

## Vacuum Cups Overview

### Hithane® p.324



A hybrid, high-temperature, non-silicone, non-marking cup good for use with hot plastic parts.  
Maximum temperature 320°F.  
Good flexibility.

| Material | Flat w/Ribs | Flat   | Oval   | 1.5 Bellows | 2.5 Bellows |
|----------|-------------|--------|--------|-------------|-------------|
| Hithane  |             | 8–50mm | 4–75mm | 5–53mm      | 7–62mm      |

### OEM Replacement p.334



The translucent clear silicone cups are very nice quality.  
Ideal for customers wanting non-colored silicone cups.  
Popular design fits PIAB nipples.  
Non-branded for OEM applications.

| Material     | Flat w/Ribs | Flat   | Deep | 1.5 Bellows | 2.5 Bellows |
|--------------|-------------|--------|------|-------------|-------------|
| Silicone     | 16–50mm     | 7–16mm |      | 5–50mm      |             |
| Hithane®     | 16–50mm     | 7–16mm |      | 5–50mm      |             |
| Polyurethane |             |        |      |             |             |
| Nitrile      | 16–50mm     | 7–16mm |      | 5–50mm      |             |

### Piab® p.338



Excellent performing silicone.  
Low-cost chloroprene for lower temperature, non-critical applications.

| Material     | Flat w/Ribs | Flat    | Deep    | 1.5 Bellows | 2.5 Bellows |
|--------------|-------------|---------|---------|-------------|-------------|
| Silicone     | 15–75mm     | 2–50mm  | 15–50mm | 5–75mm      |             |
| Polyurethane | 15–50mm     |         |         | 15–50mm     |             |
| Chloroprene  | 15–30mm     | 4–20mm  | 15–50mm | 5–40mm      |             |
| Nitrile      | 40–75mm     | 30–50mm | 15–50mm | 50–75mm     |             |

### >S< Style p.360



Good quality, high performing vacuum cups in a broad size and material range.  
Silicone maximum temperature 482°F.  
New Hithane cups! Max. temperature 320°F.  
Hard-to-find foam cups on page 368.

| Material | Foam    | Foam, 1.5 Bellows | Flat   | 1.5 Bellows | 2.5 Bellows |
|----------|---------|-------------------|--------|-------------|-------------|
| Silicone | 15–50mm | 4–50mm            | 1–95mm | 4–75mm      | 5–90mm      |
| Hithane  |         |                   | 2–95mm | 4–75mm      | 5–7mm       |
| Nitrile  | 15–50mm | 20–50mm           | 1–95mm | 4–75mm      | 5–90mm      |

### SMC® p.374



We make ordering SMC vacuum cups easy. See step by step ordering guide on page 375.  
Good variety of alternate vacuum entries with push-in fittings and barbed fittings.

| Material     | Flat w/Ribs | Flat   | Deep    | 1.5 Bellows | 2.5 Bellows |
|--------------|-------------|--------|---------|-------------|-------------|
| Silicone     | 10–50mm     | 2–50mm | 10–40mm | 6–50mm      |             |
| Polyurethane | 10–50mm     | 2–50mm | 10–40mm | 6–50mm      |             |
| Anti-Static  |             | 2–16mm |         | 6–16mm      |             |
| Nitrile      | 10–50mm     | 2–50mm | 10–40mm | 6–50mm      |             |

### Senvex® p.392



One-nipple-size-fits-all Senvex cups make it easy to standardize with fewer nipples, suspensions, and mounting brackets.  
Nipple-integrated suspensions are also available.

| Material     | Flat w/Ribs | Flat | Deep | 1.5 Bellows | 2.5 Bellows |
|--------------|-------------|------|------|-------------|-------------|
| Silicone     | 10–40mm     |      |      | 10–40mm     |             |
| Polyurethane | 10–40mm     |      |      | 10–40mm     |             |
| Special PU   |             |      |      |             |             |
| Nitrile      |             |      |      |             |             |

### Star® p.400



Very nice quality vacuum cups.  
Two nipple sizes fit the entire range.  
Nipple integrated suspensions are available.

| Material     | Flat w/Ribs | Flat   | Foam   | 1.5 Bellows | 2.5 Bellows |
|--------------|-------------|--------|--------|-------------|-------------|
| Silicone     | 15–20mm     | 6–45mm | 8–60mm |             | 6–40mm      |
| Polyurethane |             |        |        |             |             |
| Fluorine     |             | 6–40mm |        |             | 12–20mm     |
| Nitrile      |             |        |        |             |             |

### Apex® p.396




Long lasting, slightly thicker silicone.  
One-nipple-size-fits-all.  
Good quality, basic vacuum cups.

| Material     | Flat w/Ribs | Flat | Deep | 1.5 Bellows | 2.5 Bellows |
|--------------|-------------|------|------|-------------|-------------|
| Silicone     | 10–50mm     |      |      | 5–40mm      |             |
| Polyurethane |             |      |      |             |             |
| Special PU   |             |      |      |             |             |
| Nitrile      |             |      |      |             |             |

# Vacuum Cups Overview


**Gimatic®** p.386



Available in two styles: flat or with 1.5 bellows.  
 Four materials: Silicone, EPDM, and HNBR. \*Call EMI for Natural Rubber cups.  
 Diameter from 11mm to 53mm.

| Material       | Flat w/Ribs | Flat    | Oval | 1.5 Bellows | 2.5 Bellows |
|----------------|-------------|---------|------|-------------|-------------|
| Silicone       |             | 11–53mm |      | 11–53mm     |             |
| EPDM           |             | 11–53mm |      | 11–53mm     |             |
| HNBR           |             | 11–53mm |      | 11–53mm     |             |
| Natural Rubber |             | 11–53mm |      | 11–53mm     |             |

**For Carbon Fiber** p.420




PTFE vacuum cups do not stick to hot carbon fiber parts (up to 480°F)  
 Used in applications where needle grippers would puncture and damage the structure of composites.  
 Supporting ribs avoid suction and deformation of soft materials.

**Aclathane®** Online Only!




A special, long-life, non-marking polyurethane.  
 Maximum temperature 212°F.  
 Relatively stiff.

**Duraflex®** p.346




One of the best polyurethane cups for use with EOAT.  
 Green PU is stiffer to provide excellent part support when carrying the part vertically. Yellow PU is very flexible to provide excellent sealing.  
 1.5 & 2.5 bellows 11–75mm.

**Foam** p.406



Very soft, closed-cell silicone foam vacuum cups for textured surfaces.  
 Flat 8–60mm.  
 1.5 bellows 15–40mm.  
 Additional foam cups on page 368.

**ShorTec® with Larger Lip** p.350



These dual durometer cups offer excellent quality and feature a larger and more flexible lip. Available at a lower price compared to other similar polyurethane cups.  
 Made of mark-free polyurethane.  
 2.5 bellows 25–55mm.

**ShorTec®** p.352



These dual durometer cups offer excellent quality and features like the popular brand name dual durometer cups, but at a lower price. Made of mark-free polyurethane.  
 1.5 & 2.5 bellows 10–70mm.

**Packaging & Paper** p.423



DURAFLEX® mark-free material features the elasticity of rubber in combination with the wear resistance of polyurethane.  
 High-flow fitting allows for high initial vacuum flow needed for bag handling.  
 30–40mm.

**Paper & Foil** p.424



Special ridges keep paper, foil, and other thin material from being sucked into the cup.  
 Natural rubber vacuum cups 15–40mm.

**Oval** p.408



From 2x4mm to 25x75mm.  
 Translucent silicone.  
 Hard to find 2.5 bellows silicone.  
 Additional Hithane Oval cups on page 330.

**Hi-Speed** p.422




Optimized for high speed attachment and release.  
 Great for high speed thin wall molding applications.  
 Silicone and very flexible polyurethane materials.

**Mini** p.412




For those tiny parts, vacuum cups as small as Ø1mm.  
 Flat, 1.5 bellows, and 2.5 bellows.

**Long Neck** p.391




Translucent silicone.  
 6–25mm.  
 Softer durometer.  
 Good for small parts.

**Anti-Static** p.376



Anti-Static vacuum cups are typically used in electronic, packaging, and small parts applications.  
 These are from the SMC family of vacuum cups.  
 Available in Flat, and 1.5 bellows up to 16mm.

**4.5 Bellows** p.426



Great for use with angled and contoured surfaces.  
 Translucent silicone.  
 20–50mm.

# Hithane® – Flat

(Shown Actual Size)



## Hithane - Time Proven!

This hybrid non-marking cup combines the high-temperature and flexibility properties of silicone with the wear resistance and non-marking properties of polyurethane.

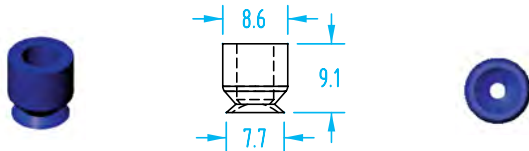
It contains no silicone so it is suitable to be used with parts that will be painted.

Hithane is designed not to leave residue, mold release marks, or ghost marks on hot, injection molded plastic parts.

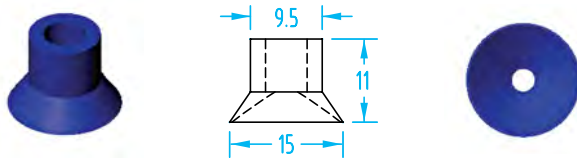
Hithane Vacuum Cup Properties

| Material | Color | Max Temp. | Durometer |
|----------|-------|-----------|-----------|
| Hithane  | Blue  | 320°F     | 60°       |

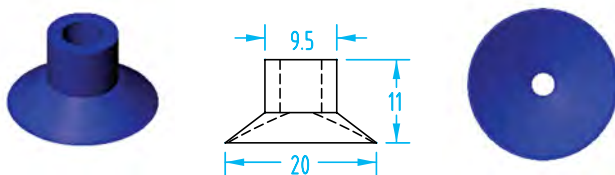
See page 332–333 for nipple dimensions.



| Cup Ø  | Material  | Quick# | Part#        | Price  |
|--------|-----------|--------|--------------|--------|
| 8mm    | Hithane   | 1645   | GSV-FHT-8    | \$5.26 |
| Nipple | Female M5 | 5431   | GSF-HTN1-M5F | \$3.59 |
|        | Male M5   | 408    | GSF-N16-M5M  | \$3.52 |



| Cup Ø  | Material     | Quick# | Part#        | Price  |
|--------|--------------|--------|--------------|--------|
| 15mm   | Hithane      | 1646   | GSV-FHT-15   | \$6.63 |
| Nipple | Female M5    | 5431   | GSF-HTN1-M5F | \$3.59 |
|        | Male M5      | 408    | GSF-N16-M5M  | \$3.52 |
|        | Male G1/8"   | 1604   | GSF-PFN-G8M  | \$3.99 |
|        | Female G1/8" | 1603   | GSF-PFN-G8F  | \$3.99 |

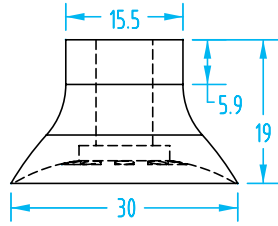


| Cup Ø  | Material     | Quick# | Part#        | Price  |
|--------|--------------|--------|--------------|--------|
| 20mm   | Hithane      | 1647   | GSV-FHT-20   | \$5.26 |
| Nipple | Female M5    | 5431   | GSF-HTN1-M5F | \$3.59 |
|        | Male M5      | 408    | GSF-N16-M5M  | \$3.52 |
|        | Male G1/8"   | 1604   | GSF-PFN-G8M  | \$3.99 |
|        | Female G1/8" | 1603   | GSF-PFN-G8F  | \$3.99 |

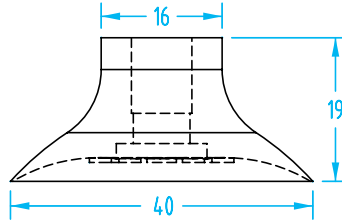
**Hithane® – Flat**

(Shown Actual Size)

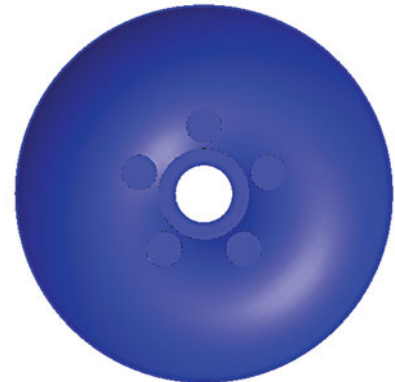
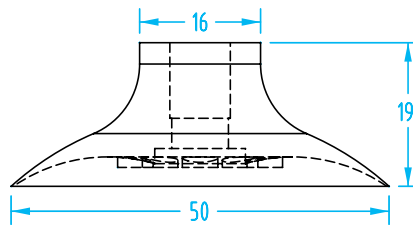
Use Quick#s for easy online ordering.



| Cup Ø  | Material     | Quick# | Part#        | Price  |
|--------|--------------|--------|--------------|--------|
| 30mm   | Hithane      | 1648   | GSV-FHT-30   | \$7.88 |
| Nipple | Female G1/8" | 5432   | GSF-HTN1-G8F | \$3.67 |
|        | Male G1/8"   | 5433   | GSF-HTN1-G8M | \$3.67 |
|        | Female G1/4" | 1744   | GSF-HTN4-G4F | \$6.61 |
|        | Male G1/4"   | 1743   | GSF-HTN4-G4M | \$6.77 |



| Cup Ø  | Material     | Quick# | Part#        | Price   |
|--------|--------------|--------|--------------|---------|
| 40mm   | Hithane      | 1649   | GSV-FHT-40   | \$14.12 |
| Nipple | Female G1/8" | 5432   | GSF-HTN1-G8F | \$3.67  |
|        | Male G1/8"   | 5433   | GSF-HTN1-G8M | \$3.67  |
|        | Female G1/4" | 1744   | GSF-HTN4-G4F | \$6.61  |
|        | Male G1/4"   | 1743   | GSF-HTN4-G4M | \$6.77  |



| Cup Ø  | Material     | Quick# | Part#        | Price   |
|--------|--------------|--------|--------------|---------|
| 50mm   | Hithane      | 1650   | GSV-FHT-50   | \$10.56 |
| Nipple | Female G1/8" | 5432   | GSF-HTN1-G8F | \$3.67  |
|        | Male G1/8"   | 5433   | GSF-HTN1-G8M | \$3.67  |
|        | Female G1/4" | 1744   | GSF-HTN4-G4F | \$6.61  |
|        | Male G1/4"   | 1743   | GSF-HTN4-G4M | \$6.77  |

Fittings Available  
on page 1043



# Hithane® – 1.5 Bellows

(Shown Actual Size)



## Hithane - Time Proven!

This hybrid non-marking cup combines the high-temperature and flexibility properties of silicone with the wear resistance and non-marking properties of polyurethane.

It contains no silicone so it is suitable to be used with parts that will be painted.

Hithane is designed not to leave residue, mold release marks, or ghost marks on hot, injection molded plastic parts.

### Hithane Vacuum Cup Properties

| Material | Color | Max Temp. | Durometer |
|----------|-------|-----------|-----------|
| Hithane  | Blue  | 320°F     | 60°       |

See page 332–333 for nipple dimensions.

| Cup Ø  | Material  | Quick# | Part#       | Price   |
|--------|-----------|--------|-------------|---------|
| 5mm    | Hithane   | 5988   | GSV-BHT-5   | \$11.48 |
| Nipple | Male M5   | 258    | GSF-BS-M506 | \$0.77  |
|        | Female M5 | 1070   | ZPT1B5      | \$3.25  |

\* 9mm Compressed

| Cup Ø  | Material  | Quick# | Part#        | Price  |
|--------|-----------|--------|--------------|--------|
| 11mm   | Hithane   | 5989   | GSV-BHT-11   | \$7.17 |
| Nipple | Male M5   | 408    | GSF-N16-M5M  | \$3.52 |
|        | Female M5 | 5431   | GSF-HTN1-M5F | \$3.59 |

\* 11mm Compressed

| Cup Ø  | Material     | Quick# | Part#        | Price  |
|--------|--------------|--------|--------------|--------|
| 14mm   | Hithane      | 1651   | GSV-BHT-14   | \$6.34 |
| Nipple | Male M5      | 408    | GSF-N16-M5M  | \$3.52 |
|        | Female M5    | 5431   | GSF-HTN1-M5F | \$3.59 |
|        | Male G1/8"   | 1604   | GSF-PFN-G8M  | \$3.99 |
|        | Female G1/8" | 1603   | GSF-PFN-G8F  | \$3.99 |

\* 11mm Compressed

| Cup Ø  | Material     | Quick# | Part#        | Price  |
|--------|--------------|--------|--------------|--------|
| 14mm   | Hithane      | 1651   | GSV-BHT-14   | \$6.34 |
| Nipple | Male M5      | 408    | GSF-N16-M5M  | \$3.52 |
|        | Female M5    | 5431   | GSF-HTN1-M5F | \$3.59 |
|        | Male G1/8"   | 1604   | GSF-PFN-G8M  | \$3.99 |
|        | Female G1/8" | 1603   | GSF-PFN-G8F  | \$3.99 |

| Cup Ø  | Material     | Quick# | Part#        | Price  |
|--------|--------------|--------|--------------|--------|
| 20mm   | Hithane      | 1652   | GSV-BHT-20   | \$7.69 |
| Nipple | Male M5      | 408    | GSF-N16-M5M  | \$3.52 |
|        | Female M5    | 5431   | GSF-HTN1-M5F | \$3.59 |
|        | Male G1/8"   | 1604   | GSF-PFN-G8M  | \$3.99 |
|        | Female G1/8" | 1603   | GSF-PFN-G8F  | \$3.99 |

\* 11mm Compressed

| Cup Ø  | Material     | Quick# | Part#        | Price  |
|--------|--------------|--------|--------------|--------|
| 20mm   | Hithane      | 1652   | GSV-BHT-20   | \$7.69 |
| Nipple | Male M5      | 408    | GSF-N16-M5M  | \$3.52 |
|        | Female M5    | 5431   | GSF-HTN1-M5F | \$3.59 |
|        | Male G1/8"   | 1604   | GSF-PFN-G8M  | \$3.99 |
|        | Female G1/8" | 1603   | GSF-PFN-G8F  | \$3.99 |

| Cup Ø  | Material     | Quick# | Part#        | Price  |
|--------|--------------|--------|--------------|--------|
| 25mm   | Hithane      | 1653   | GSV-BHT-25   | \$7.81 |
| Nipple | Male M5      | 408    | GSF-N16-M5M  | \$3.52 |
|        | Female M5    | 5431   | GSF-HTN1-M5F | \$3.59 |
|        | Male G1/8"   | 1604   | GSF-PFN-G8M  | \$3.99 |
|        | Female G1/8" | 1603   | GSF-PFN-G8F  | \$3.99 |

\* 13mm Compressed

| Cup Ø  | Material     | Quick# | Part#        | Price  |
|--------|--------------|--------|--------------|--------|
| 25mm   | Hithane      | 1653   | GSV-BHT-25   | \$7.81 |
| Nipple | Male M5      | 408    | GSF-N16-M5M  | \$3.52 |
|        | Female M5    | 5431   | GSF-HTN1-M5F | \$3.59 |
|        | Male G1/8"   | 1604   | GSF-PFN-G8M  | \$3.99 |
|        | Female G1/8" | 1603   | GSF-PFN-G8F  | \$3.99 |

**Hithane® – 1.5 Bellows**

(Shown Actual Size)

\* 19mm Compressed

| Cup Ø         | Material     | Quick# | Part#        | Price   |
|---------------|--------------|--------|--------------|---------|
| 33mm          | Hithane      | 1654   | GSV-BHT-33   | \$10.66 |
| <b>Nipple</b> | Female G1/8" | 5432   | GSF-HTN1-G8F | \$3.67  |
|               | Male G1/8"   | 5433   | GSF-HTN1-G8M | \$3.67  |
|               | Female G1/4" | 1744   | GSF-HTN4-G4F | \$6.61  |
|               | Male G1/4"   | 1743   | GSF-HTN4-G4M | \$6.77  |

\* 19mm Compressed

| Cup Ø         | Material     | Quick# | Part#        | Price   |
|---------------|--------------|--------|--------------|---------|
| 43mm          | Hithane      | 1655   | GSV-BHT-43   | \$11.77 |
| <b>Nipple</b> | Female G1/8" | 5432   | GSF-HTN1-G8F | \$3.67  |
|               | Male G1/8"   | 5433   | GSF-HTN1-G8M | \$3.67  |
|               | Female G1/4" | 1744   | GSF-HTN4-G4F | \$6.61  |
|               | Male G1/4"   | 1743   | GSF-HTN4-G4M | \$6.77  |

\* 21mm Compressed

| Cup Ø         | Material     | Quick# | Part#        | Price   |
|---------------|--------------|--------|--------------|---------|
| 53mm          | Hithane      | 1656   | GSV-BHT-53   | \$12.79 |
| <b>Nipple</b> | Female G1/8" | 5432   | GSF-HTN1-G8F | \$3.67  |
|               | Male G1/8"   | 5433   | GSF-HTN1-G8M | \$3.67  |
|               | Female G1/4" | 1744   | GSF-HTN4-G4F | \$6.61  |
|               | Male G1/4"   | 1743   | GSF-HTN4-G4M | \$6.77  |

# Hithane® – 2.5 Bellows

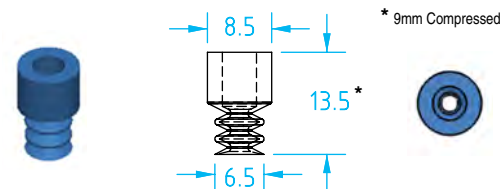
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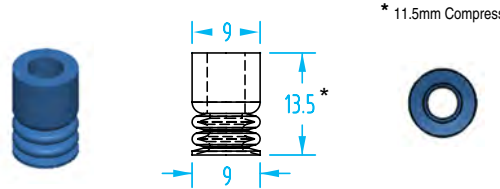
Hithane Vacuum Cup Properties

| Material | Color | Max Temp. | Durometer |
|----------|-------|-----------|-----------|
| Hithane  | Blue  | 320°F     | 60°       |

See page 332–333 for nipple dimensions.



| Cup Ø  | Material  | Quick# | Part#        | Price  |
|--------|-----------|--------|--------------|--------|
| 7mm    | Hithane   | 5442   | GSV-2BHT-7   | \$9.03 |
| Nipple | Male M5   | 408    | GSF-N16-M5M  | \$3.52 |
|        | Female M5 | 5431   | GSF-HTN1-M5F | \$3.59 |



| Cup Ø  | Material     | Quick# | Part#        | Price  |
|--------|--------------|--------|--------------|--------|
| 9mm    | Hithane      | 1657   | GSV-2BHT-9   | \$7.17 |
| Nipple | Male M5      | 408    | GSF-N16-M5M  | \$3.52 |
|        | Female M5    | 5431   | GSF-HTN1-M5F | \$3.59 |
|        | Male G1/8"   | 1604   | GSF-PFN-G8M  | \$3.99 |
|        | Female G1/8" | 1603   | GSF-PFN-G8F  | \$3.99 |



| Cup Ø  | Material     | Quick# | Part#        | Price  |
|--------|--------------|--------|--------------|--------|
| 12mm   | Hithane      | 5443   | GSV-2BHT-12  | \$7.77 |
| Nipple | Male M5      | 408    | GSF-N16-M5M  | \$3.52 |
|        | Female M5    | 5431   | GSF-HTN1-M5F | \$3.59 |
|        | Male G1/8"   | 1604   | GSF-PFN-G8M  | \$3.99 |
|        | Female G1/8" | 1603   | GSF-PFN-G8F  | \$3.99 |



| Cup Ø  | Material     | Quick# | Part#        | Price  |
|--------|--------------|--------|--------------|--------|
| 14mm   | Hithane      | 1658   | GSV-2BHT-14  | \$7.42 |
| Nipple | Male M5      | 408    | GSF-N16-M5M  | \$3.52 |
|        | Female M5    | 5431   | GSF-HTN1-M5F | \$3.59 |
|        | Male G1/8"   | 1604   | GSF-PFN-G8M  | \$3.99 |
|        | Female G1/8" | 1603   | GSF-PFN-G8F  | \$3.99 |

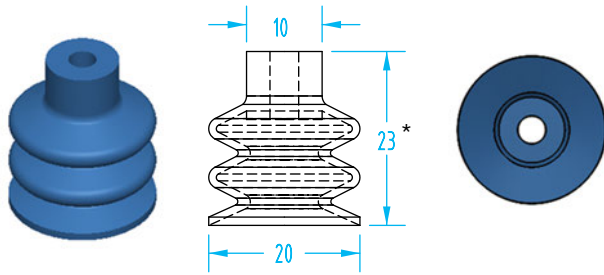


| Cup Ø  | Material     | Quick# | Part#        | Price  |
|--------|--------------|--------|--------------|--------|
| 18mm   | Hithane      | 1659   | GSV-2BHT-18  | \$7.42 |
| Nipple | Male M5      | 408    | GSF-N16-M5M  | \$3.52 |
|        | Female M5    | 5431   | GSF-HTN1-M5F | \$3.59 |
|        | Male G1/8"   | 1604   | GSF-PFN-G8M  | \$3.99 |
|        | Female G1/8" | 1603   | GSF-PFN-G8F  | \$3.99 |

Hithane® – 2.5 Bellows

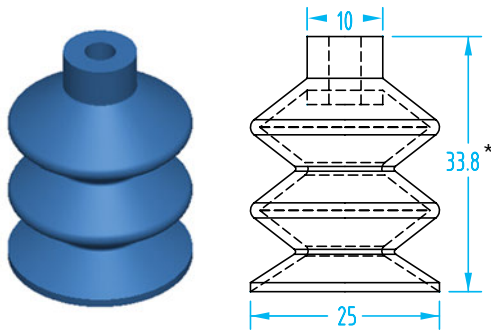
(Shown Actual Size)

\* 13mm Compressed



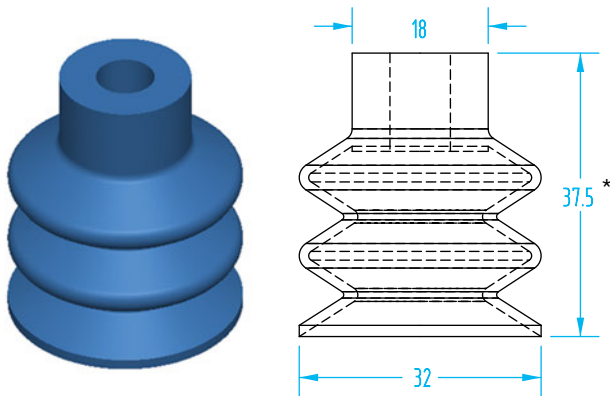
| Cup Ø  | Material     | Quick# | Part#        | Price  |
|--------|--------------|--------|--------------|--------|
| 20mm   | Hithane      | 1184   | GSV-2BHT-20  | \$9.45 |
| Nipple | Male M5      | 408    | GSF-N16-M5M  | \$3.52 |
|        | Female M5    | 5431   | GSF-HTN1-M5F | \$3.59 |
|        | Male G1/8"   | 1604   | GSF-PFN-G8M  | \$3.99 |
|        | Female G1/8" | 1603   | GSF-PFN-G8F  | \$3.99 |

\* 16mm Compressed



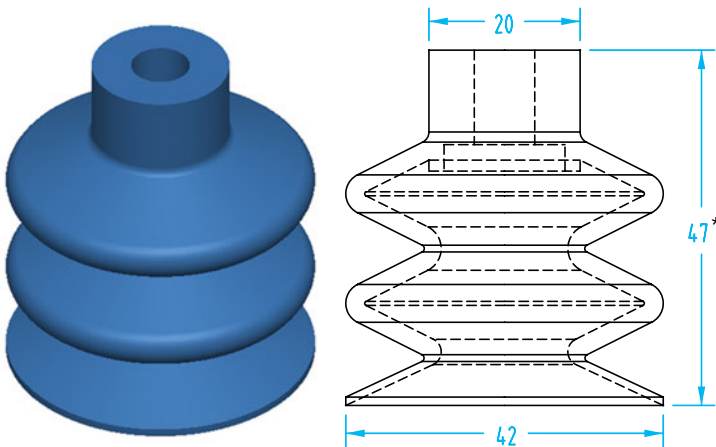
| Cup Ø  | Material     | Quick# | Part#        | Price   |
|--------|--------------|--------|--------------|---------|
| 25mm   | Hithane      | 1660   | GSV-2BHT-25  | \$11.75 |
| Nipple | Male M5      | 408    | GSF-N16-M5M  | \$3.52  |
|        | Female M5    | 5431   | GSF-HTN1-M5F | \$3.59  |
|        | Male G1/8"   | 1604   | GSF-PFN-G8M  | \$3.99  |
|        | Female G1/8" | 1603   | GSF-PFN-G8F  | \$3.99  |

\* 22mm Compressed



| Cup Ø  | Material     | Quick# | Part#        | Price   |
|--------|--------------|--------|--------------|---------|
| 32mm   | Hithane      | 1185   | GSV-2BHT-32  | \$13.29 |
| Nipple | Female G1/8" | 5432   | GSF-HTN1-G8F | \$3.67  |
|        | Male G1/8"   | 5433   | GSF-HTN1-G8M | \$3.67  |
|        | Female G1/4" | 1744   | GSF-HTN4-G4F | \$6.61  |
|        | Male G1/4"   | 1743   | GSF-HTN4-G4M | \$6.77  |

\* 26mm Compressed



| Cup Ø  | Material     | Quick# | Part#        | Price   |
|--------|--------------|--------|--------------|---------|
| 42mm   | Hithane      | 1661   | GSV-2BHT-42  | \$12.97 |
| Nipple | Female G1/8" | 5432   | GSF-HTN1-G8F | \$3.67  |
|        | Male G1/8"   | 5433   | GSF-HTN1-G8M | \$3.67  |
|        | Female G1/4" | 1744   | GSF-HTN4-G4F | \$6.61  |
|        | Male G1/4"   | 1743   | GSF-HTN4-G4M | \$6.77  |

| Cup Ø | Material | Quick# | Part#       | Price   |
|-------|----------|--------|-------------|---------|
| 62mm  | Hithane  | 1186   | GSV-2BHT-62 | \$31.14 |

visit EMIcorp.com for dimensions and fittings.

\* This cup uses the same nipples as Quick#1661: Q#'s 5432, 5433, 1744, 1743.



# Hithane® – Oval

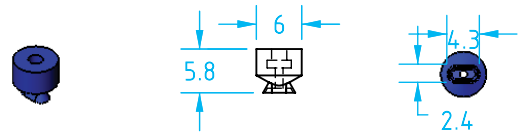
(Shown Actual Size)



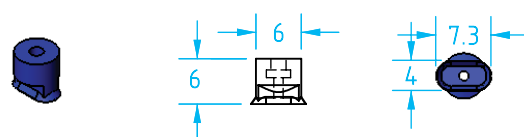
Hithane Vacuum Cup Properties

| Material | Color | Max Temp. | Durometer |
|----------|-------|-----------|-----------|
| Hithane  | Blue  | 320°F     | 60°       |

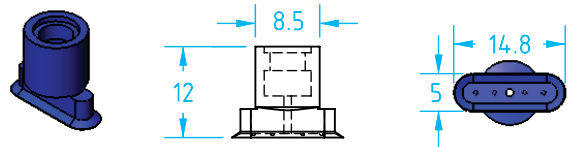
See page 332–333 for nipple dimensions.



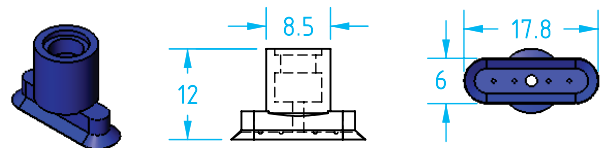
| Cup Size | Material  | Quick# | Part#          | Price  |
|----------|-----------|--------|----------------|--------|
| 2x4mm    | Hithane   | 5416   | GSV-OHT-24     | \$9.98 |
| Nipple   | Male M3   | 3285   | VSA5           | \$6.09 |
|          | Female M5 | 5434   | GSF-HTN2-M5FXS | \$3.59 |
|          | Male M5   | 5435   | GSF-HTN2-M5MXS | \$3.59 |



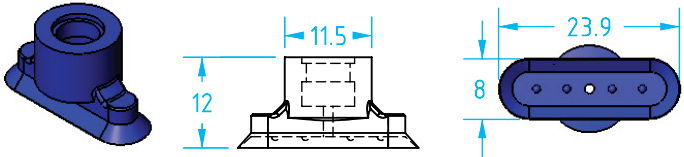
| Cup Size | Material  | Quick# | Part#          | Price   |
|----------|-----------|--------|----------------|---------|
| 3.5x7mm  | Hithane   | 5417   | GSV-OHT-357    | \$10.12 |
| Nipple   | Male M3   | 3285   | VSA5           | \$6.09  |
|          | Female M5 | 5434   | GSF-HTN2-M5FXS | \$3.59  |
|          | Male M5   | 5435   | GSF-HTN2-M5MXS | \$3.59  |



| Cup Size | Material  | Quick# | Part#       | Price   |
|----------|-----------|--------|-------------|---------|
| 5x15mm   | Hithane   | 5418   | GSV-OHT-515 | \$19.57 |
| Nipple   | Male M5   | 378    | GSF-N21-M5M | \$7.26  |
|          | Female M5 | 379    | GSF-N21-M5F | \$7.26  |



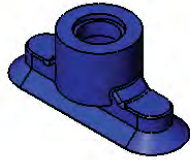
| Cup Size | Material  | Quick# | Part#       | Price   |
|----------|-----------|--------|-------------|---------|
| 6x18mm   | Hithane   | 5419   | GSV-OHT-618 | \$20.56 |
| Nipple   | Male M5   | 378    | GSF-N21-M5M | \$7.26  |
|          | Female M5 | 379    | GSF-N21-M5F | \$7.26  |



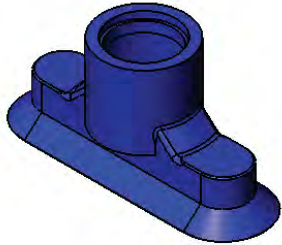
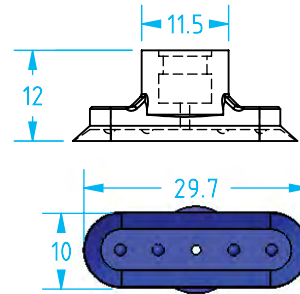
| Cup Size | Material  | Quick# | Part#         | Price   |
|----------|-----------|--------|---------------|---------|
| 8x24mm   | Hithane   | 5420   | GSV-OHT-824   | \$23.25 |
| Nipple   | Female M5 | 5438   | GSF-HTN2-M5FM | \$3.62  |
|          | Male M5   | 5439   | GSF-HTN2-M5MM | \$3.62  |

**Hithane® – Oval**

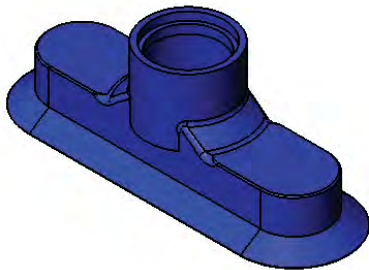
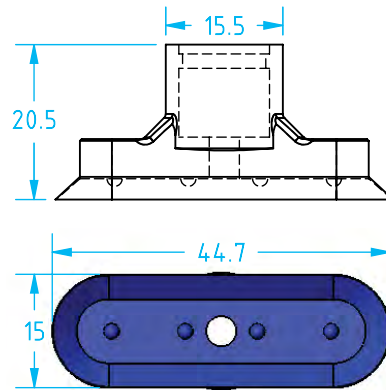
(Shown Actual Size)



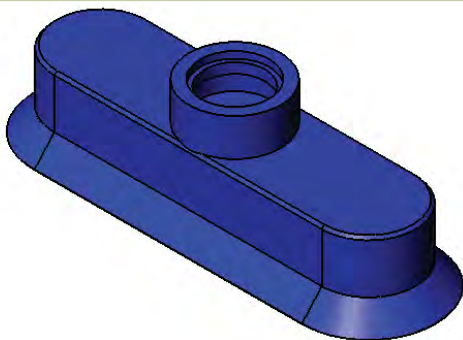
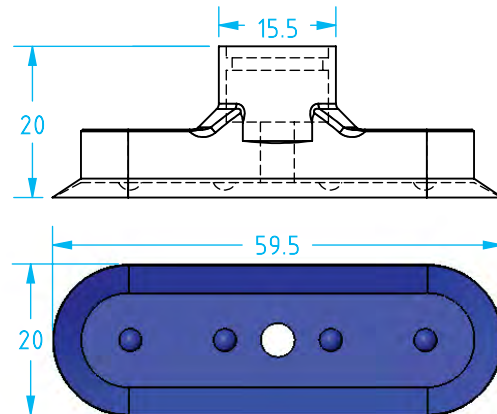
| Cup Size      | Material  | Quick# | Part#         | Price   |
|---------------|-----------|--------|---------------|---------|
| 10x30mm       | Hithane   | 5421   | GSV-OHT-1030  | \$26.23 |
| <b>Nipple</b> | Female M5 | 5438   | GSF-HTN2-M5FM | \$3.62  |
|               | Male M5   | 5439   | GSF-HTN2-M5MM | \$3.62  |



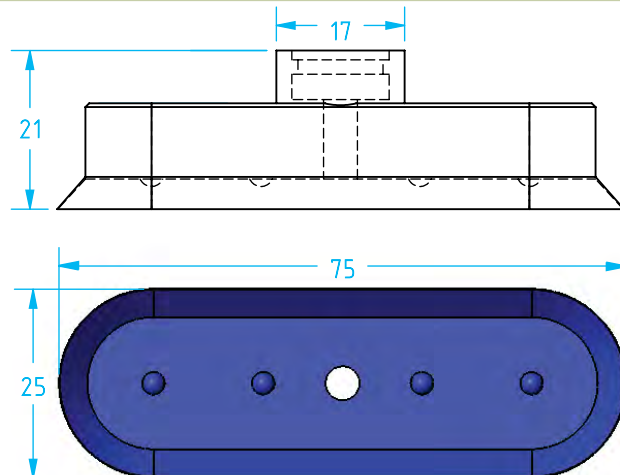
| Cup Size      | Material     | Quick# | Part#         | Price   |
|---------------|--------------|--------|---------------|---------|
| 15x45mm       | Hithane      | 5422   | GSV-OHT-1545  | \$26.94 |
| <b>Nipple</b> | Female G1/8" | 5440   | GSF-HTN2-G8FL | \$3.67  |
|               | Male G1/8"   | 5441   | GSF-HTN2-G8ML | \$3.67  |



| Cup Size      | Material     | Quick# | Part#         | Price   |
|---------------|--------------|--------|---------------|---------|
| 20x60mm       | Hithane      | 5423   | GSV-OHT-2060  | \$32.80 |
| <b>Nipple</b> | Female G1/8" | 5440   | GSF-HTN2-G8FL | \$3.67  |
|               | Male G1/8"   | 5441   | GSF-HTN2-G8ML | \$3.67  |

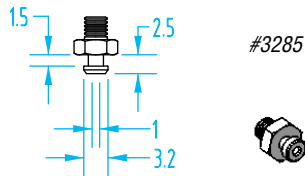


| Cup Size      | Material     | Quick# | Part#         | Price   |
|---------------|--------------|--------|---------------|---------|
| 25x75mm       | Hithane      | 5424   | GSV-OHT-2575  | \$41.83 |
| <b>Nipple</b> | Female G1/8" | 5440   | GSF-HTN2-G8FL | \$3.67  |
|               | Male G1/8"   | 5441   | GSF-HTN2-G8ML | \$3.67  |

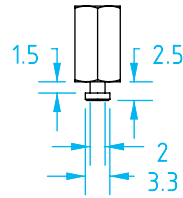


# Hithane® – Vacuum Cup Nipples

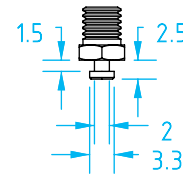
(Shown Actual Size)



#3285



#5434

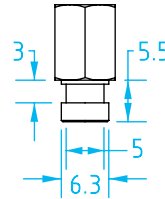


#5435

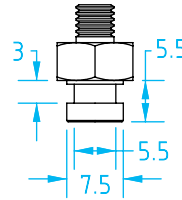
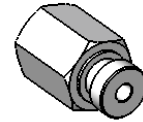


| Thread    | Quick# | Part#          | Price  |
|-----------|--------|----------------|--------|
| Male M3   | 3285   | VSA5           | \$6.09 |
| Female M5 | 5434   | GSF-HTN2-M5FX5 | \$3.59 |
| Male M5   | 5435   | GSF-HTN2-M5MX5 | \$3.59 |

For: Oval Cups: 2x4mm and 3.5x7mm



#5438

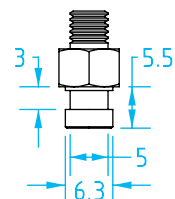


#5439

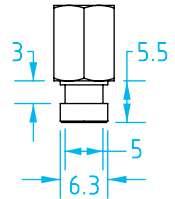


| Thread    | Quick# | Part#         | Price  |
|-----------|--------|---------------|--------|
| Female M5 | 5438   | GSF-HTN2-M5FM | \$3.62 |
| Male M5   | 5439   | GSF-HTN2-M5MM | \$3.62 |

For: Oval Cups: 8x24mm and 10x30 mm



#378

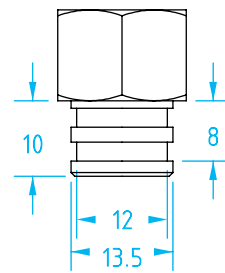


#379

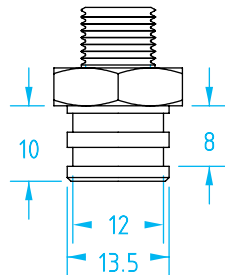
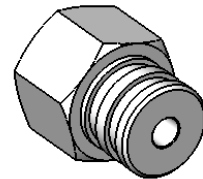


| Thread    | Quick# | Part#       | Price  |
|-----------|--------|-------------|--------|
| Male M5   | 378    | GSF-N21-M5M | \$7.26 |
| Female M5 | 379    | GSF-N21-M5F | \$7.26 |

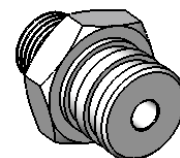
For: Oval Cups: 5x15mm and 6x18mm



#5440



#5441



| Thread       | Quick# | Part#         | Price  |
|--------------|--------|---------------|--------|
| Female G1/8" | 5440   | GSF-HTN2-G8FL | \$3.92 |
| Male G1/8"   | 5441   | GSF-HTN2-G8ML | \$3.92 |

For: Oval Cups: 15x45mm, 20x60mm, and 25x75mm

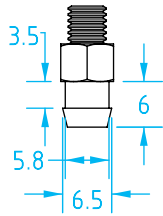


3D Printed Clamp Rings clamp onto the stem of oval Hithane vacuum cups to prevent them from rotating. Please note, they can only be installed once.

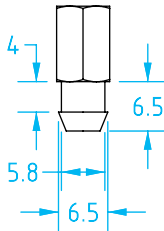
| Quick# | Part#           | For:                                       | Price  |
|--------|-----------------|--|--------|
| 770    | GSF-515618-CR   | 5 x 15mm & 6 x 18mm cups: Q #5418, #5419   | \$0.73 |
| 771    | GSF-8241030-CR  | 8 x 24mm & 10 x 30mm cups: Q #5420, #5421  | \$0.84 |
| 772    | GSF-15452060-CR | 15 x 45mm & 20 x 60mm cups: Q #5422, #5423 | \$0.88 |
| 773    | GSF-2575-CR     | 25x75mm cups: Q #5424                      | \$0.91 |

Hithane® – Vacuum Cup Nipples

(Shown Actual Size)



#408, nickle-plated, FDA approved

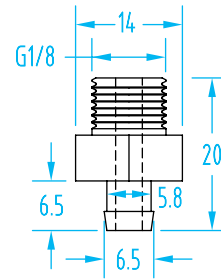


#5431

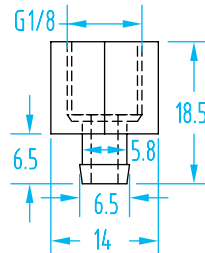


| Thread    | Quick# | Part#        | Price  |
|-----------|--------|--------------|--------|
| Female M5 | 5431   | GSF-HTN1-M5F | \$3.59 |
| Male M5   | 408    | GSF-N16-M5M  | \$3.52 |

For: Flat Cups: 5mm, 8mm, 11mm, 15mm, and 20mm  
 1.5 Bellows Cups: 11mm, 14mm, 20mm, and 25mm  
 2.5 Bellows Cups: 7mm, 9mm, 12mm, 14mm, 18mm, 20mm and 25mm



#1604

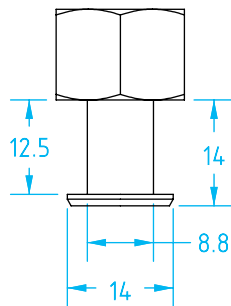


#1603

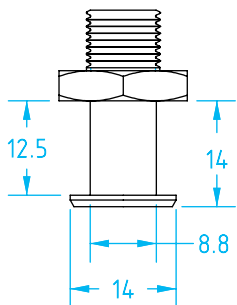
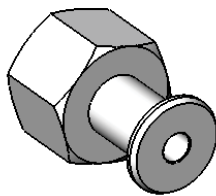


| Thread       | Quick# | Part#       | Price  |
|--------------|--------|-------------|--------|
| Male G1/8"   | 1604   | GSF-PFN-G8M | \$3.99 |
| Female G1/8" | 1603   | GSF-PFN-G8F | \$3.99 |

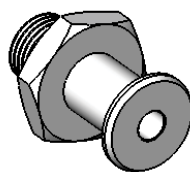
For: Flat Cups: 5mm, 8mm, 11mm, 15mm, and 20mm  
 1.5 Bellows Cups: 14mm, 20mm, and 25mm  
 2.5 Bellows Cups: 7mm, 9mm, 12mm, 14mm, 18mm, and 25mm



#5432

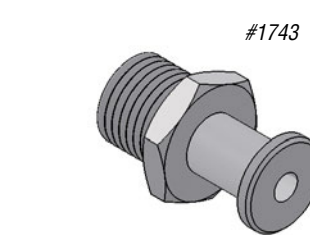


#5433

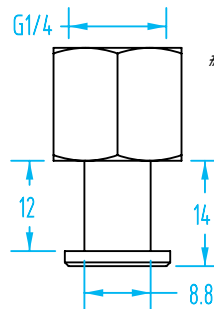
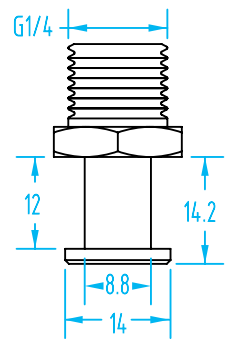


| Thread       | Quick# | Part#        | Price  |
|--------------|--------|--------------|--------|
| Female G1/8" | 5432   | GSF-HTN1-G8F | \$3.67 |
| Male G1/8"   | 5433   | GSF-HTN1-G8M | \$3.67 |

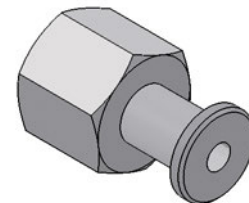
For: Flat Cups: 30mm, 40mm, and 50mm  
 1.5 Bellows Cups: 33mm, 43mm, and 53mm  
 2.5 Bellows Cups: 32mm, and 42mm



#1743



#1744



| Thread       | Quick# | Part#        | Price  |
|--------------|--------|--------------|--------|
| Male G1/4"   | 1743   | GSF-HTN4-G4M | \$6.77 |
| Female G1/4" | 1744   | GSF-HTN4-G4F | \$6.61 |

For: Flat Cups: 30mm, 40mm, and 50mm  
 1.5 Bellows Cups: 33mm, 43mm, and 53mm  
 2.5 Bellows Cups: 32mm, and 42mm

## OEM Replacement – Flat, Flat Ribbed



(Shown Actual Size)

### Compatible with PIAB nipples!

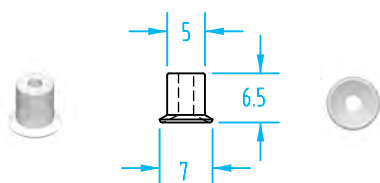
OEM replacement vacuum cups are available in Hithane. This EMI exclusive material combines the high-temperature and flexibility properties of silicone with the wear resistance and non-marking properties of polyurethane.

#### OEM Replacement Vacuum Cup Properties

| Material | Color                  | Max Temp. | Durometer |
|----------|------------------------|-----------|-----------|
| Silicone | Semi-translucent White | 392°F     | 50°       |
| Hithane  | Blue                   | 320°F     | 60°       |
| Nitrile  | Black                  | 240°F     | 60°       |

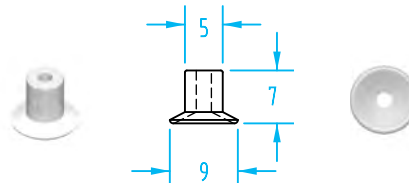
Order nipples separately. See page 356–357 for nipple dimensions.

