|-----|
| OGVM-20 | 22      | G1/4 | 3       | 4    | 22   | 12 | 15  |
| OGVM-30 | 30      | G1/4 | 3       | 5    | 22   | 12 | 15  |
| OGVM-45 | 47      | G1/4 | 4       | 7.8  | 24.5 | 12 | 17  |
| OGVM-60 | 63      | G1/4 | 6       | 10.6 | 36   | 20 | 22  |
| OGVM-80 | 83      | G1/4 | 7       | 12.8 | 40   | 20 | 22  |

### Ordering data

| Suction cup Ø<br>[mm] | Suction cup height compensator<br>[mm] | Weight<br>[g] | Part no. | Type             |
|-----------------------|----------------------------------------|---------------|----------|------------------|
| <b>Nitrile rubber</b> |                                        |               |          |                  |
| 20                    | 4                                      | 6             | 8073847  | OGVM-20-G-N-G14F |
| 30                    | 5                                      | 7             | 8073848  | OGVM-30-G-N-G14F |
| 45                    | 7.8                                    | 13            | 8073831  | OGVM-45-G-N-G14F |
| 60                    | 10.6                                   | 29            | 8073832  | OGVM-60-G-N-G14F |
| 80                    | 12.8                                   | 51            | 8073833  | OGVM-80-G-N-G14F |



## Data sheet



- $\varnothing$  - Diameter  
20 ... 125 mm
- $\text{I}$  - Temperature range  
-20 ... +120°C



## General technical data

| General technical data                               |                    |                                      |     |     |    |    |     |     |     |     |
|------------------------------------------------------|--------------------|--------------------------------------|-----|-----|----|----|-----|-----|-----|-----|
| Suction cup $\varnothing$                            | [mm]               | 20                                   | 30  | 40  | 50 | 60 | 80  | 100 | 125 |     |
| Vacuum connection                                    |                    | Female thread G1/4                   |     |     |    |    |     |     |     |     |
| Nominal width                                        | [mm]               | 4                                    |     |     | 7  | 8  |     |     |     |     |
| Suction cup shape                                    |                    | Round, bellows with 1.5 convolutions |     |     |    |    |     |     |     |     |
| Type of mounting                                     |                    | Via vacuum port                      |     |     |    |    |     |     |     |     |
| Connection position                                  |                    | Top                                  |     |     |    |    |     |     |     |     |
| Mounting position                                    |                    | Any                                  |     |     |    |    |     |     |     |     |
| Min. workpiece radius                                | [mm]               | 12.5                                 | 25  | 30  | 35 | 40 | 75  | 90  | 140 |     |
| Suction cup volume                                   | [cm <sup>3</sup> ] | 2                                    | 5.5 | 7.8 | 15 | 28 | 64  | 115 | 241 |     |
| Holding force at nominal operating pressure –0.6 bar | OGVM-...-N         | [N]                                  | 15  | 37  | 60 | 90 | 140 | 246 | 379 | 587 |
|                                                      | OGVM-...-HN        | [N]                                  | 18  | 37  | 69 | 93 | –   | –   | 318 | –   |
| Lateral force at nominal operating pressure –0.6 bar | OGVM-...-N         | [N]                                  | 15  | 31  | 62 | 72 | 126 | 225 | 346 | 426 |
|                                                      | OGVM-...-HN        | [N]                                  | 18  | 38  | 59 | 88 | –   | –   | 147 | –   |

## Operating and environmental conditions

| Type                                   |       | OGVM-...-N                                      | OGVM-...-HN  |
|----------------------------------------|-------|-------------------------------------------------|--------------|
| Operating pressure                     | [MPa] | -95 ... 0 kPa                                   |              |
|                                        | [bar] | -0.95 ... 0 bar                                 |              |
|                                        | [psi] | -13.775 ... 0 psi                               |              |
| Nominal operating pressure             | [MPa] | -60 kPa                                         |              |
|                                        | [bar] | -0.6 bar                                        |              |
| Operating medium                       |       | Atmospheric air based on ISO 8573-1:2010 [7:::] |              |
| PWIS conformity                        |       | VDMA24364-A1-L                                  |              |
| Ambient temperature                    | [°C]  | -20 ... +80                                     | +10 ... +120 |
| Corrosion resistance CRC <sup>1)</sup> |       | 2                                               |              |