### Flat



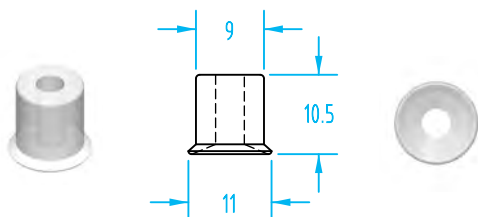
| Cup Ø         | Material | Quick# | Part#       | Price  |
|---------------|----------|--------|-------------|--------|
| 7mm           | Silicone | 673    | GSV-FOS-5   | \$2.21 |
|               | Hithane  | 1113   | GSV-FOH-5   | \$5.69 |
|               | Nitrile  | 1153   | GSV-FON-5   | \$1.94 |
| <b>Nipple</b> | M5 Male  | 688    | GSF-NF11-M5 | \$2.31 |

### Flat



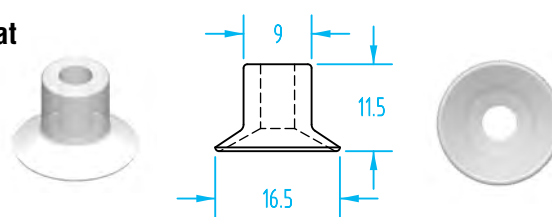
| Cup Ø         | Material | Quick# | Part#       | Price  |
|---------------|----------|--------|-------------|--------|
| 9mm           | Silicone | 674    | GSV-FOS-7   | \$2.39 |
|               | Hithane  | 1114   | GSV-FOH-7   | \$5.69 |
|               | Nitrile  | 1154   | GSV-FON-7   | \$1.94 |
| <b>Nipple</b> | M5 Male  | 688    | GSF-NF11-M5 | \$2.31 |

### Flat



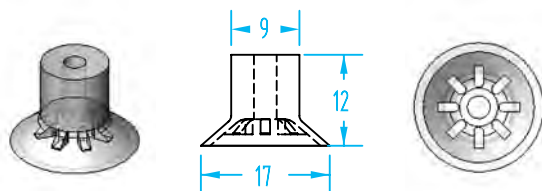
| Cup Ø         | Material | Quick# | Part#      | Price  |
|---------------|----------|--------|------------|--------|
| 11mm          | Silicone | 675    | GSV-FOS-11 | \$3.19 |
|               | Hithane  | 1115   | GSV-FOH-11 | \$6.06 |
|               | Nitrile  | 1155   | GSV-FON-11 | \$2.12 |
| <b>Nipple</b> | M5 Male  | 411    | GSF-NF1-M5 | \$1.75 |

### Flat



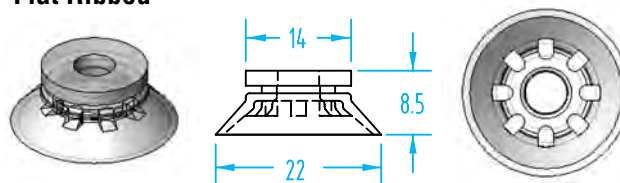
| Cup Ø         | Material | Quick# | Part#      | Price  |
|---------------|----------|--------|------------|--------|
| 16mm          | Silicone | 676    | GSV-FOS-16 | \$3.51 |
|               | Hithane  | 1116   | GSV-FOH-16 | \$5.80 |
|               | Nitrile  | 1156   | GSV-FON-16 | \$2.24 |
| <b>Nipple</b> | M5 Male  | 411    | GSF-NF1-M5 | \$1.75 |

### Flat Ribbed



| Cup Ø         | Material | Quick# | Part#       | Price  |
|---------------|----------|--------|-------------|--------|
| 16mm          | Silicone | 682    | GSV-FOS-16R | \$3.62 |
|               | Hithane  | 1122   | GSV-FOH-16R | \$6.50 |
|               | Nitrile  | 1121   | GSV-FON-16R | \$2.36 |
| <b>Nipple</b> | M5 Male  | 411    | GSF-NF1-M5  | \$1.75 |

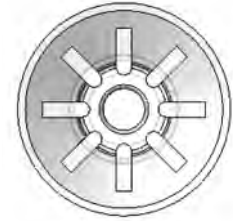
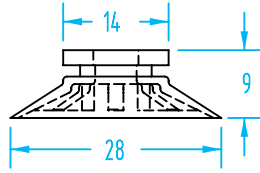
### Flat Ribbed



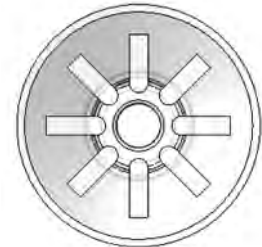
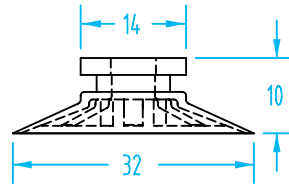
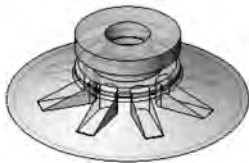
| Cup Ø         | Material             | Quick# | Part#        | Price  |
|---------------|----------------------|--------|--------------|--------|
| 20mm          | Silicone             | 683    | GSV-FOS-20R  | \$4.08 |
|               | Hithane              | 1124   | GSV-FOH-20R  | \$5.86 |
|               | Nitrile              | 1123   | GSV-FON-20R  | \$3.07 |
| <b>Nipple</b> | Male G1/8" Female M5 | 412    | GSF-NF2-G8M5 | \$5.25 |

**OEM Replacement – Flat Ribbed**

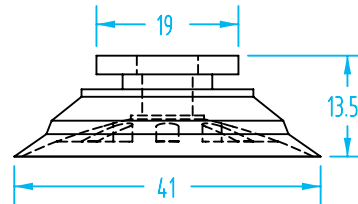
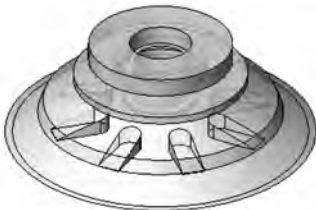
(Shown Actual Size)



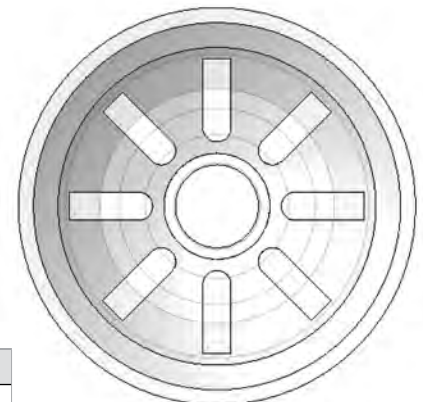
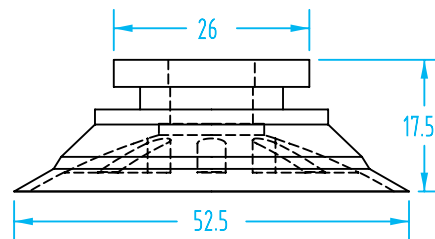
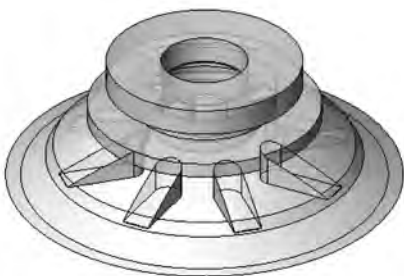
| Cup Ø         | Material             | Quick# | Part#        | Price  |
|---------------|----------------------|--------|--------------|--------|
| 25mm          | Silicone             | 684    | GSV-FOS-25R  | \$4.18 |
|               | Hithane              | 1126   | GSV-FOH-25R  | \$7.68 |
|               | Nitrile              | 1125   | GSV-FON-25R  | \$3.76 |
| <b>Nipple</b> | Male G1/8"/Female M5 | 412    | GSF-NF2-G8M5 | \$5.25 |



| Cup Ø         | Material             | Quick# | Part#        | Price  |
|---------------|----------------------|--------|--------------|--------|
| 30mm          | Silicone             | 685    | GSV-FOS-30R  | \$4.57 |
|               | Hithane              | 1128   | GSV-FOH-30R  | \$8.48 |
|               | Nitrile              | 1127   | GSV-FON-30R  | \$3.92 |
| <b>Nipple</b> | Male G1/8"/Female M5 | 412    | GSF-NF2-G8M5 | \$5.25 |



| Cup Ø         | Material     | Quick# | Part#       | Price   |
|---------------|--------------|--------|-------------|---------|
| 40mm          | Silicone     | 686    | GSV-FOS-40R | \$7.05  |
|               | Hithane      | 1130   | GSV-FOH-40R | \$12.93 |
|               | Nitrile      | 1129   | GSV-FON-40R | \$5.94  |
| <b>Nipple</b> | G1/8" Female | 413    | GSF-NF3-G8  | \$6.56  |



| Cup Ø         | Material     | Quick# | Part#       | Price   |
|---------------|--------------|--------|-------------|---------|
| 50mm          | Silicone     | 687    | GSV-FOS-50R | \$7.10  |
|               | Hithane      | 1132   | GSV-FOH-50R | \$12.85 |
|               | Nitrile      | 1131   | GSV-FON-50R | \$5.48  |
| <b>Nipple</b> | G1/8" Female | 646    | GSF-NF5-G8F | \$5.78  |

# OEM Replacement – 1.5 Bellows

(Shown Actual Size)

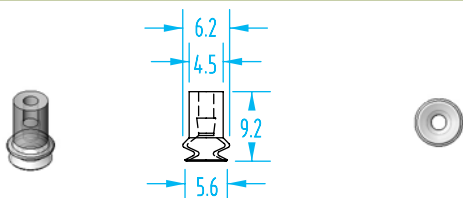


### Compatible with PIAB nipples!

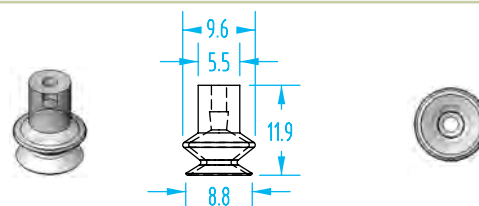
OEM replacement vacuum cups are available in Hithane. This EMI exclusive material combines the high-temperature and flexibility properties of silicone with the wear resistance and non-marking properties of polyurethane.

OEM Replacement Vacuum Cup Properties

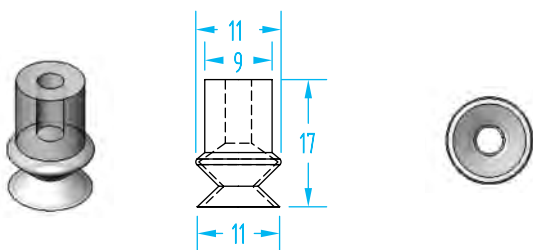
| Material | Color                  | Max Temp. | Durometer |
|----------|------------------------|-----------|-----------|
| Silicone | Semi-translucent White | 392°F     | 50°       |
| Hithane  | Blue                   | 320°F     | 60°       |
| Nitrile  | Black                  | 240°F     | 60°       |



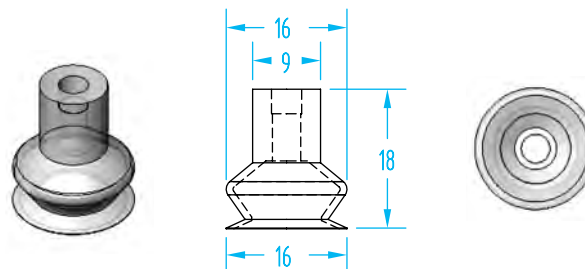
| Cup Ø         | Material | Quick# | Part#       | Price  |
|---------------|----------|--------|-------------|--------|
| 5mm           | Silicone | 1142   | GSV-BOS-5   | \$3.84 |
|               | Hithane  | 1133   | GSV-BOH-5   | \$7.02 |
|               | Nitrile  | 1144   | GSV-BON-5   | \$2.13 |
| <b>Nipple</b> | M5 Male  | 688    | GSF-NF11-M5 | \$2.31 |



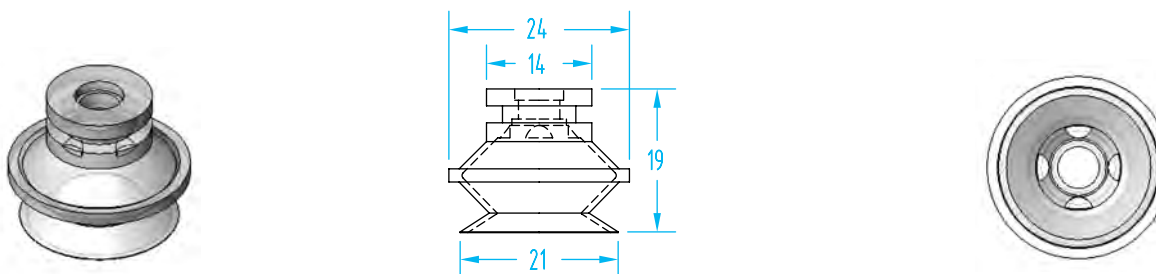
| Cup Ø         | Material | Quick# | Part#       | Price  |
|---------------|----------|--------|-------------|--------|
| 8mm           | Silicone | 1143   | GSV-BOS-8   | \$4.12 |
|               | Hithane  | 1134   | GSV-BOH-8   | \$6.35 |
|               | Nitrile  | 1145   | GSV-BON-8   | \$2.21 |
| <b>Nipple</b> | M5 Male  | 688    | GSF-NF11-M5 | \$2.31 |



| Cup Ø         | Material | Quick# | Part#      | Price  |
|---------------|----------|--------|------------|--------|
| 11mm          | Silicone | 640    | GSV-BOS-11 | \$2.33 |
|               | Hithane  | 1135   | GSV-BOH-11 | \$7.14 |
|               | Nitrile  | 1146   | GSV-BON-11 | \$2.59 |
| <b>Nipple</b> | M5 Male  | 411    | GSF-NF1-M5 | \$1.75 |



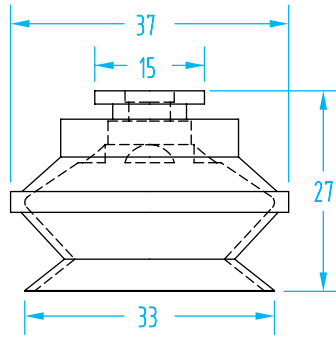
| Cup Ø         | Material | Quick# | Part#      | Price  |
|---------------|----------|--------|------------|--------|
| 16mm          | Silicone | 641    | GSV-BOS-16 | \$3.02 |
|               | Hithane  | 1136   | GSV-BOH-16 | \$7.50 |
|               | Nitrile  | 1147   | GSV-BON-16 | \$2.75 |
| <b>Nipple</b> | M5 Male  | 411    | GSF-NF1-M5 | \$1.75 |



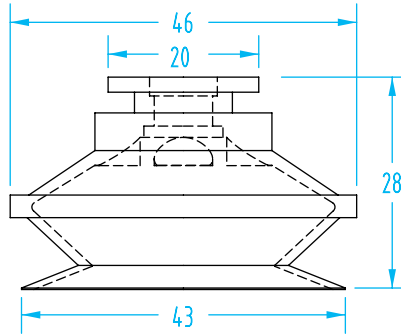
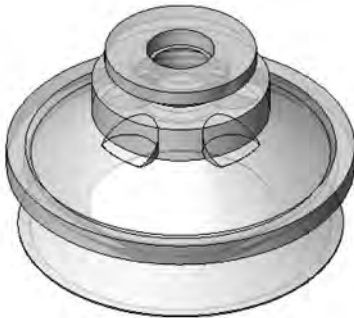
| Cup Ø         | Material             | Quick# | Part#        | Price  |
|---------------|----------------------|--------|--------------|--------|
| 20mm          | Silicone             | 642    | GSV-BOS-20   | \$6.62 |
|               | Hithane              | 1137   | GSV-BOH-20   | \$9.36 |
|               | Nitrile              | 1148   | GSV-BON-20   | \$4.37 |
| <b>Nipple</b> | Male G1/8"/Female M5 | 412    | GSF-NF2-G8M5 | \$5.25 |

**OEM Replacement – 1.5 Bellows**

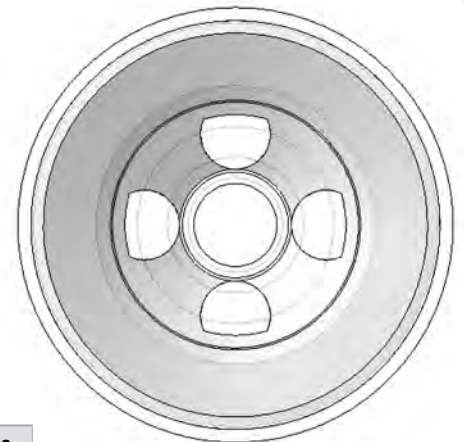
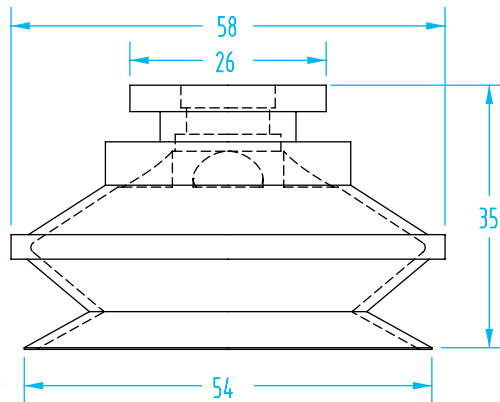
(Shown Actual Size)



| Cup Ø         | Material             | Quick# | Part#        | Price   |
|---------------|----------------------|--------|--------------|---------|
| 30mm          | Silicone             | 643    | GSV-BOS-30   | \$9.52  |
|               | Hithane              | 1138   | GSV-BOH-30   | \$13.22 |
|               | Nitrile              | 1149   | GSV-BON-30   | \$5.53  |
| <b>Nipple</b> | Male G1/8"/Female M5 | 412    | GSF-NF2-G8M5 | \$5.25  |



| Cup Ø         | Material     | Quick# | Part#      | Price   |
|---------------|--------------|--------|------------|---------|
| 40mm          | Silicone     | 644    | GSV-BOS-40 | \$11.09 |
|               | Hithane      | 1139   | GSV-BOH-40 | \$15.15 |
|               | Nitrile      | 1151   | GSV-BON-40 | \$7.07  |
| <b>Nipple</b> | G1/8" Female | 413    | GSF-NF3-G8 | \$6.56  |



| Cup Ø         | Material     | Quick# | Part#       | Price   |
|---------------|--------------|--------|-------------|---------|
| 50mm          | Silicone     | 645    | GSV-BOS-50  | \$12.83 |
|               | Hithane      | 1140   | GSV-BOH-50  | \$17.27 |
|               | Nitrile      | 1152   | GSV-BON-50  | \$8.42  |
| <b>Nipple</b> | G1/8" Female | 646    | GSF-NF5-G8F | \$5.78  |



# PIAB® – Flat Smooth



**NEW**

(Shown Actual Size)

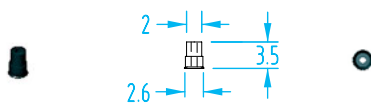
PIAB silicone vacuum cups are among the best and longest lasting silicone cups available. PIAB's specially compounded silicone keeps its flexibility longer than others. If your silicone cups are 'cracking' at the edges and leaking vacuum, try these for longer life. The new FDA Silicone material is approved by FDA (FDA 21 CFR 177.2600.) and meets EU's regulation EU 1935/2004.

### PIAB Vacuum Cup Properties

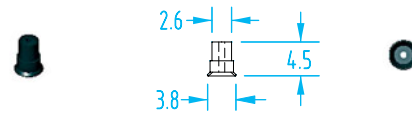
| Material         | Color                | Max Temp. | Durometer |
|------------------|----------------------|-----------|-----------|
| Silicone         | Red w/ Blue Ring     | 392°F     | 50°       |
| FDA Silicone     | Clear w/ Blue Ring   | 392°F     | 50°       |
| Polyurethane TPU | Clear w/ Yellow Ring | 176°F     | 81°       |
| Chloroprene      | Black w/ Yellow Ring | 230°F     | 50°       |
| Nitrile          | Black w/ White Dot   | 225°F     | 50°       |

Order nipples separately. See page 356–357 for nipple dimensions.

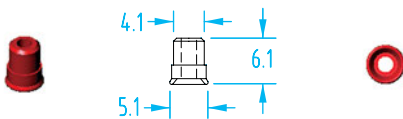
Use Quick#s for easy online ordering.



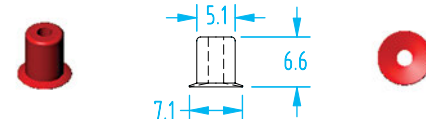
| Cup Ø         | Material    | Quick# | Part#       | Price   |
|---------------|-------------|--------|-------------|---------|
| 2mm           | AS Silicone | 5091   | GSV-U2-25   | \$10.47 |
| <b>Nipple</b> | M3 Male     | 5464   | GSF-MN15-M3 | \$5.59  |



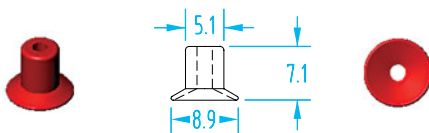
| Cup Ø         | Material    | Quick# | Part#       | Price  |
|---------------|-------------|--------|-------------|--------|
| 3mm           | AS Silicone | 5092   | GSV-U3-25   | \$9.91 |
| <b>Nipple</b> | M3 Male     | 5464   | GSF-MN15-M3 | \$5.59 |



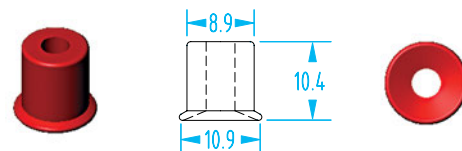
| Cup Ø         | Material     | Quick# | Part#     | Price  |
|---------------|--------------|--------|-----------|--------|
| 4mm           | Silicone     | 5093   | GSV-U4-20 | \$7.70 |
|               | FDA Silicone | 2910   | GSV-U4-21 | \$7.70 |
|               | Chloroprene  | 5102   | GSV-U4-10 | \$3.42 |
| <b>Nipple</b> | M5 Male      | 1438   | GSV-01AB  | \$1.85 |



| Cup Ø         | Material     | Quick# | Part#     | Price  |
|---------------|--------------|--------|-----------|--------|
| 6mm           | Silicone     | 5094   | GSV-U6-20 | \$5.89 |
|               | FDA Silicone | 2911   | GSV-U6-21 | \$5.89 |
|               | Chloroprene  | 5103   | GSV-U6-10 | \$2.99 |
| <b>Nipple</b> | M5 Male      | 1438   | GSV-01AB  | \$1.85 |



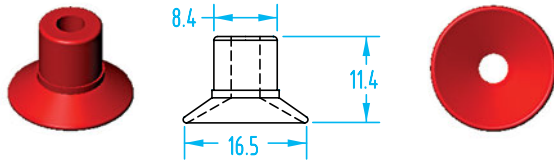
| Cup Ø         | Material     | Quick# | Part#     | Price  |
|---------------|--------------|--------|-----------|--------|
| 8mm           | Silicone     | 5095   | GSV-U8-20 | \$6.36 |
|               | FDA Silicone | 2912   | GSV-U8-21 | \$6.36 |
|               | Chloroprene  | 5104   | GSV-U8-10 | \$2.99 |
| <b>Nipple</b> | M5 Male      | 1438   | GSV-01AB  | \$1.85 |



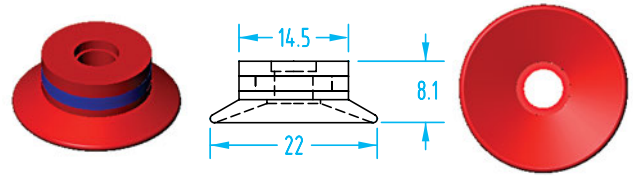
| Cup Ø         | Material     | Quick# | Part#      | Price  |
|---------------|--------------|--------|------------|--------|
| 10mm          | Silicone     | 5096   | GSV-U10-20 | \$6.24 |
|               | FDA Silicone | 2913   | GSV-U10-21 | \$6.24 |
|               | Chloroprene  | 5105   | GSV-U10-10 | \$3.35 |
| <b>Nipple</b> | M5 Male      | 1439   | GSV-01AC   | \$1.85 |

**PIAB® – Flat Smooth**

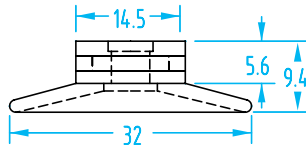
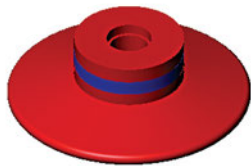
(Shown Actual Size)



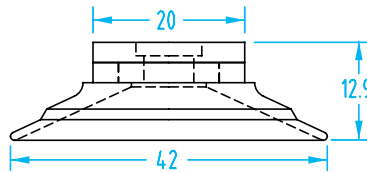
| Cup Ø         | Material     | Quick# | Part#      | Price  |
|---------------|--------------|--------|------------|--------|
| 15mm          | Silicone     | 5097   | GSV-U15-20 | \$6.24 |
|               | FDA Silicone | 2914   | GSV-U15-21 | \$5.86 |
|               | Chloroprene  | 5106   | GSV-U15-10 | \$3.79 |
| <b>Nipple</b> | M5 Male      | 1439   | GSV-01AC   | \$1.85 |



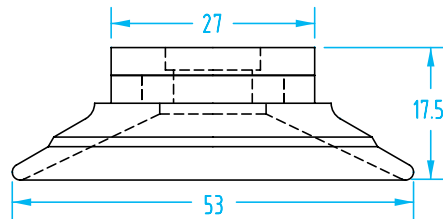
| Cup Ø         | Material     | Quick# | Part#      | Price  |
|---------------|--------------|--------|------------|--------|
| 20mm          | Silicone     | 5098   | GSV-U20-20 | \$8.39 |
|               | FDA Silicone | 2915   | GSV-U20-21 | \$8.39 |
|               | Chloroprene  | 5107   | GSV-U20-10 | \$6.33 |
| <b>Nipple</b> | G1/8" & M5   | 1440   | GSV-02AF   | \$5.14 |
|               | G1/8" Male   | 5157   | GSV-02AB   | \$5.44 |



| Cup Ø         | Material     | Quick# | Part#      | Price  |
|---------------|--------------|--------|------------|--------|
| 30mm          | Silicone     | 5099   | GSV-U30-20 | \$9.21 |
|               | FDA Silicone | 2916   | GSV-U30-21 | \$9.21 |
|               | Nitrile      | 5108   | GSV-U30-30 | \$7.07 |
| <b>Nipple</b> | G1/8" & M5   | 1440   | GSV-02AF   | \$5.14 |
|               | G1/8" Male   | 5157   | GSV-02AB   | \$5.44 |



| Cup Ø         | Material     | Quick# | Part#        | Price   |
|---------------|--------------|--------|--------------|---------|
| 40mm          | Silicone     | 5100   | GSV-U40-2-20 | \$15.66 |
|               | FDA Silicone | 2917   | GSV-U40-2-21 | \$15.66 |
|               | Nitrile      | 5109   | GSV-U40-2-30 | \$11.61 |
| <b>Nipple</b> | G1/8" Female | 1441   | GSV-04AG     | \$6.61  |
|               | G1/4" Male   | 5315   | GSV-04AB     | \$7.11  |



| Cup Ø         | Material     | Quick# | Part#        | Price   |
|---------------|--------------|--------|--------------|---------|
| 50mm          | Silicone     | 5101   | GSV-U50-2-20 | \$19.89 |
|               | FDA Silicone | 2918   | GSV-U50-2-21 | \$19.89 |
|               | Nitrile      | 5110   | GSV-U50-2-30 | \$13.05 |
| <b>Nipple</b> | G1/8" Female | 1442   | GSV-05AG     | \$8.14  |
|               | G1/4" Male   | 5316   | GSV-05AB     | \$8.77  |

# PIAB® – Flat Ribbed

(Shown Actual Size)



PIAB Vacuum Cup Properties

| Material         | Color                | Max Temp. | Durometer |
|------------------|----------------------|-----------|-----------|
| Silicone         | Red w/ Blue Ring     | 392°F     | 50°       |
| FDA Silicone     | Clear w/ Blue Ring   | 392°F     | 50°       |
| Polyurethane TPU | Clear w/ Yellow Ring | 176°F     | 81°       |
| Chloroprene      | Black w/ Yellow Ring | 230°F     | 50°       |
| Nitrile          | Black w/ White Dot   | 225°F     | 50°       |

Order nipples separately. See page 356–357 for nipple dimensions.

| Cup Ø         | Material     | Quick# | Part#        | Price  |
|---------------|--------------|--------|--------------|--------|
| 15mm          | Silicone     | 1426   | GSV-F15-20   | \$5.86 |
|               | FDA Silicone | 2919   | GSV-F15-21   | \$5.86 |
|               | Polyurethane | 1432   | GSV-F15MF-40 | \$3.66 |
|               | Chloroprene  | 5124   | GSV-F15-10   | \$3.62 |
| <b>Nipple</b> | M5 Male      | 1439   | GSV-01AC     | \$1.85 |

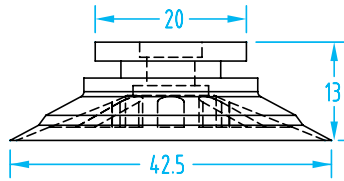
| Cup Ø         | Material     | Quick# | Part#        | Price  |
|---------------|--------------|--------|--------------|--------|
| 20mm          | Silicone     | 1427   | GSV-F20-20   | \$8.71 |
|               | FDA Silicone | 2920   | GSV-F20-21   | \$8.71 |
|               | Polyurethane | 1433   | GSV-F20MF-40 | \$6.51 |
|               | Chloroprene  | 5125   | GSV-F20-10   | \$6.76 |
| <b>Nipple</b> | G1/8" & M5   | 1440   | GSV-02AF     | \$5.14 |
|               | G1/8" Male   | 5157   | GSV-02AB     | \$5.44 |

| Cup Ø         | Material     | Quick# | Part#        | Price  |
|---------------|--------------|--------|--------------|--------|
| 25mm          | Silicone     | 1428   | GSV-F25-20   | \$9.26 |
|               | FDA Silicone | 2921   | GSV-F25-21   | \$9.26 |
|               | Polyurethane | 1434   | GSV-F25MF-40 | \$6.72 |
|               | Chloroprene  | 5126   | GSV-F25-10   | \$7.09 |
| <b>Nipple</b> | G1/8" & M5   | 1440   | GSV-02AF     | \$5.14 |
|               | G1/8" Male   | 5157   | GSV-02AB     | \$5.44 |

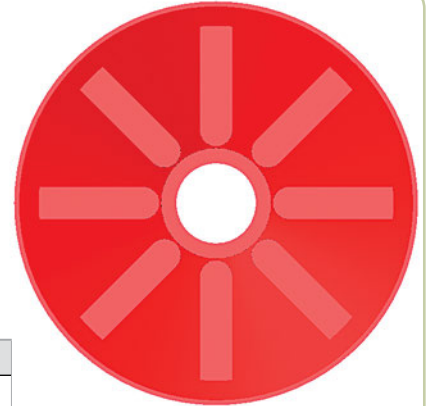
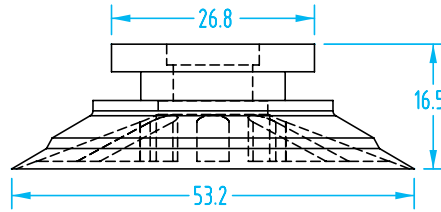
| Cup Ø         | Material     | Quick# | Part#        | Price  |
|---------------|--------------|--------|--------------|--------|
| 30mm          | Silicone     | 1429   | GSV-F30-20   | \$9.75 |
|               | FDA Silicone | 2922   | GSV-F30-2-21 | \$9.75 |
|               | Polyurethane | 1435   | GSV-F30MF-40 | \$7.38 |
|               | Chloroprene  | 5127   | GSV-F30-10   | \$7.68 |
| <b>Nipple</b> | G1/8" & M5   | 1440   | GSV-02AF     | \$5.14 |
|               | G1/8" Male   | 5157   | GSV-02AB     | \$5.44 |

PIAB® – Flat Ribbed

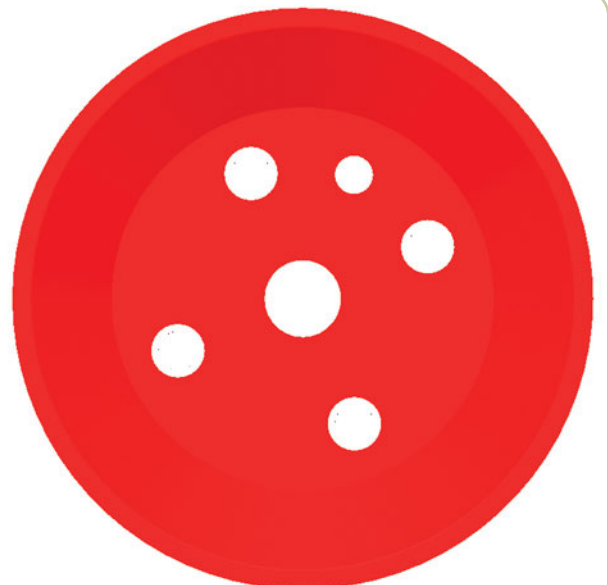
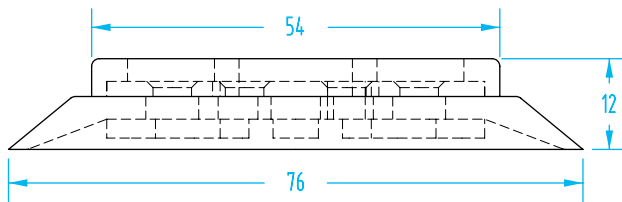
(Shown Actual Size)



| Cup Ø  | Material     | Quick# | Part#        | Price   |
|--------|--------------|--------|--------------|---------|
| 40mm   | Silicone     | 1430   | GSV-F40-20   | \$13.40 |
|        | FDA Silicone | 2937   | GSV-F40-2-21 | \$12.64 |
|        | Polyurethane | 1436   | GSV-F40MF-40 | \$9.03  |
|        | Nitrile      | 5128   | GSV-F40-30   | \$9.21  |
| Nipple | G1/8" Female | 1441   | GSV-04AG     | \$6.61  |
|        | G1/4" Male   | 5315   | GSV-04AB     | \$7.11  |



| Cup Ø  | Material     | Quick# | Part#        | Price   |
|--------|--------------|--------|--------------|---------|
| 50mm   | Silicone     | 1431   | GSV-F50-20   | \$21.08 |
|        | FDA Silicone | 2923   | GSV-F50-2-21 | \$21.08 |
|        | Polyurethane | 1437   | GSV-F50MF-40 | \$10.39 |
|        | Nitrile      | 5129   | GSV-F50-30   | \$10.60 |
| Nipple | G1/8" Female | 1442   | GSV-05AG     | \$8.14  |
|        | G1/4" Male   | 5316   | GSV-05AB     | \$8.77  |



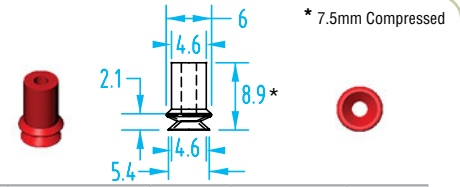
| Cup Ø  | Material     | Quick# | Part#      | Price   |
|--------|--------------|--------|------------|---------|
| 75mm   | Silicone     | 5131   | GSV-F75-20 | \$32.11 |
|        | FDA Silicone | 2924   | GSV-F75-21 | \$32.11 |
|        | Nitrile      | 5130   | GSV-F75-30 | \$20.01 |
| Nipple | G1/8" Female | 2172   | GSV-07UA   | \$31.24 |

# PIAB® – 1.5 Bellows



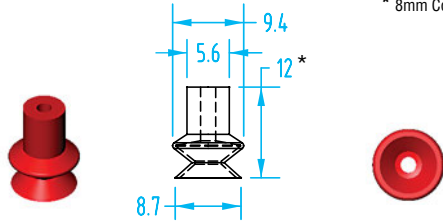
Order nipples separately. See page 356–357 for nipple dimensions.

(Shown Actual Size)



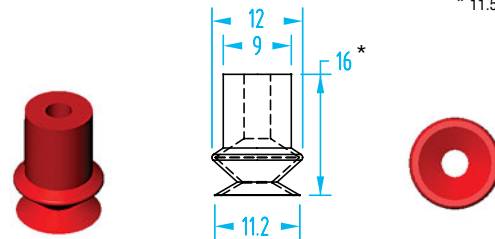
| Cup Ø         | Material     | Quick# | Part#     | Price  |
|---------------|--------------|--------|-----------|--------|
| 5mm           | Silicone     | 1413   | GSV-B5-20 | \$8.72 |
|               | FDA Silicone | 2925   | GSV-B5-21 | \$7.31 |
|               | Chloroprene  | 5115   | GSV-B5-10 | \$3.23 |
| <b>Nipple</b> | M5 Male      | 1438   | GSV-01AB  | \$1.85 |

\* 8mm Compressed



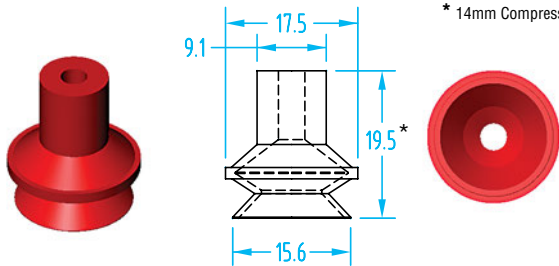
| Cup Ø         | Material     | Quick# | Part#     | Price   |
|---------------|--------------|--------|-----------|---------|
| 8mm           | Silicone     | 1414   | GSV-B8-20 | \$10.19 |
|               | FDA Silicone | 2926   | GSV-B8-21 | \$8.55  |
|               | Chloroprene  | 5116   | GSV-B8-10 | \$3.77  |
| <b>Nipple</b> | M5 Male      | 1438   | GSV-01AB  | \$1.85  |

\* 11.5mm Compressed



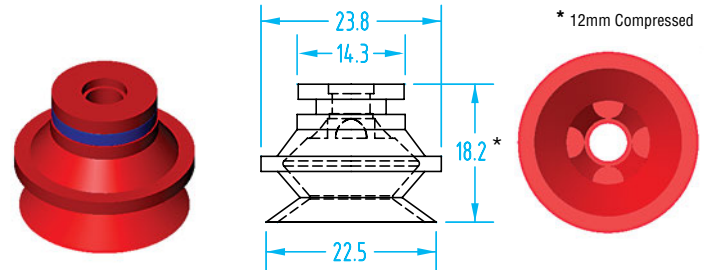
| Cup Ø         | Material     | Quick# | Part#        | Price  |
|---------------|--------------|--------|--------------|--------|
| 10mm          | Silicone     | 1415   | GSV-B10-2-20 | \$9.14 |
|               | FDA Silicone | 2927   | GSV-B10-2-21 | \$9.14 |
|               | Chloroprene  | 5117   | GSV-B10-2-10 | \$5.06 |
| <b>Nipple</b> | M5 Male      | 1439   | GSV-01AC     | \$1.85 |

\* 14mm Compressed



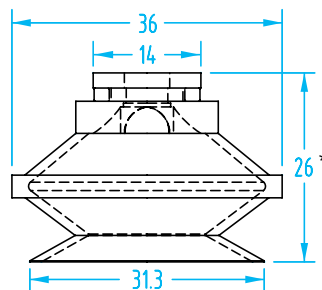
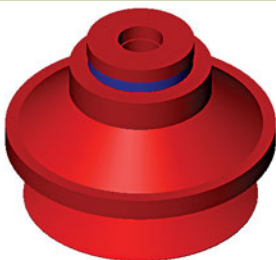
| Cup Ø         | Material     | Quick# | Part#        | Price   |
|---------------|--------------|--------|--------------|---------|
| 15mm          | Silicone     | 1416   | GSV-B15-2-20 | \$11.10 |
|               | FDA Silicone | 2928   | GSV-B15-2-21 | \$11.10 |
|               | Polyurethane | 1421   | GSV-B15MF-40 | \$5.11  |
|               | Chloroprene  | 5118   | GSV-B15-2-10 | \$5.06  |
| <b>Nipple</b> | M5 Male      | 1439   | GSV-01AC     | \$1.85  |

\* 12mm Compressed



| Cup Ø         | Material     | Quick# | Part#        | Price   |
|---------------|--------------|--------|--------------|---------|
| 20mm          | Silicone     | 1417   | GSV-B20-20   | \$15.16 |
|               | FDA Silicone | 2929   | GSV-B20-21   | \$15.16 |
|               | Polyurethane | 1422   | GSV-B20MF-40 | \$8.18  |
|               | Chloroprene  | 5119   | GSV-B20-10   | \$8.52  |
| <b>Nipple</b> | G1/8" & M5   | 1440   | GSV-02AF     | \$5.14  |

\* 16mm Compressed

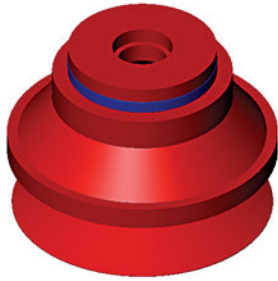


| Cup Ø         | Material    | Quick# | Part#      | Price   |
|---------------|-------------|--------|------------|---------|
| 30mm          | Silicone    | 1418   | GSV-B30-20 | \$21.99 |
|               | Chloroprene | 5120   | GSV-B30-10 | \$11.94 |
| <b>Nipple</b> | G1/8" & M5  | 1440   | GSV-02AF   | \$5.14  |
|               | G1/8" Male  | 5157   | GSV-02AB   | \$5.44  |

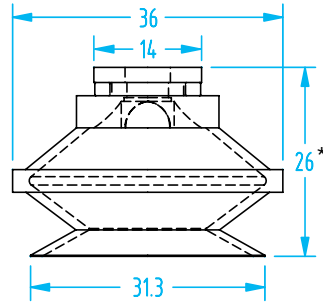
(1st generation 30mm cup—smaller fitting)

**PIAB® – 1.5 Bellows**

(Shown Actual Size)



(2nd generation 30mm cup—larger fitting)

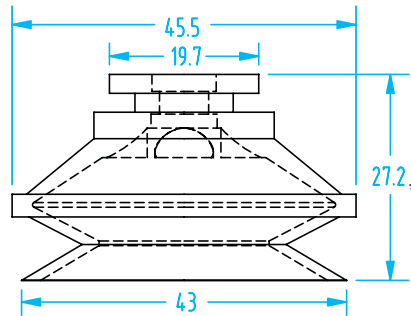
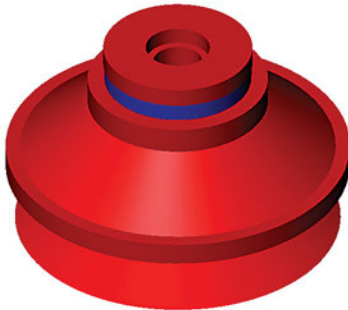


\* 15mm Compressed



| Cup Ø         | Material     | Quick# | Part#        | Price   |
|---------------|--------------|--------|--------------|---------|
| 30mm          | Silicone     | 2228   | GSV-B30-2-20 | \$21.99 |
|               | FDA Silicone | 2930   | GSV-B30-2-21 | \$21.99 |
|               | Polyurethane | 1423   | GSV-B30MF-40 | \$11.15 |
|               | Chloroprene  | 5121   | GSV-B30-2-10 | \$11.94 |
| <b>Nipple</b> | G1/8" Female | 1441   | GSV-04AG     | \$6.61  |

See page 356–357 for all nipple options.



\* 20mm Compressed



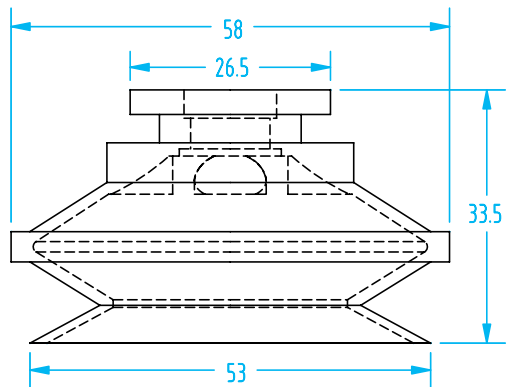
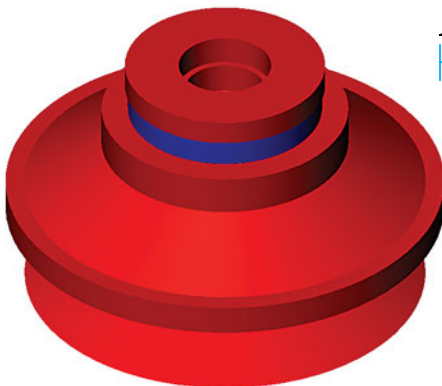
| Cup Ø         | Material     | Quick# | Part#        | Price   |
|---------------|--------------|--------|--------------|---------|
| 40mm          | Silicone     | 1419   | GSV-B40-20   | \$25.83 |
|               | FDA Silicone | 2931   | GSV-B40-21   | \$25.83 |
|               | Polyurethane | 1424   | GSV-B40MF-40 | \$13.96 |
|               | Chloroprene  | 5122   | GSV-B40-10   | \$14.95 |
| <b>Nipple</b> | G1/8" Female | 1441   | GSV-04AG     | \$6.61  |

See page 356–357 for all nipple options.

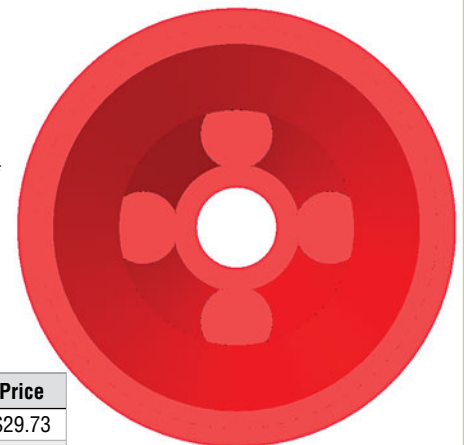
**Also Available: 50mm Cup 1-1/2 B**  
Q#2382 Silicone cup with filter disk

**Also Available: 75mm Cup**  
Q#2153 PIAB 1-1/2 Bellows  
Nitrile Vacuum Cup  
Q#1999 PIAB 1-1/2 Bellows  
Silicone Vacuum Cup

**110mm Cup Q#2672 PIAB 1-1/2**  
Bellows Silicone Vacuum Cup



\* 22mm Compressed



| Cup Ø         | Material     | Quick# | Part#        | Price   |
|---------------|--------------|--------|--------------|---------|
| 50mm          | Silicone     | 1420   | GSV-B50-20   | \$29.73 |
|               | FDA Silicone | 2932   | GSV-B50-21   | \$29.73 |
|               | Polyurethane | 1425   | GSV-B50MF-40 | \$16.06 |
|               | Nitrile      | 5123   | GSV-B50-30   | \$15.90 |
| <b>Nipple</b> | G1/8" Female | 1442   | GSV-05AG     | \$8.14  |
|               | G1/8" Male   | 1444   | GSV-05AI     | \$6.94  |
|               | G1/4" Male   | 5316   | GSV-05AB     | \$8.77  |

PIAB® – Deep

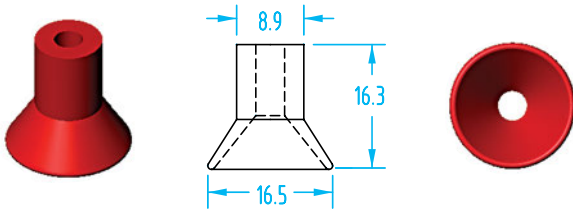
(Shown Actual Size)



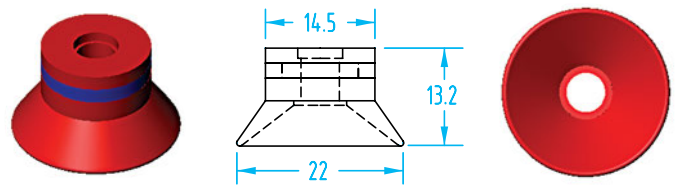
PIAB Vacuum Cup Properties

| Material         | Color                | Max Temp. | Durometer |
|------------------|----------------------|-----------|-----------|
| Silicone         | Red w/ Blue Ring     | 392°F     | 50°       |
| FDA Silicone     | Clear w/ Blue Ring   | 392°F     | 50°       |
| Polyurethane TPU | Clear w/ Yellow Ring | 176°F     | 81°       |
| Chloroprene      | Black w/ Yellow Ring | 230°F     | 50°       |
| Nitrile          | Black w/White Dot    | 225°F     | 50°       |

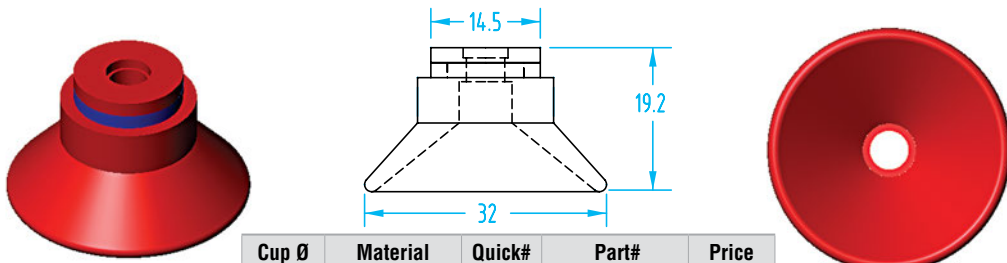
Use Quick#s for easy online ordering.



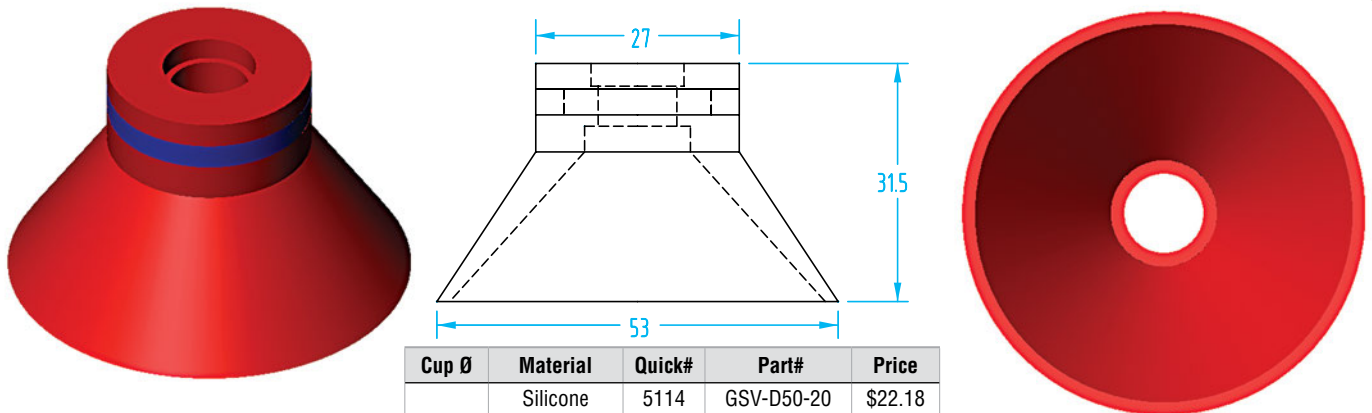
| Cup Ø  | Material     | Quick# | Part#        | Price  |
|--------|--------------|--------|--------------|--------|
| 15mm   | Silicone     | 5111   | GSV-D15-2-20 | \$6.99 |
|        | FDA Silicone | 2933   | GSV-D15-2-21 | \$6.99 |
|        | Chloroprene  | 5138   | GSV-D15-2-10 | \$4.27 |
| Nipple | M5 Male      | 1439   | GSV-01AC     | \$1.85 |



| Cup Ø  | Material     | Quick# | Part#        | Price  |
|--------|--------------|--------|--------------|--------|
| 20mm   | Silicone     | 5112   | GSV-D20-2-20 | \$9.32 |
|        | FDA Silicone | 2934   | GSV-D20-2-21 | \$9.32 |
|        | Chloroprene  | 5139   | GSV-D20-2-10 | \$6.19 |
| Nipple | G1/8" & M5   | 1440   | GSV-02AF     | \$5.14 |
|        | G1/8" Male   | 5157   | GSV-02AB     | \$5.44 |



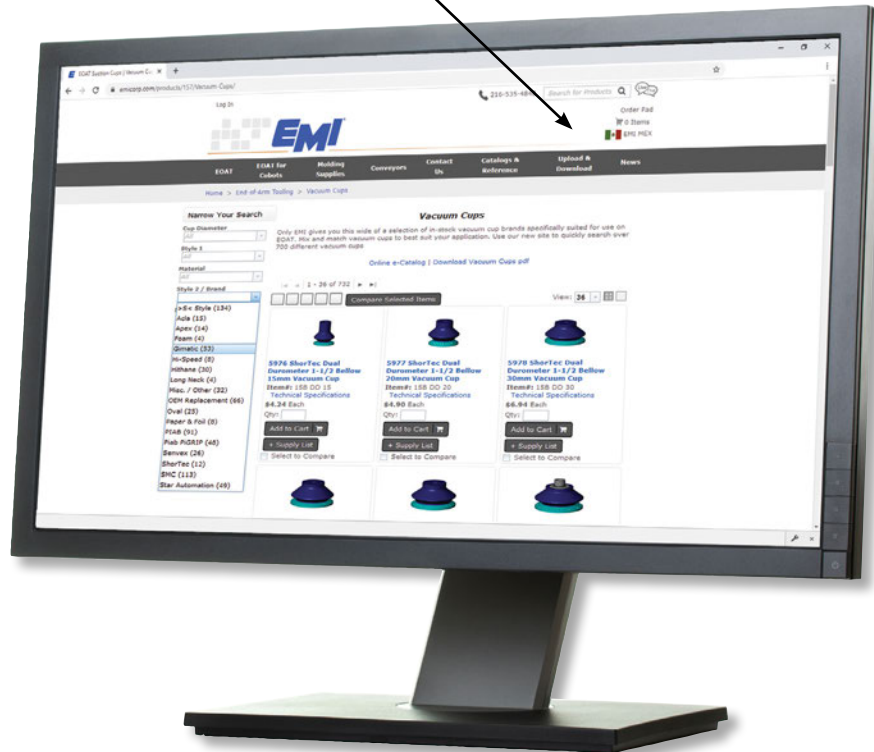
| Cup Ø  | Material     | Quick# | Part#        | Price   |
|--------|--------------|--------|--------------|---------|
| 30mm   | Silicone     | 5113   | GSV-D30-2-20 | \$11.41 |
|        | FDA Silicone | 2935   | GSV-D30-2-21 | \$11.41 |
|        | Chloroprene  | 5140   | GSV-D30-2-10 | \$8.35  |
| Nipple | G1/8" & M5   | 1440   | GSV-02AF     | \$5.14  |
|        | G1/8" Male   | 5157   | GSV-02AB     | \$5.44  |



| Cup Ø  | Material     | Quick# | Part#      | Price   |
|--------|--------------|--------|------------|---------|
| 50mm   | Silicone     | 5114   | GSV-D50-20 | \$22.18 |
|        | FDA Silicone | 2936   | GSV-D50-21 | \$22.18 |
|        | Chloroprene  | 5141   | GSV-D50-10 | \$13.23 |
| Nipple | G1/8" Female | 1442   | GSV-05AG   | \$8.14  |

## Upload orders with an excel sheet

- Find the 'Order Pad' link above the shopping cart icon.
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Shop PIAB PiGrip Configurable Vacuum Cups and Replacement Lips!





# PIAB – Duraflex® Polyurethane with 2.5 Bellows

(Shown Actual Size)



## Dual Durometer Polyurethane

These polyurethane vacuum cups are constructed in two different durometers (hardness). The cups have a sturdy and “forgiving” bellows (60° shore, green) and a large flexible sealing surface (30° shore, yellow) that performs extremely well on uneven surfaces. 30° shore makes these the most flexible sealing surface cups available. As shown installed in the cup on the left, white filter discs are included with 25mm and larger PIAB Dual Durometer cups.

The polyurethane makes them mark free and long lasting. The dual durometer makes these vacuum cups both strong and flexible.

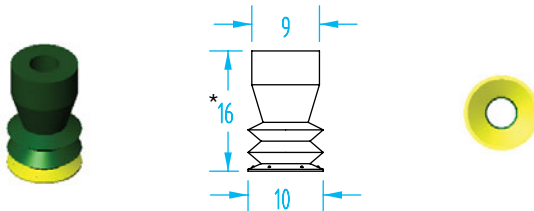
Many consider these the best performing polyurethane cup available.

Dual Durometer Vacuum Cup Properties

| Material                    | Color                           | Max Temp. | Durometer       |
|-----------------------------|---------------------------------|-----------|-----------------|
| Dual Durometer Polyurethane | Semi-translucent Green / Yellow | 122°F     | 60° / 30° Shore |

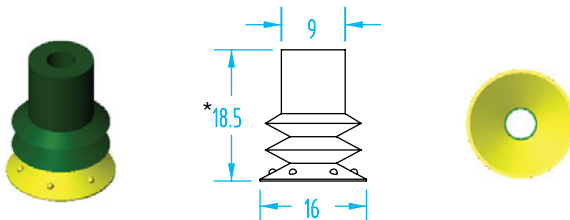
Order nipples separately. See page 356–357 for nipple dimensions.

\* 12.5mm Compressed



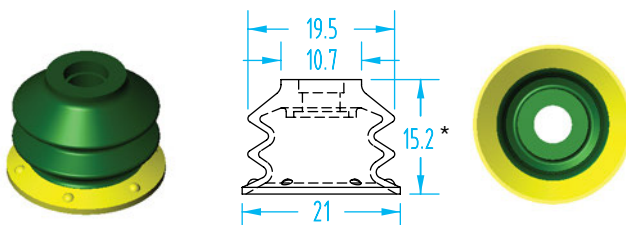
| Cup Ø         | Material     | Quick# | Part#      | Price  |
|---------------|--------------|--------|------------|--------|
| 10mm          | Polyurethane | 5639   | GSV-BDD-10 | \$9.00 |
| <b>Nipple</b> | M5 Male      | 1439   | GSV-01AC   | \$1.85 |

\* 13.5mm Compressed



| Cup Ø         | Material     | Quick# | Part#      | Price   |
|---------------|--------------|--------|------------|---------|
| 16mm          | Polyurethane | 5640   | GSV-BDD-15 | \$11.03 |
| <b>Nipple</b> | M5 Male      | 1439   | GSV-01AC   | \$1.85  |

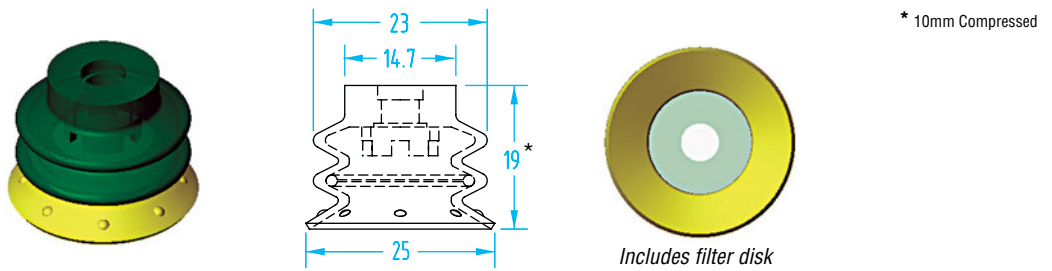
\* 9mm Compressed



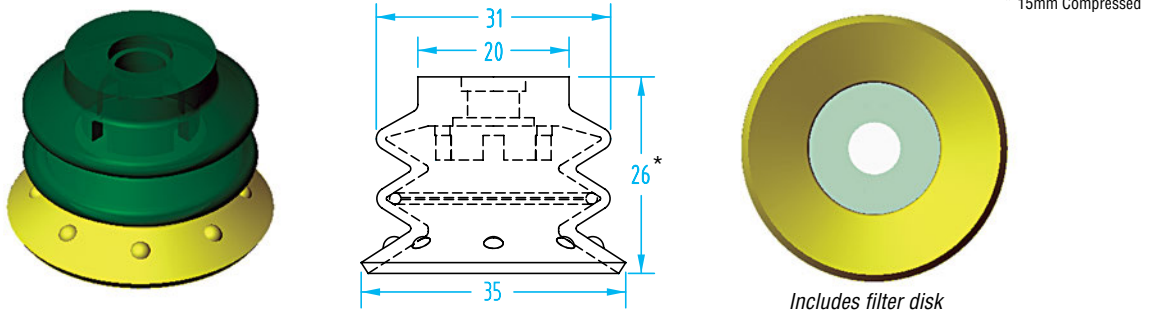
| Cup Ø         | Material     | Quick# | Part#      | Price   |
|---------------|--------------|--------|------------|---------|
| 20mm          | Polyurethane | 5641   | GSV-BDD-20 | \$15.84 |
| <b>Nipple</b> | G1/8" & M5   | 1440   | GSV-02AF   | \$5.14  |
|               | G1/8" Male   | 5157   | GSV-02AB   | \$5.44  |

**PIAB – Duraflex® Polyurethane with 2.5 Bellows**

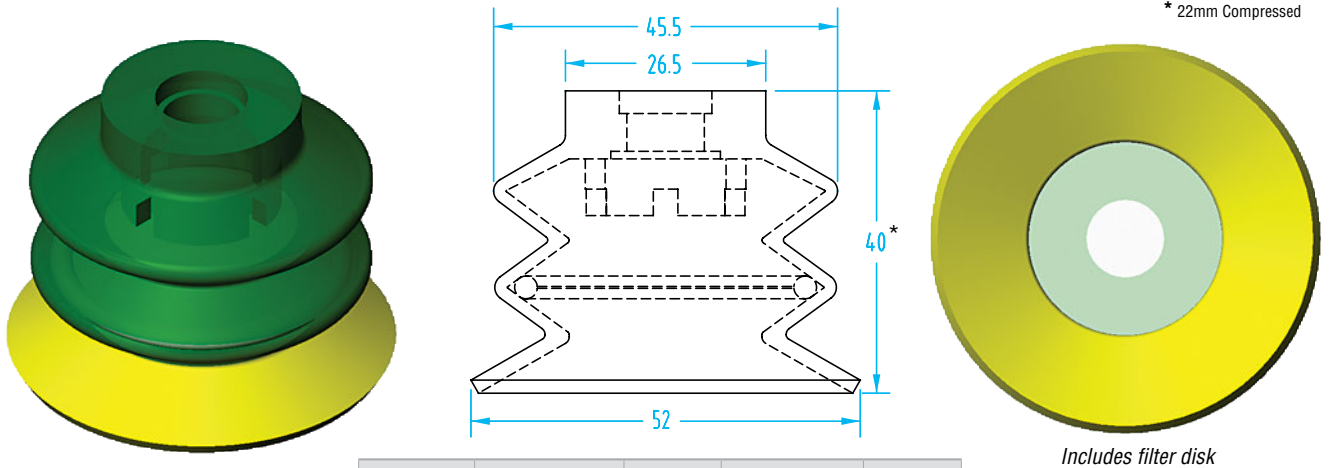
(Shown Actual Size)



| Cup Ø         | Material     | Quick# | Part#      | Price   |
|---------------|--------------|--------|------------|---------|
| 25mm          | Polyurethane | 5173   | GSV-BDD-25 | \$21.43 |
| <b>Nipple</b> | G1/8" & M5   | 1440   | GSV-02AF   | \$5.14  |
|               | G1/8" Male   | 5157   | GSV-02AB   | \$5.44  |



| Cup Ø         | Material     | Quick# | Part#      | Price   |
|---------------|--------------|--------|------------|---------|
| 35mm          | Polyurethane | 1826   | GSV-BDD-35 | \$29.32 |
| <b>Nipple</b> | G1/8" Female | 1441   | GSV-04AG   | \$6.61  |
|               | G1/4" Male   | 5315   | GSV-04AB   | \$7.11  |



| Cup Ø         | Material     | Quick# | Part#      | Price   |
|---------------|--------------|--------|------------|---------|
| 52mm          | Polyurethane | 1827   | GSV-BDD-52 | \$33.85 |
| <b>Nipple</b> | G1/8" Female | 1442   | GSV-05AG   | \$8.14  |
|               | G1/4" Male   | 5316   | GSV-05AB   | \$8.77  |

| Cup Ø         | Material                  | Quick# | Part#              | Price    |
|---------------|---------------------------|--------|--------------------|----------|
| 75mm          | Polyurethane              | 5135   | GSV-BX75P-4K-07UFF | \$62.08  |
| <b>Nipple</b> | G3/8" Male / G1/8" Female |        |                    | Included |

*Includes filter disk*

# PIAB – Duraflex® Polyurethane with 1.5 Bellows

(Shown Actual Size)



## Dual Durometer Polyurethane

These polyurethane vacuum cups are constructed in two different durometers (hardness). The cups have a sturdy and “forgiving” bellows (60° shore, green) and a large flexible sealing surface (30° shore, yellow) that performs extremely well on uneven surfaces. 30° shore makes these the most flexible sealing surface cups available. White filter discs are included with 25mm and larger PIAB Dual Durometer cups.

The polyurethane makes them mark free and long lasting. The dual durometer makes these vacuum cups both strong and flexible.

Many consider these the best performing polyurethane cup available.

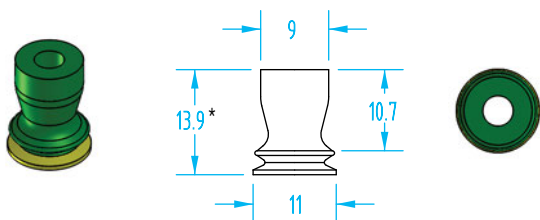
Dual Durometer Vacuum Cup Properties

| Material                    | Color                           | Max Temp. | Durometer       |
|-----------------------------|---------------------------------|-----------|-----------------|
| Dual Durometer Polyurethane | Semi-translucent Green / Yellow | 122°F     | 60° / 30° Shore |

Order nipples separately. See page 356–357 for nipple dimensions.

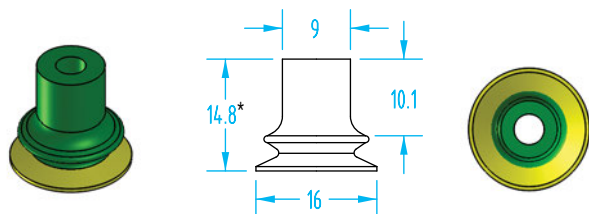
Use Quick#s for easy online ordering.

\* 10.8mm Compressed



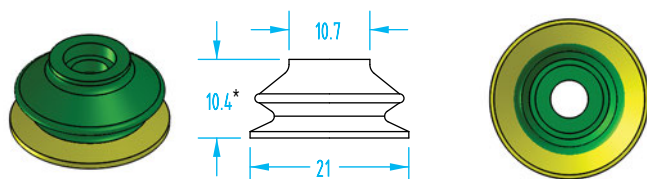
| Cup Ø  | Material     | Quick# | Part#       | Price  |
|--------|--------------|--------|-------------|--------|
| 10mm   | Polyurethane | 5642   | GSV-1BDD-10 | \$8.46 |
| Nipple | M5 Male      | 1439   | GSV-01AC    | \$1.85 |

\* 11.5mm Compressed



| Cup Ø  | Material     | Quick# | Part#       | Price   |
|--------|--------------|--------|-------------|---------|
| 15mm   | Polyurethane | 5643   | GSV-1BDD-15 | \$10.38 |
| Nipple | M5 Male      | 1439   | GSV-01AC    | \$1.85  |

\* 5.8mm Compressed

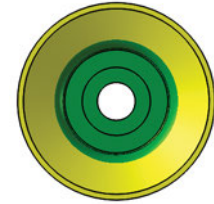
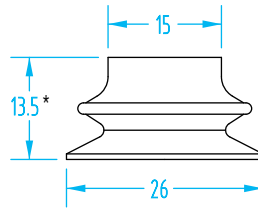
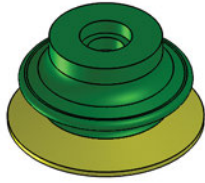


| Cup Ø  | Material     | Quick# | Part#       | Price   |
|--------|--------------|--------|-------------|---------|
| 20mm   | Polyurethane | 5644   | GSV-1BDD-20 | \$14.68 |
| Nipple | G1/8" & M5   | 1440   | GSV-02AF    | \$5.14  |
|        | G1/8" Male   | 5157   | GSV-02AB    | \$5.44  |

**PIAB – Duraflex® Polyurethane with 1.5 Bellows**

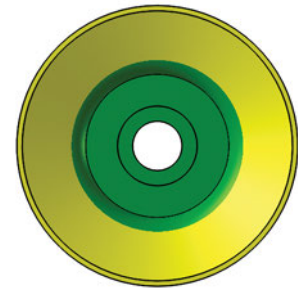
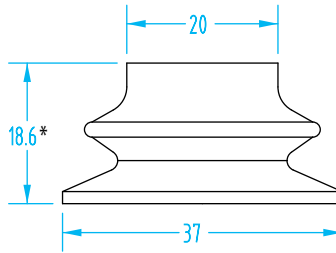
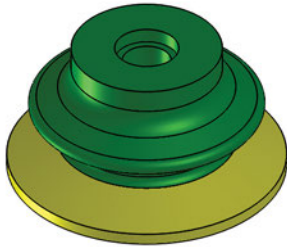
(Shown Actual Size)

\* 7.9mm Compressed



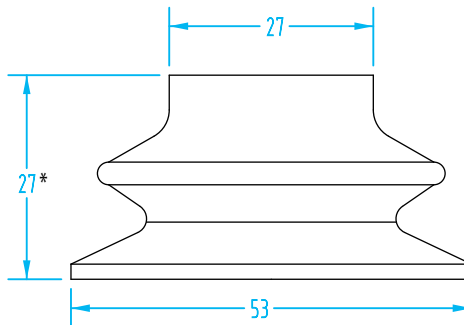
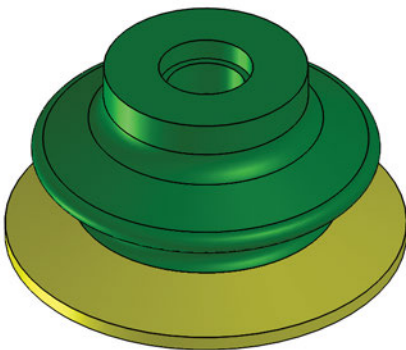
| Cup Ø         | Material     | Quick# | Part#       | Price   |
|---------------|--------------|--------|-------------|---------|
| 25mm          | Polyurethane | 5645   | GSV-1BDD-25 | \$16.35 |
| <b>Nipple</b> | G1/8" & M5   | 1440   | GSV-02AF    | \$5.14  |
|               | G1/8" Male   | 5157   | GSV-02AB    | \$5.44  |

\* 9.2mm Compressed



| Cup Ø         | Material     | Quick# | Part#       | Price   |
|---------------|--------------|--------|-------------|---------|
| 35mm          | Polyurethane | 5646   | GSV-1BDD-35 | \$23.67 |
| <b>Nipple</b> | G1/8" Female | 1441   | GSV-04AG    | \$6.61  |
|               | G1/4" Male   | 5315   | GSV-04AB    | \$7.11  |

\* 15.8mm Compressed



| Cup Ø         | Material     | Quick# | Part#       | Price   |
|---------------|--------------|--------|-------------|---------|
| 52mm          | Polyurethane | 5647   | GSV-1BDD-52 | \$27.79 |
| <b>Nipple</b> | G1/8" Female | 1442   | GSV-05AG    | \$8.14  |
|               | G1/4" Male   | 5316   | GSV-05AB    | \$8.77  |

\* 18mm Compressed

| Cup Ø         | Material                  | Quick# | Part#       | Price    |
|---------------|---------------------------|--------|-------------|----------|
| 75mm          | Polyurethane              | 5648   | GSV-1BDD-75 | \$59.24  |
| <b>Nipple</b> | G3/8" Male / G1/8" Female |        |             | Included |

**Also Available: 75mm Cup**  
Q#2384 PIAB 1-1/2 Bellows  
Vacuum Cup

# ShorTec® Dual Durometer with Large Lip – 2.5 Bellows

(Shown Actual Size)



## Dual Durometer Vacuum Cups, now with a larger and more flexible lip!

Dual durometer-style vacuum cups are considered to be the best performing polyurethane cup.

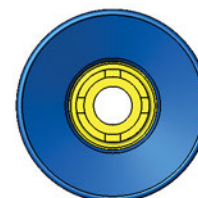
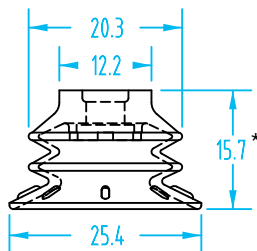
These yellow dual durometer cups are comparable to our current cups on page 352–353 but with larger and more flexible lips. They use mark-free and long-lasting polyurethane, and fit the same size nipples. The yellow bellows have a 55° shore and a large, flexible sealing surface with a lighter blue 30° shore.

Vacuum Cup Properties

| Material     | Color         | Max Temp. | Durometer       |
|--------------|---------------|-----------|-----------------|
| Polyurethane | Yellow / Blue | 122°F     | 55° / 30° Shore |

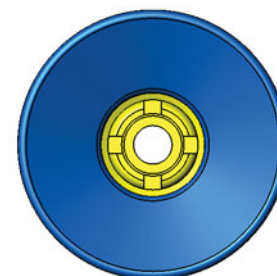
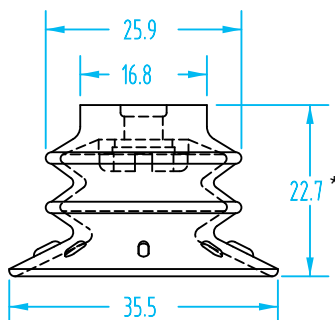
Order nipples separately. See page 356–357 for nipple dimensions.

\* 7.7mm Compressed



| Cup Ø  | Material     | Quick# | Part#       | Price  |
|--------|--------------|--------|-------------|--------|
| 25mm   | Polyurethane | 2066   | 25B-DDBL-25 | \$9.66 |
| Nipple | G1/8" Male   | 5982   | F02-G8M     | \$3.25 |
|        | G1/8" Female | 5983   | F02-G8F     | \$3.25 |

\* 11.5mm Compressed



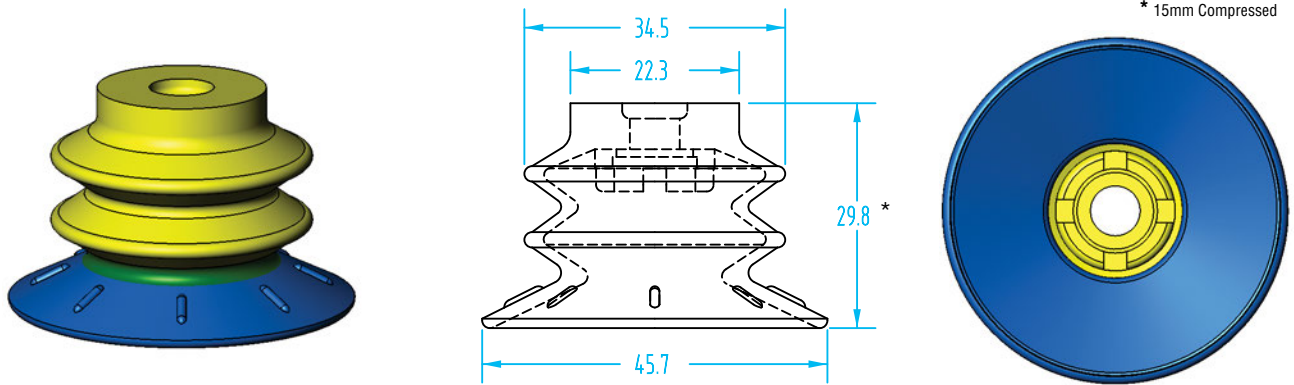
| Cup Ø  | Material     | Quick# | Part#       | Price   |
|--------|--------------|--------|-------------|---------|
| 35mm   | Polyurethane | 2067   | 25B-DDBL-35 | \$12.50 |
| Nipple | G1/8" Male   | 5982   | F02-G8M     | \$3.25  |
|        | G1/8" Female | 5983   | F02-G8F     | \$3.25  |

# ShorTec® Dual Durometer with Large Lip – 2.5 Bellows

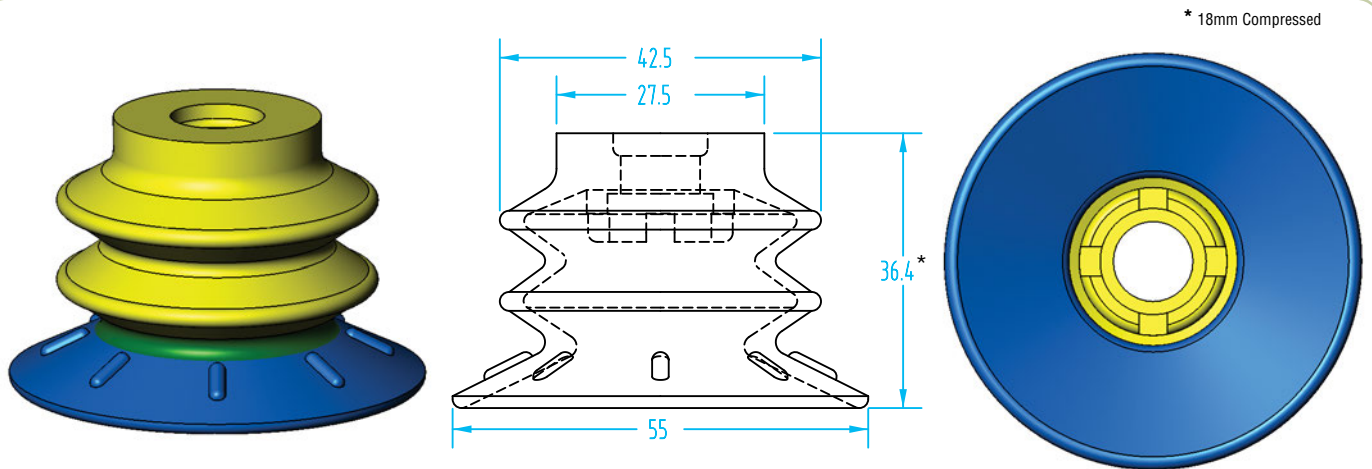
(Shown Actual Size)



ShorTec cups are shown here with the OnRobot electric vacuum gripper VGP20. Great for packaging! See page 141 for more info.



| Cup Ø  | Material     | Quick# | Part#       | Price   |
|--------|--------------|--------|-------------|---------|
| 45mm   | Polyurethane | 2068   | 25B-DDBL-45 | \$14.92 |
| Nipple | G1/4" Male   | 5984   | F03-G4M     | \$4.00  |
|        | G1/4" Female | 5985   | F03-G4F     | \$4.00  |



| Cup Ø  | Material     | Quick# | Part#       | Price   |
|--------|--------------|--------|-------------|---------|
| 55mm   | Polyurethane | 2069   | 25B-DDBL-55 | \$17.12 |
| Nipple | G3/8" Male   | 5986   | F04-G3M     | \$4.40  |
|        | G3/8" Female | 5987   | F04-G3F     | \$4.40  |

G3/8" to G1/4" reducer fittings are available on catalog page 1069.

# ShorTec® Dual Durometer – 2.5 Bellows

(Shown Actual Size)



## Dual Durometer Vacuum Cups!

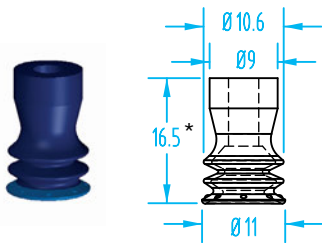
Dual durometer-style vacuum cups are considered to be the best performing polyurethane cup and are now available at a lower price.

These blue dual durometer cups are comparable to the brand-name OEM green and yellow cups in that they use mark-free and long-lasting polyurethane, have the same dual-shore rating, and fit the same size nipples. They have a sturdy dark blue bellows with a 60° shore and a large, flexible sealing surface with a lighter blue 30° shore.

### Vacuum Cup Properties

| Material     | Color       | Max Temp. | Durometer       |
|--------------|-------------|-----------|-----------------|
| Polyurethane | Blue / Blue | 122°F     | 60° / 30° Shore |

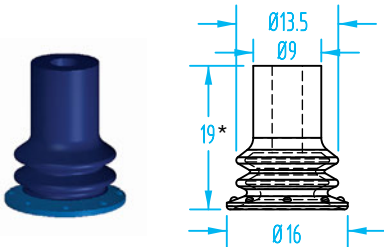
Order nipples separately. See page 356–357 for nipple dimensions.



\* 13mm Compressed

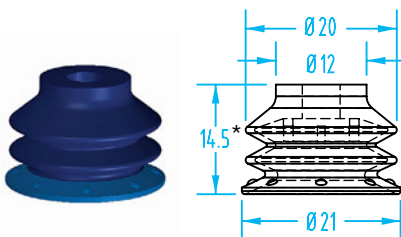
**NEW**

| Cup Ø         | Material     | Quick# | Part#      | Price  |
|---------------|--------------|--------|------------|--------|
| 10mm          | Polyurethane | 5966   | 25B-DD-10  | \$5.05 |
| <b>Nipple</b> | M5 Male      | 411    | GSF-NF1-M5 | \$1.75 |



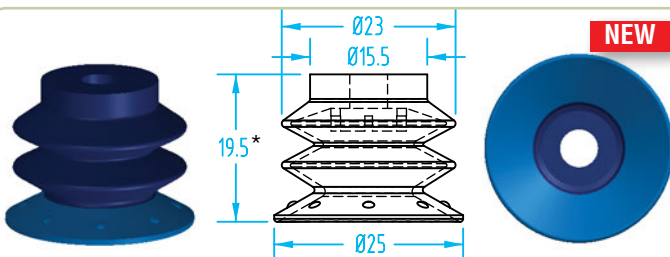
\* 14mm Compressed

| Cup Ø         | Material     | Quick# | Part#      | Price  |
|---------------|--------------|--------|------------|--------|
| 15mm          | Polyurethane | 5967   | 25B-DD-15  | \$5.64 |
| <b>Nipple</b> | M5 Male      | 411    | GSF-NF1-M5 | \$1.75 |



\* 9mm Compressed

| Cup Ø         | Material     | Quick# | Part#     | Price  |
|---------------|--------------|--------|-----------|--------|
| 20mm          | Polyurethane | 5971   | 25B-DD-20 | \$7.32 |
| <b>Nipple</b> | G1/8" Male   | 5982   | F02-G8M   | \$3.25 |
|               | G1/8" Female | 5983   | F02-G8F   | \$3.25 |

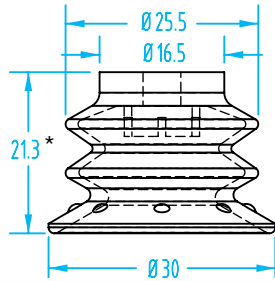


**NEW**

| Cup Ø         | Material     | Quick# | Part#     | Price  |
|---------------|--------------|--------|-----------|--------|
| 25mm          | Polyurethane | 2082   | 25B-DD-25 | \$9.14 |
| <b>Nipple</b> | G1/8" Male   | 5982   | F02-G8M   | \$3.25 |
|               | G1/8" Female | 5983   | F02-G8F   | \$3.25 |

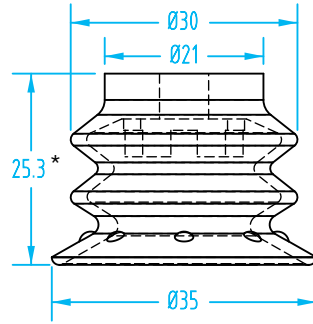
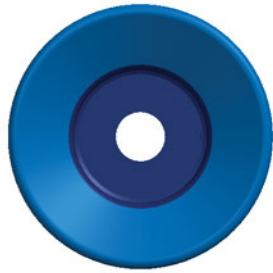
**ShorTec® Dual Durometer – 2.5 Bellows**

(Shown Actual Size)



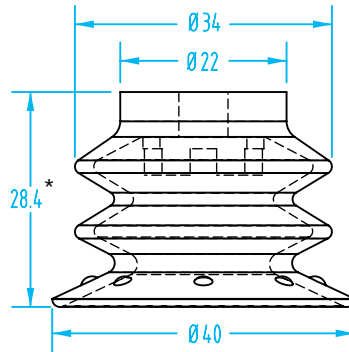
\* 12mm Compressed

| Cup Ø         | Material     | Quick# | Part#     | Price  |
|---------------|--------------|--------|-----------|--------|
| 30mm          | Polyurethane | 5972   | 25B-DD-30 | \$9.50 |
| <b>Nipple</b> | G1/4" Male   | 5984   | F03-G4M   | \$4.00 |
|               | G1/4" Female | 5985   | F03-G4F   | \$4.00 |



\* 14mm Compressed

| Cup Ø         | Material     | Quick# | Part#     | Price   |
|---------------|--------------|--------|-----------|---------|
| 35mm          | Polyurethane | 2081   | 25B-DD-35 | \$12.08 |
| <b>Nipple</b> | G1/4" Male   | 5984   | F03-G4M   | \$4.00  |
|               | G1/4" Female | 5985   | F03-G4F   | \$4.00  |



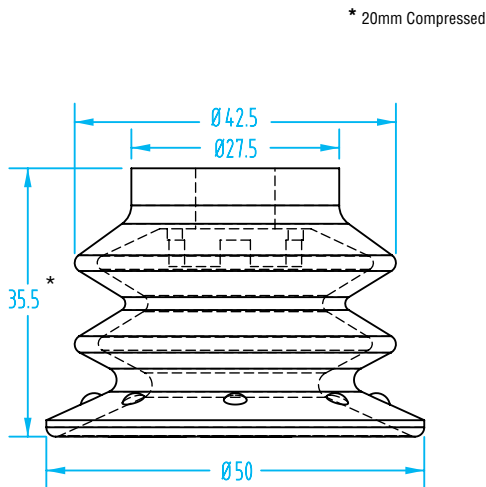
\* 16mm Compressed

| Cup Ø         | Material     | Quick# | Part#     | Price   |
|---------------|--------------|--------|-----------|---------|
| 40mm          | Polyurethane | 5973   | 25B-DD-40 | \$12.67 |
| <b>Nipple</b> | G1/4" Male   | 5984   | F03-G4M   | \$4.00  |
|               | G1/4" Female | 5985   | F03-G4F   | \$4.00  |

G3/8" to G1/4" reducer fittings are available on catalog page 1069.

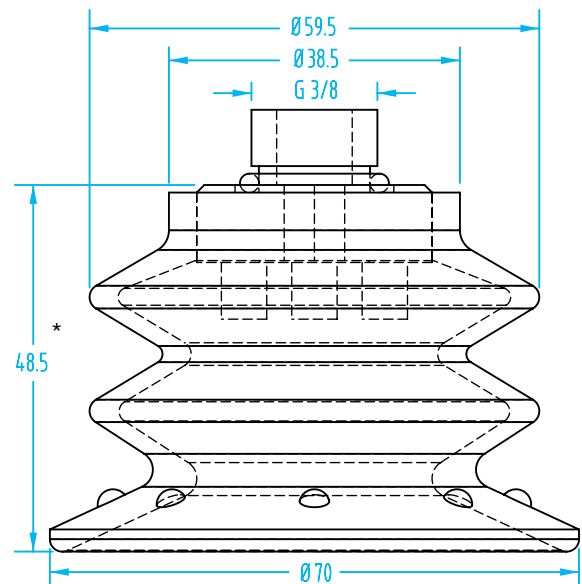
Q# 5975 shown, see website for #2083

\* 23mm Compressed



\* 20mm Compressed

| Cup Ø         | Material     | Quick# | Part#     | Price   |
|---------------|--------------|--------|-----------|---------|
| 50mm          | Polyurethane | 5974   | 25B-DD-50 | \$15.94 |
| <b>Nipple</b> | G3/8" Male   | 5986   | F04-G3M   | \$4.40  |
|               | G3/8" Female | 5987   | F04-G3F   | \$4.40  |



| Cup Ø | Nipple       | Material | Quick# | Part#          | Price   |
|-------|--------------|----------|--------|----------------|---------|
| 70mm  | G3/8" Male   | PU       | 5975   | 25B-DD-70      | \$25.84 |
|       | G3/8" Female | PU       | 2083   | 25B-DD-70-G38F | \$25.84 |



# ShorTec® Dual Durometer – 1.5 Bellows

(Shown Actual Size)



## Dual Durometer Vacuum Cups!

Dual durometer-style vacuum cups are considered to be the best performing polyurethane cup and are now available at a lower price.

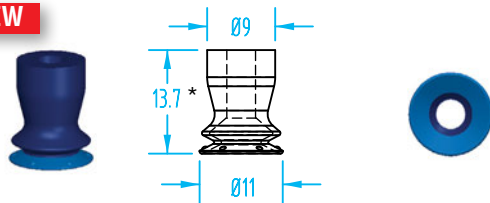
These blue dual durometer cups are comparable to the brand-name OEM green and yellow cups in that they use mark-free and long-lasting polyurethane, have the same dual-shore rating, and fit the same size nipples. They have a sturdy dark blue bellows with a 60° shore and a large, flexible sealing surface with a lighter blue 30° shore.

### Vacuum Cup Properties

| Material     | Color       | Max Temp. | Durometer       |
|--------------|-------------|-----------|-----------------|
| Polyurethane | Blue / Blue | 122°F     | 60° / 30° Shore |

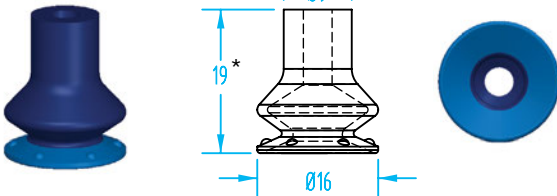
Order nipples separately. See page 356–357 for nipple dimensions.

**NEW**



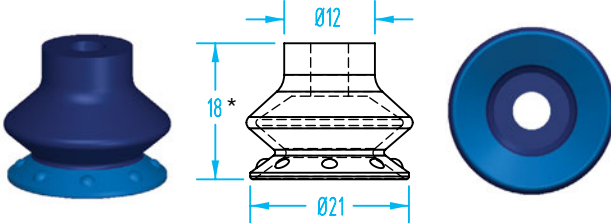
\* 11mm Compressed

| Cup Ø         | Material     | Quick# | Part#      | Price  |
|---------------|--------------|--------|------------|--------|
| 10mm          | Polyurethane | 5948   | 15B-DD-10  | \$3.78 |
| <b>Nipple</b> | M5 Male      | 411    | GSF-NF1-M5 | \$1.75 |



\* 15mm Compressed

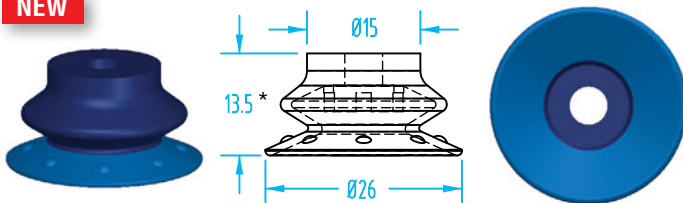
| Cup Ø         | Material     | Quick# | Part#      | Price  |
|---------------|--------------|--------|------------|--------|
| 15mm          | Polyurethane | 5976   | 15B-DD-15  | \$4.46 |
| <b>Nipple</b> | M5 Male      | 411    | GSF-NF1-M5 | \$1.75 |



\* 12mm Compressed

| Cup Ø         | Material     | Quick# | Part#     | Price  |
|---------------|--------------|--------|-----------|--------|
| 20mm          | Polyurethane | 5977   | 15B-DD-20 | \$5.04 |
| <b>Nipple</b> | G1/8" Male   | 5982   | F02-G8M   | \$3.25 |
|               | G1/8" Female | 5983   | F02-G8F   | \$3.25 |

**NEW**



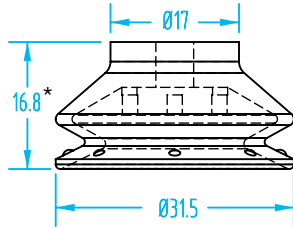
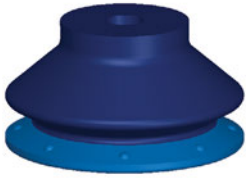
\* 8mm Compressed

| Cup Ø         | Material     | Quick# | Part#     | Price  |
|---------------|--------------|--------|-----------|--------|
| 25mm          | Polyurethane | 5949   | 15B-DD-25 | \$5.88 |
| <b>Nipple</b> | G1/8" Male   | 5982   | F02-G8M   | \$3.25 |
|               | G1/8" Female | 5983   | F02-G8F   | \$3.25 |

**ShorTec® Dual Durometer – 1.5 Bellows**

(Shown Actual Size)

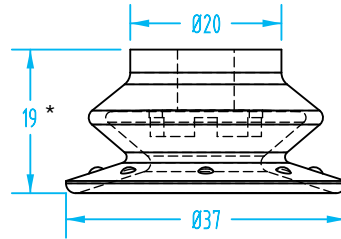
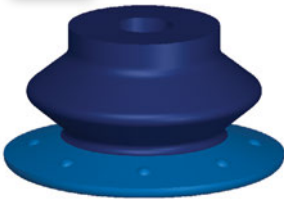
\* 11.5mm Compressed



| Cup Ø  | Material     | Quick# | Part#     | Price  |
|--------|--------------|--------|-----------|--------|
| 30mm   | Polyurethane | 5978   | 15B-DD-30 | \$7.18 |
| Nipple | G1/4" Male   | 5984   | F03-G4M   | \$4.00 |
|        | G1/4" Female | 5985   | F03-G4F   | \$4.00 |

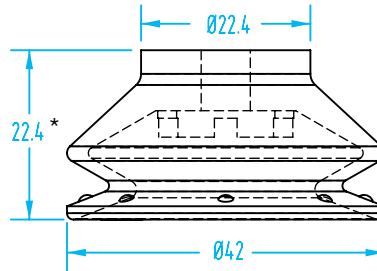
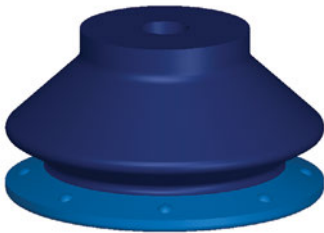
**NEW**

\* 11.5mm Compressed

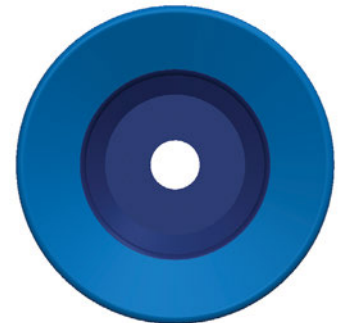


| Cup Ø  | Material     | Quick# | Part#     | Price  |
|--------|--------------|--------|-----------|--------|
| 35mm   | Polyurethane | 2080   | 15B-DD-35 | \$8.30 |
| Nipple | G1/4" Male   | 5984   | F03-G4M   | \$4.00 |
|        | G1/4" Female | 5985   | F03-G4F   | \$4.00 |

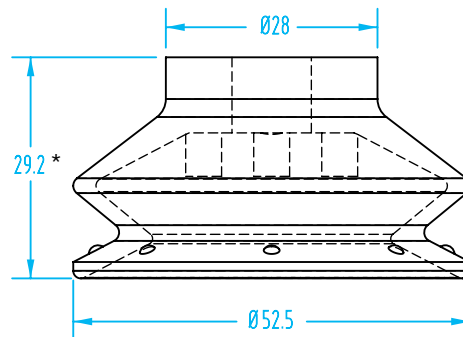
\* 16mm Compressed



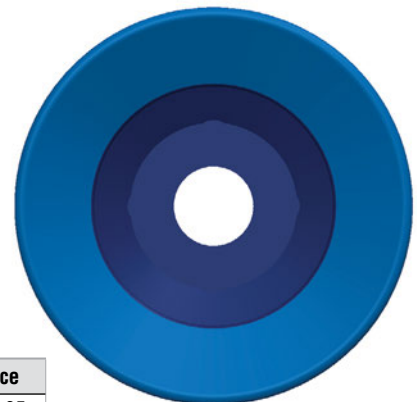
| Cup Ø  | Material     | Quick# | Part#     | Price  |
|--------|--------------|--------|-----------|--------|
| 40mm   | Polyurethane | 5979   | 15B-DD-40 | \$9.29 |
| Nipple | G1/4" Male   | 5984   | F03-G4M   | \$4.00 |
|        | G1/4" Female | 5985   | F03-G4F   | \$4.00 |



\* 21mm Compressed



| Cup Ø  | Material     | Quick# | Part#     | Price   |
|--------|--------------|--------|-----------|---------|
| 50mm   | Polyurethane | 5980   | 15B-DD-50 | \$10.95 |
| Nipple | G3/8" Male   | 5986   | F04-G3M   | \$4.40  |
|        | G3/8" Female | 5987   | F04-G3F   | \$4.40  |



G3/8" to G1/4" reducer fittings are available on catalog page 1069.