1) Corrosion resistance class CRC 2 to Festo standard FN 940070

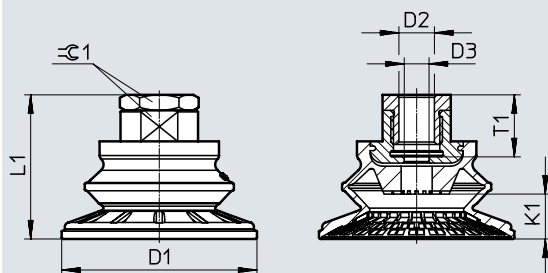
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

## Materials

| Type              | OGVM-...-N              | OGVM-...-HN  |
|-------------------|-------------------------|--------------|
| Shore hardness    | 60 ±5                   |              |
| Suction cup       | NBR                     | HNBR         |
|                   | Colour: black           | Colour: grey |
| Screwed trunnion  | Wrought aluminium alloy |              |
| Note on materials | RoHS-compliant          |              |

## Data sheet

## Dimensions

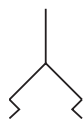
Download CAD data → [www.festo.com](http://www.festo.com)

| Type     | D1<br>ø | D2   | D3<br>ø | K1   | L1   | T1 | ⌀ 1 |
|----------|---------|------|---------|------|------|----|-----|
| OGVM-20  | 22      | G1/4 | 4       | 5.8  | 25   | 12 | 17  |
| OGVM-30  | 32      | G1/4 | 4       | 9    | 28   | 12 | 17  |
| OGVM-40  | 42      | G1/4 | 4       | 10   | 29   | 12 | 17  |
| OGVM-50  | 52      | G1/4 | 7       | 11.5 | 42   | 20 | 22  |
| OGVM-60  | 63      | G1/4 | 8       | 14.5 | 46.5 | 20 | 22  |
| OGVM-80  | 83      | G1/4 | 8       | 22   | 55   | 20 | 22  |
| OGVM-100 | 103     | G1/4 | 8       | 26   | 62   | 20 | 22  |
| OGVM-125 | 128     | G1/4 | 8       | 32   | 73   | 20 | 22  |

## Ordering data

| Suction cup ø<br>[mm]                    | Suction cup height compensator<br>[mm] | Weight<br>[g] | Part no. | Type               |
|------------------------------------------|----------------------------------------|---------------|----------|--------------------|
| <b>Nitrile rubber</b>                    |                                        |               |          |                    |
| 20                                       | 5.8                                    | 12            | 8073834  | OGVM-20-A-N-G14F   |
| 30                                       | 9                                      | 15            | 8073835  | OGVM-30-A-N-G14F   |
| 40                                       | 10                                     | 17            | 8073836  | OGVM-40-A-N-G14F   |
| 50                                       | 11.5                                   | 41            | 8073837  | OGVM-50-A-N-G14F   |
| 60                                       | 14.5                                   | 50            | 8073838  | OGVM-60-A-N-G14F   |
| 80                                       | 22                                     | 75            | 8073839  | OGVM-80-A-N-G14F   |
| 100                                      | 26                                     | 109           | 8073840  | OGVM-100-A-N-G14F  |
| 125                                      | 32                                     | 188           | 8073841  | OGVM-125-A-N-G14F  |
| <b>Hydrated nitrile butadiene rubber</b> |                                        |               |          |                    |
| 20                                       | 5.8                                    | 12            | 8073842  | OGVM-20-A-HN-G14F  |
| 30                                       | 9                                      | 15            | 8073843  | OGVM-30-A-HN-G14F  |
| 40                                       | 10                                     | 17            | 8073844  | OGVM-40-A-HN-G14F  |
| 50                                       | 11.5                                   | 41            | 8073845  | OGVM-50-A-HN-G14F  |
| 100                                      | 26                                     | 109           | 8073846  | OGVM-100-A-HN-G14F |

## Data sheet



— ● — Temperature range  
–20 ... +80°C



| General technical data                                        |                    |                    |       |       |       |        |        |        |
|---------------------------------------------------------------|--------------------|--------------------|-------|-------|-------|--------|--------|--------|
| Suction cup size                                              | [mm]               | 16x55              | 20x65 | 30x95 | 40x85 | 50x105 | 60x125 | 70x145 |
| Vacuum connection                                             |                    | Female thread G1/4 |       |       |       |        |        |        |
| Nominal width                                                 | [mm]               | 3                  | 6     |       |       | 8      |        |        |
| Suction cup shape                                             |                    | Oval, flat         |       |       |       |        |        |        |
| Type of mounting                                              |                    | Via vacuum port    |       |       |       |        |        |        |
| Connection position                                           |                    | Top                |       |       |       |        |        |        |
| Mounting position                                             |                    | Any                |       |       |       |        |        |        |
| Min. workpiece radius                                         | [mm]               | 10                 | 20    | 40    | 50    | 75     | 75     | 90     |
| Suction cup volume                                            | [cm <sup>3</sup> ] | 2                  | 3.6   | 9.6   | 13    | 25     | 44     | 70     |
| Holding force at nominal operating pressure –0.6 bar          | [N]                | 36                 | 66    | 146   | 150   | 240    | 345    | 630    |
| Vertical lateral force at nominal operating pressure –0.6 bar | [N]                | 40                 | 76    | 114   | 92    | 174    | 324    | 455    |