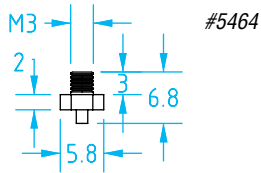
| Cup Ø | Material     | Quick# | Part#     | Price   |
|-------|--------------|--------|-----------|---------|
| 70mm  | Polyurethane | 5981   | 15B-DD-70 | \$22.69 |

Note: G3/8" Male Nipple Included

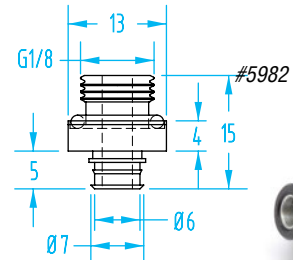
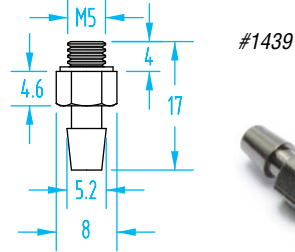
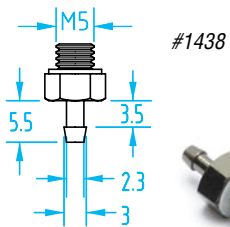
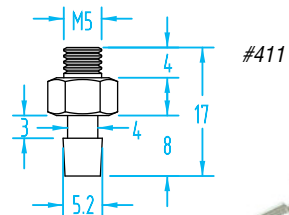
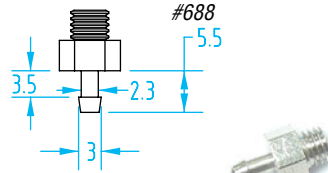
# OEM, ShorTec & PIAB – Nipples

(Shown Actual Size)

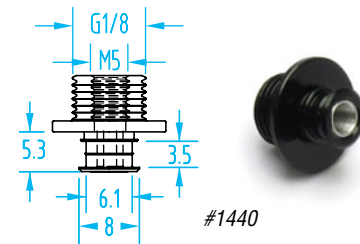
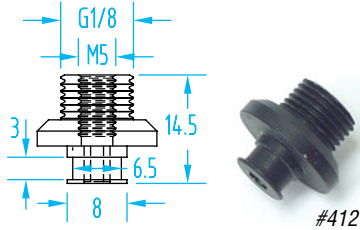
**M3**



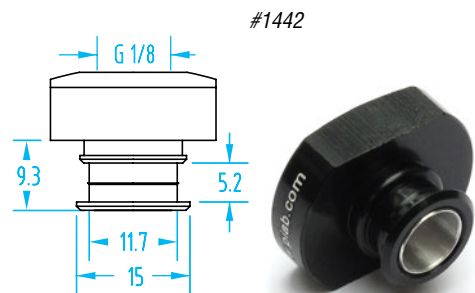
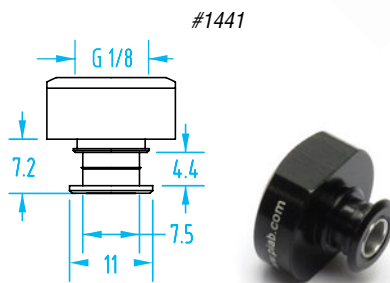
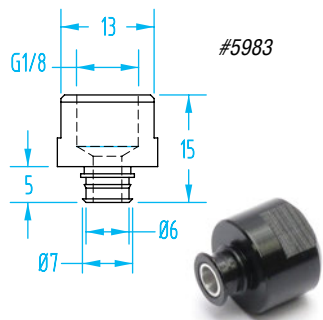
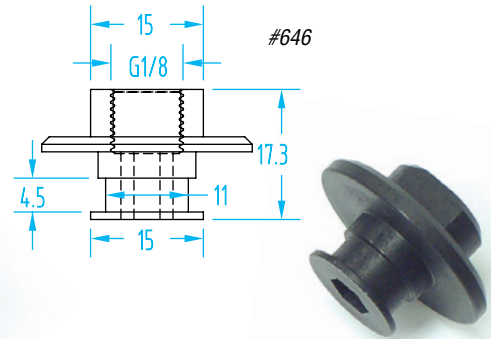
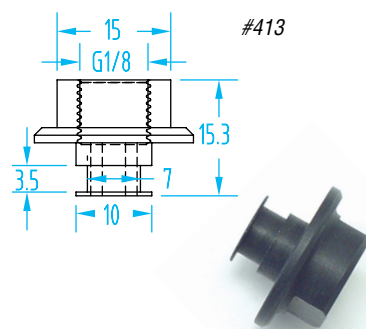
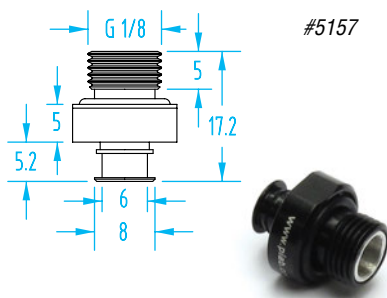
**M5**



**M5 Female / G1/8" Male**

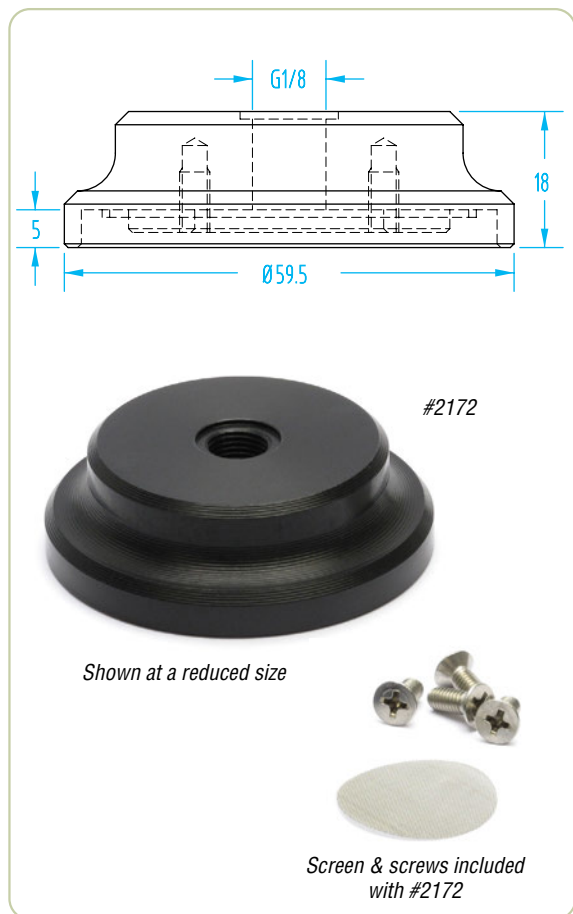
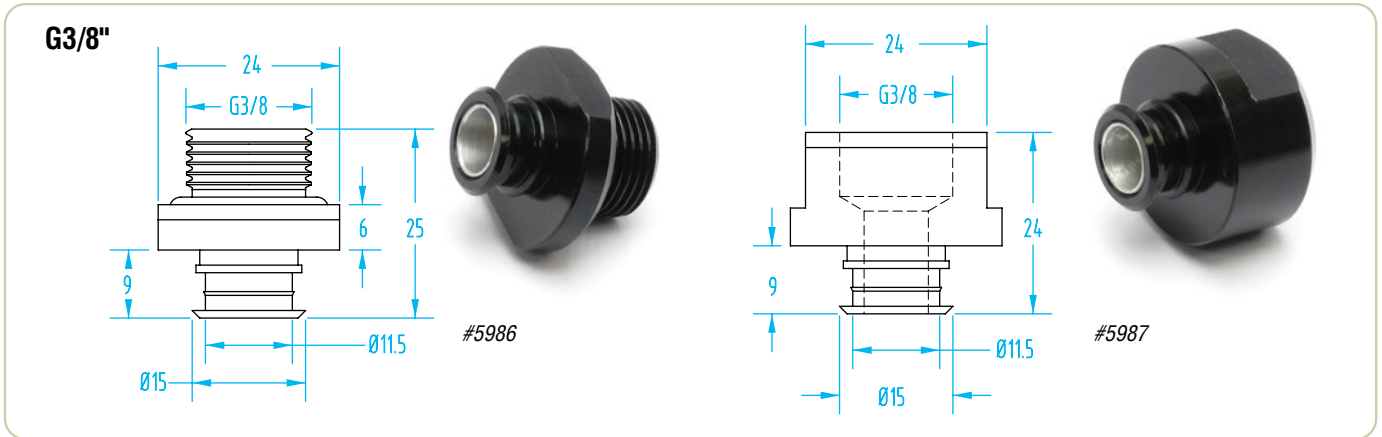
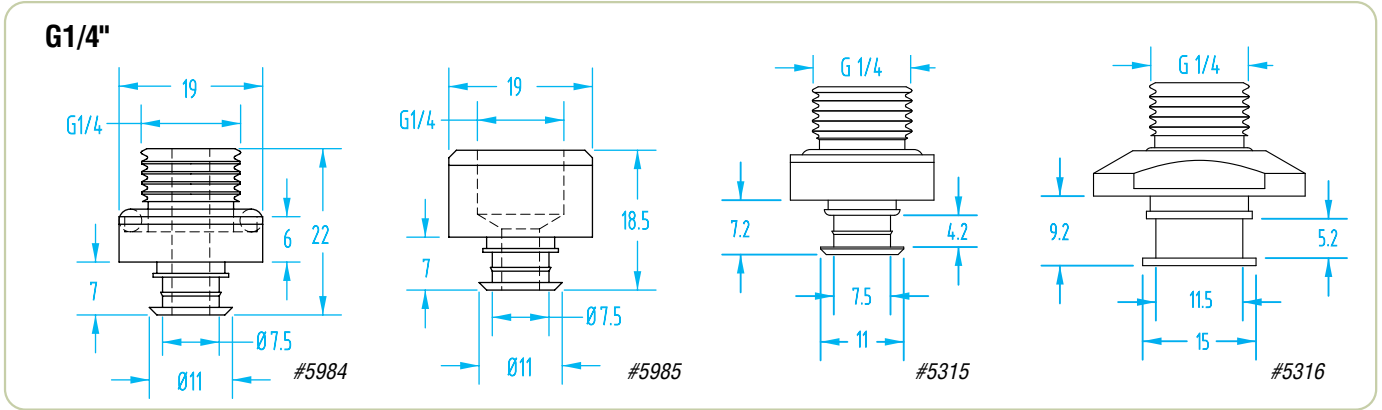


**G1/8"**



**OEM, ShorTec & PIAB – Nipples**

(Shown Actual Size)



**Nipples**

| Quick# | Part#        | Nipple      | Thread    | Vacuum Cup Ø | Price   |
|--------|--------------|-------------|-----------|--------------|---------|
| 5174   | GSV-01AA     | Male        | M2.5      | 2–3mm        | \$2.71  |
| 5464   | GSF-MN15-M3  | Male        | M3        | 2–3mm        | \$5.59  |
| 688    | GSF-NF11-M5  | Male        | M5        | 5–7mm        | \$2.31  |
| 411    | GSF-NF1-M5   | Male        | M5        | 15mm         | \$1.75  |
| 1438   | GSV-01AB     | Male        | M5        | 4–8mm        | \$1.85  |
| 1439   | GSV-01AC     | Male        | M5        | 10–15mm      | \$1.85  |
| 412    | GSF-NF2-G8M5 | Male/Female | G1/8" /M5 | 20–30mm      | \$5.25  |
| 1440   | GSV-02AF     | Male/Female | G1/8" /M5 | 20–30mm      | \$5.14  |
| 5982   | F02-G8M      | Male        | G1/8"     | 20–30mm      | \$3.25  |
| 5157   | GSV-02AB     | Male        | G1/8"     | 20–30mm      | \$5.44  |
| 5983   | F02-G8F      | Female      | G1/8"     | 20–30mm      | \$3.25  |
| 1441   | GSV-04AG     | Female      | G1/8"     | 30–40mm      | \$6.61  |
| 1443   | GSV-04AI     | Male        | G1/8"     | 30–40mm      | \$6.94  |
| 413    | GSF-NF3-G8   | Female      | G1/8"     | 40mm         | \$6.56  |
| 1442   | GSV-05AG     | Female      | G1/8"     | 50mm         | \$8.14  |
| 1444   | GSV-05AI     | Male        | G1/8"     | 50mm         | \$6.94  |
| 646    | GSF-NF5-G8F  | Female      | G1/8"     | 50mm         | \$5.78  |
| 2172   | GSV-07UA     | Female      | G1/8"     | 75mm         | \$31.24 |
| 5984   | F03-G4M      | Male        | G1/4"     | 30–40mm      | \$4.00  |
| 5985   | F03-G4F      | Female      | G1/4"     | 30–40mm      | \$4.00  |
| 5315   | GSV-04AB     | Male        | G1/4"     | 30–40mm      | \$7.11  |
| 5316   | GSV-05AB     | Male        | G1/4"     | 50mm         | \$8.77  |
| 5986   | F04-G3M      | Male        | G3/8"     | 50mm         | \$4.40  |
| 5987   | F04-G3F      | Female      | G3/8"     | 50mm         | \$4.40  |

**Reference our Compatibility Chart on pages 358–359 to determine which nipple to use for OEM, ShorTec & PIAB Vacuum Cups!**

## OEM, ShorTec &amp; PIAB – Nipple Compatibility

|              |  | Quick# | 5464 | 688  | 1438 | 411  | 1439 | 412           | 1440          | 5157   | 5982    | 5983    |
|--------------|--|--------|------|------|------|------|------|---------------|---------------|--------|---------|---------|
|              |  | Brand  | Piab | OEM  | Piab | OEM  | Piab | OEM           | Piab          | Piab   | ShorTec | ShorTec |
|              |  | Thread | M3-M | M5-M | M5-M | M5-M | M5-M | G1/8-M / M5-F | G1/8-M / M5-F | G1/8-M | G1/8-M  | G1/8-F  |
| <b>2mm</b>   | Piab (flat-smooth)                       |        | ✓    |      |      |      |      |               |               |        |         |         |
| <b>3mm</b>   | Piab (flat-smooth)                       |        | ✓    |      |      |      |      |               |               |        |         |         |
| <b>4mm</b>   | Piab (flat-smooth)                       |        |      | ✓    | ✓    |      |      |               |               |        |         |         |
| <b>5mm</b>   | Piab (1.5 B)                             |        |      | ✓    | ✓    |      |      |               |               |        |         |         |
| <b>6mm</b>   | Piab (flat-smooth)                       |        |      | ✓    | ✓    |      |      |               |               |        |         |         |
| <b>8mm</b>   | Piab (flat-smooth, 1.5 B)                |        |      | ✓    | ✓    |      |      |               |               |        |         |         |
| <b>10mm</b>  | Piab (flat, 1.5 B, Duraflex)             |        |      |      |      | ✓    | ✓    |               |               |        |         |         |
|              | ShorTec (1.5 B)                          |        |      |      |      | ✓    | ✓    |               |               |        |         |         |
|              | ShorTec (2.5 B)                          |        |      |      |      | ✓    | ✓    |               |               |        |         |         |
| <b>11mm</b>  | OEM (1.5 B)                              |        |      |      | ✓    | ✓    |      |               |               |        |         |         |
| <b>15mm</b>  | Piab (flat, 1.5 B, deep, 1.5 B Duraflex) |        |      |      |      | ✓    | ✓    |               |               |        |         |         |
|              | ShorTec (1.5 B)                          |        |      |      |      | ✓    | ✓    |               |               |        |         |         |
| <b>16mm</b>  | OEM (1.5 B)                              |        |      |      |      | ✓    | ✓    |               |               |        |         |         |
| <b>20mm</b>  | Piab (flat, 1.5 B, deep, Duraflex)       |        |      |      |      |      |      | ✓             | ✓             | ✓      | ✓       | ✓       |
|              | OEM (1.5 B)                              |        |      |      |      |      |      | ✓             | ✓             | ✓      | ✓       | ✓       |
|              | ShorTec (1.5 B, 2.5 B)                   |        |      |      |      |      |      | ✓             | ✓             | ✓      | ✓       | ✓       |
| <b>25mm</b>  | Piab (flat-ribbed, Duraflex)             |        |      |      |      |      |      | ✓             | ✓             | ✓      | ✓       | ✓       |
|              | OEM (flat-ribbed)                        |        |      |      |      |      |      | ✓             | ✓             | ✓      | ✓       | ✓       |
|              | ShorTec (1.5 B)                          |        |      |      |      |      |      | ✓             | ✓             | ✓      | ✓       | ✓       |
|              | ShorTec (2.5 B with large lip)           |        |      |      |      |      |      | ✓             | ✓             | ✓      | ✓       | ✓       |
| <b>30mm</b>  | Piab (flat, 1.5 B, deep)                 |        |      |      |      |      |      | ✓             | ✓             | ✓      | ✓       | ✓       |
|              | OEM (flat-ribbed)                        |        |      |      |      |      |      | ✓             | ✓             | ✓      | ✓       | ✓       |
| <b>35mm</b>  | ShorTec (2.5 B with large lip)           |        |      |      |      |      |      | ✓             | ✓             | ✓      | ✓       | ✓       |
| <b>30mm</b>  | ShorTec (1.5 B, 2.5 B)                   |        |      |      |      |      |      |               |               |        |         |         |
| <b>30mm*</b> | Piab (1.5 B - 2nd generation)            |        |      |      |      |      |      |               |               |        |         |         |
| <b>35mm</b>  | Piab (Duraflex)                          |        |      |      |      |      |      |               |               |        |         |         |
|              | ShorTec (1.5 B)                          |        |      |      |      |      |      |               |               |        |         |         |
| <b>40mm</b>  | Piab (flat, 1.5 B)                       |        |      |      |      |      |      |               |               |        |         |         |
|              | OEM (1.5 B)                              |        |      |      |      |      |      |               |               |        |         |         |
|              | ShorTec (1.5 B, 2.5 B)                   |        |      |      |      |      |      |               |               |        |         |         |
| <b>45mm</b>  | ShorTec (2.5 B with large lip)           |        |      |      |      |      |      |               |               |        |         |         |
| <b>50mm</b>  | Piab (flat, 1.5 B, deep)                 |        |      |      |      |      |      |               |               |        |         |         |
|              | OEM (1.5 B)                              |        |      |      |      |      |      |               |               |        |         |         |
|              | ShorTec (1.5 B, 2.5 B)                   |        |      |      |      |      |      |               |               |        |         |         |
| <b>52mm</b>  | Piab (Duraflex)                          |        |      |      |      |      |      |               |               |        |         |         |
| <b>55mm</b>  | ShorTec (2.5 B with large lip)           |        |      |      |      |      |      |               |               |        |         |         |

\* Piab 2nd generation cup takes a larger fitting. B= Bellow. Duraflex refers to the 1.5 Bellow and 2.5 Bellow Dual Durometer cups unless noted.

## OEM, ShorTec & PIAB – Nipple Compatibility

|              |  | Quick# | 413    | 1441   | 5984    | 5985    | 5315   | 5316   | 646    | 1442   | 5986    | 5987    |
|--------------|--|--------|--------|--------|---------|---------|--------|--------|--------|--------|---------|---------|
|              |  | Brand  | OEM    | Piab   | ShorTec | ShorTec | PIAB   | PIAB   | OEM    | Piab   | ShorTec | ShorTec |
|              |  | Thread | G1/8-F | G1/8-F | G1/4-M  | G1/4-F  | G1/4-M | G1/4-M | G1/8-F | G1/8-F | G3/8-M  | G3/8-F  |
| <b>2mm</b>   | Piab (flat-smooth)                       |        |        |        |         |         |        |        |        |        |         |         |
| <b>3mm</b>   | Piab (flat-smooth)                       |        |        |        |         |         |        |        |        |        |         |         |
| <b>4mm</b>   | Piab (flat-smooth)                       |        |        |        |         |         |        |        |        |        |         |         |
| <b>5mm</b>   | Piab (1.5 B)                             |        |        |        |         |         |        |        |        |        |         |         |
| <b>6mm</b>   | Piab (flat-smooth)                       |        |        |        |         |         |        |        |        |        |         |         |
| <b>8mm</b>   | Piab (flat-smooth, 1.5 B)                |        |        |        |         |         |        |        |        |        |         |         |
| <b>10mm</b>  | Piab (flat, 1.5 B, Duraflex)             |        |        |        |         |         |        |        |        |        |         |         |
|              | ShorTec (1.5 B)                          |        |        |        |         |         |        |        |        |        |         |         |
|              | ShorTec (2.5 B)                          |        |        |        |         |         |        |        |        |        |         |         |
| <b>11mm</b>  | OEM (1.5 B)                              |        |        |        |         |         |        |        |        |        |         |         |
| <b>15mm</b>  | Piab (flat, 1.5 B, deep, 1.5 B Duraflex) |        |        |        |         |         |        |        |        |        |         |         |
|              | ShorTec (1.5 B)                          |        |        |        |         |         |        |        |        |        |         |         |
| <b>16mm</b>  | OEM (1.5 B)                              |        |        |        |         |         |        |        |        |        |         |         |
| <b>20mm</b>  | Piab (flat, 1.5 B, deep, Duraflex)       |        |        |        |         |         |        |        |        |        |         |         |
|              | OEM (1.5 B)                              |        |        |        |         |         |        |        |        |        |         |         |
|              | ShorTec (1.5 B, 2.5 B)                   |        |        |        |         |         |        |        |        |        |         |         |
| <b>25mm</b>  | Piab (flat-ribbed, Duraflex)             |        |        |        |         |         |        |        |        |        |         |         |
|              | OEM (flat-ribbed)                        |        |        |        |         |         |        |        |        |        |         |         |
|              | ShorTec (1.5 B)                          |        |        |        |         |         |        |        |        |        |         |         |
|              | ShorTec (2.5 B with large lip)           |        |        |        |         |         |        |        |        |        |         |         |
| <b>30mm</b>  | Piab (flat, 1.5 B, deep)                 |        |        |        |         |         |        |        |        |        |         |         |
|              | OEM (flat-ribbed)                        |        |        |        |         |         |        |        |        |        |         |         |
| <b>35mm</b>  | ShorTec (2.5 B with large lip)           |        |        |        |         |         |        |        |        |        |         |         |
| <b>30mm</b>  | ShorTec (1.5 B, 2.5 B)                   | ✓      | ✓      | ✓      | ✓       | ✓       |        |        |        |        |         |         |
| <b>30mm*</b> | Piab (1.5 B - 2nd generation)            | ✓      | ✓      | ✓      | ✓       | ✓       |        |        |        |        |         |         |
| <b>35mm</b>  | Piab (Duraflex)                          | ✓      | ✓      | ✓      | ✓       | ✓       |        |        |        |        |         |         |
|              | ShorTec (1.5 B)                          | ✓      | ✓      | ✓      | ✓       | ✓       |        |        |        |        |         |         |
| <b>40mm</b>  | Piab (flat, 1.5 B)                       | ✓      | ✓      | ✓      | ✓       | ✓       |        |        |        |        |         |         |
|              | OEM (1.5 B)                              | ✓      | ✓      | ✓      | ✓       | ✓       |        |        |        |        |         |         |
|              | ShorTec (1.5 B, 2.5 B)                   | ✓      | ✓      | ✓      | ✓       | ✓       |        |        |        |        |         |         |
| <b>45mm</b>  | ShorTec (2.5 B with large lip)           | ✓      | ✓      | ✓      | ✓       | ✓       |        |        |        |        |         |         |
| <b>50mm</b>  | Piab (flat, 1.5 B, deep)                 |        |        |        |         |         | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       |
|              | OEM (1.5 B)                              |        |        |        |         |         | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       |
|              | ShorTec (1.5 B, 2.5 B)                   |        |        |        |         |         | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       |
| <b>52mm</b>  | Piab (Duraflex)                          |        |        |        |         |         | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       |
| <b>55mm</b>  | ShorTec (2.5 B with large lip)           |        |        |        |         |         | ✓      | ✓      | ✓      | ✓      | ✓       | ✓       |

\* Piab 2nd generation cup takes a larger fitting. B= Bellow. Duraflex refers to the 1.5 Bellow and 2.5 Bellow Dual Durometer cups unless noted.

## >S< Style – Flat

(Shown Actual Size)

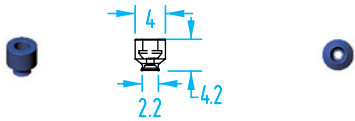


### >S< Style Vacuum Cup Properties

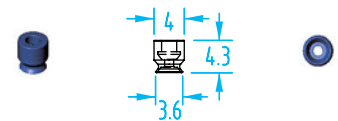
| Material | Color                  | Max Temp. | Durometer |
|----------|------------------------|-----------|-----------|
| Silicone | Semi-translucent white | 482°F     | 50°       |
| Hithane  | Blue                   | 320°F     | 60°       |
| Nitrile  | Black                  | 248°F     | 60°       |

Available with Foam Cup, see page 368.

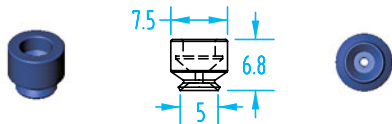
Additional Mini Vacuum Cup sizes on page 412.



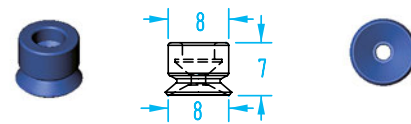
| Cup Ø         | Material | Quick# | Part#   | (Reference) | Price  |
|---------------|----------|--------|---------|-------------|--------|
| 2mm           | SIL      | 3187   | VN1-2-S | PFG-2A-SI   | \$3.59 |
|               | HIT      | 1161   | VN1-2-H | PFG-2A-U    | \$8.51 |
|               | NIT      | 3186   | VN1-2-N | PFG-2A-NBR  | \$2.63 |
| <b>Nipple</b> |          | 3286   | VSA10   | M5 Male     | \$2.94 |



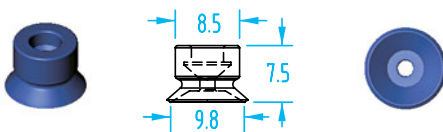
| Cup Ø         | Material | Quick# | Part#     | (Reference)  | Price  |
|---------------|----------|--------|-----------|--------------|--------|
| 3.5mm         | SIL      | 3190   | VN1-3.5-S | PFG-3.5A-SI  | \$3.50 |
|               | HIT      | 1162   | VN1-3.5-H | PFG-3.5A-U   | \$8.10 |
|               | NIT      | 3189   | VN1-3.5-N | PFG-3.5A-NBR | \$3.08 |
| <b>Nipple</b> |          | 3286   | VSA10     | M5 Male      | \$2.94 |



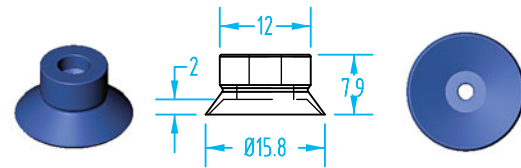
| Cup Ø         | Material | Quick# | Part#   | (Reference) | Price  |
|---------------|----------|--------|---------|-------------|--------|
| 5mm           | SIL      | 3193   | VN1-5-S | PFG-5A-SI   | \$2.86 |
|               | HIT      | 1163   | VN1-5-H | PFG-5A-U    | \$4.05 |
|               | NIT      | 3192   | VN1-5-N | PFG-5A-NBR  | \$2.10 |
| <b>Nipple</b> |          | 3289   | VSA30   | M5 Male     | \$2.94 |
|               |          | 5178   | VSA30F  | M5 Female   | \$2.94 |



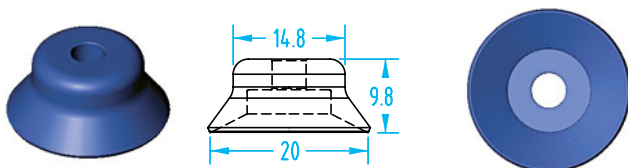
| Cup Ø         | Material | Quick# | Part#   | (Reference) | Price  |
|---------------|----------|--------|---------|-------------|--------|
| 8mm           | SIL      | 3196   | VN1-8-S | PFG-8A-SI   | \$2.97 |
|               | HIT      | 1164   | VN1-8-H | PFG-8A-U    | \$4.05 |
|               | NIT      | 3195   | VN1-8-N | PFG-8A-NBR  | \$2.30 |
| <b>Nipple</b> |          | 3289   | VSA30   | M5 Male     | \$2.94 |
|               |          | 5178   | VSA30F  | M5 Female   | \$2.94 |



| Cup Ø         | Material | Quick# | Part#    | (Reference) | Price  |
|---------------|----------|--------|----------|-------------|--------|
| 10mm          | SIL      | 3200   | VN1-10-S | PFG-10A-SI  | \$3.07 |
|               | HIT      | 1165   | VN1-10-H | PFG-10A-U   | \$4.44 |
|               | NIT      | 3199   | VN1-10-N | PFG-10A-NBR | \$2.63 |
| <b>Nipple</b> |          | 3289   | VSA30    | M5 Male     | \$2.94 |
|               |          | 5178   | VSA30F   | M5 Female   | \$2.94 |



| Cup Ø         | Material | Quick# | Part#    | (Reference) | Price  |
|---------------|----------|--------|----------|-------------|--------|
| 15mm          | SIL      | 3204   | VN1-15-S | PFG-15A-SI  | \$3.15 |
|               | HIT      | 1166   | VN1-15-H | PFG-015A-U  | \$4.44 |
|               | NIT      | 3203   | VN1-15-N | PFG-15A-NBR | \$2.39 |
| <b>Nipple</b> |          | 3289   | VSA30    | M5 Male     | \$2.94 |
|               |          | 5178   | VSA30F   | M5 Female   | \$2.94 |

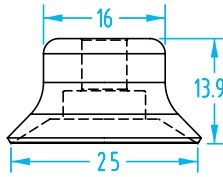


| Cup Ø         | Material | Quick# | Part#    | (Reference)  | Price  |
|---------------|----------|--------|----------|--------------|--------|
| 20mm          | SIL      | 3207   | VN1-20-S | PFG-20-SI    | \$3.15 |
|               | HIT      | 1167   | VN1 20 H | PFG-20-U     | \$4.73 |
|               | NIT      | 3206   | VN1-20-N | PFG-20A-NBR  | \$2.36 |
| <b>Nipple</b> |          | 3291   | VSA50    | G1/8" Male   | \$3.33 |
|               |          | 5179   | VSA50F   | G1/8" Female | \$5.36 |

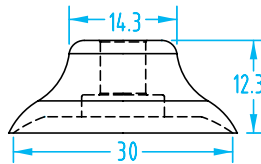
**>S< Style – Flat**

(Shown Actual Size)

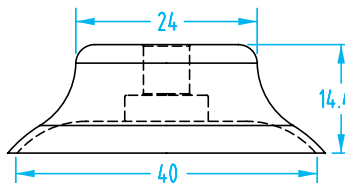
See page 372 for nipple dimensions.  
Use Quick#s for easy online ordering.



| Cup Ø         | Material | Quick# | Part#    | (Reference)  | Price  |
|---------------|----------|--------|----------|--------------|--------|
| 25mm          | SIL      | 3211   | VN1-25-S | PFG-25-SI    | \$3.15 |
|               | HIT      | 1168   | VN1-25-H | PFG-25-U     | \$5.03 |
|               | NIT      | 3210   | VN1-25-N | PFG-25A-NBR  | \$2.63 |
| <b>Nipple</b> |          | 3292   | VSA60    | G1/8" Male   | \$3.33 |
|               |          | 5180   | VSA60F   | G1/8" Female | \$3.50 |



| Cup Ø         | Material | Quick# | Part#    | (Reference)  | Price  |
|---------------|----------|--------|----------|--------------|--------|
| 30mm          | SIL      | 3215   | VN1-30-S | PFG-30-SI    | \$3.15 |
|               | HIT      | 1169   | VN1-30-H | PFG-30-U     | \$5.78 |
|               | NIT      | 3214   | VN1-30-N | PFG-30A-NBR  | \$2.61 |
| <b>Nipple</b> |          | 3292   | VSA60    | G1/8" Male   | \$3.33 |
|               |          | 5180   | VSA60F   | G1/8" Female | \$3.50 |



| Cup Ø         | Material | Quick# | Part#    | (Reference)  | Price  |
|---------------|----------|--------|----------|--------------|--------|
| 40mm          | SIL      | 3219   | VN1-40-S | PFG-40-SI    | \$3.43 |
|               | HIT      | 1170   | VN1-40-H | PFG-40-U     | \$6.08 |
|               | NIT      | 3218   | VN1-40-N | PFG-40A-NBR  | \$3.07 |
| <b>Nipple</b> |          | 3292   | VSA60    | G1/8" Male   | \$3.33 |
|               |          | 5180   | VSA60F   | G1/8" Female | \$3.50 |

Fittings Available  
on page 1043





## >S< Style – Flat

(Shown Actual Size)

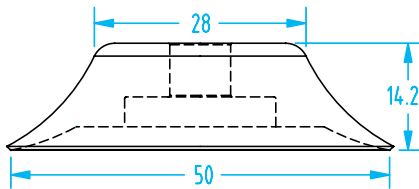
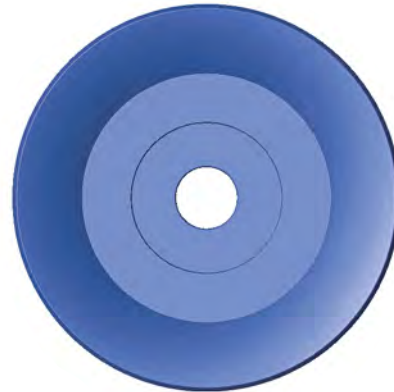


>S< Style Vacuum Cup Properties

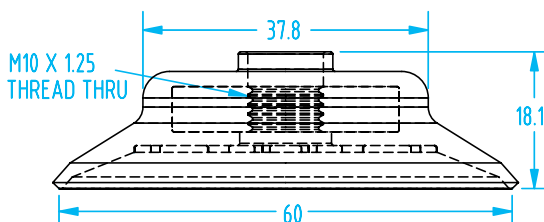
| Material | Color                  | Max Temp. | Durometer |
|----------|------------------------|-----------|-----------|
| Silicone | Semi-translucent white | 482°F     | 50°       |
| Hithane  | Blue                   | 320°F     | 60°       |
| Nitrile  | Black                  | 248°F     | 60°       |

Available with Foam Cup, see page 368.

See page 372 for nipple dimensions.



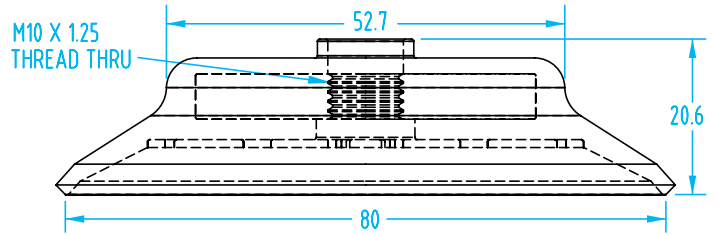
| Cup Ø  | Material | Quick# | Part#    | (Reference)  | Price  |
|--------|----------|--------|----------|--------------|--------|
| 50mm   | SIL      | 3223   | VN1-50-S | PFG-50-SI    | \$3.72 |
|        | HIT      | 1171   | VN1-50-H | PFG-50-U     | \$7.95 |
|        | NIT      | 3222   | VN1-50-N | PFG-50A-NBR  | \$3.23 |
| Nipple |          | 3294   | VSA80    | G1/8" Male   | \$3.68 |
|        |          | 5182   | VSA80F   | G1/8" Female | \$3.68 |



| Cup Ø  | Material | Quick# | Part#    | (Reference)  | Price   |
|--------|----------|--------|----------|--------------|---------|
| 60mm   | SIL      | 3227   | VN1-60-S | PFG-60-SI    | \$9.90  |
|        | HIT      | 1172   | VN1-60-H | PFG-60-U     | \$14.70 |
|        | NIT      | 3226   | VN1-60-N | PFG-60A-NBR  | \$8.93  |
| Nipple |          | 3297   | VSA110   | G1/4" Male   | \$5.59  |
|        |          | 5183   | VSA110F  | G1/4" Female | \$5.59  |

>S< Style – Flat

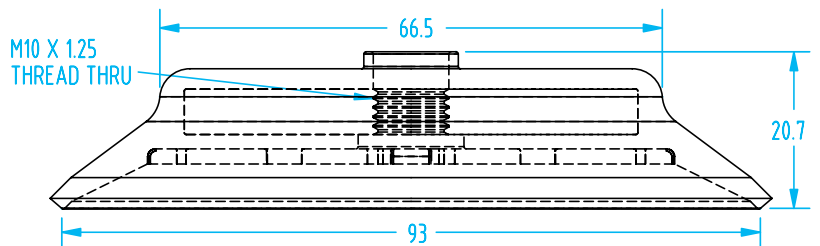
(Shown Actual Size)



| Cup Ø         | Material | Quick# | Part#    | (Reference)  | Price   |
|---------------|----------|--------|----------|--------------|---------|
| 80mm          | SIL      | 3230   | VN1-80-S | PFG-80-SI    | \$14.70 |
|               | HIT      | 1173   | VN1-80-H | PFG-80-U     | \$16.28 |
|               | NIT      | 3229   | VN1-80-N | PFG-80A-NBR  | \$11.03 |
| <b>Nipple</b> |          | 3297   | VSA110   | G1/4" Male   | \$5.59  |
|               |          | 5183   | VSA110F  | G1/4" Female | \$5.59  |



| Cup Ø         | Material | Quick# | Part#    | (Reference)  | Price   |
|---------------|----------|--------|----------|--------------|---------|
| 95mm          | SIL      | 3233   | VN1-95-S | PFG-95-SI    | \$20.21 |
|               | HIT      | 1174   | VN1-95-H | PFG-95-U     | \$31.28 |
|               | NIT      | 3232   | VN1-95-N | PFG-95A-NBR  | \$15.40 |
| <b>Nipple</b> |          | 3297   | VSA110   | G1/4" Male   | \$5.59  |
|               |          | 5183   | VSA110F  | G1/4" Female | \$5.59  |



## >S< Style – 1.5 Bellows

(Shown Actual Size)



### >S< Style Vacuum Cup Properties

| Material | Color                  | Max Temp. | Durometer |
|----------|------------------------|-----------|-----------|
| Silicone | Semi-translucent white | 482°F     | 50°       |
| Hithane  | Blue                   | 320°F     | 60°       |
| Nitrile  | Black                  | 248°F     | 60°       |

Available with Foam Cup, see page 368.

Additional Mini Vacuum Cup sizes on page 416.

See page 372 for nipple dimensions.

\* 9.5mm Compressed

| Cup Ø  | Material | Quick# | Part#    | (Reference) | Price  |
|--------|----------|--------|----------|-------------|--------|
| 10mm   | NIT      | 3235   | VN2-10-N | PBG-10A-NBR | \$3.51 |
|        | SIL      | 3236   | VN2-10-S | PBG-10A-SI  | \$5.46 |
|        | HIT      | 1175   | VN2-10-H | PBG-10A-U   | \$7.56 |
| Nipple |          | 3289   | VSA30    | M5 Male     | \$2.94 |
|        |          | 5178   | VSA30F   | M5 Female   | \$2.94 |

\* 9mm Compressed

| Cup Ø  | Material | Quick# | Part#    | (Reference) | Price  |
|--------|----------|--------|----------|-------------|--------|
| 15mm   | NIT      | 3238   | VN2-15-N | PBG-15A-NBR | \$4.20 |
|        | SIL      | 3239   | VN2-15-S | PBG-15A-SI  | \$7.35 |
|        | HIT      | 1176   | VN2-15-H | PBG-15A-U   | \$8.40 |
| Nipple |          | 3289   | VSA30    | M5 Male     | \$2.94 |
|        |          | 5178   | VSA30F   | M5 Female   | \$2.94 |

\* 16mm Compressed

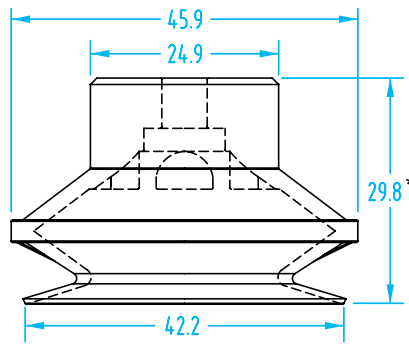
| Cup Ø  | Material | Quick# | Part#    | (Reference)  | Price  |
|--------|----------|--------|----------|--------------|--------|
| 20mm   | NIT      | 3241   | VN2-20-N | PBG-20-NBR   | \$4.50 |
|        | SIL      | 3242   | VN2-20-S | PBG-20-SI    | \$7.27 |
|        | HIT      | 1177   | VN2-20-H | PBG-20A-U    | \$9.19 |
| Nipple |          | 3292   | VSA60    | G1/8" Male   | \$3.33 |
|        |          | 5180   | VSA60F   | G1/8" Female | \$3.50 |

\* 20mm Compressed

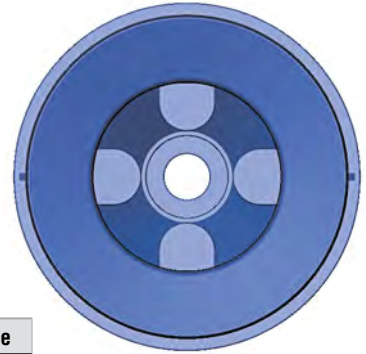
| Cup Ø  | Material | Quick# | Part#    | (Reference)  | Price   |
|--------|----------|--------|----------|--------------|---------|
| 30mm   | NIT      | 3244   | VN2-30-N | PBG-30-NBR   | \$5.33  |
|        | SIL      | 3245   | VN2-30-S | PBG-30-SI    | \$8.11  |
|        | HIT      | 1178   | VN2-30-H | PBG-30A-U    | \$12.24 |
| Nipple |          | 3292   | VSA60    | G1/8" Male   | \$3.33  |
|        |          | 5180   | VSA60F   | G1/8" Female | \$3.50  |

**>S< Style – 1.5 Bellows**

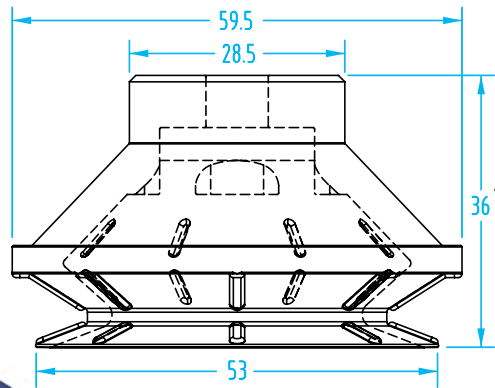
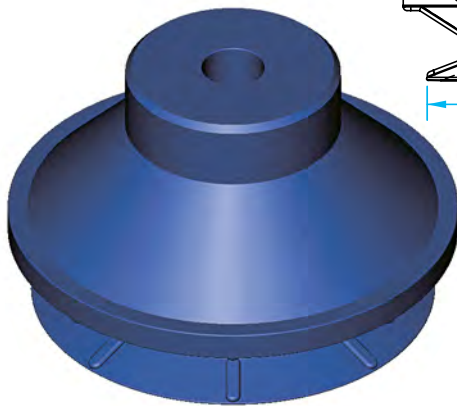
(Shown Actual Size)



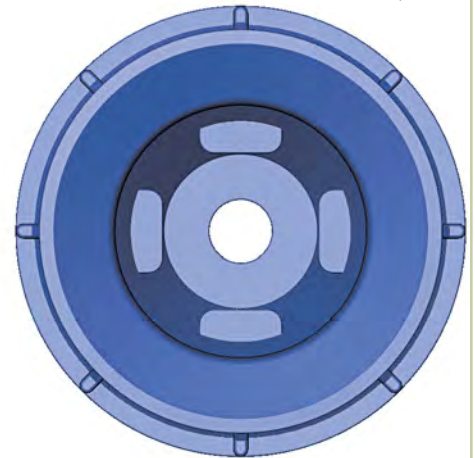
\* 20mm Compressed



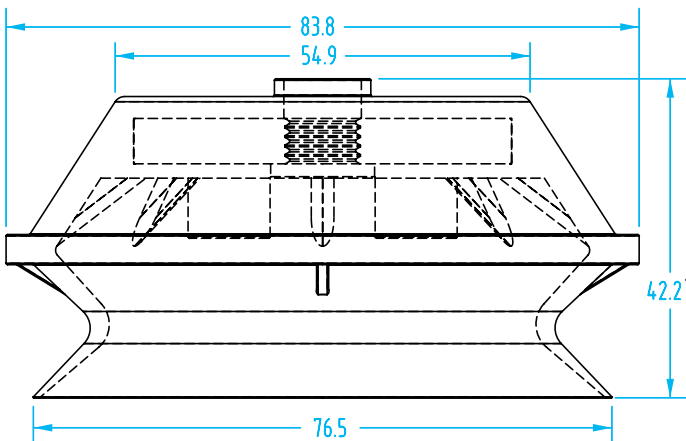
| Cup Ø         | Material | Quick# | Part#    | (Reference)  | Price   |
|---------------|----------|--------|----------|--------------|---------|
| 40mm          | NIT      | 3247   | VN2-40-N | PBG-40-NBR   | \$6.91  |
|               | SIL      | 3248   | VN2-40-S | PBG-40-SI    | \$12.08 |
|               | HIT      | 1179   | VN2-40-H | PBG-40A-U    | \$14.99 |
| <b>Nipple</b> |          | 3292   | VSA60    | G1/8" Male   | \$3.33  |
|               |          | 5180   | VSA60F   | G1/8" Female | \$3.50  |



\* 24mm Compressed



| Cup Ø         | Material | Quick# | Part#    | (Reference)  | Price   |
|---------------|----------|--------|----------|--------------|---------|
| 50mm          | NIT      | 3250   | VN2-50-N | PBG-50-NBR   | \$7.70  |
|               | SIL      | 3251   | VN2-50-S | PBG-50-SI    | \$13.25 |
|               | HIT      | 1180   | VN2-50-H | PBG-50A-U    | \$23.84 |
| <b>Nipple</b> |          | 3294   | VSA80    | G1/8" Male   | \$3.68  |
|               |          | 5182   | VSA80F   | G1/8" Female | \$3.68  |



\* 20mm Compressed

| Cup Ø         | Material | Quick# | Part#    | (Reference)  | Price   |
|---------------|----------|--------|----------|--------------|---------|
| 75mm          | NIT      | 3253   | VN2-75-N | PBG-75-NBR   | \$22.92 |
|               | SIL      | 3254   | VN2-75-S | PBG-75-SI    | \$30.53 |
|               | HIT      | 1181   | VN2-75-H | PBG-75A-U    | \$57.75 |
| <b>Nipple</b> |          | 3297   | VSA110   | G1/4" Male   | \$5.59  |
|               |          | 5183   | VSA110F  | G1/4" Female | \$5.59  |

## >S< Style – 2.5 Bellows



(Shown Actual Size)

### >S< Style Vacuum Cup Properties

| Material | Color                  | Max Temp. | Durometer |
|----------|------------------------|-----------|-----------|
| Silicone | Semi-translucent white | 482°F     | 50°       |
| Hithane  | Blue                   | 320°F     | 60°       |
| Nitrile  | Black                  | 248°F     | 60°       |

See page 372 for nipple dimensions.

\* 8mm Compressed

| Cup Ø         | Material | Quick# | Part#   | (Reference) | Price  |
|---------------|----------|--------|---------|-------------|--------|
| 5mm           | NIT      | 3256   | VN3-5-N | PCG-5-NBR   | \$4.64 |
|               | SIL      | 3257   | VN3-5-S | PCG-5-SI    | \$5.23 |
|               | HIT      | 1182   | VN3-5-H | PCG-5-U     | \$8.93 |
| <b>Nipple</b> |          | 3289   | VSA30   | M5 Male     | \$2.94 |
|               |          | 5178   | VSA30F  | M5 Female   | \$2.94 |

\* 8mm Compressed

| Cup Ø         | Material | Quick# | Part#   | (Reference) | Price  |
|---------------|----------|--------|---------|-------------|--------|
| 8mm           | NIT      | 3259   | VN3-8-N | PCG-7-NBR   | \$4.64 |
|               | SIL      | 3260   | VN3-8-S | PCG-7-SI    | \$5.23 |
|               | HIT      | 1183   | VN3-7-H | PCG-7-U     | \$8.93 |
| <b>Nipple</b> |          | 3289   | VSA30   | M5 Male     | \$2.94 |
|               |          | 5178   | VSA30F  | M5 Female   | \$2.94 |

\* 12.5mm Compressed

| Cup Ø         | Material | Quick# | Part#       | (Reference)  | Price  |
|---------------|----------|--------|-------------|--------------|--------|
| 10mm          | NIT      | 3262   | VN3-10-N    | PCG-10-NBR   | \$3.17 |
|               | SIL      | 3263   | VN3-10-S    | PCG-10-SI    | \$3.95 |
| <b>Nipple</b> |          | 3290   | VSA40       | M5 Male      | \$1.86 |
|               |          | 1603   | GSF-PFN-G8F | G1/8" Female | \$3.99 |

\* 15mm Compressed

| Cup Ø         | Material | Quick# | Part#       | (Reference)  | Price  |
|---------------|----------|--------|-------------|--------------|--------|
| 15mm          | NIT      | 3265   | VN3-15-N    | PCG-15-NBR   | \$3.17 |
|               | SIL      | 3266   | VN3-15-S    | PCG-15-SI    | \$3.85 |
| <b>Nipple</b> |          | 3290   | VSA40       | M5 Male      | \$1.86 |
|               |          | 1603   | GSF-PFN-G8F | G1/8" Female | \$3.99 |

\* 15mm Compressed

| Cup Ø         | Material | Quick# | Part#       | (Reference)  | Price  |
|---------------|----------|--------|-------------|--------------|--------|
| 18mm          | NIT      | 3268   | VN3-18-N    | PCG-18-NBR   | \$4.73 |
|               | SIL      | 3269   | VN3-18-S    | PCG-18-SI    | \$4.45 |
| <b>Nipple</b> |          | 1604   | GSF-PFN-G8M | G1/8" Male   | \$3.99 |
|               |          | 1603   | GSF-PFN-G8F | G1/8" Female | \$3.99 |

\* 15mm Compressed

| Cup Ø         | Material | Quick# | Part#       | (Reference)  | Price  |
|---------------|----------|--------|-------------|--------------|--------|
| 18mm          | NIT      | 3268   | VN3-18-N    | PCG-18-NBR   | \$4.73 |
|               | SIL      | 3269   | VN3-18-S    | PCG-18-SI    | \$4.45 |
| <b>Nipple</b> |          | 1604   | GSF-PFN-G8M | G1/8" Male   | \$3.99 |
|               |          | 1603   | GSF-PFN-G8F | G1/8" Female | \$3.99 |

\* 14mm Compressed

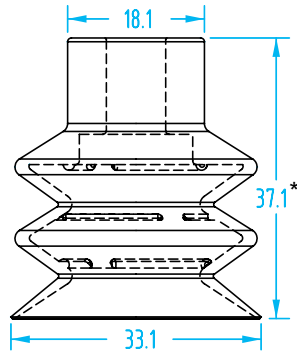
| Cup Ø         | Material | Quick# | Part#       | (Reference)  | Price  |
|---------------|----------|--------|-------------|--------------|--------|
| 20mm          | NIT      | 3271   | VN3-20-N    | PCG-20-NBR   | \$3.85 |
|               | SIL      | 3272   | VN3-20-S    | PCG-20-SI    | \$4.64 |
| <b>Nipple</b> |          | 1604   | GSF-PFN-G8M | G1/8" Male   | \$3.99 |
|               |          | 1603   | GSF-PFN-G8F | G1/8" Female | \$3.99 |

\* 14mm Compressed

| Cup Ø         | Material | Quick# | Part#       | (Reference)  | Price  |
|---------------|----------|--------|-------------|--------------|--------|
| 20mm          | NIT      | 3271   | VN3-20-N    | PCG-20-NBR   | \$3.85 |
|               | SIL      | 3272   | VN3-20-S    | PCG-20-SI    | \$4.64 |
| <b>Nipple</b> |          | 1604   | GSF-PFN-G8M | G1/8" Male   | \$3.99 |
|               |          | 1603   | GSF-PFN-G8F | G1/8" Female | \$3.99 |

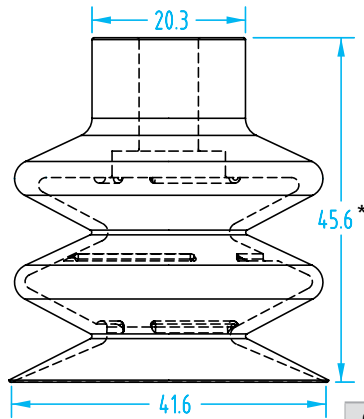
>S< Style – 2.5 Bellows

(Shown Actual Size)



\* 24mm Compressed

| Cup Ø  | Material | Quick# | Part#        | (Reference)  | Price  |
|--------|----------|--------|--------------|--------------|--------|
| 30mm   | NIT      | 3274   | VN3-30-N     | PCG-30-NBR   | \$5.12 |
|        | SIL      | 3275   | VN3-30-S     | PCG-30-SI    | \$7.12 |
| Nipple |          | 5433   | GSF-HTN1-G8M | G1/8" Male   | \$3.67 |
|        |          | 5432   | GSF-HTN1-G8F | G1/8" Female | \$3.67 |

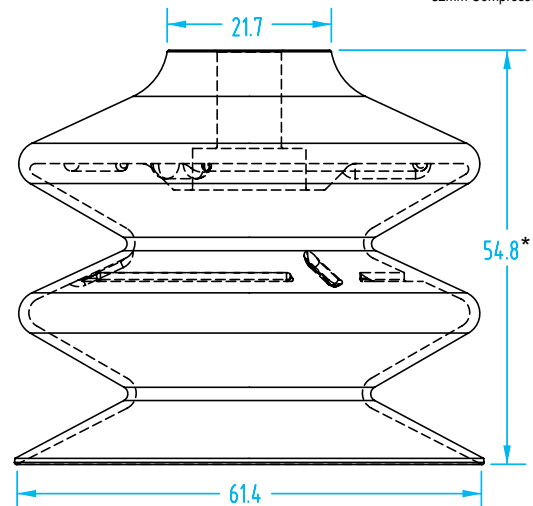


\* 28mm Compressed

| Cup Ø  | Material | Quick# | Part#        | (Reference)  | Price  |
|--------|----------|--------|--------------|--------------|--------|
| 40mm   | NIT      | 3277   | VN3-40-N     | PCG-40-NBR   | \$7.25 |
|        | SIL      | 3278   | VN3-40-S     | PCG-40-SI    | \$9.05 |
| Nipple |          | 5433   | GSF-HTN1-G8M | G1/8" Male   | \$3.67 |
|        |          | 5432   | GSF-HTN1-G8F | G1/8" Female | \$3.67 |

| Cup Ø  | Material | Quick# | Part#        | (Reference)  | Price   |
|--------|----------|--------|--------------|--------------|---------|
| 60mm   | NIT      | 3280   | VN3-60-N     | PCG-60-NBR   | \$11.70 |
|        | SIL      | 3281   | VN3-60-S     | PCG-60-SI    | \$14.78 |
| Nipple |          | 5433   | GSF-HTN1-G8M | G1/8" Male   | \$3.67  |
|        |          | 5432   | GSF-HTN1-G8F | G1/8" Female | \$3.67  |

| Cup Ø  | Material | Quick# | Part#        | (Reference)  | Price   |
|--------|----------|--------|--------------|--------------|---------|
| 90mm   | NIT      | 3283   | VN3-90-N     | PCG-90-NBR   | \$23.29 |
|        | SIL      | 3284   | VN3-90-S     | PCG-90-SI    | \$32.26 |
| Nipple |          | 3296   | VSA100       | G1/4" Male   | \$5.31  |
|        |          | 1607   | GSF-PFN4-G4F | G1/4" Female | \$6.74  |



\* 32mm Compressed

## >S< Style – Foam Surface – Flat

(Shown Actual Size)

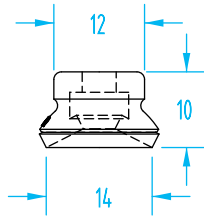


Foam cups are designed for gripping products with an uneven or ridged surface such as metal sheets or flat surfaces with bumps or hollows. Heat-resistant silicone cups have a temperature range up to 428°F, and don't leave marks on products handled. Silicone foam cups are not recommended for gripping products before painting or coating.

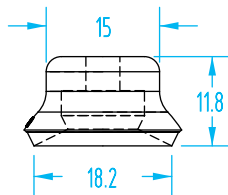
Foam Vacuum Cup Properties

| Material | Color | Max Temp. | Cup Durometer |
|----------|-------|-----------|---------------|
| Nitrile  | Black | 176°      | 60°           |
| Silicone | Clear | 428°      | 50°           |

See page 372 for nipple dimensions.



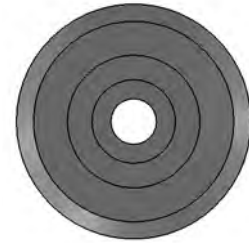
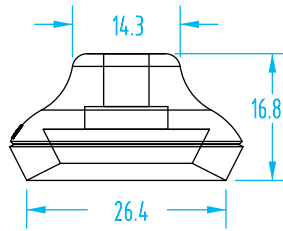
| Cup Ø  | Material     | Quick# | Part#         | Price   |
|--------|--------------|--------|---------------|---------|
| 15mm   | Nitrile      | 1049   | VPG-15-NBR-BM | \$12.16 |
|        | Silicone     | 1050   | VPG-15-SI-BM  | \$12.52 |
| Nipple | M5 Male      | 3290   | VSA40         | \$1.86  |
|        | G1/8" Female | 1603   | GSF-PFN-G8F   | \$3.99  |



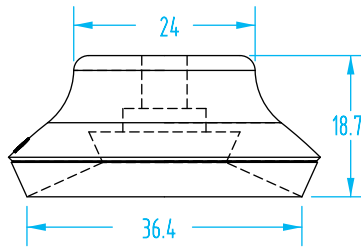
| Cup Ø  | Material     | Quick# | Part#         | Price   |
|--------|--------------|--------|---------------|---------|
| 20mm   | Nitrile      | 1051   | VPG-20-NBR-BM | \$12.68 |
|        | Silicone     | 1052   | VPG-20-SI-BM  | \$13.13 |
| Nipple | G1/8" Male   | 1604   | GSF-PFN-G8M   | \$3.99  |
|        | G1/8" Female | 1603   | GSF-PFN-G8F   | \$3.99  |

>S< Style – Foam Surface – Flat

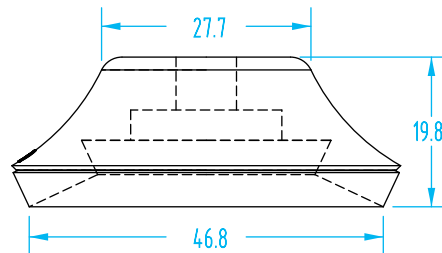
(Shown Actual Size)



| Cup Ø  | Material     | Quick# | Part#         | Price   |
|--------|--------------|--------|---------------|---------|
| 30mm   | Nitrile      | 1053   | VPG-30-NBR-BM | \$13.73 |
|        | Silicone     | 1054   | VPG-30-SI-BM  | \$15.67 |
| Nipple | G1/8" Male   | 3292   | VSA60         | \$3.33  |
|        | G1/8" Female | 5180   | VSA60F        | \$3.50  |



| Cup Ø  | Material     | Quick# | Part#         | Price   |
|--------|--------------|--------|---------------|---------|
| 40mm   | Nitrile      | 1055   | VPG-40-NBR-BM | \$13.91 |
|        | Silicone     | 1056   | VPG-40-SI-BM  | \$16.72 |
| Nipple | G1/8" Male   | 3292   | VSA60         | \$3.33  |
|        | G1/8" Female | 5180   | VSA60F        | \$3.50  |



| Cup Ø  | Material     | Quick# | Part#         | Price   |
|--------|--------------|--------|---------------|---------|
| 50mm   | Nitrile      | 1057   | VPG-50-NBR-BM | \$15.67 |
|        | Silicone     | 1058   | VPG-50-SI-BM  | \$18.29 |
| Nipple | G1/8" Male   | 3294   | VSA80         | \$3.68  |
|        | G1/8" Female | 5182   | VSA80F        | \$3.68  |



## >S< Style – Foam Surface – 1.5 Bellow

(Shown Actual Size)

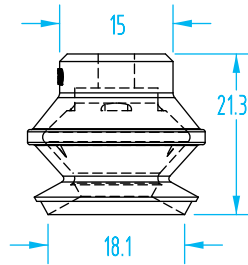


Foam cups are designed for gripping products with an uneven or ridged surface such as metal sheets or flat surfaces with bumps or hollows. Heat-resistant silicone cups have a temperature range up to 428°F, and don't leave marks on products handled. Silicone foam cups are not recommended for gripping products before painting or coating.

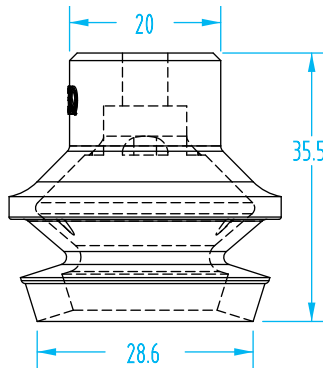
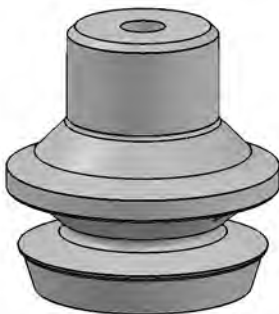
Foam Vacuum Cup Properties

| Material | Color | Max Temp. | Cup Durometer |
|----------|-------|-----------|---------------|
| Nitrile  | Black | 176°      | 60°           |
| Silicone | Clear | 428°      | 50°           |

See page 372 for nipple dimensions.



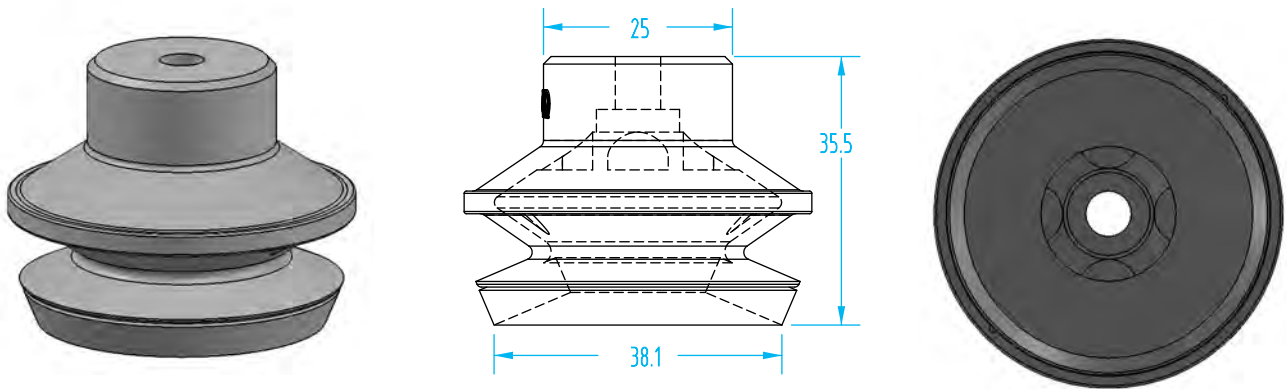
| Cup Ø  | Material     | Quick# | Part#           | Price   |
|--------|--------------|--------|-----------------|---------|
| 20mm   | Nitrile      | 1059   | VSAG-20-BNBR-BM | \$16.28 |
|        | Silicone     | 1060   | VSAG-20-BSI-BM  | \$19.01 |
| Nipple | G1/8" Male   | 1604   | GSF-PFN-G8M     | \$3.99  |
|        | G1/8" Female | 1603   | GSF-PFN-G8F     | \$3.99  |



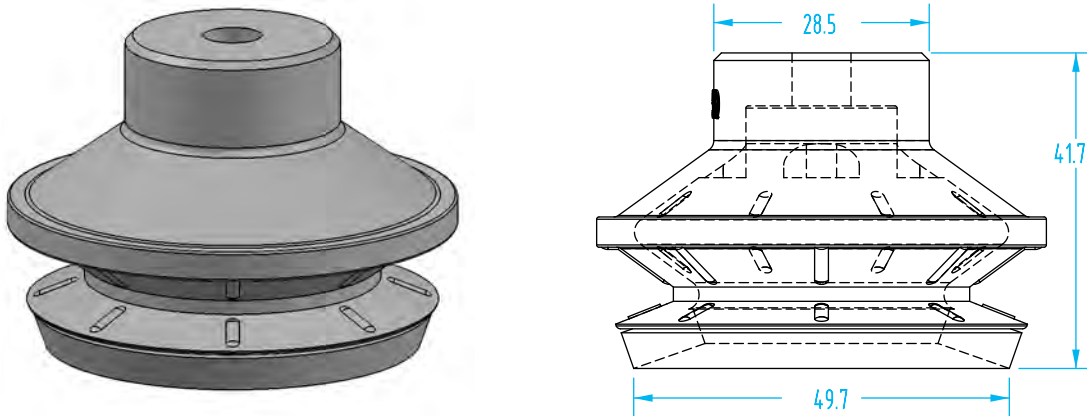
| Cup Ø  | Material     | Quick# | Part#          | Price   |
|--------|--------------|--------|----------------|---------|
| 30mm   | Nitrile      | 1061   | VSAG-30-NBR-BM | \$16.80 |
|        | Silicone     | 1062   | VSAG-30-SI-BM  | \$19.95 |
| Nipple | G1/8" Male   | 3292   | VSA60          | \$3.33  |
|        | G1/8" Female | 5180   | VSA60F         | \$3.50  |

**>S< Style – Foam Surface – 1.5 Bellow**

(Shown Actual Size)



| Cup Ø         | Material     | Quick# | Part#          | Price   |
|---------------|--------------|--------|----------------|---------|
| 40mm          | Nitrile      | 1063   | VSAG-40-NBR-BM | \$20.16 |
|               | Silicone     | 1064   | VSAG-40-SI-BM  | \$23.10 |
| <b>Nipple</b> | G1/8" Male   | 3292   | VSA60          | \$3.33  |
|               | G1/8" Female | 5180   | VSA60F         | \$3.50  |



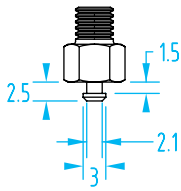
| Cup Ø         | Material     | Quick# | Part#          | Price   |
|---------------|--------------|--------|----------------|---------|
| 50mm          | Nitrile      | 1065   | VSAG-50-NBR-BM | \$21.42 |
|               | Silicone     | 1066   | VSAG-50-SI-BM  | \$27.30 |
| <b>Nipple</b> | G1/8" Male   | 3294   | VSA80          | \$3.68  |
|               | G1/8" Female | 5182   | VSA80F         | \$3.68  |

## >S< Style – Nipples

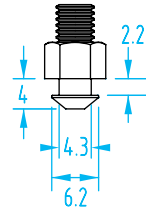
(Shown Actual Size)

M5

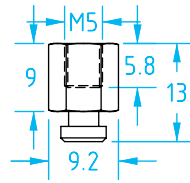
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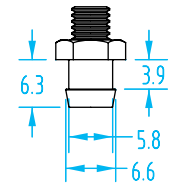
#3289



#5178

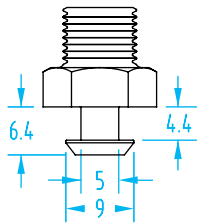


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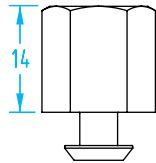


G1/8"

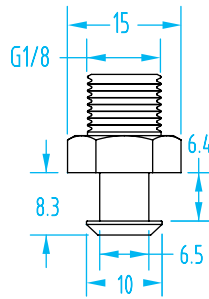
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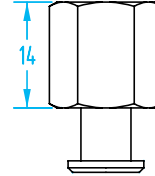
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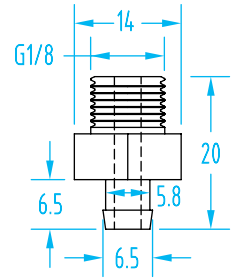
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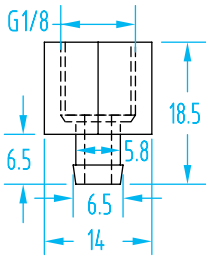
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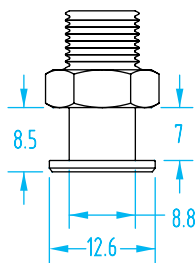
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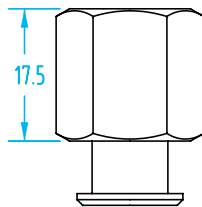
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#3294

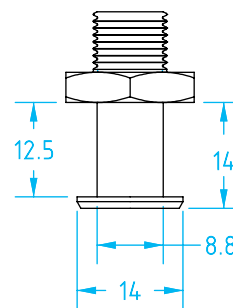


#5182

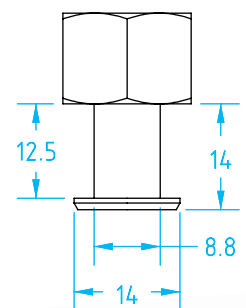


#5433

\*Includes the #244 seal ring



#5432

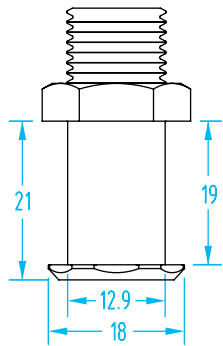


**>S< Style – Nipples**

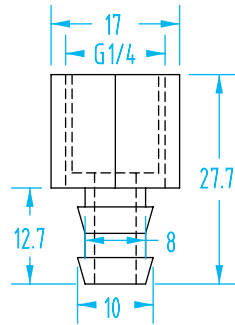
(Shown Actual Size)

**G1/4"**

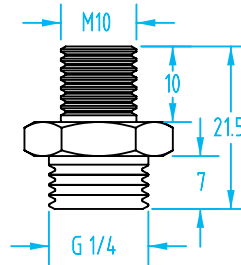
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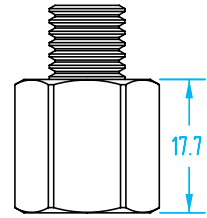
#1607



#3297



#5183



| Quick# | Part#        | Thread       | Price  |
|--------|--------------|--------------|--------|
| 3286   | VSA10        | M5 Male      | \$2.94 |
| 3289   | VSA30        | M5 Male      | \$2.94 |
| 5178   | VSA30F       | M5 Female    | \$2.94 |
| 3290   | VSA40        | M5 Male      | \$1.86 |
| 3291   | VSA50        | G1/8" Male   | \$3.33 |
| 5179   | VSA50F       | G1/8" Female | \$5.36 |
| 3292   | VSA60        | G1/8" Male   | \$3.33 |
| 5180   | VSA60F       | G1/8" Female | \$3.50 |
| 1604   | GSF-PFN-G8M  | G1/8" Male   | \$3.99 |
| 1603   | GSF-PFN-G8F  | G1/8" Female | \$3.99 |
| 3294   | VSA80        | G1/8" Male   | \$3.68 |
| 5182   | VSA80F       | G1/8" Female | \$3.68 |
| 5433   | GSF-HTN1-G8M | G1/8" Male   | \$3.67 |
| 5432   | GSF-HTN1-G8F | G1/8" Female | \$3.67 |
| 3296   | VSA100       | G1/4" Male   | \$5.31 |
| 1607   | GSF-PFN4-G4F | G1/4" Female | \$6.74 |
| 3297   | VSA110       | G1/4" Male   | \$5.59 |
| 5183   | VSA110F      | G1/4" Female | \$5.59 |

Use Quick#s for easy online ordering.

Fittings Available  
on page 1043



## SMC® Vacuum Cups – Introduction



SMC Vacuum Cup Properties

| Material     | Color                  | Max Temp. | Durometer |
|--------------|------------------------|-----------|-----------|
| Silicone     | Semi-translucent white | 392°F     | 40°       |
| Polyurethane | Semi-translucent gold  | 140°F     | 60°       |
| Nitrile      | Black                  | 180°F     | 50°       |
| Anti-static  | Black                  | 356°F     | 50°       |



*Anti-static vacuum cups available.*

### SMC Vacuum Cups

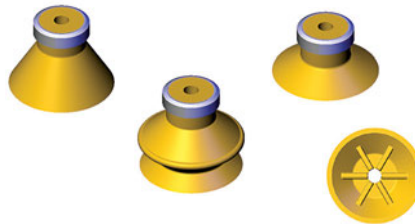
SMC makes very nice quality and good performing vacuum cups. They are well suited for most robotic EOAT applications. The silicone cups are more flexible because they have a softer durometer (40°) than most silicone cups (50°–55°). Therefore, they often provide a better seal on contoured parts or slightly textured parts.

And we make ordering them easy. Our simple step-by-step ordering guide makes it easy for you to build the vacuum cup and mounting assembly that is suited to your application. Full-size drawings assist you in getting the right size. And of course, our EOAT engineers are always available to provide engineering assistance.

**How to Order SMC® Vacuum Cups**

**STEP 1 SELECT VACUUM CUP TYPE AND SIZE**

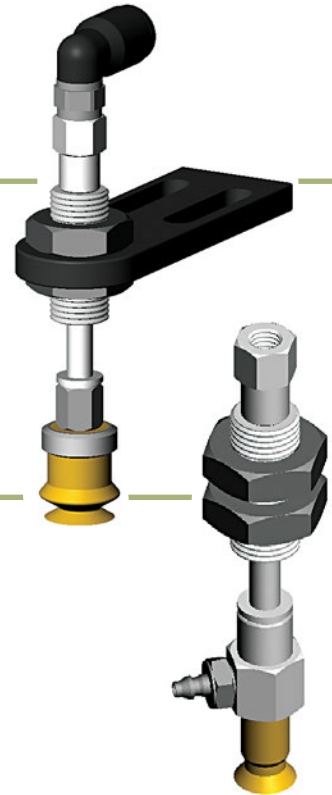
Silicone, Polyurethane, Nitrile or Anti-static:  
 Deep Cups on page 382.  
 Bellows Cups on page 380.  
 Flat Cups on page 376.  
 Flat Cups with Ridges on page 378.  
 Nitrile Material available for all cups.  
 Anti-Static Cups on page 376 & 380.



*Vacuum cups 10mm and larger include clamp ring as standard.*

**STEP 2 DETERMINE REQUIRED NIPPLE**

Vacuum cup nipples are ordered separately. See corresponding sizing chart on Page 383.



**STEP 3 (OPTIONAL) ALTERNATE VACUUM ENTRY**

Alternate vacuum entry adaptors are available with push-in tubing connectors. Page 383.



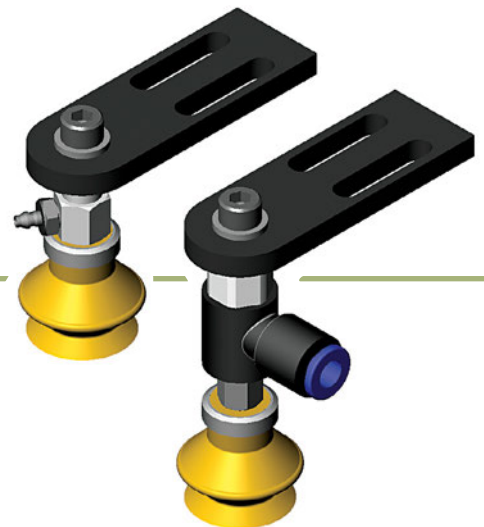
**STEP 4 (OPTIONAL) MOUNTING SUSPENSIONS**

Also known as “buffers” and “level compensators”, these devices have internal springs. Page 384.



**STEP 5 (OPTIONAL) MOUNTING BRACKETS**

Custom aluminum brackets are available that allow for easy mounting and adjustment to popular types of aluminum framing profiles. Page 385.



# SMC® – Flat Smooth

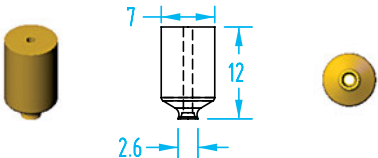
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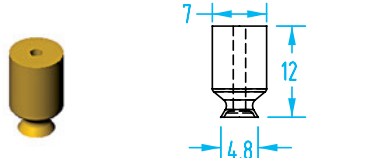
SMC Vacuum Cup Properties

| Material     | Color                  | Max Temp. | Durometer |
|--------------|------------------------|-----------|-----------|
| Silicone     | Semi-translucent white | 392°F     | 40°       |
| Polyurethane | Semi-translucent gold  | 140°F     | 60°       |
| Nitrile      | Black                  | 180°F     | 50°       |
| Anti-static  | Black                  | 356°F     | 50°       |

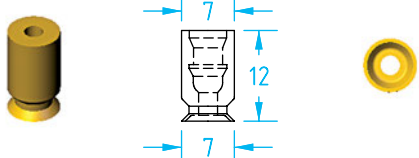
Order nipples separately, see page 383.



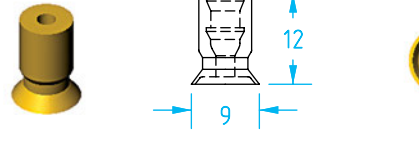
| Cup Ø | Material     | Quick# | Part#   | Price  |
|-------|--------------|--------|---------|--------|
| 2mm   | Silicone     | 2501   | ZP02US  | \$2.45 |
|       | Polyurethane | 2535   | ZP02UU  | \$2.95 |
|       | Nitrile      | 2604   | ZP02UN  | \$2.25 |
|       | Anti-static  | 2683   | ZP02UGS | \$2.40 |



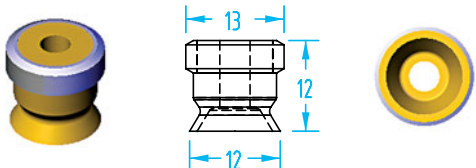
| Cup Ø | Material     | Quick# | Part#   | Price  |
|-------|--------------|--------|---------|--------|
| 4mm   | Silicone     | 2502   | ZP04US  | \$2.45 |
|       | Polyurethane | 2536   | ZP04UU  | \$2.95 |
|       | Nitrile      | 2605   | ZP04UN  | \$2.25 |
|       | Anti-static  | 2684   | ZP04UGS | \$2.40 |



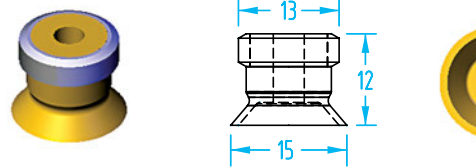
| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 6mm   | Silicone     | 2503   | ZP06US | \$2.45 |
|       | Polyurethane | 2537   | ZP06UU | \$2.95 |
|       | Nitrile      | 2606   | ZP06UN | \$2.25 |



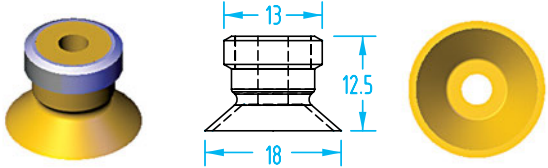
| Cup Ø | Material     | Quick# | Part#   | Price  |
|-------|--------------|--------|---------|--------|
| 8mm   | Silicone     | 2504   | ZP08US  | \$2.45 |
|       | Polyurethane | 2538   | ZP08UU  | \$2.95 |
|       | Nitrile      | 2607   | ZP08UN  | \$2.25 |
|       | Anti-static  | 2685   | ZP08UGS | \$2.40 |



| Cup Ø | Material     | Quick# | Part#   | Price  |
|-------|--------------|--------|---------|--------|
| 10mm  | Silicone     | 2505   | ZP10US  | \$2.95 |
|       | Polyurethane | 2539   | ZP10UU  | \$3.65 |
|       | Nitrile      | 2608   | ZP10UN  | \$2.70 |
|       | Anti-static  | 2686   | ZP10UGS | \$4.30 |



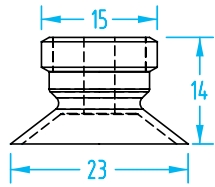
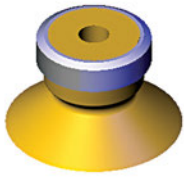
| Cup Ø | Material     | Quick# | Part#   | Price  |
|-------|--------------|--------|---------|--------|
| 13mm  | Silicone     | 2506   | ZP13US  | \$2.95 |
|       | Polyurethane | 2540   | ZP13UU  | \$3.65 |
|       | Nitrile      | 2609   | ZP13UN  | \$2.70 |
|       | Anti-static  | 2687   | ZP13UGS | \$4.30 |



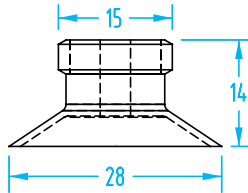
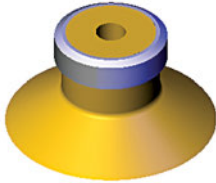
| Cup Ø | Material     | Quick# | Part#   | Price  |
|-------|--------------|--------|---------|--------|
| 16mm  | Silicone     | 2507   | ZP16US  | \$3.40 |
|       | Polyurethane | 2541   | ZP16UU  | \$4.10 |
|       | Nitrile      | 2610   | ZP16UN  | \$3.15 |
|       | Anti-static  | 2688   | ZP16UGS | \$4.75 |

**SMC® – Flat Smooth**

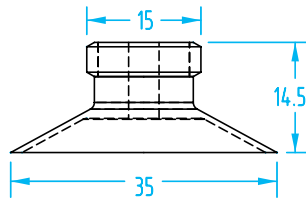
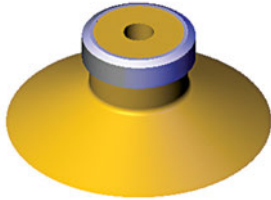
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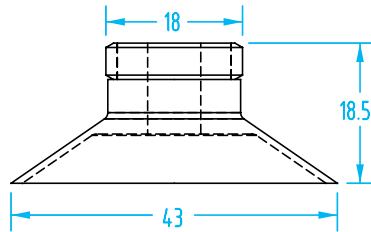
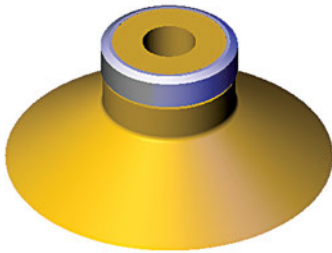
| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 20mm  | Silicone     | 2508   | ZP20US | \$3.40 |
|       | Polyurethane | 2542   | ZP20UU | \$4.10 |
|       | Nitrile      | 2611   | ZP20UN | \$3.15 |



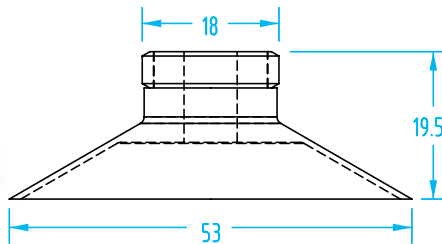
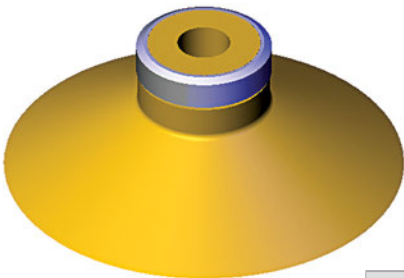
| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 25mm  | Silicone     | 2509   | ZP25US | \$3.40 |
|       | Polyurethane | 2543   | ZP25UU | \$4.10 |
|       | Nitrile      | 2612   | ZP25UN | \$3.15 |



| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 32mm  | Silicone     | 2510   | ZP32US | \$3.75 |
|       | Polyurethane | 2544   | ZP32UU | \$4.45 |
|       | Nitrile      | 2613   | ZP32UN | \$3.40 |



| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 40mm  | Silicone     | 2511   | ZP40US | \$4.90 |
|       | Polyurethane | 2545   | ZP40UU | \$5.85 |
|       | Nitrile      | 2614   | ZP40UN | \$4.45 |



| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 50mm  | Silicone     | 2512   | ZP50US | \$4.90 |
|       | Polyurethane | 2546   | ZP50UU | \$5.85 |
|       | Nitrile      | 2615   | ZP50UN | \$4.45 |



# SMC® – Flat Ribbed

(Shown Actual Size)



SMC Vacuum Cup Properties

| Material     | Color                  | Max Temp. | Durometer |
|--------------|------------------------|-----------|-----------|
| Silicone     | Semi-translucent white | 392°F     | 40°       |
| Polyurethane | Semi-translucent gold  | 140°F     | 60°       |
| Nitrile      | Black                  | 180°F     | 50°       |

Order nipples separately, see page 383.

| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 10mm  | Silicone     | 2513   | ZP10CS | \$2.95 |
|       | Polyurethane | 2547   | ZP10CU | \$3.65 |
|       | Nitrile      | 2616   | ZP10CN | \$2.70 |

| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 13mm  | Silicone     | 2514   | ZP13CS | \$2.95 |
|       | Polyurethane | 2548   | ZP13CU | \$3.65 |
|       | Nitrile      | 2617   | ZP13CN | \$2.70 |

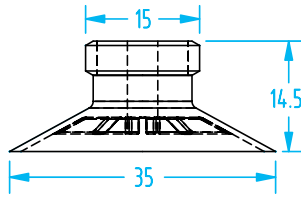
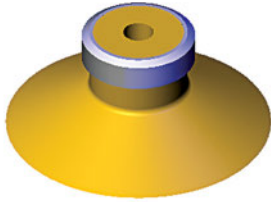
| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 16mm  | Silicone     | 2515   | ZP16CS | \$3.40 |
|       | Polyurethane | 2549   | ZP16CU | \$4.10 |
|       | Nitrile      | 2618   | ZP16CN | \$3.15 |

| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 20mm  | Silicone     | 2516   | ZP20CS | \$3.40 |
|       | Polyurethane | 2550   | ZP20CU | \$4.10 |
|       | Nitrile      | 2619   | ZP20CN | \$3.15 |

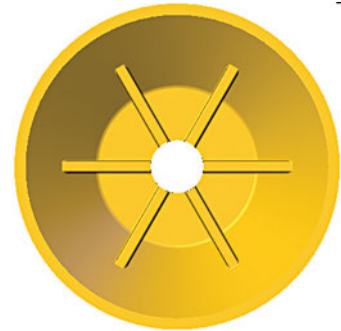
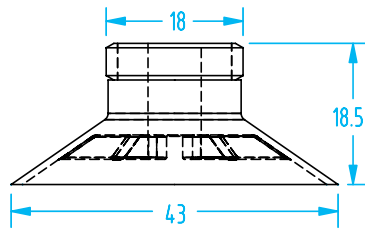
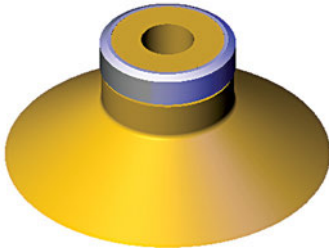
| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 25mm  | Silicone     | 2517   | ZP25CS | \$3.40 |
|       | Polyurethane | 2551   | ZP25CU | \$4.10 |
|       | Nitrile      | 2620   | ZP25CN | \$3.15 |

**SMC® – Flat Ribbed**

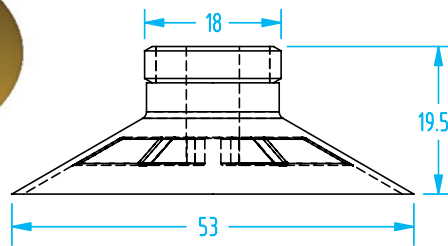
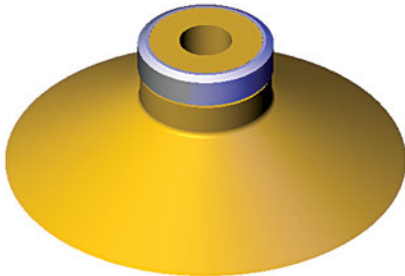
(Shown Actual Size)



| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 32mm  | Silicone     | 2518   | ZP32CS | \$3.75 |
|       | Polyurethane | 2552   | ZP32CU | \$4.45 |
|       | Nitrile      | 2621   | ZP32CN | \$3.40 |



| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 40mm  | Silicone     | 2519   | ZP40CS | \$4.90 |
|       | Polyurethane | 2553   | ZP40CU | \$5.85 |
|       | Nitrile      | 2637   | ZP40CN | \$4.45 |



| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 50mm  | Silicone     | 2520   | ZP50CS | \$4.90 |
|       | Polyurethane | 2554   | ZP50CU | \$5.85 |
|       | Nitrile      | 2622   | ZP50CN | \$4.45 |

Use Quick#s for easy online ordering.

# SMC® – 1.5 Bellows

(Shown Actual Size)

\* 11mm Compressed

| Cup Ø | Material     | Quick# | Part#   | Price  |
|-------|--------------|--------|---------|--------|
| 6mm   | Silicone     | 2525   | ZP06BS  | \$4.25 |
|       | Polyurethane | 2559   | ZP06BU  | \$4.60 |
|       | Nitrile      | 2625   | ZP06BN  | \$4.05 |
|       | Anti-static  | 2678   | ZP06BGS | \$4.20 |

\* 11mm Compressed

| Cup Ø | Material     | Quick# | Part#   | Price  |
|-------|--------------|--------|---------|--------|
| 8mm   | Silicone     | 2526   | ZP08BS  | \$4.25 |
|       | Polyurethane | 2560   | ZP08BU  | \$4.60 |
|       | Nitrile      | 2624   | ZP08BN  | \$4.05 |
|       | Anti-static  | 2679   | ZP08BGS | \$4.20 |

\* 12mm Compressed

| Cup Ø | Material     | Quick# | Part#   | Price  |
|-------|--------------|--------|---------|--------|
| 10mm  | Silicone     | 2527   | ZP10BS  | \$5.35 |
|       | Polyurethane | 2561   | ZP10BU  | \$5.95 |
|       | Nitrile      | 2654   | ZP10BN  | \$5.15 |
|       | Anti-static  | 2680   | ZP10BGS | \$6.45 |

\* 13mm Compressed

| Cup Ø | Material     | Quick# | Part#   | Price  |
|-------|--------------|--------|---------|--------|
| 13mm  | Silicone     | 2528   | ZP13BS  | \$5.35 |
|       | Polyurethane | 2562   | ZP13BU  | \$5.95 |
|       | Nitrile      | 2623   | ZP13BN  | \$5.15 |
|       | Anti-static  | 2681   | ZP13BGS | \$6.45 |

\* 13mm Compressed

| Cup Ø | Material     | Quick# | Part#   | Price  |
|-------|--------------|--------|---------|--------|
| 16mm  | Silicone     | 2529   | ZP16BS  | \$5.75 |
|       | Polyurethane | 2563   | ZP16BU  | \$6.30 |
|       | Nitrile      | 2626   | ZP16BN  | \$5.50 |
|       | Anti-static  | 2682   | ZP16BGS | \$6.85 |

\* 15mm Compressed

| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 20mm  | Silicone     | 2530   | ZP20BS | \$5.75 |
|       | Polyurethane | 2564   | ZP20BU | \$6.30 |
|       | Nitrile      | 2627   | ZP20BN | \$5.50 |

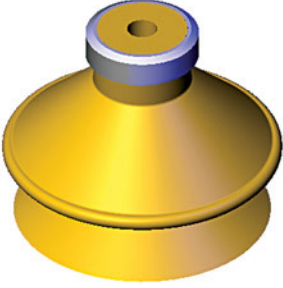
\* 15mm Compressed

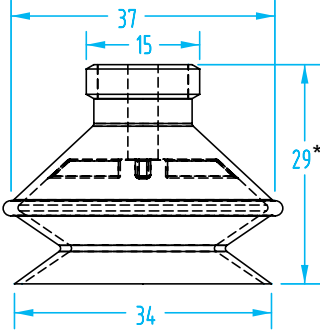
| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 25mm  | Silicone     | 2531   | ZP25BS | \$5.75 |
|       | Polyurethane | 2565   | ZP25BU | \$6.30 |
|       | Nitrile      | 2628   | ZP25BN | \$5.50 |

**SMC® – 1.5 Bellows**


(Shown Actual Size)

Order nipples separately, see page 383.

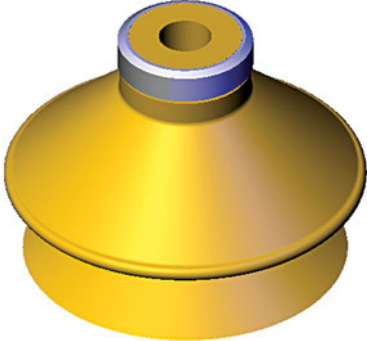


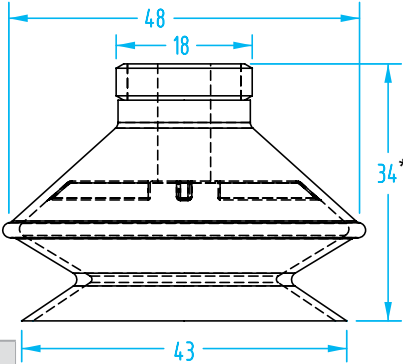


\* 18mm Compressed




| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 32mm  | Silicone     | 2532   | ZP32BS | \$7.10 |
|       | Polyurethane | 2566   | ZP32BU | \$7.70 |
|       | Nitrile      | 2629   | ZP32BN | \$6.80 |

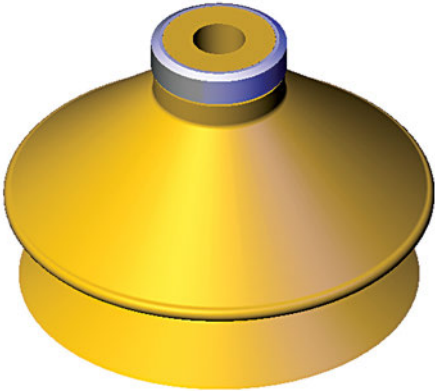


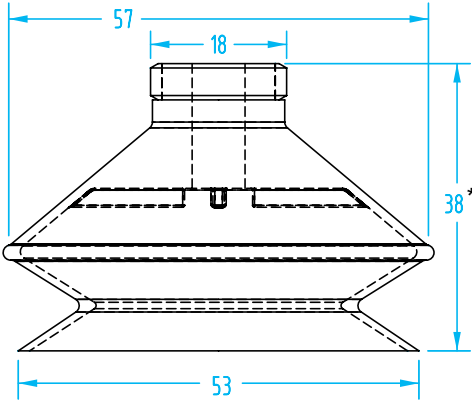


\* 22mm Compressed

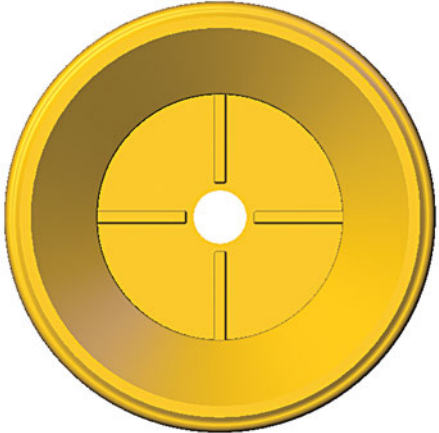


| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 40mm  | Silicone     | 2533   | ZP40BS | \$9.15 |
|       | Polyurethane | 2567   | ZP40BU | \$9.95 |
|       | Nitrile      | 2630   | ZP40BN | \$8.80 |





\* 22mm Compressed



| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 50mm  | Silicone     | 2534   | ZP50BS | \$9.15 |
|       | Polyurethane | 2568   | ZP50BU | \$9.95 |
|       | Nitrile      | 2631   | ZP50BN | \$8.80 |

# SMC® – Deep Cups

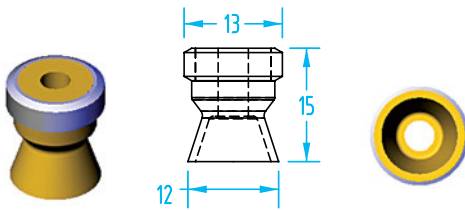
(Shown Actual Size)



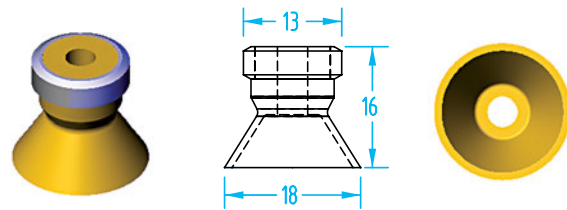
SMC Vacuum Cup Properties

| Material     | Color                  | Max Temp. | Durometer |
|--------------|------------------------|-----------|-----------|
| Silicone     | Semi-translucent white | 392°F     | 40°       |
| Polyurethane | Semi-translucent gold  | 140°F     | 60°       |
| Nitrile      | Black                  | 180°F     | 50°       |

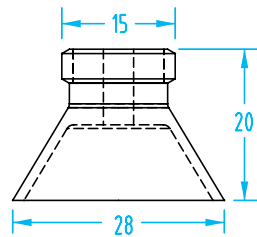
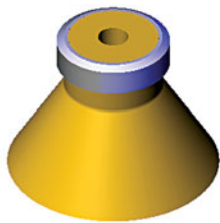
Use Quick#s for easy online ordering.



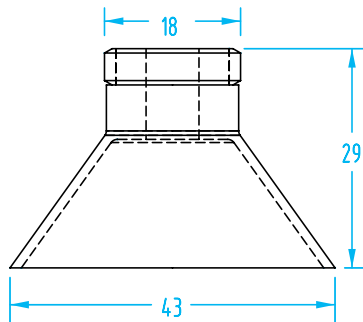
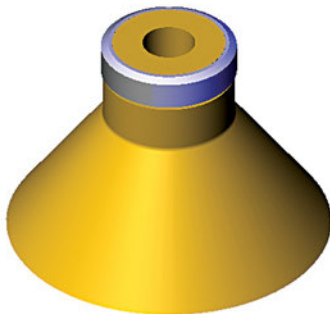
| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 10mm  | Silicone     | 2521   | ZP10DS | \$6.30 |
|       | Polyurethane | 2555   | ZP10DU | \$7.00 |
|       | Nitrile      | 2632   | ZP10DN | \$6.05 |



| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 16mm  | Silicone     | 2522   | ZP16DS | \$6.65 |
|       | Polyurethane | 2556   | ZP16DU | \$7.35 |
|       | Nitrile      | 2633   | ZP16DN | \$6.40 |



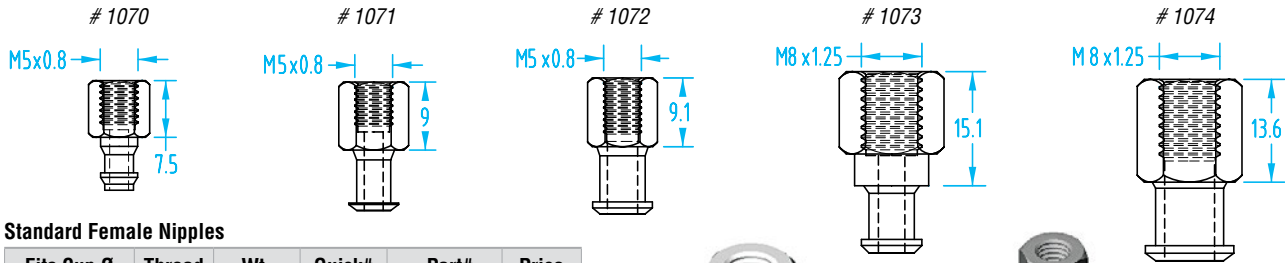
| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 25mm  | Silicone     | 2523   | ZP25DS | \$6.65 |
|       | Polyurethane | 2557   | ZP25DU | \$7.35 |
|       | Nitrile      | 2634   | ZP25DN | \$6.40 |



| Cup Ø | Material     | Quick# | Part#  | Price  |
|-------|--------------|--------|--------|--------|
| 40mm  | Silicone     | 2524   | ZP40DS | \$3.85 |
|       | Polyurethane | 2558   | ZP40DU | \$4.80 |
|       | Nitrile      | 2635   | ZP40DN | \$3.40 |

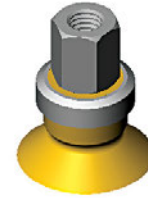
SMC® – Nipples and Adaptors

(Shown Actual Size)

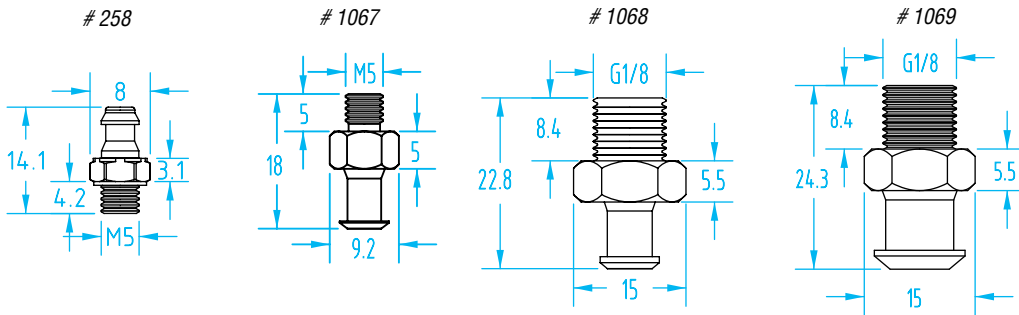


Standard Female Nipples

| Fits Cup Ø | Thread | Wt. | Quick# | Part#  | Price  |
|------------|--------|-----|--------|--------|--------|
| 2–8mm      | M5     | 3g  | 1070   | ZPT1B5 | \$3.25 |
| 10–16mm    | M5     | 4g  | 1071   | ZPT2B5 | \$6.15 |
| 20–32mm    | M5     | 4g  | 1072   | ZPT3B5 | \$6.15 |
| 20–32mm    | M8     | 12g | 1073   | ZPT3B8 | \$6.15 |
| 40–50mm    | M8     | 12g | 1074   | ZPT4B8 | \$6.15 |

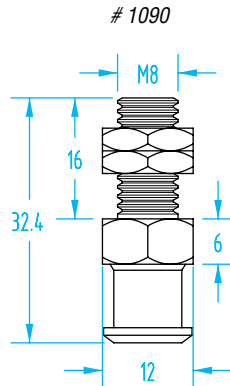


Shown with vacuum cup attached (typical)

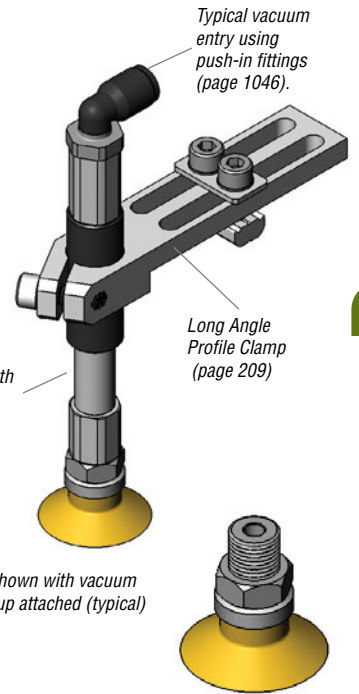


Standard Male Nipples

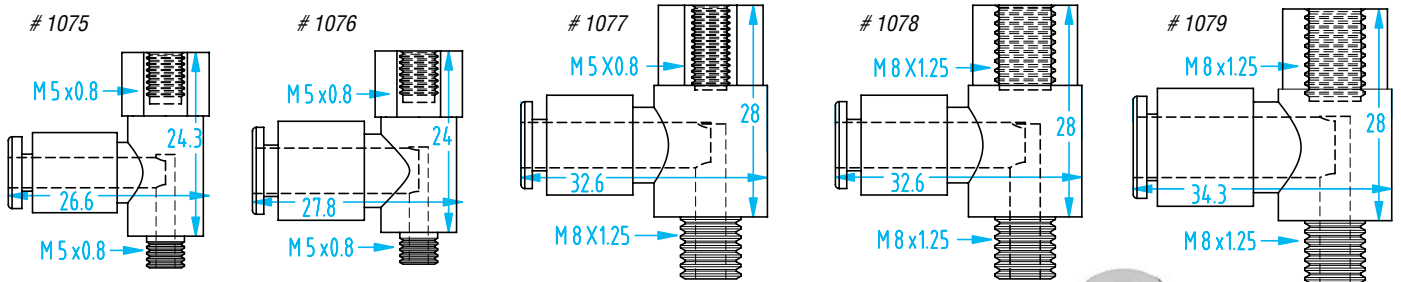
| Fits Cup Ø | Thread | Wt. | Quick# | Part#        | Price  |
|------------|--------|-----|--------|--------------|--------|
| 2–8mm      | M5     | 4g  | 258    | GSF-BS-M506  | \$0.78 |
| 10–16mm    | M5     | 5g  | 1067   | GSF-ZPT2-M5S | \$6.15 |
| 10–16mm    | M5     | 10g | 1088   | ZPT2A5       | \$6.40 |
| 20–32mm    | M8     | 13g | 1089   | ZPT3A8       | \$6.40 |
| 20–32mm    | G1/8"  | 13g | 1068   | GSF-ZPT3-G8  | \$6.15 |
| 40–50mm    | M8     | 13g | 1090   | ZPT4A8       | \$6.40 |
| 40–50mm    | G1/8"  | 13g | 1069   | GSF-ZPT4-G8  | \$6.15 |



Gimatic Smooth Suspension (page 286)



Shown with vacuum cup attached (typical)



One-Touch Adaptor for Standard Nipples (use with standard polyurethane tubing)

| Fits Cup Ø | Tubing Dia. | Thread | Wt. | Quick# | Part#    | Price   |
|------------|-------------|--------|-----|--------|----------|---------|
| 2–16mm     | Ø 4mm       | M5     | 12g | 1075   | ZPRS04B5 | \$12.80 |
| 2–16mm     | Ø 6mm       | M5     | 14g | 1076   | ZPRS06B5 | \$12.80 |
| 20–32mm    | Ø 6mm       | M5     | 24g | 1077   | ZPRL06B5 | \$13.80 |
| 20–50mm    | Ø 6mm       | M8     | 24g | 1078   | ZPRL06B8 | \$13.80 |
| 20–50mm    | Ø 8mm       | M8     | 24g | 1079   | ZPRL08B8 | \$13.80 |

See page 384 for typical assembly styles.