| Operating and environmental conditions |       |                                                 |
|----------------------------------------|-------|-------------------------------------------------|
| Operating pressure                     | [MPa] | –95 ... 0 kPa                                   |
|                                        | [bar] | –0.95 ... 0 bar                                 |
|                                        | [psi] | –13.775 ... 0 psi                               |
| Nominal operating pressure             | [MPa] | –60 kPa                                         |
|                                        | [bar] | –0.6 bar                                        |
| Operating medium                       |       | Atmospheric air based on ISO 8573-1:2010 [7:::] |
| PWIS conformity                        |       | VDMA24364-A1-L                                  |
| Ambient temperature                    | [°C]  | –20 ... +80                                     |
| Corrosion resistance CRC <sup>1)</sup> |       | 2                                               |

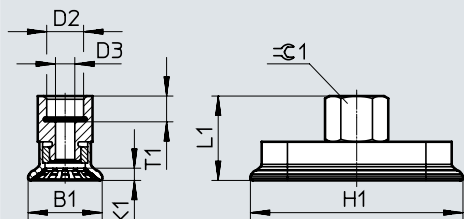
1) Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

| Materials         |                         |
|-------------------|-------------------------|
| Shore hardness    | 60 ±5                   |
| Suction cup       | NBR                     |
|                   | Colour: black           |
| Screwed trunnion  | Wrought aluminium alloy |
| Note on materials | RoHS-compliant          |

## Data sheet

## Dimensions

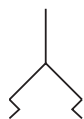
Download CAD data → [www.festo.com](http://www.festo.com)

| Type        | B1 | D2   | D3<br>Ø | H1  | K1 | L1 | T1 | ±0.1 |
|-------------|----|------|---------|-----|----|----|----|------|
| OGVM-16x55  | 16 | G1/4 | 3       | 56  | 3  | 34 | 8  | 17   |
| OGVM-20x65  | 23 | G1/4 | 6       | 66  | 3  | 26 | 8  | 17   |
| OGVM-30x95  | 32 | G1/4 | 6       | 97  | 3  | 27 | 8  | 17   |
| OGVM-40x85  | 40 | G1/4 | 6       | 86  | 4  | 28 | 8  | 17   |
| OGVM-50x105 | 50 | G1/4 | 8       | 106 | 5  | 30 | 8  | 17   |
| OGVM-60x125 | 60 | G1/4 | 8       | 127 | 6  | 32 | 8  | 17   |
| OGVM-70x145 | 70 | G1/4 | 8       | 146 | 7  | 33 | 8  | 17   |

## Ordering data

| Suction cup size<br>[mm] | Suction cup height compensator<br>[mm] | Weight<br>[g] | Part no. | Type                  |
|--------------------------|----------------------------------------|---------------|----------|-----------------------|
| <b>Nitrile rubber</b>    |                                        |               |          |                       |
| 16x55                    | 3                                      | 29            | 8073852  | OGVM-16X55-SV-N-G14F  |
| 20x65                    | 3                                      | 21            | 8073853  | OGVM-20X65-SV-N-G14F  |
| 30x95                    | 3                                      | 44            | 8073854  | OGVM-30X95-SV-N-G14F  |
| 40x85                    | 4                                      | 38            | 8073855  | OGVM-40X85-SV-N-G14F  |
| 50x105                   | 5                                      | 67            | 8073856  | OGVM-50X105-SV-N-G14F |
| 60x125                   | 6                                      | 86            | 8073857  | OGVM-60X125-SV-N-G14F |
| 70x145                   | 7                                      | 124           | 8073858  | OGVM-70X145-SV-N-G14F |