Screws into standard nipples (above)

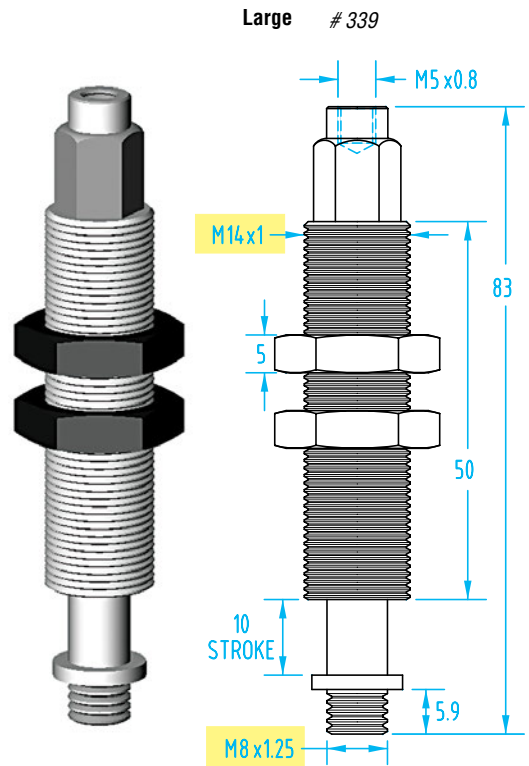
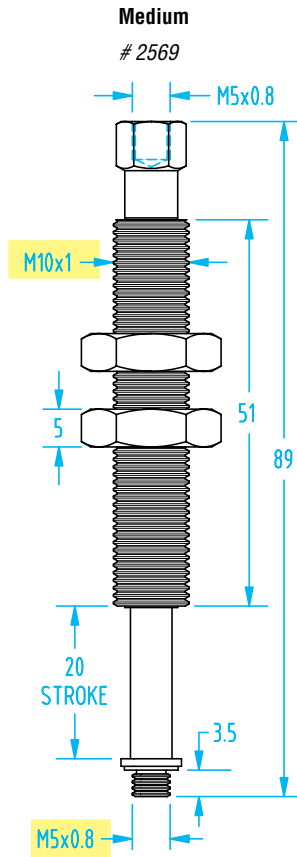
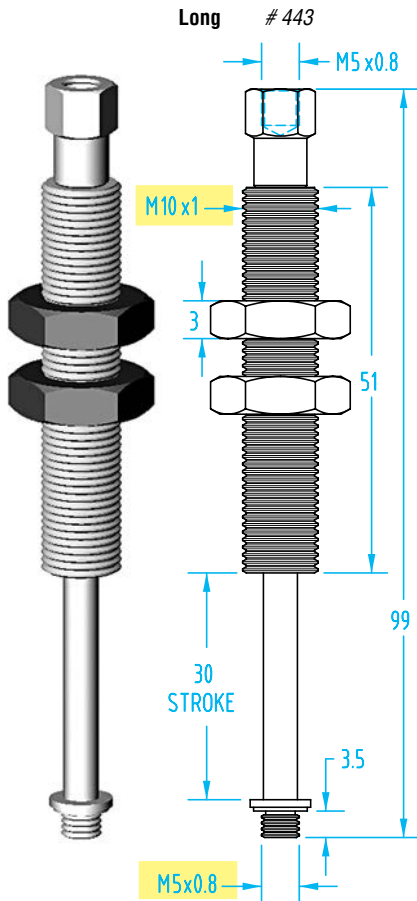
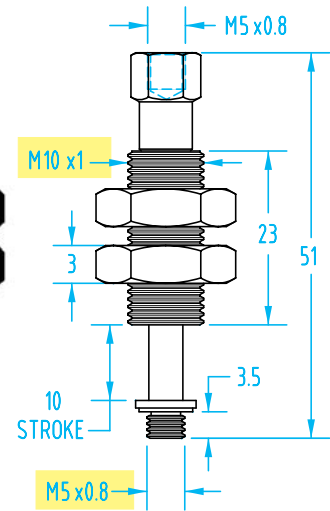
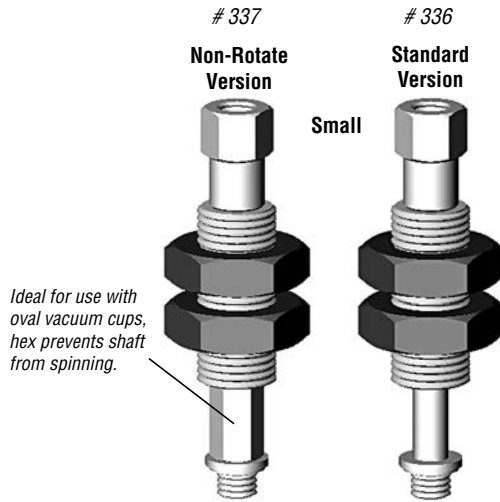
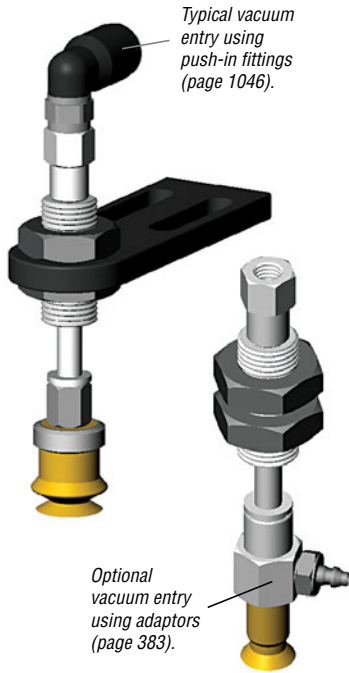
# SMC® – Spring Loaded Suspensions

(Shown Actual Size)

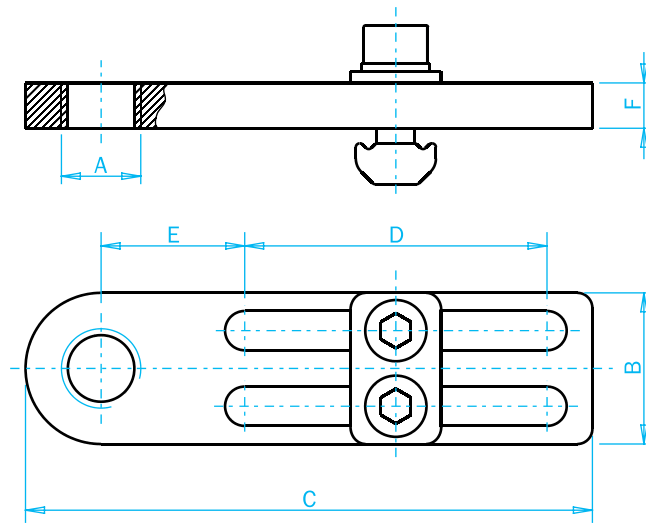
## Suspensions (with Internal Springs)

| Style      | Size   | Weight | Quick# | Part#         | Price   |
|------------|--------|--------|--------|---------------|---------|
| Standard   | Small  | 20g    | 336    | GSS-53-M10M5  | \$19.75 |
| Non-rotate |        | 20g    | 337    | GSS-53R-M10M5 | \$22.34 |
| Standard   | Large  | 68g    | 339    | GSS-88-M14M5  | \$18.39 |
| Non-rotate |        | 68g    | 340    | GSS-88R-M14M5 | \$28.69 |
| Standard   | Medium | 26g    | 2569   | GSS-80-M10M5  | \$23.64 |
| Non-rotate |        | 26g    | 2571   | GSS-80R-M10M5 | \$33.92 |
| Standard   | Long   | 32g    | 443    | GSS-99-M10M5  | \$24.68 |
| Non-rotate |        | 32g    | 1870   | GSS-99R-M10M5 | \$34.96 |

More SMC Suspensions on page 282.

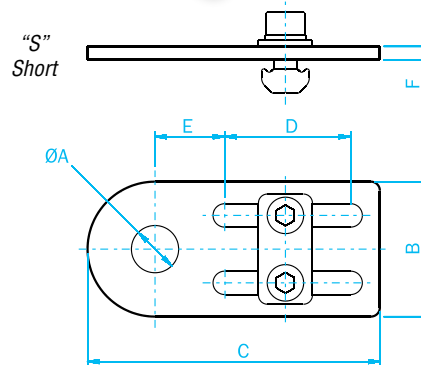
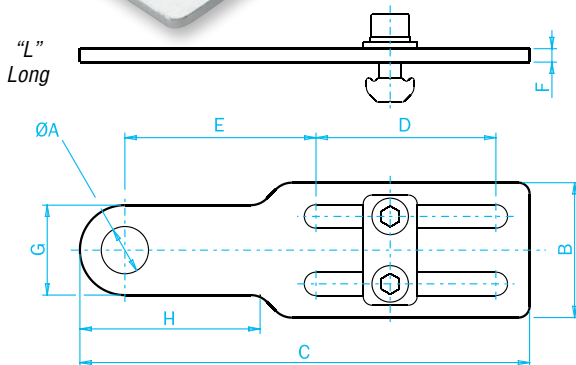
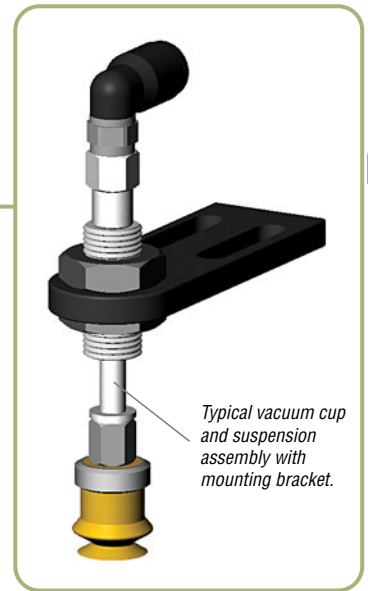


Mounting Brackets for SMC



Slotted Mounting Bracket (anodized aluminum)

| Quick# | Part#    | Price   | A     | Type  | B  | C   | D  | E    | F | Wt. |
|--------|----------|---------|-------|-------|----|-----|----|------|---|-----|
| 5668   | MFI-A106 | \$9.23  | M10x1 | Short | 20 | 75  | 40 | 19   | 6 | 30g |
| 5669   | MFI-A107 | \$10.13 | M10x1 | Long  | 25 | 105 | 60 | 26.5 | 6 | 40g |
| 5670   | MFI-A108 | \$9.22  | M14x1 | Short | 20 | 75  | 40 | 19   | 6 | 20g |
| 5671   | MFI-A109 | \$10.13 | M14x1 | Long  | 25 | 105 | 60 | 26.5 | 6 | 40g |



Slotted Mounting Bracket (economy version - steel)

| Quick# | Part#    | Price  | Type | ØA   | B  | C   | D  | E    | F | G  | H  | Wt. |
|--------|----------|--------|------|------|----|-----|----|------|---|----|----|-----|
| 5678   | MFI-A116 | \$8.26 | L    | 10.5 | 30 | 100 | 40 | 42.5 | 3 | 20 | 38 | 60g |
| 5680   | MFI-A118 | \$8.26 | L    | 14.5 | 30 | 100 | 40 | 42.5 | 3 | 24 | 38 | 60g |
| 5683   | MFI-A121 | \$7.68 | S    | 10.5 | 30 | 65  | 28 | 15.5 | 3 | -  | -  | 45g |
| 5685   | MFI-A123 | \$7.68 | S    | 14.5 | 30 | 65  | 28 | 15.5 | 3 | -  | -  | 45g |

More Sizes Available on page 245



Fittings Available on page 1043





# Gimatic® – Flat

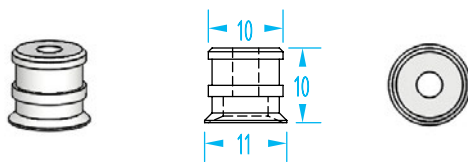
(Shown Actual Size)



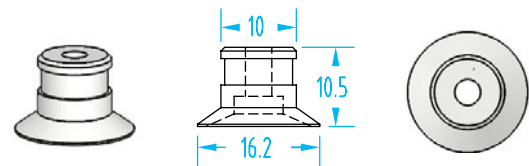
Gimatic Vacuum Cup Properties

| Material               | Color | Max Temp. | Durometer |
|------------------------|-------|-----------|-----------|
| FDA-Compliant Silicone | Clear | 392°F     | 50°       |
| Silicone               | Red   | 392°F     | 50°       |
| EPDM                   | Black | 212° F    | 50°       |
| HNBR                   | Blue  | 302° F    | 60°       |
| Natural Rubber         | Green | 176°F     | 53°       |

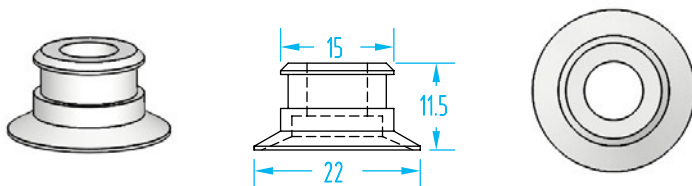
- Two styles: flat or with 1.5 bellows.
- Four materials: FDA-Compliant Silicone, EPDM, HNBR, & Natural Rubber.
- Non-marking HNBR material has a higher temperature range.
- Call EMI or visit our website for natural rubber cups.
- Diameters from 11mm to 53mm.
- See page 390 for nipple dimensions.



| Cup Ø  | Quick# | Part#       | Reference    | Price  |
|--------|--------|-------------|--------------|--------|
| 11mm   | 5785   | V0111S01    | FDA-SIL      | \$3.56 |
|        | 5786   | V0111E02    | EPDM         | \$2.59 |
|        | 2019   | V0111H04    | HNBR         | \$3.56 |
| Nipple | V1157  | GOC-2321408 | Female M5    | \$1.75 |
|        | V1159  | GOC-2321410 | Male M5      | \$1.75 |
|        | V1161  | GOC-2321412 | Female G1/8" | \$3.79 |
|        | V1163  | GOC-2321414 | Male G1/8"   | \$3.79 |



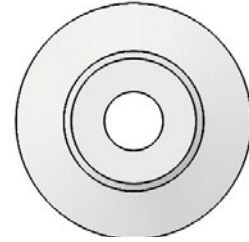
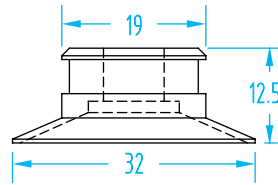
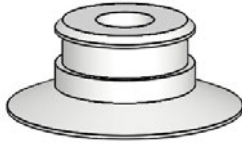
| Cup Ø  | Quick# | Part#       | Reference    | Price  |
|--------|--------|-------------|--------------|--------|
| 16mm   | 5788   | V0116S01    | FDA-SIL      | \$4.54 |
|        | 5789   | V0116E02    | EPDM         | \$2.59 |
|        | 2020   | V0116H04    | HNBR         | \$4.54 |
|        | V1157  | GOC-2321408 | Female M5    | \$1.75 |
| Nipple | V1159  | GOC-2321410 | Male M5      | \$1.75 |
|        | V1161  | GOC-2321412 | Female G1/8" | \$3.79 |
|        | V1163  | GOC-2321414 | Male G1/8"   | \$3.79 |



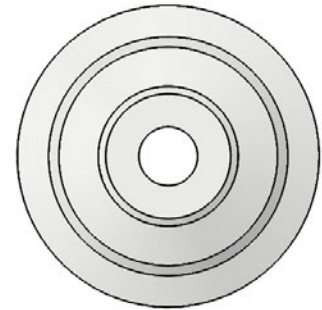
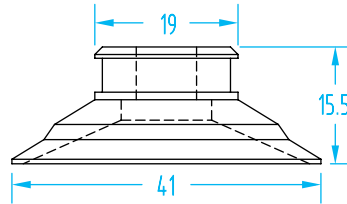
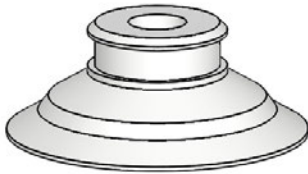
| Cup Ø  | Quick# | Part#       | Reference    | Price  |
|--------|--------|-------------|--------------|--------|
| 22mm   | 5791   | V0122S01    | FDA-SIL      | \$5.18 |
|        | 5792   | V0122E02    | EPDM         | \$3.56 |
|        | 2021   | V0122H04    | HNBR         | \$5.18 |
| Nipple | V1171  | GOC-2321422 | Female G1/8" | \$5.84 |
|        | V1173  | GOC-2321424 | Male G1/8"   | \$5.84 |
|        | V1175  | GOC-2321426 | Female G1/8" | \$5.84 |
|        | V1177  | GOC-2321428 | Male G1/8"   | \$5.84 |

**Gimatic® – Flat**

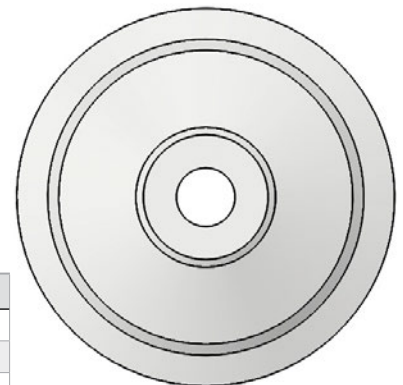
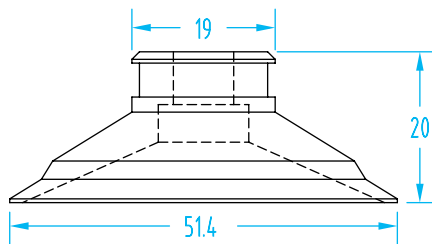
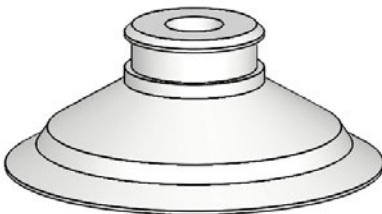
(Shown Actual Size)



| Cup Ø  | Quick# | Part#       | Reference    | Price  |
|--------|--------|-------------|--------------|--------|
| 33mm   | 5794   | V0133S01    | FDA-SIL      | \$5.83 |
|        | 5795   | V0133E02    | EPDM         | \$4.86 |
|        | 2022   | V0133H04    | HNBR         | \$5.83 |
| Nipple | V1171  | GOC-2321422 | Female G1/8" | \$5.84 |
|        | V1173  | GOC-2321424 | Male G1/8"   | \$5.84 |
|        | V1175  | GOC-2321426 | Female G1/8" | \$5.84 |
|        | V1177  | GOC-2321428 | Male G1/8"   | \$5.84 |
|        | V1179  | GOC-2321430 | Female G1/4" | \$6.43 |
|        | 5830   | AV0114M16   | Male G1/4"   | \$7.14 |



| Cup Ø  | Quick# | Part#       | Reference    | Price  |
|--------|--------|-------------|--------------|--------|
| 42mm   | 5797   | V0142S01    | FDA-SIL      | \$7.14 |
|        | 5798   | V0142E02    | EPDM         | \$4.86 |
|        | 2023   | V0142H04    | HNBR         | \$7.14 |
| Nipple | V1171  | GOC-2321422 | Female G1/8" | \$5.84 |
|        | V1173  | GOC-2321424 | Male G1/8"   | \$5.84 |
|        | V1175  | GOC-2321426 | Female G1/8" | \$5.84 |
|        | V1177  | GOC-2321428 | Male G1/8"   | \$5.84 |
|        | V1179  | GOC-2321430 | Female G1/4" | \$6.43 |
|        | 5830   | AV0114M16   | Male G1/4"   | \$7.14 |



| Cup Ø  | Quick# | Part#       | Reference    | Price  |
|--------|--------|-------------|--------------|--------|
| 53mm   | 5800   | V0153S01    | FDA-SIL      | \$8.11 |
|        | 5801   | V0153E02    | EPDM         | \$6.49 |
|        | 2024   | V0153H04    | HNBR         | \$8.11 |
| Nipple | V1171  | GOC-2321422 | Female G1/8" | \$5.84 |
|        | V1173  | GOC-2321424 | Male G1/8"   | \$5.84 |
|        | V1175  | GOC-2321426 | Female G1/8" | \$5.84 |
|        | V1177  | GOC-2321428 | Male G1/8"   | \$5.84 |
|        | V1179  | GOC-2321430 | Female G1/4" | \$6.43 |
|        | 5830   | AV0114M16   | Male G1/4"   | \$7.14 |

# Gimatic® – 1.5 Bellows

(Shown Actual Size)



Gimatic Vacuum Cup Properties

| Material               | Color | Max Temp. | Durometer |
|------------------------|-------|-----------|-----------|
| FDA-Compliant Silicone | Clear | 392°F     | 50°       |
| Silicone               | Red   | 392°F     | 50°       |
| EPDM                   | Black | 212° F    | 50°       |
| HNBR                   | Blue  | 302° F    | 60°       |
| Natural Rubber         | Green | 176° F    | 53°       |

See page 390 for nipple dimensions.

\* 11.2mm Compressed

| Cup Ø  | Quick# | Part#       | Reference    | Price  |
|--------|--------|-------------|--------------|--------|
| 11mm   | 5803   | V0211S01    | FDA-SIL      | \$4.54 |
|        | 5804   | V0211E02    | EPDM         | \$2.92 |
|        | 2025   | V0211H04    | HNBR         | \$4.54 |
| Nipple | V1157  | GOC-2321408 | Female M5    | \$1.75 |
|        | V1159  | GOC-2321410 | Male M5      | \$1.75 |
|        | V1161  | GOC-2321412 | Female G1/8" | \$3.79 |
|        | V1163  | GOC-2321414 | Male G1/8"   | \$3.79 |

\* 14mm Compressed

| Cup Ø | Quick# | Part#       | Reference    | Price     |
|-------|--------|-------------|--------------|-----------|
| 16mm  | 5806   | V0216S01    | FDA-SIL      | \$5.83    |
|       | 5807   | V0216E02    | EPDM         | \$3.56    |
|       | 2026   | V0216H04    | HNBR         | \$5.83    |
|       | Nipple | V1157       | GOC-2321408  | Female M5 |
| V1159 |        | GOC-2321410 | Male M5      | \$1.75    |
| V1161 |        | GOC-2321412 | Female G1/8" | \$3.79    |
| V1163 |        | GOC-2321414 | Male G1/8"   | \$3.79    |

\* 12mm Compressed

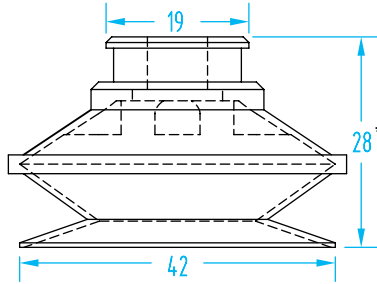
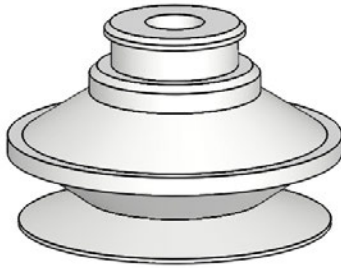
| Cup Ø  | Quick# | Part#       | Reference    | Price  |
|--------|--------|-------------|--------------|--------|
| 22mm   | 5809   | V0222S01    | FDA-SIL      | \$7.14 |
|        | 5810   | V0222E02    | EPDM         | \$3.89 |
|        | 2027   | V0222H04    | HNBR         | \$7.14 |
| Nipple | V1157  | GOC-2321408 | Female M5    | \$1.75 |
|        | V1159  | GOC-2321410 | Male M5      | \$1.75 |
|        | V1161  | GOC-2321412 | Female G1/8" | \$3.79 |
|        | V1163  | GOC-2321414 | Male G1/8"   | \$3.79 |

\* 15mm Compressed

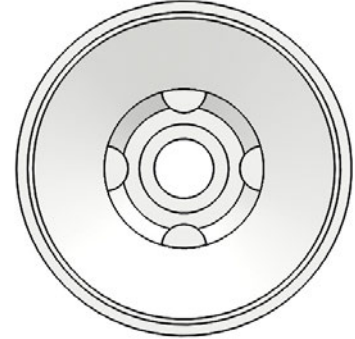
| Cup Ø  | Quick# | Part#       | Reference    | Price  |
|--------|--------|-------------|--------------|--------|
| 33mm   | 5812   | V0233S01    | FDA-SIL      | \$7.79 |
|        | 5813   | V0233E02    | EPDM         | \$5.51 |
|        | 2028   | V0233H04    | HNBR         | \$7.79 |
| Nipple | V1171  | GOC-2321422 | Female G1/8" | \$5.84 |
|        | V1173  | GOC-2321424 | Male G1/8"   | \$5.84 |
|        | V1175  | GOC-2321426 | Female G1/8" | \$5.84 |
|        | V1177  | GOC-2321428 | Male G1/8"   | \$5.84 |
|        | V1179  | GOC-2321430 | Female G1/4" | \$6.43 |
|        | 5830   | AV0114M16   | Male G1/4"   | \$7.14 |

**Gimatic® – 1.5 Bellows**

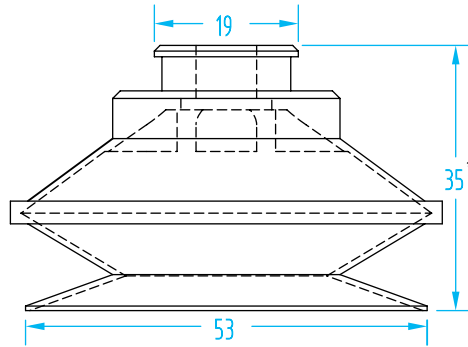
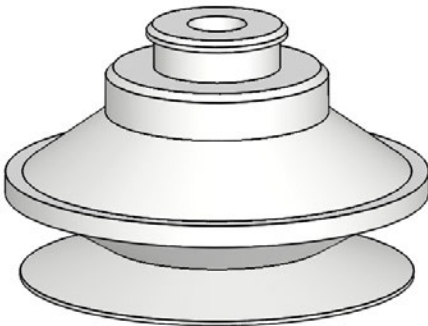
(Shown Actual Size)



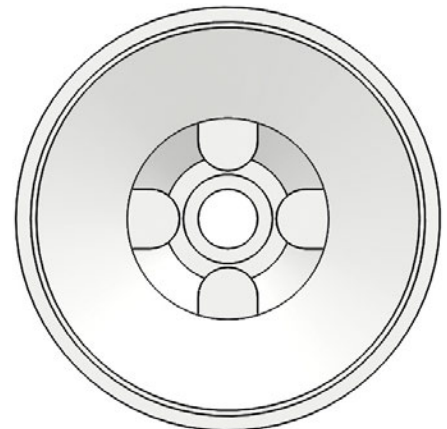
\* 14.5mm Compressed



| Cup Ø  | Quick# | Part#       | Reference    | Price  |
|--------|--------|-------------|--------------|--------|
| 42mm   | 5815   | V0242S01    | FDA-SIL      | \$8.44 |
|        | 5816   | V0242E02    | EPDM         | \$7.14 |
|        | 2029   | V0242H04    | HNBR         | \$8.44 |
| Nipple | V1171  | GOC-2321422 | Female G1/8" | \$5.84 |
|        | V1173  | GOC-2321424 | Male G1/8"   | \$5.84 |
|        | V1175  | GOC-2321426 | Female G1/8" | \$5.84 |
|        | V1177  | GOC-2321428 | Male G1/8"   | \$5.84 |
|        | V1179  | GOC-2321430 | Female G1/4" | \$6.43 |
|        | 5830   | AV0114M16   | Male G1/4"   | \$7.14 |



\* 17.8mm Compressed



| Cup Ø  | Quick# | Part#       | Reference    | Price   |
|--------|--------|-------------|--------------|---------|
| 53mm   | 5818   | V0253S01    | FDA-SIL      | \$10.06 |
|        | 5819   | V0253E02    | EPDM         | \$8.11  |
|        | 2030   | V0253H04    | HNBR         | \$10.06 |
| Nipple | V1171  | GOC-2321422 | Female G1/8" | \$5.84  |
|        | V1173  | GOC-2321424 | Male G1/8"   | \$5.84  |
|        | V1175  | GOC-2321426 | Female G1/8" | \$5.84  |
|        | V1177  | GOC-2321428 | Male G1/8"   | \$5.84  |
|        | V1179  | GOC-2321430 | Female G1/4" | \$6.43  |
|        | 5830   | AV0114M16   | Male G1/4"   | \$7.14  |

# Gimatic® – Nipples

(Shown Actual Size)

| Thread    | Quick# | Part#       | Price  |
|-----------|--------|-------------|--------|
| Female M5 | V1157  | GOC-2321408 | \$1.75 |
| Male M5   | V1159  | GOC-2321410 | \$1.75 |

**For:** Vacuum Cup Ø11mm–22mm from pages 386–388

| Thread       | Quick# | Part#       | Price  |
|--------------|--------|-------------|--------|
| Female G1/8" | V1161  | GOC-2321412 | \$3.79 |
| Male G1/8"   | V1163  | GOC-2321414 | \$3.79 |

**For:** Vacuum Cup Ø11mm–22mm from pages 386–388

| Thread       | Quick# | Part#       | Price  |
|--------------|--------|-------------|--------|
| Female G1/8" | V1171  | GOC-2321422 | \$5.84 |
| Male G1/8"   | V1173  | GOC-2321424 | \$5.84 |

**For:** Vacuum Cup Ø22–53mm from pages 386–389

| Thread       | Quick# | Part#       | Price  |
|--------------|--------|-------------|--------|
| Female G1/8" | V1175  | GOC-2321426 | \$5.84 |
| Male G1/8"   | V1177  | GOC-2321428 | \$5.84 |

**For:** Vacuum Cup Ø22–53mm from pages 386–389

| Material     | Quick# | Part#       | Price  |
|--------------|--------|-------------|--------|
| Female G1/4" | V1179  | GOC-2321430 | \$6.43 |
| Male G1/4"   | 5830   | AV0114M16   | \$7.14 |

**For:** Vacuum Cup Ø33mm–53mm from pages 386–389

**Long Neck Silicone**

(Shown Actual Size)



These elastic long-neck vacuum cups have a dedicated following of users. The long neck extends the reach of the cup beyond the congestion of the fitting, suspension, and tubing. The neck is slightly more flexible than standard flat cups.

Long Neck Extra Elastic Vacuum Cup Properties

| Material | Color                  | Max Temp. | Durometer |
|----------|------------------------|-----------|-----------|
| Silicone | Semi-translucent white | 392°F     | 40°       |

| Quick#        | Part#       | Pad øD  | OAL | Price   |
|---------------|-------------|---------|-----|---------|
| 444           | GSV-LES-6   | 6mm     | 12  | \$11.55 |
| <b>Nipple</b> |             |         |     |         |
| 445           | GSF-N24-M5M | Male M5 |     | \$8.23  |

| Quick#        | Part#       | Pad øD  | OAL | Price  |
|---------------|-------------|---------|-----|--------|
| 446           | GSV-LES-10  | 10mm    | 13  | \$6.35 |
| <b>Nipple</b> |             |         |     |        |
| 447           | GSF-N25-M5M | Male M5 |     | \$8.23 |

| Quick#        | Part#       | Pad øD  | OAL | Price   |
|---------------|-------------|---------|-----|---------|
| 448           | GSV-LES-16  | 16mm    | 20  | \$12.56 |
| <b>Nipple</b> |             |         |     |         |
| 449           | GSF-N26-M5M | Male M5 |     | \$8.23  |

| Quick#        | Part#       | Pad øD     | OAL | Price   |
|---------------|-------------|------------|-----|---------|
| 450           | GSV-LES-25  | 25mm       | 30  | \$13.68 |
| <b>Nipple</b> |             |            |     |         |
| 451           | GSF-N27-G8M | Male G1/8" |     | \$8.23  |

# One-Nipple-Size-Fits-All

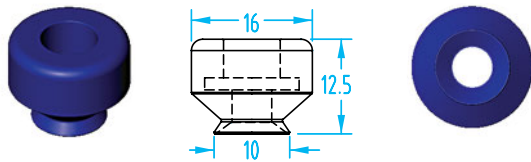
(Shown Actual Size)



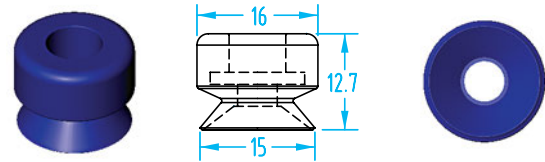
**One nipple size, five thread options.  
All vacuum cups on these two pages use the same nipple size!**

One-Nipple-Size-Fits-All Vacuum Cup Properties

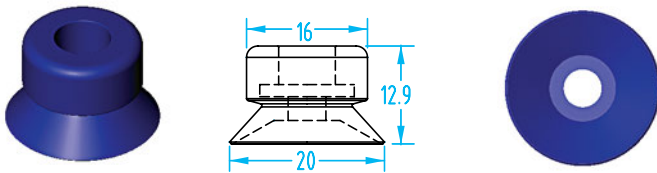
| Material | Color                  | Max Temp. | Durometer |
|----------|------------------------|-----------|-----------|
| Silicone | Semi-translucent white | 392°F     | 50°       |
| HNBR     | Blue                   | 320°F     | 60°       |



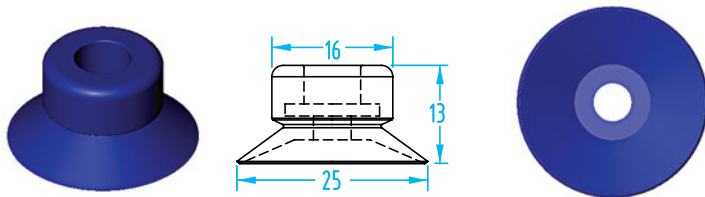
| Cup Ø | Material | Quick# | Part#     | Price  |
|-------|----------|--------|-----------|--------|
| 10mm  | Silicone | 345    | GSV-FS-10 | \$4.00 |
|       | HNBR     | 1550   | GSV-FP-10 | \$7.40 |



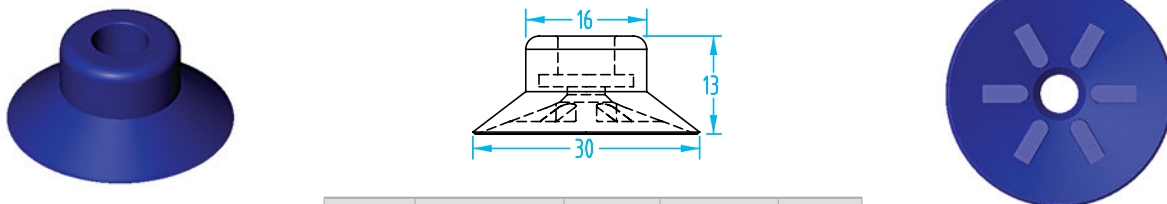
| Cup Ø | Material | Quick# | Part#     | Price  |
|-------|----------|--------|-----------|--------|
| 15mm  | Silicone | 346    | GSV-FS-15 | \$4.20 |
|       | HNBR     | 1551   | GSV-FP-15 | \$7.90 |



| Cup Ø | Material | Quick# | Part#     | Price  |
|-------|----------|--------|-----------|--------|
| 20mm  | Silicone | 347    | GSV-FS-20 | \$4.50 |
|       | HNBR     | 1552   | GSV-FP-20 | \$8.20 |



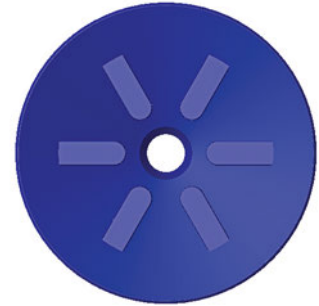
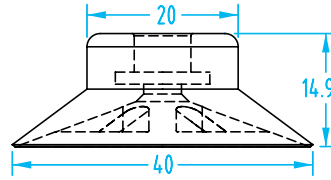
| Cup Ø | Material | Quick# | Part#     | Price  |
|-------|----------|--------|-----------|--------|
| 25mm  | Silicone | 348    | GSV-FS-25 | \$4.70 |
|       | HNBR     | 1553   | GSV-FP-25 | \$8.40 |



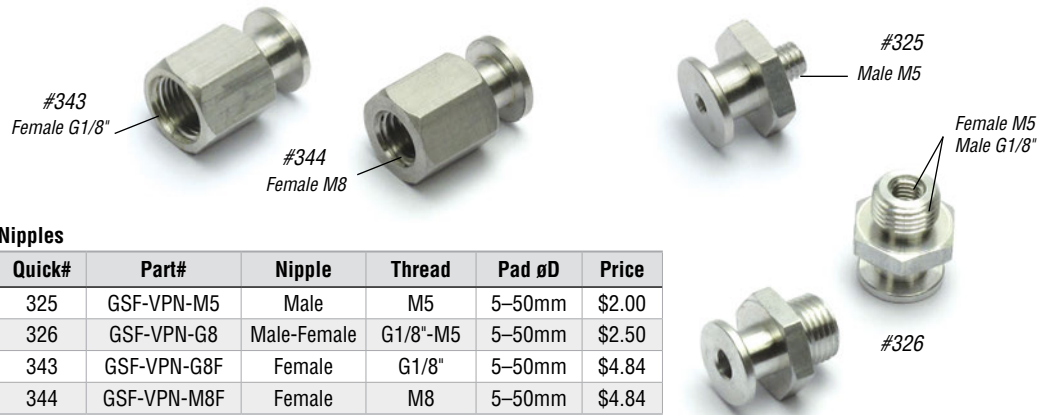
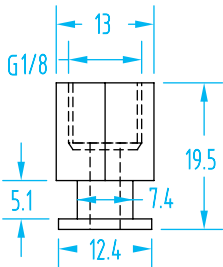
| Cup Ø | Material | Quick# | Part#     | Price  |
|-------|----------|--------|-----------|--------|
| 30mm  | Silicone | 349    | GSV-FS-30 | \$5.00 |
|       | HNBR     | 1554   | GSV-FP-30 | \$8.90 |

**One-Nipple-Size-Fits-All**

(Shown Actual Size)



| Cup Ø | Material | Quick# | Part#     | Price   |
|-------|----------|--------|-----------|---------|
| 40mm  | Silicone | 350    | GSV-FS-40 | \$5.90  |
|       | HNBR     | 1555   | GSV-FP-40 | \$11.10 |



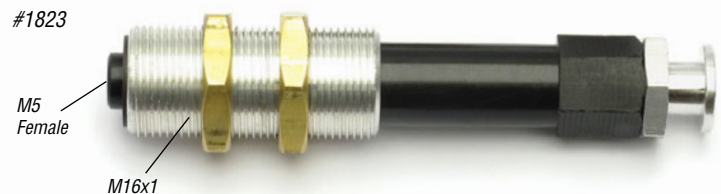
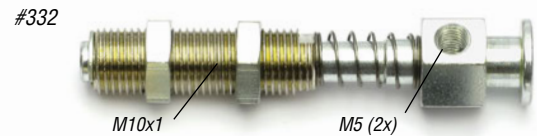
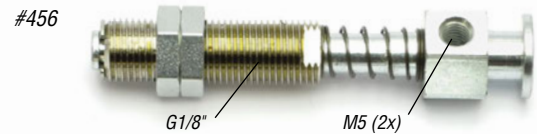
**Nipples**

| Quick# | Part#       | Nipple      | Thread   | Pad øD | Price  |
|--------|-------------|-------------|----------|--------|--------|
| 325    | GSF-VPN-M5  | Male        | M5       | 5-50mm | \$2.00 |
| 326    | GSF-VPN-G8  | Male-Female | G1/8"-M5 | 5-50mm | \$2.50 |
| 343    | GSF-VPN-G8F | Female      | G1/8"    | 5-50mm | \$4.84 |
| 344    | GSF-VPN-M8F | Female      | M8       | 5-50mm | \$4.84 |

**All vacuum cups on these two pages fit these integrated nipple suspensions.**

**Suspensions**

| Quick# | Part#         | Stroke | Weight | Price   |
|--------|---------------|--------|--------|---------|
| 332    | GSS-65N-M10M5 | 10mm   | 41g    | \$21.00 |
| 456    | GSS-65N-G8M5  | 10mm   | 39g    | \$21.00 |
| 1823   | GSS-75L-M16N  | 20mm   | 20g    | \$25.30 |





# One-Nipple-Size-Fits-All

(Shown Actual Size)

**One nipple size, five thread options.  
All vacuum cups on these two pages use the same nipple size!**



One-Nipple-Size-Fits-All Vacuum Cup Properties

| Material | Color                  | Max Temp. | Durometer |
|----------|------------------------|-----------|-----------|
| Silicone | Semi-translucent white | 392°F     | 50°       |
| HNBR     | Blue                   | 320°F     | 60°       |

These cups are also available with a foam sealing surface for textured parts, see page 407.

\* 10mm Compressed

| Cup Ø | Material | Quick# | Part#     | Price  |
|-------|----------|--------|-----------|--------|
| 10mm  | Silicone | 353    | GSV-BS-10 | \$6.40 |
|       | HNBR     | 1558   | GSV-BP-10 | \$9.70 |

\* 10mm Compressed

| Cup Ø | Material | Quick# | Part#     | Price   |
|-------|----------|--------|-----------|---------|
| 15mm  | Silicone | 354    | GSV-BS-15 | \$7.40  |
|       | HNBR     | 1559   | GSV-BP-15 | \$10.40 |

\* 10mm Compressed

| Cup Ø | Material | Quick# | Part#     | Price   |
|-------|----------|--------|-----------|---------|
| 20mm  | Silicone | 355    | GSV-BS-20 | \$8.70  |
|       | HNBR     | 1560   | GSV-BP-20 | \$10.70 |

\* 10mm Compressed

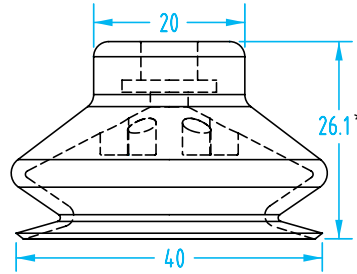
| Cup Ø | Material | Quick# | Part#     | Price   |
|-------|----------|--------|-----------|---------|
| 25mm  | Silicone | 356    | GSV-BS-25 | \$9.20  |
|       | HNBR     | 1561   | GSV-BP-25 | \$14.10 |

\* 16mm Compressed

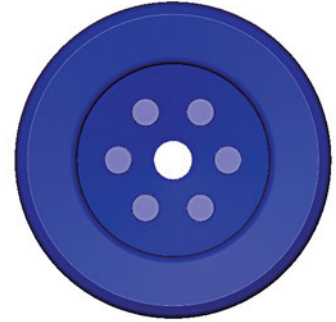
| Cup Ø | Material | Quick# | Part#     | Price   |
|-------|----------|--------|-----------|---------|
| 30mm  | Silicone | 357    | GSV-BS-30 | \$9.90  |
|       | HNBR     | 1562   | GSV-BP-30 | \$19.30 |

**One-Nipple-Size-Fits-All**

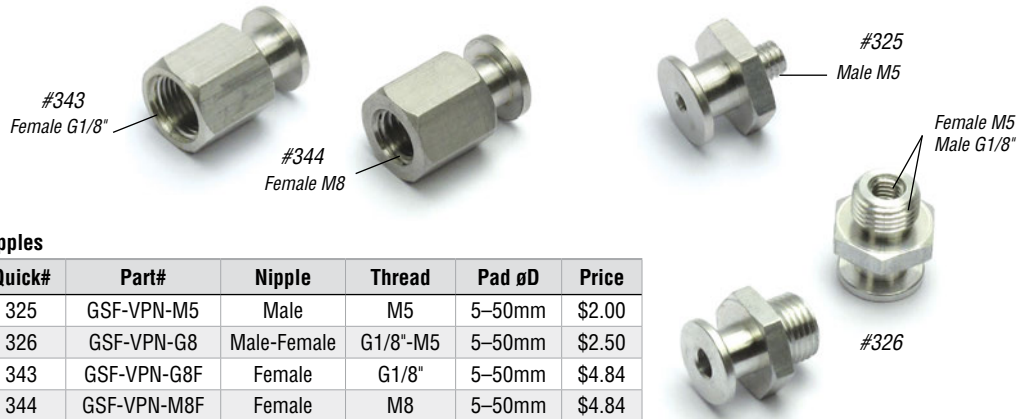
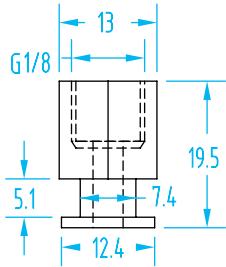
(Shown Actual Size)



\* 19mm Compressed



| Cup Ø | Material | Quick# | Part#     | Price   |
|-------|----------|--------|-----------|---------|
| 40mm  | Silicone | 358    | GSV-BS-40 | \$10.70 |
|       | HNBR     | 1563   | GSV-BP-40 | \$23.00 |



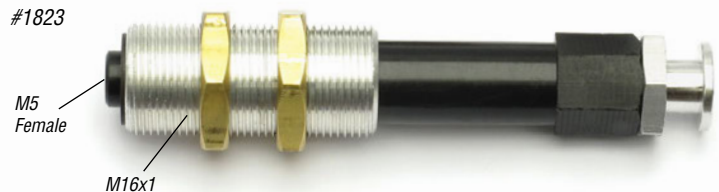
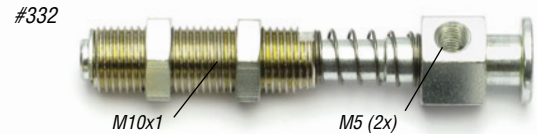
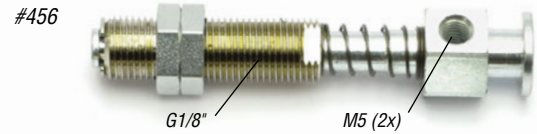
**Nipples**

| Quick# | Part#       | Nipple      | Thread   | Pad øD | Price  |
|--------|-------------|-------------|----------|--------|--------|
| 325    | GSF-VPN-M5  | Male        | M5       | 5-50mm | \$2.00 |
| 326    | GSF-VPN-G8  | Male-Female | G1/8"-M5 | 5-50mm | \$2.50 |
| 343    | GSF-VPN-G8F | Female      | G1/8"    | 5-50mm | \$4.84 |
| 344    | GSF-VPN-M8F | Female      | M8       | 5-50mm | \$4.84 |

**All vacuum cups on these two pages fit these integrated nipple suspensions.**

**Suspensions**

| Quick# | Part#         | Stroke | Weight | Price   |
|--------|---------------|--------|--------|---------|
| 332    | GSS-65N-M10M5 | 10mm   | 41g    | \$21.00 |
| 456    | GSS-65N-G8M5  | 10mm   | 39g    | \$21.00 |
| 1823   | GSS-75L-M16N  | 20mm   | 20g    | \$25.30 |



# Apex® – One-Nipple-Size-Fits-All

(Shown Actual Size)



Vacuum Cup Properties

| Material | Color                  | Max Temp. | Durometer |
|----------|------------------------|-----------|-----------|
| Silicone | Semi-translucent white | 392°F     | 50°       |

| Quick# | Part#       | Pad øD | Price  |
|--------|-------------|--------|--------|
| 1885   | GSV-FSAX-10 | 10mm   | \$3.13 |

| Quick# | Part#       | Pad øD | Price  |
|--------|-------------|--------|--------|
| 1886   | GSV-FSAX-15 | 15mm   | \$3.13 |

| Quick# | Part#       | Pad øD | Price  |
|--------|-------------|--------|--------|
| 1887   | GSV-FSAX-20 | 20mm   | \$3.13 |

| Quick# | Part#       | Pad øD | Price  |
|--------|-------------|--------|--------|
| 1888   | GSV-FSAX-25 | 25mm   | \$3.13 |

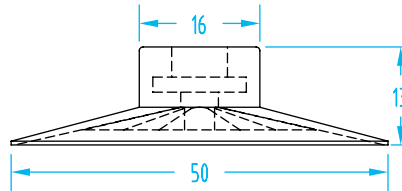
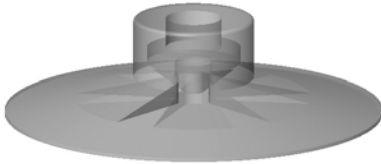
| Quick# | Part#       | Pad øD | Price  |
|--------|-------------|--------|--------|
| 1889   | GSV-FSAX-30 | 30mm   | \$3.67 |

| Quick# | Part#       | Pad øD | Price  |
|--------|-------------|--------|--------|
| 1890   | GSV-FSAX-40 | 40mm   | \$3.67 |

**Apex – One-Nipple-Size-Fits-All**

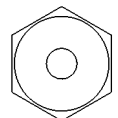
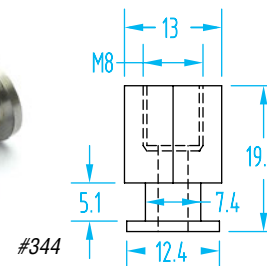
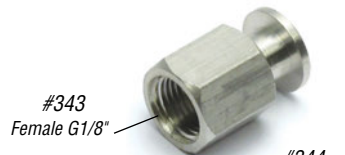
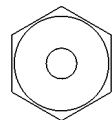
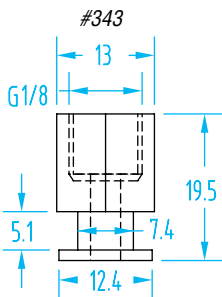
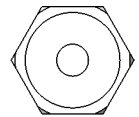
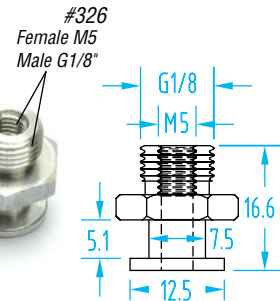
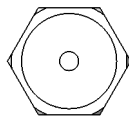
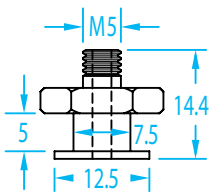
(Shown Actual Size)

Use Quick#s for easy online ordering.



| Quick# | Part#       | Pad øD | Price  |
|--------|-------------|--------|--------|
| 1891   | GSV-FSAX-50 | 50mm   | \$4.20 |

**One nipple size, five thread options.  
All vacuum cups on these two pages use the same nipple size!**



**Nipples**

| Quick# | Part#       | Nipple      | Thread   | Pad øD | Price  |
|--------|-------------|-------------|----------|--------|--------|
| 325    | GSF-VPN-M5  | Male        | M5       | 5-50mm | \$2.00 |
| 326    | GSF-VPN-G8  | Male-Female | G1/8"-M5 | 5-50mm | \$2.50 |
| 343    | GSF-VPN-G8F | Female      | G1/8"    | 5-50mm | \$4.84 |
| 344    | GSF-VPN-M8F | Female      | M8       | 5-50mm | \$4.84 |

Fittings Available  
on page 1043



All vacuum cups on these two pages fit the integrated nipple suspensions on page 399.

# Apex® – One-Nipple-Size-Fits-All

(Shown Actual Size)



Apex Vacuum Cup Properties

| Material | Color                  | Max Temp. | Durometer |
|----------|------------------------|-----------|-----------|
| Silicone | Semi-translucent white | 392°F     | 50°       |

Nipples available on page 397.

| Pad øD | Part#       | Quick# | Price  |
|--------|-------------|--------|--------|
| 5mm    | GSV-BSAX-05 | 1892   | \$4.20 |

| Pad øD | Part#       | Quick# | Price  |
|--------|-------------|--------|--------|
| 10mm   | GSV-BSAX-10 | 1893   | \$4.20 |

| Pad øD | Part#       | Quick# | Price  |
|--------|-------------|--------|--------|
| 15mm   | GSV-BSAX-15 | 1894   | \$4.20 |

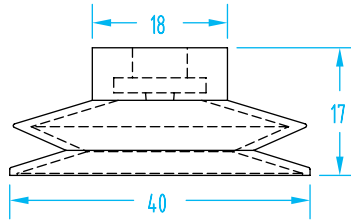
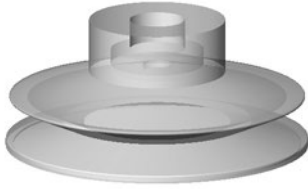
| Pad øD | Part#       | Quick# | Price  |
|--------|-------------|--------|--------|
| 20mm   | GSV-BSAX-20 | 1895   | \$5.27 |

| Pad øD | Part#       | Quick# | Price  |
|--------|-------------|--------|--------|
| 25mm   | GSV-BSAX-25 | 1896   | \$5.27 |

| Pad øD | Part#       | Quick# | Price  |
|--------|-------------|--------|--------|
| 30mm   | GSV-BSAX-30 | 1897   | \$6.33 |

**Apex – One-Nipple-Size-Fits-All**

(Shown Actual Size)



| Pad øD | Part#       | Quick# | Price  |
|--------|-------------|--------|--------|
| 40mm   | GSV-BSAX-40 | 1898   | \$6.33 |

**One nipple size, five thread options.**  
**All vacuum cups on these two pages use the same nipple size, see page 397**

**All vacuum cups on these two pages fit these integrated nipple suspensions.**

Fittings Available  
 on page 1043



**Suspensions**

| Quick# | Part#         | Stroke | Weight | Price   |
|--------|---------------|--------|--------|---------|
| 332    | GSS-65N-M10M5 | 10mm   | 41g    | \$21.00 |
| 456    | GSS-65N-G8M5  | 10mm   | 39g    | \$21.00 |
| 1823   | GSS-75L-M16N  | 20mm   | 20g    | \$25.30 |
| 333    | GSS-60-G8M5   | 20mm   | 19g    | \$36.00 |

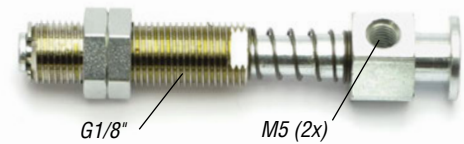
Elbow fitting  
 #120 (p.1048)

Integrated nipple  
 suspension #332

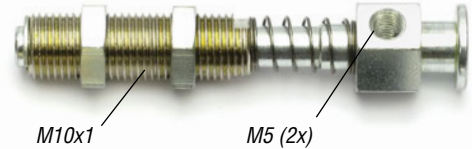
Vacuum  
 pad #355

Plug #238  
 (page 1068)

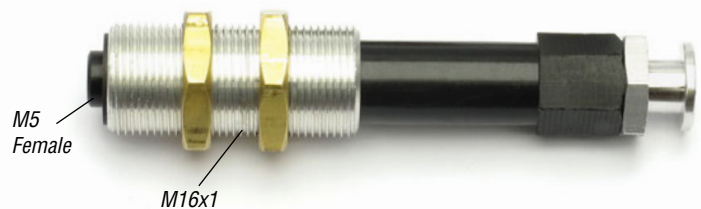
#456



#332



#1823



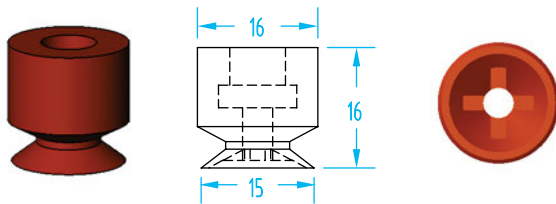
# Star® Vacuum Cups



This family of vacuum cups offer the compatibility of integrated nipple suspensions and threaded stem nipples that fit lightweight air cylinders on page 752. Also, the molded quality is outstanding. The flat cup design allows for fast vacuum build-up and release time, resulting in faster cycles.

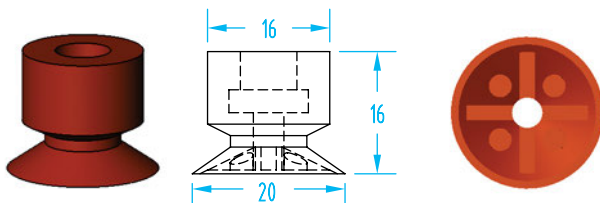
Star Vacuum Cup Properties

| Material | Color | Max Temp. | Durometer |
|----------|-------|-----------|-----------|
| Silicone | Brown | 482°F     | 50°       |
| Fluorine | Black | 446°F     | 65°       |



Cross Recessed (Suitable for plastic film, foil & paper)

| Cup Ø | Material | Quick# | Part#         | Nipple Size | Price  |
|-------|----------|--------|---------------|-------------|--------|
| 15mm  | Silicone | 1691   | GSV-VAPH-15C1 | Small       | \$8.05 |

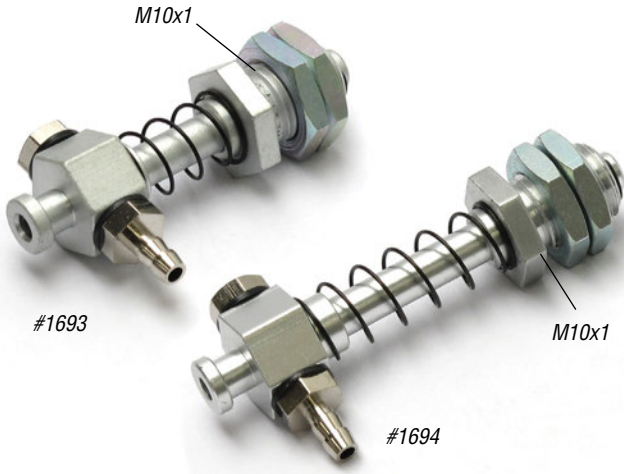


| Cup Ø | Material | Quick# | Part#         | Nipple Size | Price  |
|-------|----------|--------|---------------|-------------|--------|
| 20mm  | Silicone | 1692   | GSV-VAPH-20C1 | Small       | \$8.95 |

**Star® – Nipples and Suspensions**

(Shown Actual Size)

**“Mini” Suspensions**



See EMIcorp.com for dimensional drawings

**“Small” Suspensions**

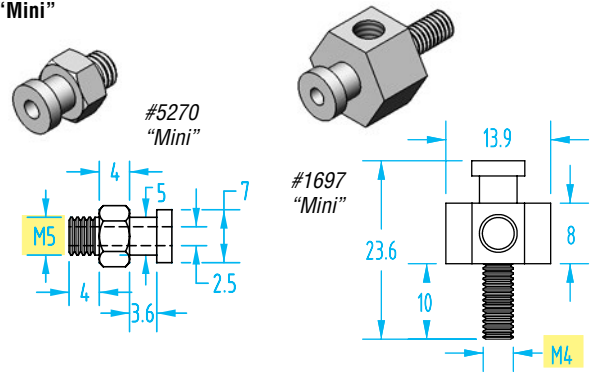


**Lightweight Aluminum Suspensions**

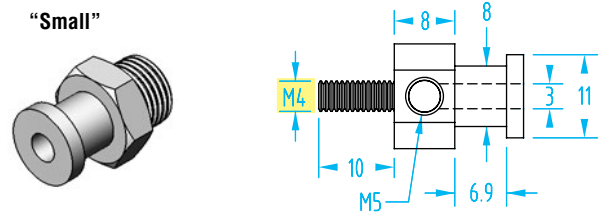
| Quick# | Part#         | Size  | Stroke | Weight | Price   |
|--------|---------------|-------|--------|--------|---------|
| 5399   | GSV-VFIL-SS-5 | Mini  | 5mm    | 14g    | \$14.60 |
| 1693   | GSV-VFIL-SS10 | Mini  | 10mm   | 14g    | \$14.64 |
| 1694   | GSV-VFIL-SS20 | Mini  | 20mm   | 16g    | \$15.65 |
| 5275   | GSV-VFIL-SS30 | Mini  | 30mm   | 20g    | \$14.75 |
| 5500   | GSV-VFIL-S    | Small | 5mm    | 20g    | \$12.23 |
| 1695   | GSV-VFIL-S10  | Small | 10mm   | 20g    | \$16.04 |
| 1696   | GSV-VFIL-S20  | Small | 20mm   | 24g    | \$13.97 |
| 5276   | GSV-VFIL-S30  | Small | 30mm   | 30g    | \$15.65 |

See EMIcorp.com for dimensional drawings

**“Mini”**

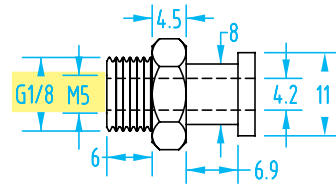


**“Small”**



#5271  
“Small”

#1698  
“Small”



**Threaded Stem Nipples**

| Quick# | Part#         | Size  | Price  | Thread   | Wt. |
|--------|---------------|-------|--------|----------|-----|
| 1697   | GSV-CP-063    | Mini  | \$8.39 | M4 Male  | 8g  |
| 5270   | GSV-CP-063-M5 | Mini  | \$4.51 | M5 Male  | 3g  |
| 1698   | GSV-CP-064    | Small | \$8.39 | M4 Male  | 10g |
| 5271   | GSV-CP-064-G8 | Small | \$5.80 | G1/8”-M5 | 4g  |



#1700



#1704

**Extension Mounts for Suspensions**

| Quick# | Part#        | Size  | Threaded Extension | Thread | Price  |
|--------|--------------|-------|--------------------|--------|--------|
| 1701   | GSV-CP-023AL | Mini  | 20mm               | M10x1  | \$7.55 |
| 1702   | GSV-CP-024AL | Mini  | 40mm               | M10x1  | \$6.29 |
| 1699   | GSV-CP-021AL | Small | 20mm               | M12x1  | \$7.55 |
| 1700   | GSV-CP-022AL | Small | 40mm               | M12x1  | \$9.29 |

**Lock nuts for extension mounts (order separately 2@)**

|      |            |       |  |       |        |
|------|------------|-------|--|-------|--------|
| 1704 | GSV-M10nut | Mini  |  | M10x1 | \$0.37 |
| 1703 | GSV-M12nut | Small |  | M12x1 | \$0.37 |



Star® – Flat

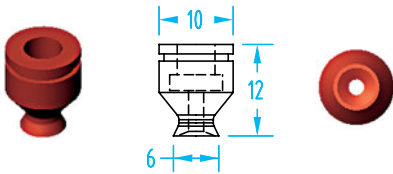
(Shown Actual Size)



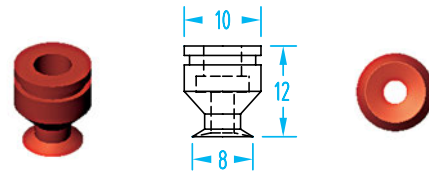
Star Vacuum Cup Properties

| Material | Color | Max Temp. | Durometer |
|----------|-------|-----------|-----------|
| Silicone | Brown | 482°F     | 50°       |
| Fluorine | Black | 446°F     | 65°       |

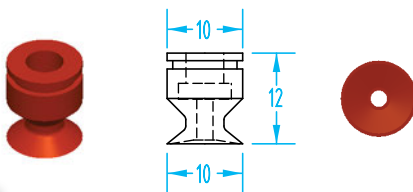
Order nipples separately, see page 401.



| Cup Ø | Material | Quick# | Part#       | Nipple Size | Price   |
|-------|----------|--------|-------------|-------------|---------|
| 6mm   | Silicone | 1674   | GSV-VAPH-6C | Mini        | \$3.21  |
|       | Fluorine | 5228   | GSV-VAPF-6C | Mini        | \$15.74 |

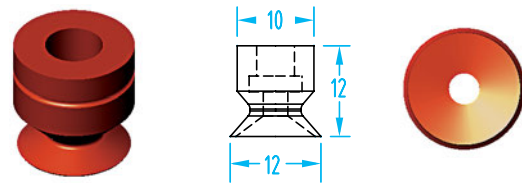


| Cup Ø | Material | Quick# | Part#       | Nipple Size | Price   |
|-------|----------|--------|-------------|-------------|---------|
| 8mm   | Silicone | 1675   | GSV-VAPH-8C | Mini        | \$3.42  |
|       | Fluorine | 5229   | GSV-VAPF-8C | Mini        | \$15.74 |

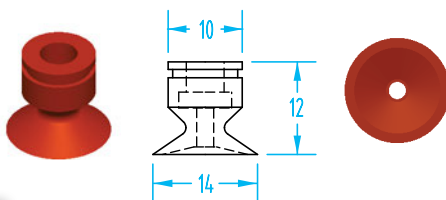


**NEW**

| Cup Ø | Material | Quick# | Part#        | Nipple Size | Price  |
|-------|----------|--------|--------------|-------------|--------|
| 10mm  | Silicone | 1676   | GSV-VAPH-10C | Mini        | \$3.95 |

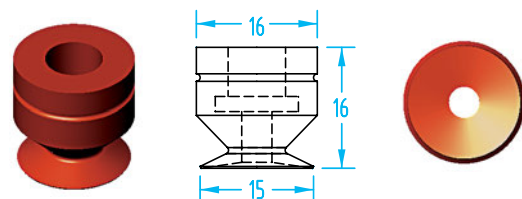


| Cup Ø | Material | Quick# | Part#        | Nipple Size | Price   |
|-------|----------|--------|--------------|-------------|---------|
| 12mm  | Silicone | 1677   | GSV-VAPH-12C | Mini        | \$4.74  |
|       | Fluorine | 5230   | GSV-VAPF-12C | Mini        | \$17.71 |



**NEW**

| Cup Ø | Material | Quick# | Part#        | Nipple Size | Price  |
|-------|----------|--------|--------------|-------------|--------|
| 14mm  | Silicone | 1678   | GSV-VAPH-14C | Mini        | \$4.89 |



| Cup Ø | Material | Quick# | Part#        | Nipple Size | Price   |
|-------|----------|--------|--------------|-------------|---------|
| 15mm  | Silicone | 1984   | GSV-VAPH-15C | Small       | \$5.05  |
|       | Fluorine | 5231   | GSV-VAPF-15C | Small       | \$19.68 |

**Star® – Flat**

(Shown Actual Size)

| Cup Ø | Material | Quick# | Part#        | Nipple Size | Price   |
|-------|----------|--------|--------------|-------------|---------|
| 20mm  | Silicone | 1679   | GSV-VAPH-20C | Small       | \$5.21  |
|       | Fluorine | 5232   | GSV-VAPF-20C | Small       | \$19.68 |

| Cup Ø | Material | Quick# | Part#        | Nipple Size | Price  |
|-------|----------|--------|--------------|-------------|--------|
| 25mm  | Silicone | 1680   | GSV-VAPH-25C | Small       | \$6.58 |

| Cup Ø | Material | Quick# | Part#        | Nipple Size | Price   |
|-------|----------|--------|--------------|-------------|---------|
| 30mm  | Silicone | 1681   | GSV-VAPH-30C | Small       | \$5.97  |
|       | Fluorine | 5233   | GSV-VAPF-30C | Small       | \$19.68 |

| Cup Ø | Material | Quick# | Part#        | Nipple Size | Price  |
|-------|----------|--------|--------------|-------------|--------|
| 35mm  | Silicone | 1682   | GSV-VAPH-35C | Small       | \$8.21 |

| Cup Ø | Material | Quick# | Part#        | Nipple Size | Price   |
|-------|----------|--------|--------------|-------------|---------|
| 40mm  | Silicone | 1683   | GSV-VAPH-40C | Small       | \$9.24  |
|       | Fluorine | 5234   | GSV-VAPF-40C | Small       | \$26.84 |

| Cup Ø | Material | Quick# | Part#        | Nipple Size | Price  |
|-------|----------|--------|--------------|-------------|--------|
| 45mm  | Silicone | 1684   | GSV-VAPH-45C | Small       | \$9.84 |

# Star® – 2.5 Bellows

(Shown Actual Size)



Order nipples separately, see page 401.



\* 13mm Compressed

| Cup Ø | Material | Quick# | Part#         | Nipple Size | Price   |
|-------|----------|--------|---------------|-------------|---------|
| 12mm  | Silicone | 1685   | GSV-VAPH-12C2 | Mini        | \$8.05  |
|       | Fluorine | 1687   | GSV-VAPF-12C2 | Mini        | \$19.68 |

\* 18mm Compressed

| Cup Ø | Material | Quick# | Part#         | Nipple Size | Price   |
|-------|----------|--------|---------------|-------------|---------|
| 20mm  | Silicone | 1686   | GSV-VAPH-20C2 | Small       | \$8.89  |
|       | Fluorine | 1688   | GSV-VAPF-20C2 | Small       | \$26.84 |

\* 13mm Compressed

| Cup Ø | Material | Quick# | Part#     | Nipple Size | Price   |
|-------|----------|--------|-----------|-------------|---------|
| 6mm   | Silicone | 5169   | TR-1062-1 | Small       | \$13.61 |

\* 13mm Compressed

| Cup Ø | Material | Quick# | Part#     | Nipple Size | Price   |
|-------|----------|--------|-----------|-------------|---------|
| 8mm   | Silicone | 5170   | TR-1062-2 | Small       | \$13.61 |

\* 13mm Compressed

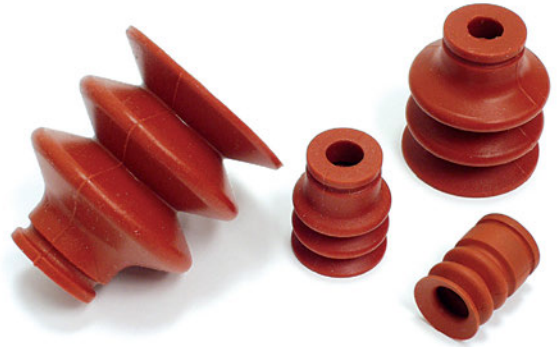
| Cup Ø | Material | Quick# | Part#     | Nipple Size | Price   |
|-------|----------|--------|-----------|-------------|---------|
| 10mm  | Silicone | 5171   | TR-1062-3 | Small       | \$13.61 |

\* 13mm Compressed

| Cup Ø | Material | Quick# | Part#     | Nipple Size | Price   |
|-------|----------|--------|-----------|-------------|---------|
| 12mm  | Silicone | 5172   | TR-1062-4 | Small       | \$13.61 |

**Star® – 2.5 Bellows**

(Shown Actual Size)



Star Vacuum Cup Properties

| Material | Color | Max Temp. | Durometer |
|----------|-------|-----------|-----------|
| Silicone | Brown | 482°F     | 50°       |
| Fluorine | Black | 446°F     | 65°       |

\* 14mm Compressed

| Cup Ø | Material | Quick# | Part#      | Nipple Size | Price  |
|-------|----------|--------|------------|-------------|--------|
| 15mm  | Silicone | 5158   | VAPH-15C-3 | Small       | \$5.40 |

\* 15mm Compressed

| Cup Ø | Material | Quick# | Part#      | Nipple Size | Price  |
|-------|----------|--------|------------|-------------|--------|
| 20mm  | Silicone | 5159   | VAPH-20C-3 | Small       | \$9.32 |

\* 20mm Compressed

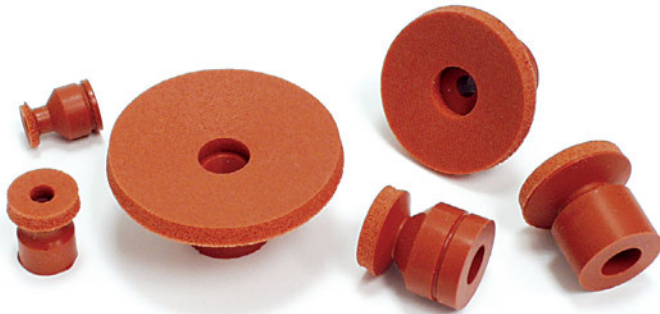
| Cup Ø | Material | Quick# | Part#      | Nipple Size | Price   |
|-------|----------|--------|------------|-------------|---------|
| 30mm  | Silicone | 5160   | VAPH-30C-3 | Small       | \$13.26 |

\* 27mm Compressed

| Cup Ø | Material | Quick# | Part#      | Nipple Size | Price   |
|-------|----------|--------|------------|-------------|---------|
| 40mm  | Silicone | 5161   | VAPH-40C-3 | Small       | \$19.68 |

# Foam Surface – Flat

(Shown Actual Size)

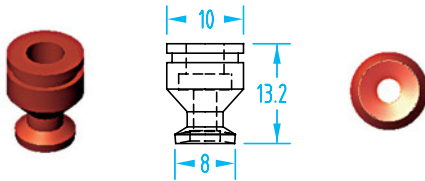


Star Foam Vacuum Cup Properties

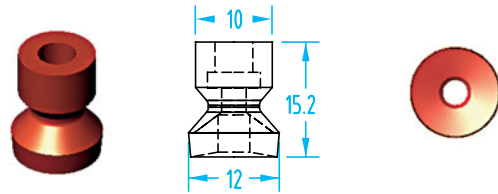
| Material | Color | Max Temp. | Durometer |
|----------|-------|-----------|-----------|
| Silicone | Brown | 482°F     | 40°       |

Order nipples separately, see page 401.

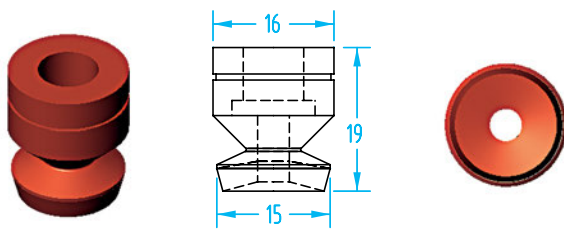
More foam cups can be found on page 368.



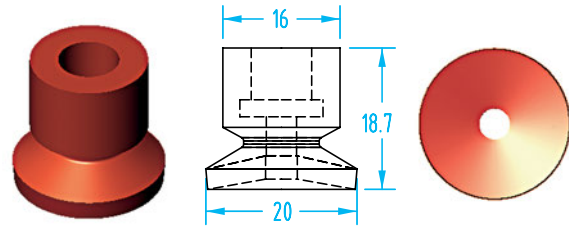
| Cup Ø | Material | Quick# | Part#      | Nipple Size | Price   |
|-------|----------|--------|------------|-------------|---------|
| 8mm   | Silicone | 5162   | VAPH-8C-SP | Mini        | \$11.63 |



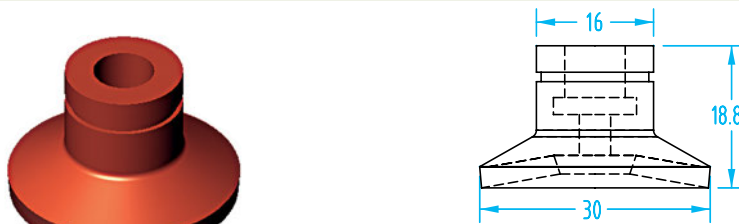
| Cup Ø | Material | Quick# | Part#       | Nipple Size | Price   |
|-------|----------|--------|-------------|-------------|---------|
| 12mm  | Silicone | 5163   | VAPH-12C-SP | Mini        | \$13.42 |



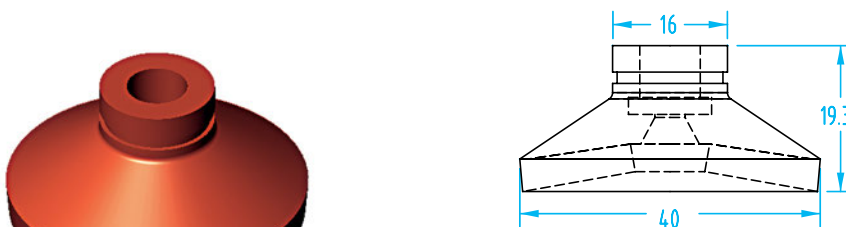
| Cup Ø | Material | Quick# | Part#       | Nipple Size | Price   |
|-------|----------|--------|-------------|-------------|---------|
| 15mm  | Silicone | 5164   | VAPH-15C-SP | Small       | \$11.63 |



| Cup Ø | Material | Quick# | Part#       | Nipple Size | Price   |
|-------|----------|--------|-------------|-------------|---------|
| 20mm  | Silicone | 5165   | VAPH-20C-SP | Small       | \$12.34 |



| Cup Ø | Material | Quick# | Part#       | Nipple Size | Price   |
|-------|----------|--------|-------------|-------------|---------|
| 30mm  | Silicone | 5166   | VAPH-30C-SP | Small       | \$17.00 |



| Cup Ø | Material | Quick# | Part#       | Nipple Size | Price   |
|-------|----------|--------|-------------|-------------|---------|
| 40mm  | Silicone | 5167   | VAPH-40C-SP | Small       | \$21.47 |
| 60mm* | Silicone | 5168   | VAPH-60C-SP | #5883       | \$26.84 |

\*#5168 & #5883 not shown, call EMI or visit website for details.

**Foam Surface – 1.5 Bellows**

(Shown Actual Size)

All vacuum cups on this page use the same nipple size!  
See page 397 for nipples and suspensions.

Foam Vacuum Cup Properties

| Material | Color       | Max Temp. | Durometer |
|----------|-------------|-----------|-----------|
| Silicone | Translucent | 320°F     | 30°       |

\* 11mm Compressed

**NEW**

| Cup Ø | Material | Quick# | Part#      | Price   |
|-------|----------|--------|------------|---------|
| 15mm  | Silicone | 5181   | GSV-BSF-15 | \$18.97 |

\* 13mm Compressed

| Cup Ø | Material | Quick# | Part#      | Price   |
|-------|----------|--------|------------|---------|
| 20mm  | Silicone | 5203   | GSV-BSF-20 | \$19.27 |

\* 14mm Compressed

| Cup Ø | Material | Quick# | Part#      | Price   |
|-------|----------|--------|------------|---------|
| 25mm  | Silicone | 5204   | GSV-BSF-25 | \$19.94 |

\* 15mm Compressed

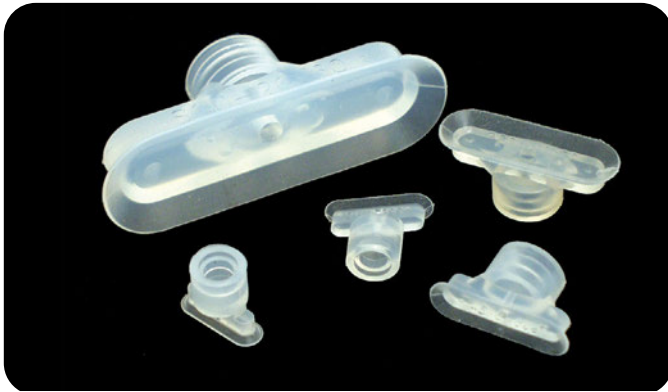
| Cup Ø | Material | Quick# | Part#      | Price   |
|-------|----------|--------|------------|---------|
| 30mm  | Silicone | 5205   | GSV-BSF-30 | \$20.60 |

\* 17mm Compressed

| Cup Ø | Material | Quick# | Part#      | Price   |
|-------|----------|--------|------------|---------|
| 40mm  | Silicone | 5206   | GSV-BSF-40 | \$21.49 |

# Silicone – Oval

(Shown Actual Size)



Oval Vacuum Cup Properties

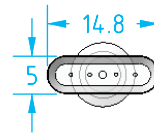
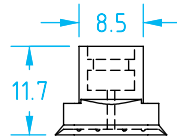
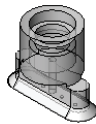
| Material | Color                  | Max Temp. | Durometer |
|----------|------------------------|-----------|-----------|
| Silicone | semi-translucent clear | 392°F     | 50°       |

See page 330 for Hithane™ Oval Vacuum Cups.

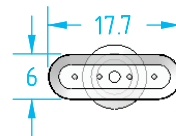
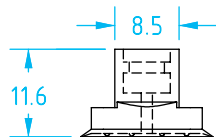
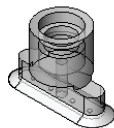
Note: All of these cups can be used in contact with isopropyl alcohol.

| Quick#        | Part#          | Pad øD  | Price  |
|---------------|----------------|---------|--------|
| 5425          | GSV-OS-24      | 2x4mm   | \$7.79 |
| <b>Nipple</b> |                |         |        |
| 5434          | GSF-HTN2-M5FXS | Male M5 | \$3.59 |
| 5435          | GSF-HTN2-M5MXS | Male M5 | \$3.59 |

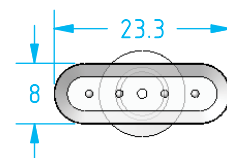
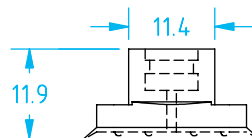
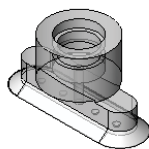
| Quick#        | Part#          | Pad øD    | Price  |
|---------------|----------------|-----------|--------|
| 5426          | GSV-OS-357     | 3-1/2x7mm | \$7.25 |
| <b>Nipple</b> |                |           |        |
| 5434          | GSF-HTN2-M5FXS | Male M5   | \$3.59 |
| 5435          | GSF-HTN2-M5MXS | Male M5   | \$3.59 |



| Quick#        | Part#       | Pad øD    | Price   |
|---------------|-------------|-----------|---------|
| 376           | GSV-OS-5x15 | 5x15mm    | \$18.06 |
| <b>Nipple</b> |             |           |         |
| 378           | GSF-N21-M5M | Male M5   | \$7.26  |
| 379           | GSF-N21-M5F | Female M5 | \$7.26  |



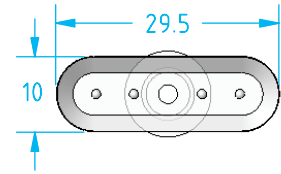
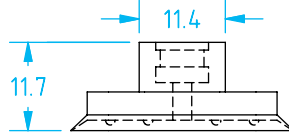
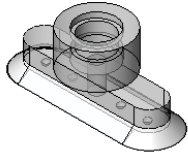
| Quick#        | Part#       | Pad øD    | Price   |
|---------------|-------------|-----------|---------|
| 377           | GSV-OS-6x18 | 6x18mm    | \$20.00 |
| <b>Nipple</b> |             |           |         |
| 378           | GSF-N21-M5M | Male M5   | \$7.26  |
| 379           | GSF-N21-M5F | Female M5 | \$7.26  |



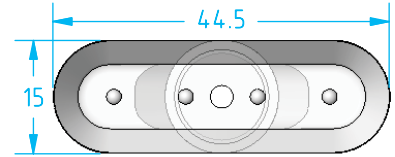
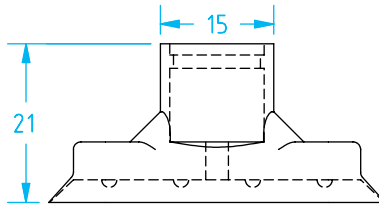
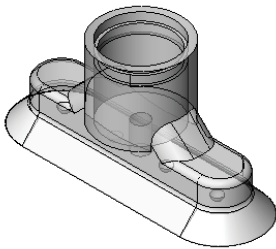
| Quick#        | Part#       | Pad øD       | Price   |
|---------------|-------------|--------------|---------|
| 380           | GSV-OS-8x24 | 8x24mm       | \$21.42 |
| <b>Nipple</b> |             |              |         |
| 651           | GSF-NF9-G8M | Male G1/8"   | \$4.99  |
| 383           | GSF-N22-G8F | Female G1/8" | \$7.26  |

**Silicone – Oval**

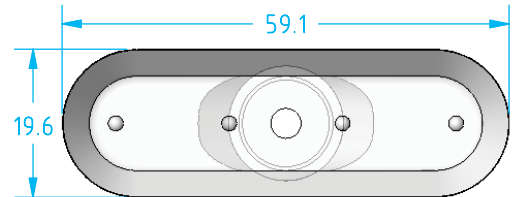
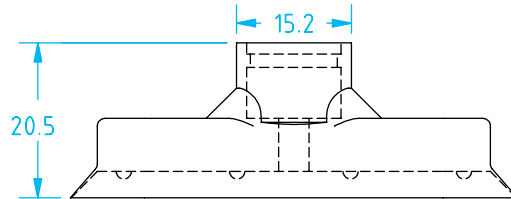
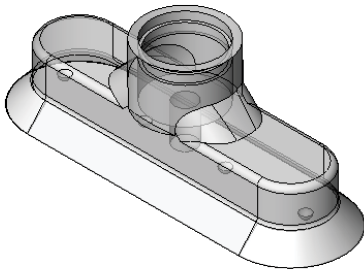
(Shown Actual Size)



| Quick#        | Part#        | Pad øD       | Price   |
|---------------|--------------|--------------|---------|
| 381           | GSV-OS-10x30 | 10x30mm      | \$24.15 |
| <b>Nipple</b> |              |              |         |
| 651           | GSF-NF9-G8M  | Male G1/8"   | \$4.99  |
| 383           | GSF-N22-G8F  | Female G1/8" | \$7.26  |



| Quick#        | Part#        | Pad øD       | Price   |
|---------------|--------------|--------------|---------|
| 384           | GSV-OS-15x45 | 15x45mm      | \$23.65 |
| <b>Nipple</b> |              |              |         |
| 655           | GSF-NF0-G4F  | Female G1/4" | \$4.78  |
| 3298          | VSA130       | Male G1/4"   | \$6.20  |



| Quick#        | Part#        | Pad øD       | Price   |
|---------------|--------------|--------------|---------|
| 385           | GSV-OS-20x60 | 20x60mm      | \$28.85 |
| <b>Nipple</b> |              |              |         |
| 655           | GSF-NF0-G4F  | Female G1/4" | \$4.78  |
| 3298          | VSA130       | Male G1/4"   | \$6.20  |

**Also Available: 25x75mm Cup**  
Quick #5427 Price: \$28.88



## Silicone – Oval 2.5 Bellows

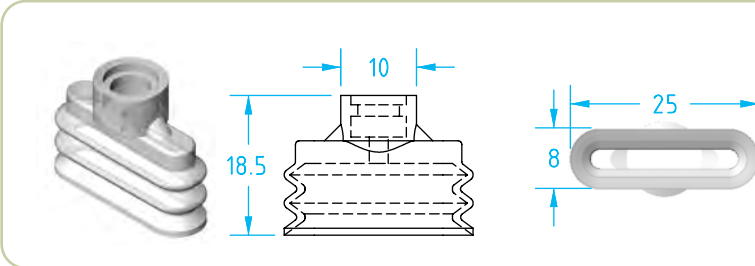


Oval bellows cups can be used on medium contour surfaces without using special angle adjusting mounting brackets.

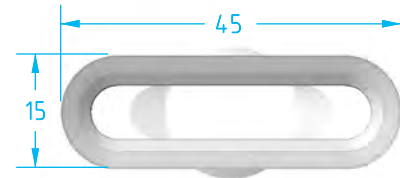
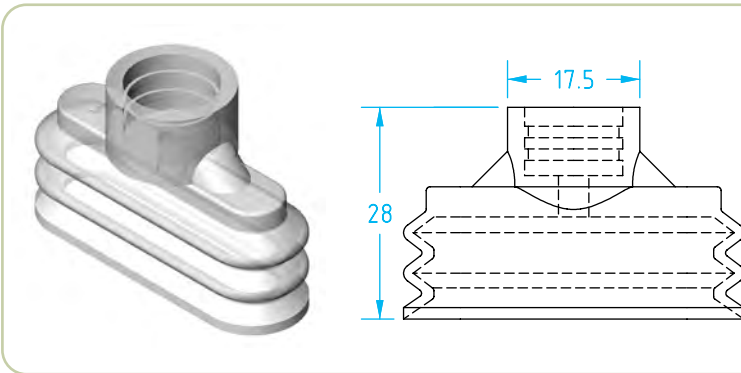
The 2.5 bellows provide extra compression that can sometimes be used in place of expensive non-rotating suspensions.

Oval Bellows Vacuum Cup Properties

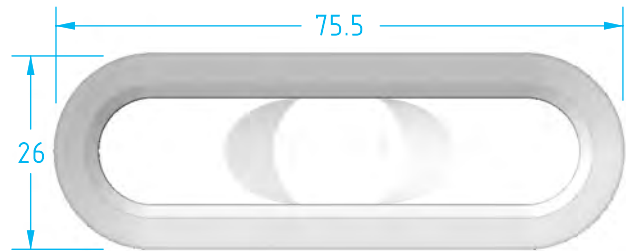
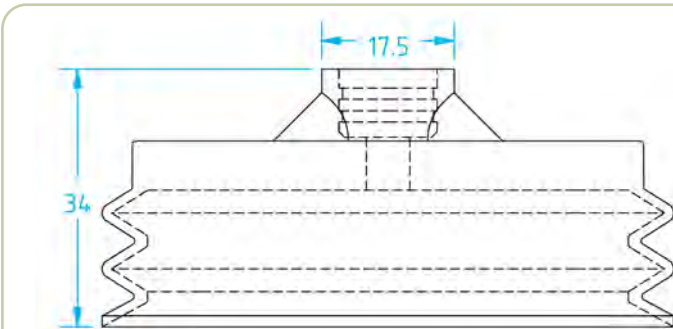
| Material | Color                  | Max Temp. | Durometer |
|----------|------------------------|-----------|-----------|
| Silicone | Semi-translucent clear | 392°F     | 55°       |



| Quick#        | Part#        | Pad øD       | Price   |
|---------------|--------------|--------------|---------|
| 1293          | GSV-OBS-8x25 | 8x25mm       | \$16.95 |
| <b>Nipple</b> |              |              |         |
| 649           | GSF-NF8-M5M  | Male M5      | \$4.28  |
| 651           | GSF-NF9-G8M  | Male G1/8"   | \$4.99  |
| 652           | GSF-NF9-G8F  | Female G1/8" | \$5.17  |



| Quick#        | Part#         | Pad øD       | Price   |
|---------------|---------------|--------------|---------|
| 1294          | GSV-OBS-15x45 | 15x45mm      | \$20.85 |
| <b>Nipple</b> |               |              |         |
| 655           | GSF-NF0-G4F   | Female G1/4" | \$4.78  |



| Quick#        | Part#         | Pad øD       | Price   |
|---------------|---------------|--------------|---------|
| 1295          | GSV-OBS-25x75 | 25x75mm      | \$30.12 |
| <b>Nipple</b> |               |              |         |
| 655           | GSF-NF0-G4F   | Female G1/4" | \$4.78  |

# Super -Sucker Vacuum Cups

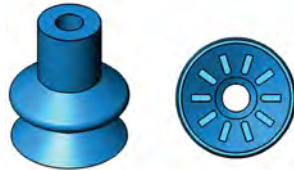
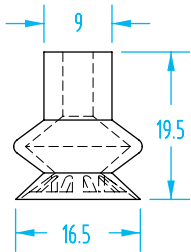
(Shown Actual Size)

Try this super flexible vacuum cup on parts that are difficult to maintain good vacuum on, such as textured, or easily distorted parts like foils.



Super-Sucker Vacuum Cup Properties

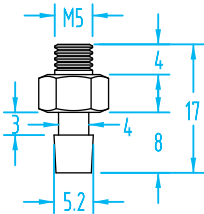
| Material       | Color                  | Max Temp. | Durometer |
|----------------|------------------------|-----------|-----------|
| Silicone       | Semi-translucent white | 392°F     | 30°       |
| Natural Rubber | Blue                   | 176°F     | 30°       |



#1662



#1663



#411

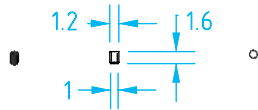
Super-Sucker Cups

| Material                          | Quick# | Part#        | Price  |
|-----------------------------------|--------|--------------|--------|
| Silicone                          | 1663   | GSV-SVC-18SI | \$5.74 |
| Natural Rubber                    | 1662   | GSV-SVC-18NR | \$6.96 |
| <b>Nipples - Order Separately</b> |        |              |        |
| Male M5                           | 411    | GSF-NF1-M5   | \$1.75 |

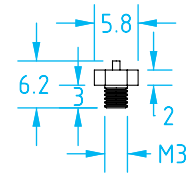
# Mini Flat Vacuum Cup – Ø1mm – Ø6mm

(Shown Actual Size)

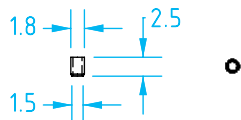
## 1mm



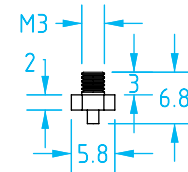
| Quick#                            | Part#      | Material | Price   |
|-----------------------------------|------------|----------|---------|
| 5452                              | VN1-1-N    | Nitrile  | \$8.19  |
| 5453                              | VN1-1-S    | Silicone | \$10.05 |
| <b>Nipples - Order Separately</b> |            |          |         |
| 5463                              | GSF-MN1-M3 | Male M3  | \$5.59  |



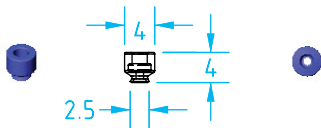
## 1.5mm



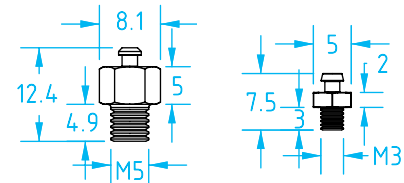
| Quick#                            | Part#       | Material | Price   |
|-----------------------------------|-------------|----------|---------|
| 5454                              | VN1-1.5-N   | Nitrile  | \$8.19  |
| 5455                              | VN1-1.5-S   | Silicone | \$10.26 |
| <b>Nipples - Order Separately</b> |             |          |         |
| 5464                              | GSF-MN15-M3 | Male M3  | \$5.59  |



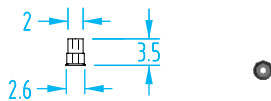
## 2mm



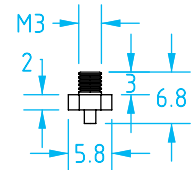
| Quick#                            | Part#       | Material             | Price  |
|-----------------------------------|-------------|----------------------|--------|
| 3187                              | VN1-2-S     | Silicone             | \$3.59 |
| 3186                              | VN1-2-N     | Nitrile              | \$2.63 |
| 1161                              | VN1-2-H     | Hithane              | \$8.51 |
| 1241                              | GSV-MFA-2   | Anti-Static Silicone | \$6.30 |
| <b>Nipples - Order Separately</b> |             |                      |        |
| 3286                              | VSA10       | Male M5              | \$2.94 |
| 1267                              | GSF-N17-M3M | Male M3              | \$3.85 |



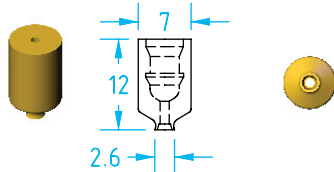
## 2mm



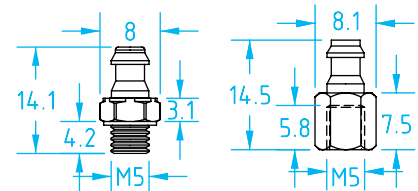
| Quick#                            | Part#       | Material             | Price   |
|-----------------------------------|-------------|----------------------|---------|
| 5091                              | GSV-U2-25   | Anti-Static Silicone | \$10.47 |
| <b>Nipples - Order Separately</b> |             |                      |         |
| 5464                              | GSF-MN15-M3 | Male M3              | \$5.59  |



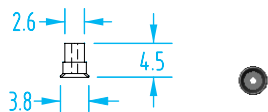
## 2mm



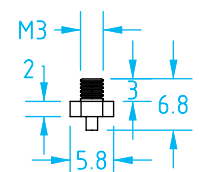
| Quick#                            | Part#       | Material     | Price  |
|-----------------------------------|-------------|--------------|--------|
| 2501                              | ZP02US      | Silicone     | \$2.45 |
| 2535                              | ZP02UU      | Polyurethane | \$2.95 |
| 2604                              | ZP02UN      | Nitrile      | \$2.25 |
| 2683                              | ZP02UGS     | Anti-static  | \$2.40 |
| <b>Nipples - Order Separately</b> |             |              |        |
| 258                               | GSF-BS-M506 | Male M5      | \$0.77 |
| 1070                              | ZPT1B5      | Female M5    | \$3.25 |



## 3mm



| Quick#                            | Part#       | Material             | Price   |
|-----------------------------------|-------------|----------------------|---------|
| 5092                              | GSV-U3-25   | Anti-Static Silicone | \$11.21 |
| <b>Nipples - Order Separately</b> |             |                      |         |
| 5464                              | GSF-MN15-M3 | Male M3              | \$5.59  |

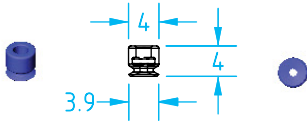


Use Quick#s for easy online ordering.