## Data sheet



— ● — Temperature range  
–20 ... +80°C

**General technical data**

| Suction cup size                                              | [mm]               | 20x60              | 30x80 | 40x90 |
|---------------------------------------------------------------|--------------------|--------------------|-------|-------|
| Vacuum connection                                             |                    | Female thread G1/4 |       |       |
| Nominal width                                                 | [mm]               | 6                  |       |       |
| Suction cup shape                                             |                    | Oval, bell-shaped  |       |       |
| Type of mounting                                              |                    | Via vacuum port    |       |       |
| Connection position                                           |                    | Top                |       |       |
| Mounting position                                             |                    | Any                |       |       |
| Min. workpiece radius                                         | [mm]               | 12.5               | 20    | 35    |
| Suction cup volume                                            | [cm <sup>3</sup> ] | 5                  | 10    | 15.8  |
| Holding force at nominal operating pressure –0.6 bar          | [N]                | 81                 | 120   | 311   |
| Vertical lateral force at nominal operating pressure –0.6 bar | [N]                | 103                | 201   | 192   |

**Operating and environmental conditions**

|                                        |       |                                                 |
|----------------------------------------|-------|-------------------------------------------------|
| Operating pressure                     | [MPa] | –95 ... 0 kPa                                   |
|                                        | [bar] | –0.95 ... 0 bar                                 |
|                                        | [psi] | –13.775 ... 0 psi                               |
| Nominal operating pressure             | [MPa] | –60 kPa                                         |
|                                        | [bar] | –0.6 bar                                        |
| Operating medium                       |       | Atmospheric air based on ISO 8573-1:2010 [7:::] |
| PWIS conformity                        |       | VDMA24364-A1-L                                  |
| Ambient temperature                    | [°C]  | –20 ... +80                                     |
| Corrosion resistance CRC <sup>1)</sup> |       | 2                                               |

1) Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

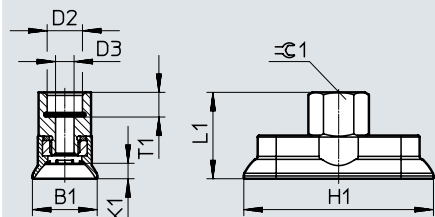
**Materials**

|                   |                         |
|-------------------|-------------------------|
| Shore hardness    | 60 ±5                   |
| Suction cup       | NBR                     |
|                   | Colour: black           |
| Screwed trunnion  | Wrought aluminium alloy |
| Note on materials | RoHS-compliant          |

## Data sheet

### Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)

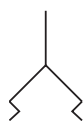


| Type       | B1   | D2   | D3<br>Ø | H1   | K1 | L1 | T1 | ±0.1 |
|------------|------|------|---------|------|----|----|----|------|
| OGVM-20x60 | 21   | G1/4 | 6       | 61.5 | 5  | 28 | 8  | 17   |
| OGVM-30x80 | 31   | G1/4 | 6       | 81   | 6  | 29 | 8  | 17   |
| OGVM-40x90 | 40.5 | G1/4 | 6       | 95.5 | 6  | 29 | 8  | 17   |

### Ordering data

| Suction cup size<br>[mm] | Suction cup height compensator<br>[mm] | Weight<br>[g] | Part no. | Type                 |
|--------------------------|----------------------------------------|---------------|----------|----------------------|
| <b>Nitrile rubber</b>    |                                        |               |          |                      |
| 20x60                    | 5                                      | 16            | 8073862  | OGVM-20X60-GV-N-G14F |
| 30x80                    | 6                                      | 26            | 8073863  | OGVM-30X80-GV-N-G14F |
| 40x90                    | 6                                      | 40            | 8073864  | OGVM-40X90-GV-N-G14F |

## Data sheet



— ● — Temperature range  
–20 ... +120°C



| General technical data                                        |                    |                                     |       |        |        |
|---------------------------------------------------------------|--------------------|-------------------------------------|-------|--------|--------|
| Suction cup size                                              | [mm]               | 30x65                               | 40x85 | 55x115 | 70x145 |
| Vacuum connection                                             |                    | Female thread G1/4                  |       |        |        |
| Nominal width                                                 | [mm]               | 6                                   |       | 8      |        |
| Suction cup shape                                             |                    | Oval, bellows with 1.5 convolutions |       |        |        |
| Type of mounting                                              |                    | Via vacuum port                     |       |        |        |
| Connection position                                           |                    | Top                                 |       |        |        |
| Mounting position                                             |                    | Any                                 |       |        |        |
| Min. workpiece radius                                         | [mm]               | 15                                  | 30    | 50     | 70     |
| Suction cup volume                                            | [cm <sup>3</sup> ] | 11.5                                | 23.5  | 52     | 111    |
| Holding force at nominal operating pressure –0.6 bar          | OGVM-...-N         | [N]                                 | 66    | 126    | 200    |
|                                                               | OGVM-...-HN        | [N]                                 | 75    | –      | –      |
| Vertical lateral force at nominal operating pressure –0.6 bar | OGVM-...-N         | [N]                                 | 104   | 173    | 234    |
|                                                               | OGVM-...-HN        | [N]                                 | 75    | –      | –      |

| Operating and environmental conditions |       |                                                  |  |             |              |
|----------------------------------------|-------|--------------------------------------------------|--|-------------|--------------|
| Type                                   |       | OGVM-...-N                                       |  | OGVM-...-HN |              |
| Operating pressure                     | [MPa] | –95 ... 0 kPa                                    |  |             |              |
|                                        | [bar] | –0.95 ... 0 bar                                  |  |             |              |
|                                        | [psi] | –13.775 ... 0 psi                                |  |             |              |
| Nominal operating pressure             | [MPa] | –60 kPa                                          |  |             |              |
|                                        | [bar] | –0.6 bar                                         |  |             |              |
| Operating medium                       |       | Atmospheric air based on ISO 8573-1:2010 [7:-:-] |  |             |              |
| PWIS conformity                        |       | VDMA24364-A1-L                                   |  |             |              |
| Ambient temperature                    | [°C]  | –20 ... +80                                      |  |             | +10 ... +120 |
| Corrosion resistance CRC <sup>1)</sup> |       | 2                                                |  |             |              |

1) Corrosion resistance class CRC 2 to Festo standard FN 940070

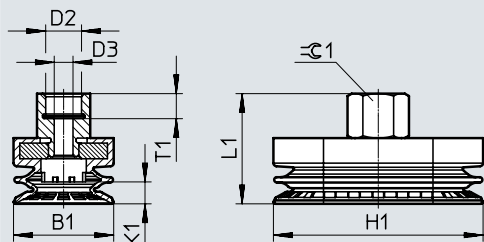
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

| Materials         |                         |              |
|-------------------|-------------------------|--------------|
| Type              | OGVM-...-N              | OGVM-...-HN  |
| Shore hardness    | 60 ±5                   |              |
| Suction cup       | NBR                     |              |
|                   | Colour: black           | Colour: grey |
| Screwed trunnion  | Wrought aluminium alloy |              |
| Note on materials | RoHS-compliant          |              |

## Data sheet

### Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)



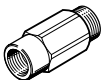
| Type        | B1 | D2   | D3<br>Ø | H1  | K1   | L1 | T1 | ≈ 1 |
|-------------|----|------|---------|-----|------|----|----|-----|
| OGVM-30x65  | 32 | G1/4 | 6       | 67  | 7    | 35 | 8  | 17  |
| OGVM-40x85  | 42 | G1/4 | 6       | 87  | 9    | 38 | 8  | 17  |
| OGVM-55x115 | 56 | G1/4 | 8       | 118 | 13   | 43 | 8  | 17  |
| OGVM-70x145 | 72 | G1/4 | 8       | 148 | 16.5 | 47 | 8  | 17  |

### Ordering data

| Suction cup size<br>[mm]                 | Suction cup height compensator<br>[mm] | Weight<br>[g] | Part no. | Type                  |
|------------------------------------------|----------------------------------------|---------------|----------|-----------------------|
| <b>Nitrile rubber</b>                    |                                        |               |          |                       |
| 30x65                                    | 7                                      | 48            | 8073865  | OGVM-30X65-AV-N-G14F  |
| 40x85                                    | 9                                      | 57            | 8073866  | OGVM-40X85-AV-N-G14F  |
| 55x115                                   | 13                                     | 76            | 8073867  | OGVM-55X115-AV-N-G14F |
| 70x145                                   | 16.5                                   | 156           | 8073868  | OGVM-70X145-AV-N-G14F |
| <b>Hydrated nitrile butadiene rubber</b> |                                        |               |          |                       |
| 30x65                                    | 7                                      | 48            | 8073869  | OGVM-30X65-AV-HN-G14F |



## Accessories

| Vacuum security valve ISV                                                         |                      | Data sheets → Internet: isv  |               |
|-----------------------------------------------------------------------------------|----------------------|------------------------------|---------------|
|                                                                                   | Pneumatic connection | Part no.                     | Type          |
|  | G1/4                 | 33970                        | ISV-1/4       |
| Double nipple NPFC-D                                                              |                      | Data sheets → Internet: npfc |               |
|                                                                                   | Pneumatic connection | Part no.                     | Type          |
|  | G1/4                 | 8030272                      | NPFC-D-2G14-M |
| Length compensator VAL                                                            |                      | Data sheets → Internet: val  |               |
|                                                                                   | Vacuum connection    | Part no.                     | Type          |
|  | G1/4                 | 151211                       | VAL-1/4-20    |

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