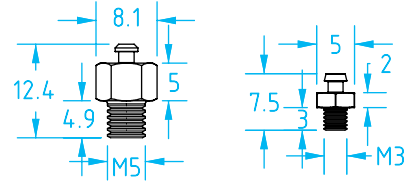
**Mini Flat Vacuum Cup – Ø1mm – Ø5mm**

(Shown Actual Size)

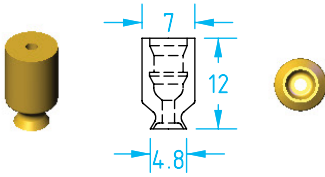
**3.5mm**



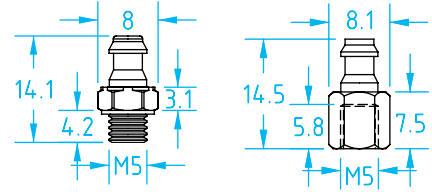
| Quick#                            | Part#       | Material             | Price   |
|-----------------------------------|-------------|----------------------|---------|
| 3189                              | VN1-3.5-N   | Nitrile              | \$3.23  |
| 3190                              | VN1-3.5-S   | Silicone             | \$3.68  |
| 1162                              | VN1-3.5-H   | Hithane              | \$8.51  |
| 5457                              | VN1-3.5-V   | Viton                | \$30.87 |
| 1244                              | GSV-MFA-35  | Anti-Static Silicone | \$6.09  |
| <b>Nipples - Order Separately</b> |             |                      |         |
| 3286                              | VSA10       | Male M5              | \$2.94  |
| 1267                              | GSF-N17-M3M | Male M3              | \$3.85  |



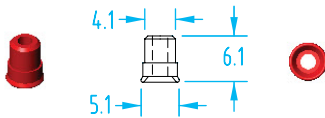
**4mm**



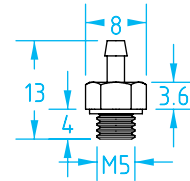
| Quick#                            | Part#       | Material     | Price  |
|-----------------------------------|-------------|--------------|--------|
| 2502                              | ZP04US      | Silicone     | \$2.45 |
| 2536                              | ZP04UU      | Polyurethane | \$2.95 |
| 2605                              | ZP04UN      | Nitrile      | \$2.25 |
| 2684                              | ZP04UGS     | Anti-static  | \$2.40 |
| <b>Nipples - Order Separately</b> |             |              |        |
| 258                               | GSF-BS-M506 | Male M5      | \$0.77 |
| 1070                              | ZPT1B5      | Female M5    | \$3.25 |



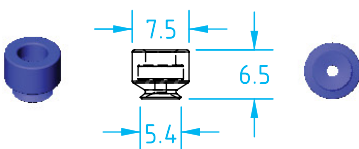
**5mm**



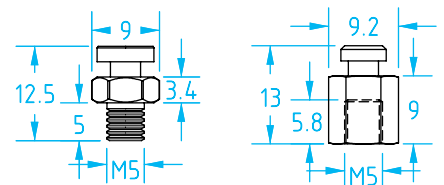
| Quick#                            | Part#     | Material    | Price  |
|-----------------------------------|-----------|-------------|--------|
| 5093                              | GSV-U4-20 | Silicone    | \$7.70 |
| 5102                              | GSV-U4-10 | Chloroprene | \$3.42 |
| <b>Nipples - Order Separately</b> |           |             |        |
| 1438                              | GSV-01AB  | Male M5     | \$1.85 |



**5mm**



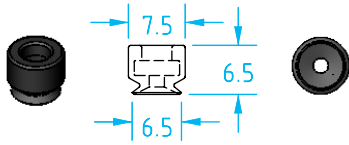
| Quick#                            | Part#     | Material             | Price  |
|-----------------------------------|-----------|----------------------|--------|
| 3192                              | VN1-5-N   | NIT                  | \$2.10 |
| 3193                              | VN1-5-S   | Silicone             | \$2.86 |
| 1163                              | VN1-5-H   | Hithane              | \$4.05 |
| 1247                              | GSV-MFA-5 | Anti-static Silicone | \$7.80 |
| <b>Nipples - Order Separately</b> |           |                      |        |
| 3289                              | VSA30     | Male M5              | \$2.94 |
| 5178                              | VSA30F    | Female M5            | \$2.94 |



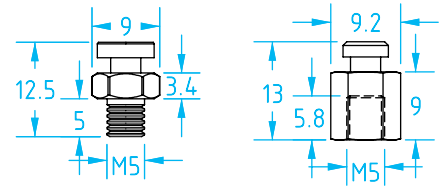
# Mini Flat Vacuum Cup – Ø6mm – Ø9mm

(Shown Actual Size)

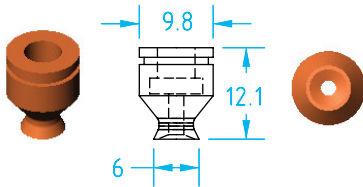
## 6mm



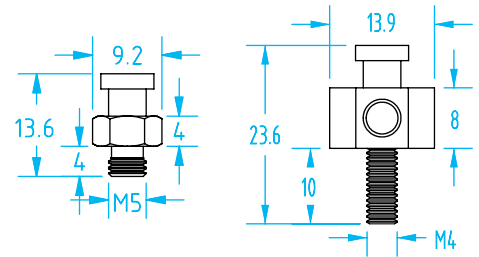
| Quick#                            | Part#     | Material             | Price  |
|-----------------------------------|-----------|----------------------|--------|
| 1249                              | GSV-MFS-6 | Silicone             | \$3.78 |
| 1250                              | GSV-MFA-6 | Anti-static Silicone | \$8.12 |
| 5459                              | VN1-6-N   | Nitrile              | \$2.94 |
| <b>Nipples - Order Separately</b> |           |                      |        |
| 3289                              | VSA30     | Male M5              | \$2.94 |
| 5178                              | VSA30F    | Female M5            | \$2.94 |



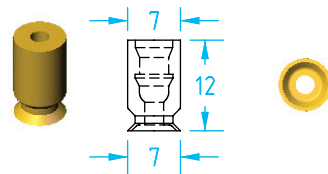
## 6mm



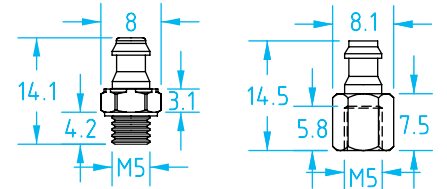
| Quick#                            | Part#         | Material     | Price   |
|-----------------------------------|---------------|--------------|---------|
| 1674                              | GSV-VAPH-6C   | Silicone     | \$3.21  |
| 5221                              | GSV-VAPU-6C   | Polyurethane | \$9.13  |
| 5228                              | GSV-VAPF-6C   | Fluorine     | \$15.74 |
| <b>Nipples - Order Separately</b> |               |              |         |
| 5270                              | GSV-CP-063-M5 | Male M5      | \$4.51  |
| 1697                              | GSV-CP-063    | Male M4      | \$8.39  |



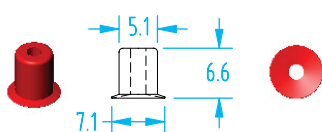
## 6mm



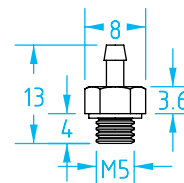
| Quick#                            | Part#       | Material     | Price  |
|-----------------------------------|-------------|--------------|--------|
| 2503                              | ZP06US      | Silicone     | \$2.45 |
| 2537                              | ZP06UU      | Polyurethane | \$2.95 |
| 2606                              | ZP06UN      | Nitrile      | \$2.25 |
| <b>Nipples - Order Separately</b> |             |              |        |
| 258                               | GSF-BS-M506 | Male M5      | \$0.77 |
| 1070                              | ZPT1B5      | Female M5    | \$3.25 |



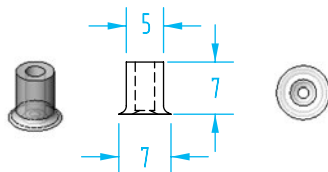
## 7mm



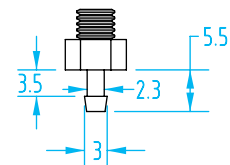
| Quick#                            | Part#     | Material    | Price  |
|-----------------------------------|-----------|-------------|--------|
| 5094                              | GSV-U6-20 | Silicone    | \$5.89 |
| 5103                              | GSV-U6-10 | Chloroprene | \$2.99 |
| <b>Nipples - Order Separately</b> |           |             |        |
| 1438                              | GSV-01AB  | Male M5     | \$1.85 |



## 7mm



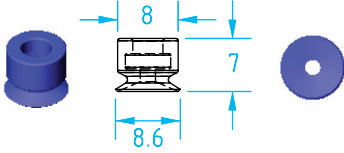
| Quick#                            | Part#       | Material | Price  |
|-----------------------------------|-------------|----------|--------|
| 674                               | GSV-FOS-7   | Silicone | \$2.39 |
| 1114                              | GSV-FOH-7   | Hithane  | \$5.69 |
| 1154                              | GSV-FON-7   | Nitrile  | \$1.94 |
| <b>Nipples - Order Separately</b> |             |          |        |
| 688                               | GSF-NF11-M5 | M5 Male  | \$2.31 |



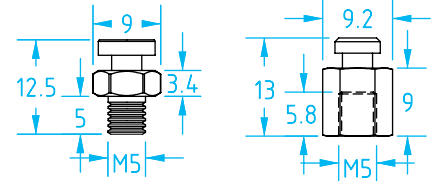
**Mini Flat Vacuum Cup – Ø6mm – Ø9mm**

(Shown Actual Size)

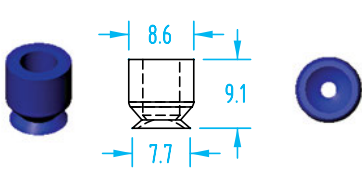
**8mm**



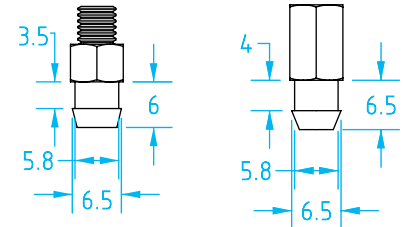
| Quick#                            | Part#     | Material             | Price  |
|-----------------------------------|-----------|----------------------|--------|
| 3195                              | VN1-8-N   | Nitrile              | \$2.30 |
| 3196                              | VN1-8-S   | Silicone             | \$2.97 |
| 1164                              | VN1-8-H   | Hithane              | \$4.05 |
| 1253                              | GSV-MFA-8 | Anti-static Silicone | \$4.83 |
| <b>Nipples - Order Separately</b> |           |                      |        |
| 3289                              | VSA30     | Male M5              | \$2.94 |
| 5178                              | VSA30F    | Female M5            | \$2.94 |



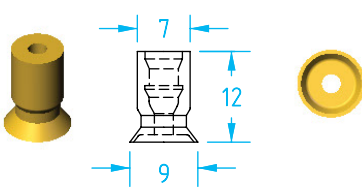
**8mm**



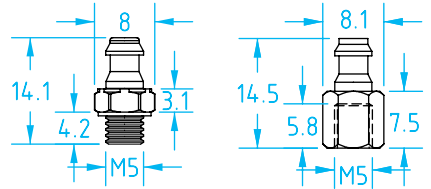
| Quick#                            | Part#        | Material  | Price  |
|-----------------------------------|--------------|-----------|--------|
| 1645                              | GSV-FHT-8    | Hithane   | \$5.26 |
| <b>Nipples - Order Separately</b> |              |           |        |
| 408                               | GSF-N16-M5M  | Male M5   | \$3.52 |
| 5431                              | GSF-HTN1-M5F | Female M5 | \$3.59 |



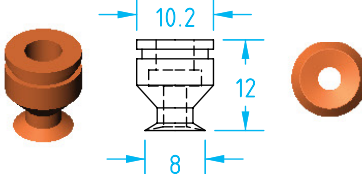
**8mm**



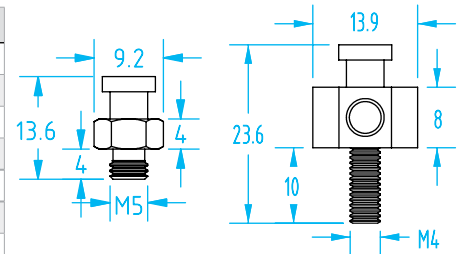
| Quick#                            | Part#       | Material     | Price  |
|-----------------------------------|-------------|--------------|--------|
| 2504                              | ZP08US      | Silicone     | \$2.45 |
| 2538                              | ZP08UU      | Polyurethane | \$2.95 |
| 2607                              | ZP08UN      | Nitrile      | \$2.25 |
| 2685                              | ZP08UGS     | Anti-static  | \$2.40 |
| <b>Nipples - Order Separately</b> |             |              |        |
| 258                               | GSF-BS-M506 | Male M5      | \$0.77 |
| 1070                              | ZPT1B5      | Female M5    | \$3.25 |



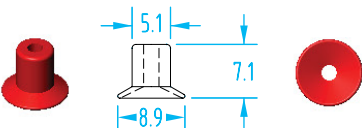
**8mm**



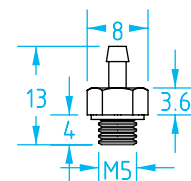
| Quick#                            | Part#         | Material      | Price   |
|-----------------------------------|---------------|---------------|---------|
| 1675                              | GSV-VAPH-8C   | Silicone      | \$3.42  |
| 5222                              | GSV-VAPU-8C   | Polyurethane  | \$9.13  |
| 5229                              | GSV-VAPF-8C   | Fluorine      | \$15.74 |
| 5162                              | VAPH-8C-SP    | Silicone-Foam | \$11.63 |
| <b>Nipples - Order Separately</b> |               |               |         |
| 5270                              | GSV-CP-063-M5 | Male M5       | \$4.51  |
| 1697                              | GSV-CP-063    | Male M4       | \$8.39  |



**9mm**



| Quick#                            | Part#     | Material    | Price  |
|-----------------------------------|-----------|-------------|--------|
| 5095                              | GSV-U8-20 | Silicone    | \$6.36 |
| 5104                              | GSV-U8-10 | Chloroprene | \$2.99 |
| <b>Nipples - Order Separately</b> |           |             |        |
| 1438                              | GSV-01AB  | Male M5     | \$1.85 |

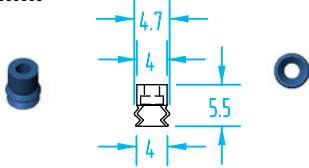


More anti-static vacuum cups available on page 374

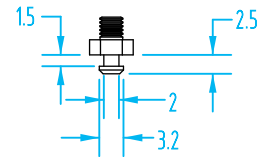
# 1.5 Bellows Mini Vacuum Cup – Ø4mm – Ø10.5mm

(Shown Actual Size)

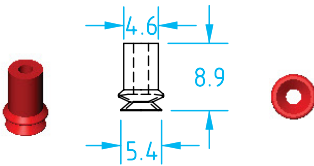
## 4mm



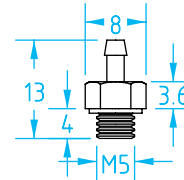
| Quick#                            | Part#     | Material | Price  |
|-----------------------------------|-----------|----------|--------|
| 3855                              | VN2-4-N   | Nitrile  | \$6.53 |
| 3856                              | VN2-4-S   | Silicone | \$6.53 |
| 3857                              | VN2-4-H   | Hithane  | \$8.15 |
| <b>Nipples - Order Separately</b> |           |          |        |
| 3871                              | GSF-VSA-5 | Male M3  | \$5.73 |



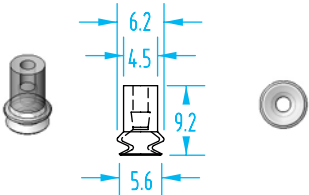
## 4.5mm



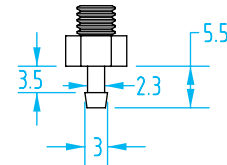
| Quick#                            | Part#     | Material    | Price  |
|-----------------------------------|-----------|-------------|--------|
| 1413                              | GSV-B5-20 | Silicone    | \$8.72 |
| 5115                              | GSV-B5-10 | Chloroprene | \$3.23 |
| <b>Nipples - Order Separately</b> |           |             |        |
| 1438                              | GSV-01AB  | Male M5     | \$1.85 |



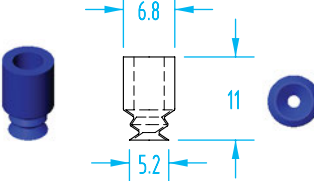
## 5mm



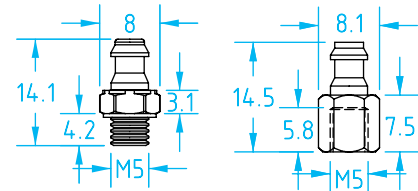
| Quick#                            | Part#       | Material | Price  |
|-----------------------------------|-------------|----------|--------|
| 1142                              | GSV-BOS-5   | Silicone | \$3.84 |
| 1133                              | GSV-BOH-5   | Hithane  | \$7.02 |
| 1144                              | GSV-BON-5   | Nitrile  | \$2.13 |
| <b>Nipples - Order Separately</b> |             |          |        |
| 688                               | GSF-NF11-M5 | M5 Male  | \$2.31 |



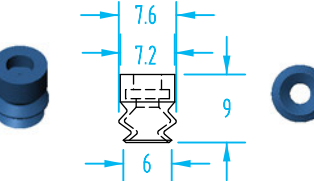
## 5mm



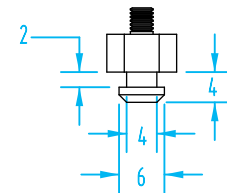
| Quick#                            | Part#       | Material  | Price   |
|-----------------------------------|-------------|-----------|---------|
| 5988                              | GSV-BHT-5   | Hithane   | \$11.48 |
| <b>Nipples - Order Separately</b> |             |           |         |
| 258                               | GSF-BS-M506 | Male M5   | \$0.77  |
| 1070                              | ZPT1B5      | Female M5 | \$3.25  |



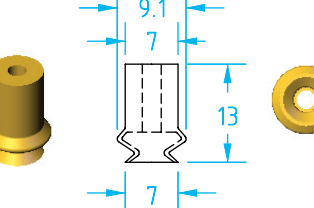
## 6mm



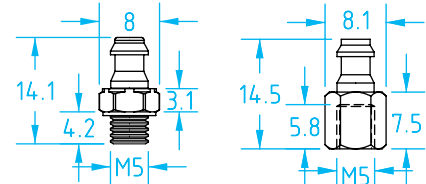
| Quick#                            | Part#     | Material | Price  |
|-----------------------------------|-----------|----------|--------|
| 3858                              | VN2-6-N   | Nitrile  | \$5.00 |
| 3859                              | VN2-6-S   | Silicone | \$7.81 |
| 3860                              | VN2-6-H   | Hithane  | \$8.00 |
| <b>Nipples - Order Separately</b> |           |          |        |
| 3870                              | GSF-VSA-4 | Male M3  | \$5.25 |



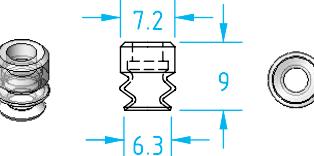
## 6mm



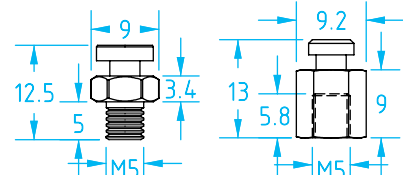
| Quick#                            | Part#       | Material     | Price  |
|-----------------------------------|-------------|--------------|--------|
| 2525                              | ZP06BS      | Silicone     | \$4.25 |
| 2559                              | ZP06BU      | Polyurethane | \$4.60 |
| 2625                              | ZP06BN      | Nitrile      | \$4.05 |
| 2678                              | ZP06BGS     | Anti-static  | \$4.20 |
| <b>Nipples - Order Separately</b> |             |              |        |
| 258                               | GSF-BS-M506 | Male M5      | \$0.77 |
| 1070                              | ZPT1B5      | Female M5    | \$3.25 |



## 6.5mm



| Quick#                            | Part#       | Material  | Price  |
|-----------------------------------|-------------|-----------|--------|
| 5488                              | GSV-MBS-65S | Silicone  | 7.81   |
| <b>Nipples - Order Separately</b> |             |           |        |
| 3289                              | VSA30       | Male M5   | \$2.94 |
| 5178                              | VSA30F      | Female M5 | \$2.94 |



# 1.5 Bellows Mini Vacuum Cup – Ø4mm – Ø10.5mm

(Shown Actual Size)

**8mm**

| Quick#                            | Part#     | Material    | Price   |
|-----------------------------------|-----------|-------------|---------|
| 1414                              | GSV-B8-20 | Silicone    | \$10.19 |
| 5116                              | GSV-B8-10 | Chloroprene | \$3.77  |
| <b>Nipples - Order Separately</b> |           |             |         |
| 1438                              | GSV-01AB  | Male M5     | \$1.85  |

**8mm**

| Quick#                            | Part#       | Material     | Price  |
|-----------------------------------|-------------|--------------|--------|
| 2526                              | ZP08BS      | Silicone     | \$4.25 |
| 2560                              | ZP08BU      | Polyurethane | \$4.60 |
| 2624                              | ZP08BN      | Nitrile      | \$4.05 |
| 2679                              | ZP08BGS     | Anti-static  | \$4.20 |
| <b>Nipples - Order Separately</b> |             |              |        |
| 258                               | GSF-BS-M506 | Male M5      | \$0.77 |
| 1070                              | ZPT1B5      | Female M5    | \$3.25 |

**8.5mm**

| Quick#                            | Part#       | Material | Price  |
|-----------------------------------|-------------|----------|--------|
| 1143                              | GSV-B0S-8   | Silicone | \$4.33 |
| 1134                              | GSV-B0H-8   | Hithane  | \$6.67 |
| 1145                              | GSV-B0N-8   | Nitrile  | \$2.32 |
| <b>Nipples - Order Separately</b> |             |          |        |
| 688                               | GSF-NF11-M5 | M5 Male  | \$2.31 |

**9.5mm**

| Quick#                            | Part#        | Material    | Price  |
|-----------------------------------|--------------|-------------|--------|
| 1415                              | GSV-B10-2-20 | Silicone    | \$9.14 |
| 5117                              | GSV-B10-2-10 | Chloroprene | \$5.06 |
| <b>Nipples - Order Separately</b> |              |             |        |
| 1439                              | GSV-01AC     | Male M5     | \$1.85 |

**10mm**

| Quick# | Part#    | Material  | Price  |
|--------|----------|-----------|--------|
| 3235   | VN2-10-N | Nitrile   | \$3.51 |
| 3236   | VN2-10-S | Silicone  | \$5.46 |
| 1175   | VN2-10-H | Hithane   | \$7.56 |
| 3289   | VSA30    | Male M5   | \$2.94 |
| 5178   | VSA30F   | Female M5 | \$2.94 |

**10.5mm**

| Quick#                            | Part#       | Material  | Price  |
|-----------------------------------|-------------|-----------|--------|
| 5490                              | GSV-MBS-10S | Silicone  | \$6.45 |
| <b>Nipples - Order Separately</b> |             |           |        |
| 3289                              | VSA30       | Male M5   | \$2.94 |
| 5178                              | VSA30F      | Female M5 | \$2.94 |

**11mm**

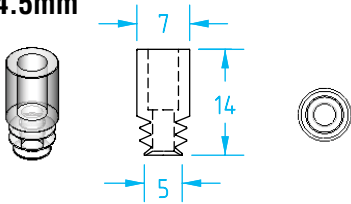
| Quick#                            | Part#      | Material | Price  |
|-----------------------------------|------------|----------|--------|
| 3861                              | VN2-11-N   | Nitrile  | \$5.75 |
| 3862                              | VN2-11-S   | Silicone | \$7.14 |
| 3863                              | VN2-11-H   | Hithane  | \$8.35 |
| <b>Nipples - Order Separately</b> |            |          |        |
| 3872                              | GSF-VSA-16 | Male M3  | \$5.25 |



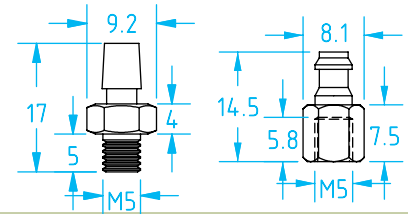
## 2.5 Bellows Mini Vacuum Cup – Ø4.5mm – Ø9mm

(Shown Actual Size)

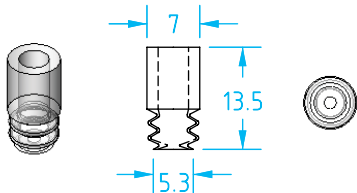
4.5mm



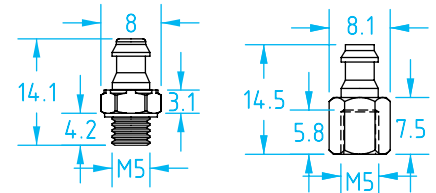
| Quick#                            | Part#      | Material  | Price  |
|-----------------------------------|------------|-----------|--------|
| 1258                              | GSV-M2BS-4 | Silicone  | \$3.42 |
| <b>Nipples - Order Separately</b> |            |           |        |
| 1439                              | GSV-01AC   | Male M5   | \$1.85 |
| 1070                              | ZPT1B5     | Female M5 | \$3.25 |



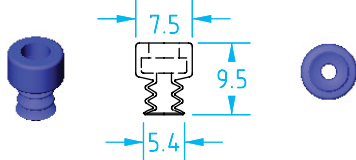
4.5mm



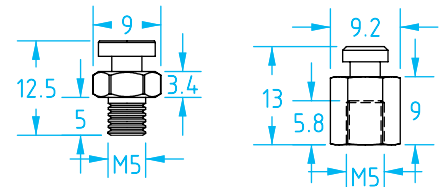
| Quick#                            | Part#       | Material  | Price  |
|-----------------------------------|-------------|-----------|--------|
| 5491                              | GSV-M2BS-5S | Silicone  | \$3.44 |
| <b>Nipples - Order Separately</b> |             |           |        |
| 258                               | GSF-BS-M506 | Male M5   | \$0.77 |
| 1070                              | ZPT1B5      | Female M5 | \$3.25 |



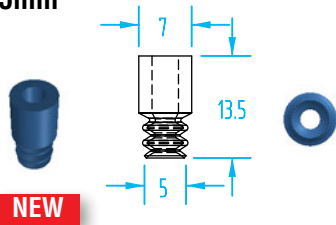
5mm



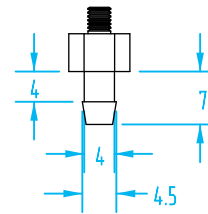
| Quick#                            | Part#   | Material  | Price  |
|-----------------------------------|---------|-----------|--------|
| 3256                              | VN3-5-N | Nitrile   | \$4.64 |
| 3257                              | VN3-5-S | Silicone  | \$5.23 |
| 1182                              | VN3-5-H | Hithane   | \$8.93 |
| <b>Nipples - Order Separately</b> |         |           |        |
| 3289                              | VSA30   | Male M5   | \$2.94 |
| 5178                              | VSA30F  | Female M5 | \$2.94 |



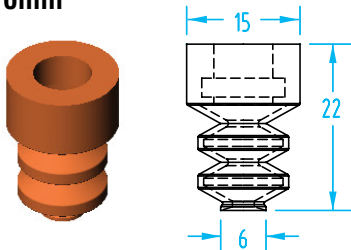
5mm



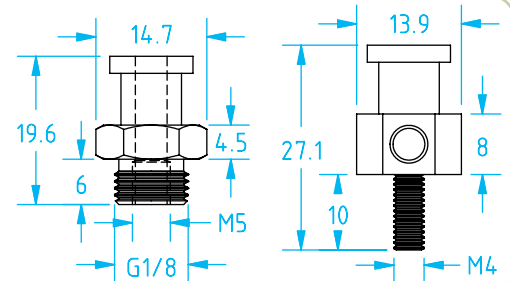
| Quick#                            | Part#      | Material | Price  |
|-----------------------------------|------------|----------|--------|
| 3864                              | GSV-M2BN-5 | Nitrile  | \$7.34 |
| 3865                              | GSV-M2BS-5 | Silicone | \$7.98 |
| 3866                              | GSV-M2BH-5 | Hithane  | \$9.24 |
| <b>Nipples - Order Separately</b> |            |          |        |
| 3873                              | GSF-VSA-17 | Male M3  | \$4.73 |



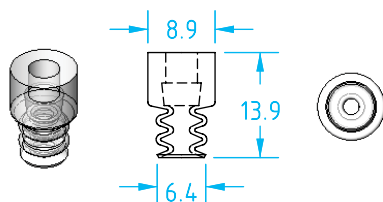
6mm



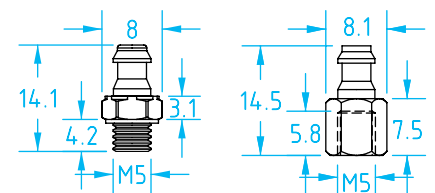
| Quick#                            | Part#         | Material | Price   |
|-----------------------------------|---------------|----------|---------|
| 5169                              | TR-1062-1     | Silicone | \$13.61 |
| <b>Nipples - Order Separately</b> |               |          |         |
| 1698                              | GSV-CP-064    | Male M4  | \$8.39  |
| 5271                              | GSV-CP-064-G8 | G1/8"-M5 | \$5.80  |



6mm



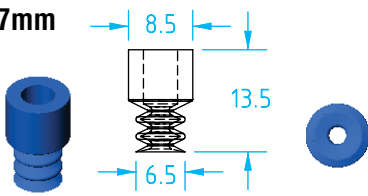
| Quick#                            | Part#        | Material  | Price  |
|-----------------------------------|--------------|-----------|--------|
| 5492                              | GSV-M2BS-65S | Silicone  | \$8.04 |
| <b>Nipples - Order Separately</b> |              |           |        |
| 258                               | GSF-BS-M506  | Male M5   | \$0.77 |
| 1070                              | ZPT1B5       | Female M5 | \$3.25 |



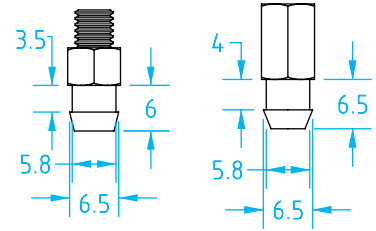
## 2.5 Bellows Mini Vacuum Cup – Ø4.5mm – Ø9mm

(Shown Actual Size)

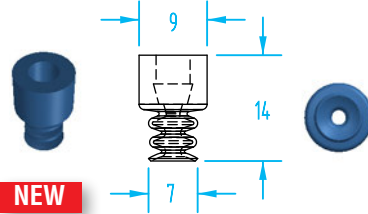
7mm



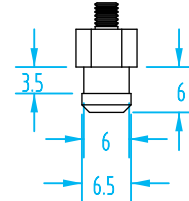
| Quick#                            | Part#        | Material  | Price  |
|-----------------------------------|--------------|-----------|--------|
| 5442                              | GSV-2BHT-7   | Hithane   | \$9.03 |
| <b>Nipples - Order Separately</b> |              |           |        |
| 408                               | GSF-N16-M5M  | Male M5   | \$3.52 |
| 5431                              | GSF-HTN1-M5F | Female M5 | \$3.59 |



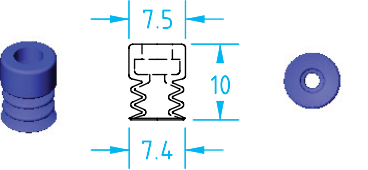
7mm



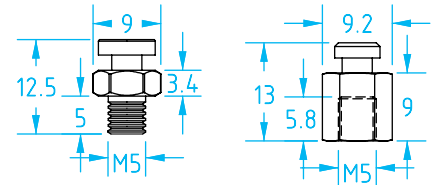
| Quick#                            | Part#      | Material | Price  |
|-----------------------------------|------------|----------|--------|
| 3867                              | GSV-M2BN-7 | Nitrile  | \$7.38 |
| 3868                              | GSV-M2BS-7 | Silicone | \$8.04 |
| 3869                              | GSV-M2BH-7 | Hithane  | \$5.25 |
| <b>Nipples - Order Separately</b> |            |          |        |
| 3872                              | GSF-VSA-16 | Male M3  | \$5.25 |



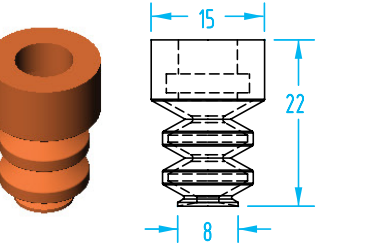
8mm



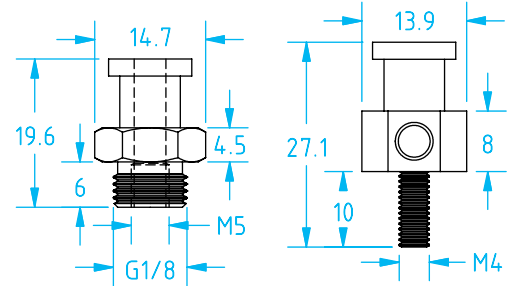
| Quick#                            | Part#   | Material  | Price  |
|-----------------------------------|---------|-----------|--------|
| 3259                              | VN3-8-N | Nitrile   | \$4.64 |
| 3260                              | VN3-8-S | Silicone  | \$5.23 |
| 1183                              | VN3-8-H | Hithane   | \$8.93 |
| <b>Nipples - Order Separately</b> |         |           |        |
| 3289                              | VSA30   | Male M5   | \$2.94 |
| 5178                              | VSA30F  | Female M5 | \$2.94 |



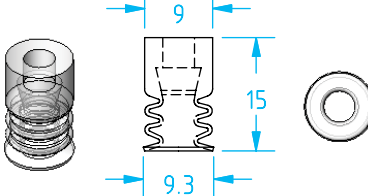
8mm



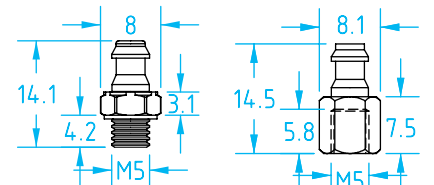
| Quick#                            | Part#         | Material | Price   |
|-----------------------------------|---------------|----------|---------|
| 5170                              | TR-1062-2     | Silicone | \$13.61 |
| <b>Nipples - Order Separately</b> |               |          |         |
| 1698                              | GSV-CP-064    | Male M4  | \$8.39  |
| 5271                              | GSV-CP-064-G8 | G1/8"-M5 | \$5.80  |



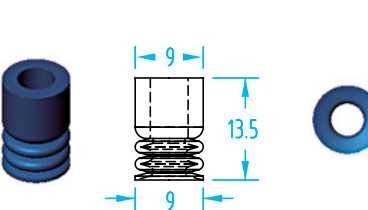
9mm



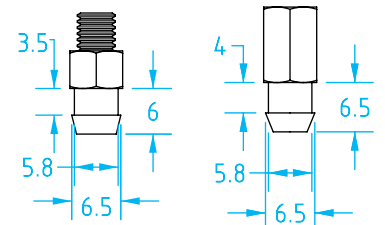
| Quick#                            | Part#       | Material  | Price  |
|-----------------------------------|-------------|-----------|--------|
| 5493                              | GSV-M2BS-9S | Silicone  | \$8.15 |
| <b>Nipples - Order Separately</b> |             |           |        |
| 258                               | GSF-BS-M506 | Male M5   | \$0.77 |
| 1070                              | ZPT1B5      | Female M5 | \$3.25 |



9mm



| Quick#                            | Part#        | Material  | Price  |
|-----------------------------------|--------------|-----------|--------|
| 1657                              | GSV-2BHT-9   | Hithane   | \$7.17 |
| <b>Nipples - Order Separately</b> |              |           |        |
| 408                               | GSF-N16-M5M  | Male M5   | \$3.52 |
| 5431                              | GSF-HTN1-M5F | Female M5 | \$3.59 |



## Cups for Carbon Fiber Parts and Sheet

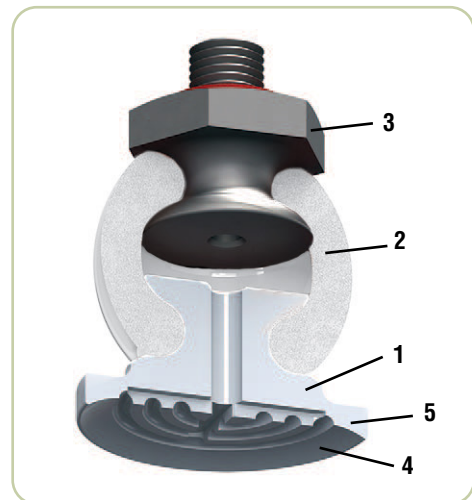
(Shown Actual Size)



### No needle damage!

Handle hot molded carbon fiber parts and cold carbon fiber sheet without damage caused when using needle grippers.

1. PTFE vacuum cup does not stick to hot carbon fiber parts up to 480°F.
2. Flexible white silicone bellow allows axial and angular movements for part compliance.
3. Stainless steel nipple included.
4. The supporting ribs avoid suction and deformation of soft materials.
5. The flexible lip allows good vacuum even at the low temperatures for effective sealing over cold composites.
6. Patented

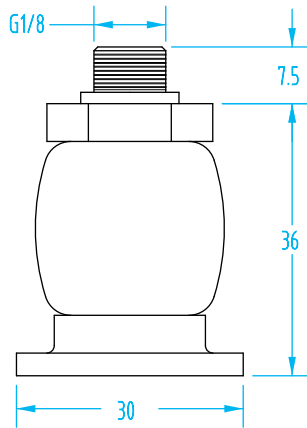
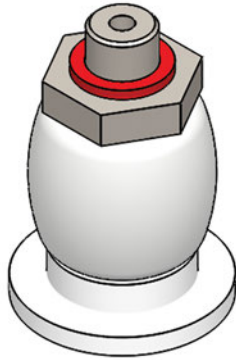


| Quick# | Part#   | Cup Ø | Weight | Price   |
|--------|---------|-------|--------|---------|
| 7339   | PAAT16R | 16mm  | 9g     | \$69.50 |

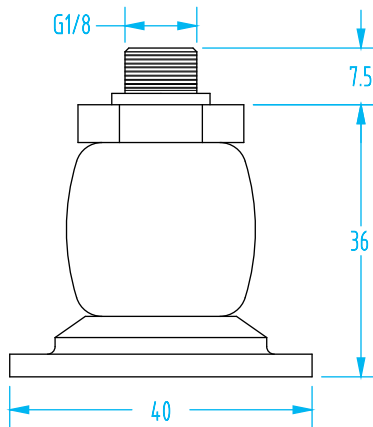
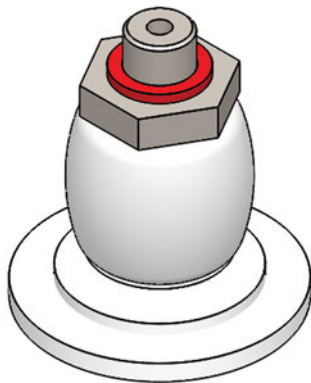
| Quick# | Part#   | Cup Ø | Weight | Price   |
|--------|---------|-------|--------|---------|
| 7340   | PAAT20R | 20mm  | 9g     | \$69.50 |

**Cups for Carbon Fiber Parts and Sheet**

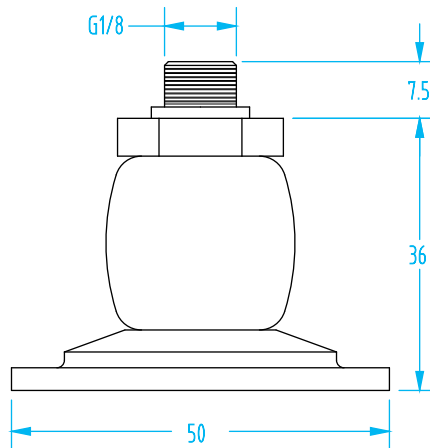
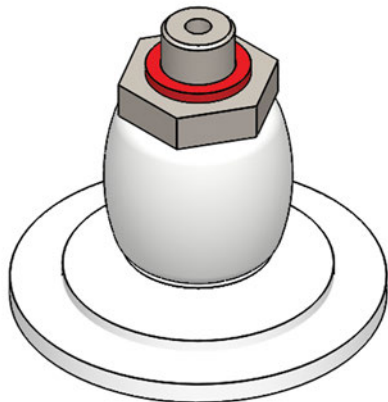
(Shown Actual Size)



| Quick# | Part#   | Cup Ø | Weight | Price   |
|--------|---------|-------|--------|---------|
| 7341   | PAAT30R | 30mm  | 35g    | \$79.00 |



| Quick# | Part#   | Cup Ø | Weight | Price   |
|--------|---------|-------|--------|---------|
| 7342   | PAAT40R | 40mm  | 37g    | \$87.25 |



| Quick# | Part#   | Cup Ø | Weight | Price    |
|--------|---------|-------|--------|----------|
| 7343   | PAAT50R | 50mm  | 41g    | \$101.00 |

# High Speed Specialty – Flat

(Shown Actual Size)



These cups are optimized in their design for use in high-speed applications such as thin-wall molding of parts having flat surfaces. Their design allows faster attach/release time than other flat cups.

High Speed Vacuum Cup Properties

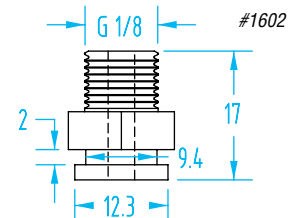
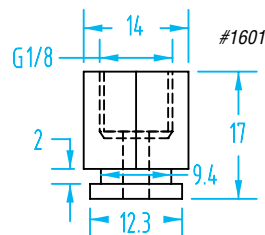
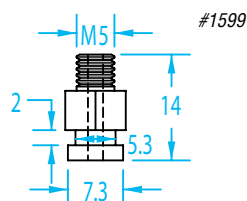
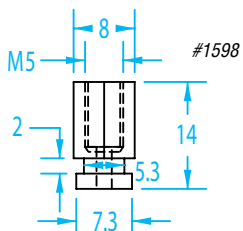
| Material     | Color                  | Max Temp. | Durometer |
|--------------|------------------------|-----------|-----------|
| Silicone     | Semi-translucent white | 392°F     | 55°       |
| Polyurethane | Blue                   | 176°F     | 55°-60°   |

| Pad øD                            | Part#       | Material | Quick# | Price   |
|-----------------------------------|-------------|----------|--------|---------|
| 7mm                               | GSV-HSP-07S | SIL      | 1590   | \$12.04 |
|                                   | GSV-HSP-07P | PU       | 1594   | \$15.02 |
| <b>Nipples - Order Separately</b> |             |          |        |         |
| M5                                | GSF-HSN-M5F | Female   | 1598   | \$8.14  |
|                                   | GSF-HSN-M5M | Male     | 1599   | \$7.07  |

| Pad øD                            | Part#       | Material | Quick# | Price   |
|-----------------------------------|-------------|----------|--------|---------|
| 9mm                               | GSV-HSP-09S | SIL      | 1591   | \$12.47 |
|                                   | GSV-HSP-09P | PU       | 1595   | \$15.81 |
| <b>Nipples - Order Separately</b> |             |          |        |         |
| M5                                | GSF-HSN-M5F | Female   | 1598   | \$8.14  |
|                                   | GSF-HSN-M5M | Male     | 1599   | \$7.07  |

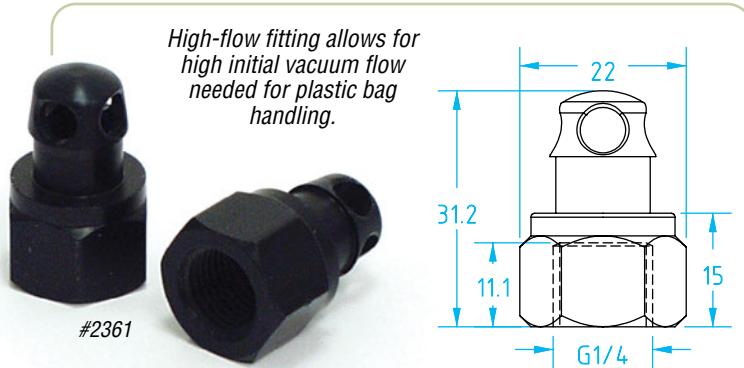
| Pad øD                            | Part#       | Material | Quick# | Price   |
|-----------------------------------|-------------|----------|--------|---------|
| 13mm                              | GSV-HSP-13S | SIL      | 1592   | \$13.50 |
|                                   | GSV-HSP-13P | PU       | 1596   | \$17.63 |
| <b>Nipples - Order Separately</b> |             |          |        |         |
| G1/8"                             | GSF-HSN-G8F | Female   | 1601   | \$8.14  |
|                                   | GSF-HSN-G8M | Male     | 1602   | \$7.07  |

| Pad øD                            | Part#       | Material | Quick# | Price   |
|-----------------------------------|-------------|----------|--------|---------|
| 16mm                              | GSV-HSP-16S | SIL      | 1593   | \$14.52 |
|                                   | GSV-HSP-16P | PU       | 1597   | \$18.68 |
| <b>Nipples - Order Separately</b> |             |          |        |         |
| G1/8"                             | GSF-HSN-G8F | Female   | 1601   | \$8.14  |
|                                   | GSF-HSN-G8M | Male     | 1602   | \$7.07  |



Packaging & Paper

(Shown Actual Size)



High-flow fitting allows for high initial vacuum flow needed for plastic bag handling.

#2361

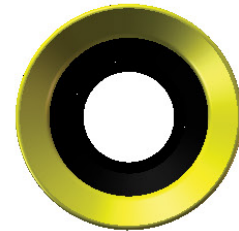
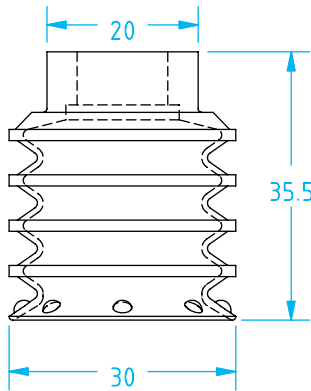
Nipples

| Quick# | Part#       | Thread        | Weight | Price  |
|--------|-------------|---------------|--------|--------|
| 2359   | GSF-04AJ    | G3/8" Male    | 11g    | \$6.43 |
| 2360   | GSF-04AL    | 3/8" NPT Male | 11g    | \$6.43 |
| 2361   | GSF-NF8-G4F | G1/4" Female  | 10g    | \$4.50 |

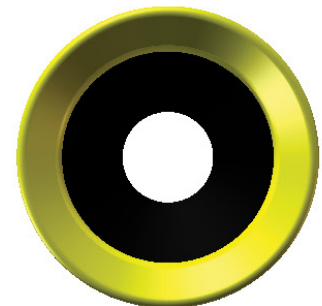
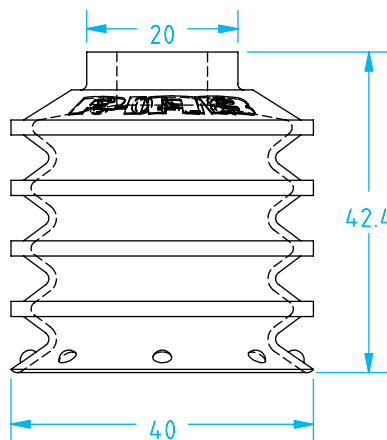


Dual Durometer Properties - Packaging & Paper

| Material                    | Color          | Max Temp. | Durometer       |
|-----------------------------|----------------|-----------|-----------------|
| Dual Durometer Polyurethane | Black / Yellow | 122°F     | 70° / 30° Shore |



| Pad øD | Part#          | Material     | Quick# | Weight | Price   |
|--------|----------------|--------------|--------|--------|---------|
| 30mm   | GSV-BL30-3P-4L | Polyurethane | 5448   | 5.9g   | \$21.85 |



| Pad øD | Part#      | Material     | Quick# | Weight | Price   |
|--------|------------|--------------|--------|--------|---------|
| 40mm   | GSV-BL40-3 | Polyurethane | 2358   | 12g    | \$29.09 |

# Paper and Foil Specialty

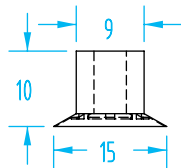
(Shown Actual Size)



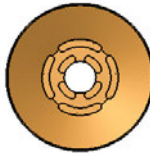
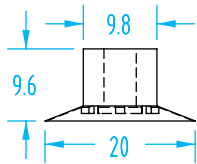
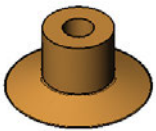
These cups are specially designed for handling paper and foil. The soft, tapered sealing lips and the inner support on the bottom of the pad prevent the foil from being drawn in. The softer material ensures that the paper and foil is not creased or damaged.

Paper & Foil Vacuum Cup Properties

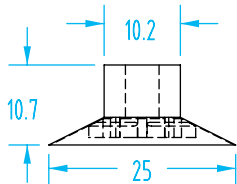
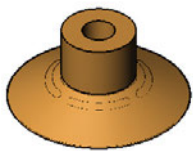
| Material       | Color | Max Temp. | Durometer |
|----------------|-------|-----------|-----------|
| Natural Rubber | Beige | 176°F     | 40°       |



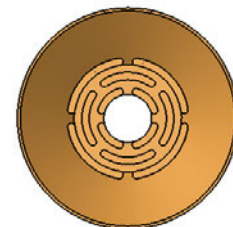
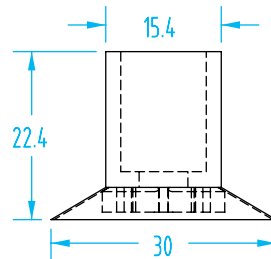
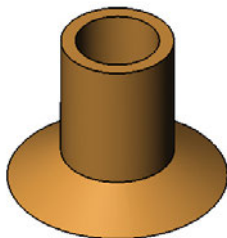
| Pad øD                            | Part#        | Quick# | Price  |
|-----------------------------------|--------------|--------|--------|
| 15mm                              | GSV-PFP-15NR | 250    | \$6.35 |
| <b>Nipples - Order Separately</b> |              |        |        |
| G1/8" Female                      | GSF-PFN-G8F  | 1603   | \$3.99 |
| G1/8" Male                        | GSF-PFN-G8M  | 1604   | \$3.99 |



| Pad øD                            | Part#        | Quick# | Price  |
|-----------------------------------|--------------|--------|--------|
| 20mm                              | GSV-PFP-20NR | 251    | \$7.60 |
| <b>Nipples - Order Separately</b> |              |        |        |
| G1/8" Female                      | GSF-PFN-G8F  | 1603   | \$3.99 |
| G1/8" Male                        | GSF-PFN-G8M  | 1604   | \$3.99 |



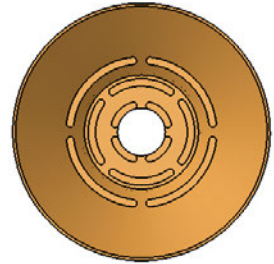
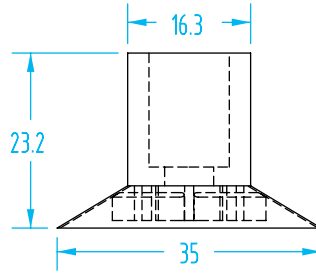
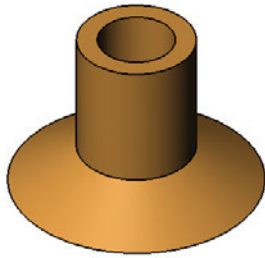
| Pad øD                            | Part#        | Quick# | Price  |
|-----------------------------------|--------------|--------|--------|
| 25mm                              | GSV-PFP-25NR | 252    | \$9.56 |
| <b>Nipples - Order Separately</b> |              |        |        |
| G1/8" Female                      | GSF-PFN-G8F  | 1603   | \$3.99 |
| G1/8" Male                        | GSF-PFN-G8M  | 1604   | \$3.99 |



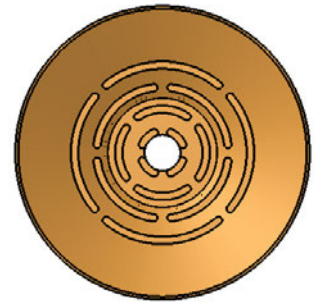
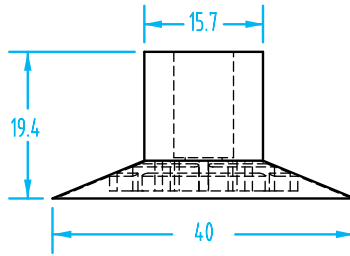
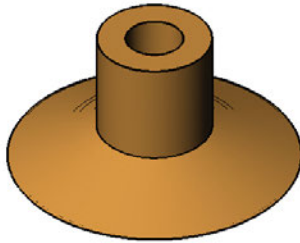
| Pad øD                            | Part#        | Quick# | Price   |
|-----------------------------------|--------------|--------|---------|
| 30mm                              | GSV-PFP-30NR | 253    | \$10.55 |
| <b>Nipples - Order Separately</b> |              |        |         |
| G1/4" Female                      | GSF-PFN2-G4F | 1605   | \$9.03  |

**Paper and Foil Specialty**

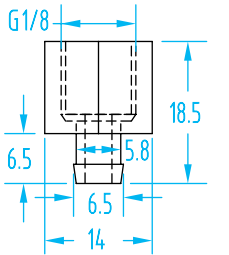
(Shown Actual Size)



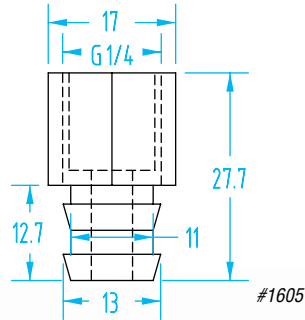
| Pad $\phi$ D                      | Part#        | Quick# | Price   |
|-----------------------------------|--------------|--------|---------|
| 35mm                              | GSV-PFP-35NR | 254    | \$10.55 |
| <b>Nipples - Order Separately</b> |              |        |         |
| G1/4" Female                      | GSF-PFN3-G4F | 1606   | \$9.03  |



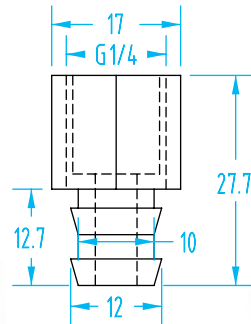
| Pad $\phi$ D                      | Part#        | Quick# | Price   |
|-----------------------------------|--------------|--------|---------|
| 40mm                              | GSV-PFP-40NR | 255    | \$11.24 |
| <b>Nipples - Order Separately</b> |              |        |         |
| G1/4" Female                      | GSF-PFN4-G4F | 1607   | \$6.74  |



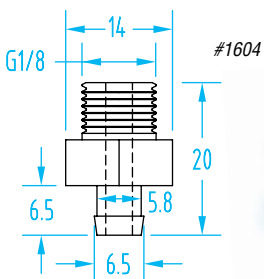
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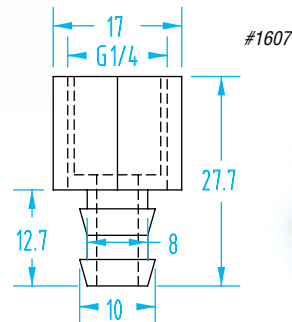
#1605



#1606



#1604



#1607





## 4.5 Bellows – Silicone

(Shown Actual Size)

4.5 Bellows Vacuum Cup Properties

| Material | Color                  | Max Temp. | Durometer |
|----------|------------------------|-----------|-----------|
| Silicone | Semi-translucent white | 392°F     | 50°       |

Use 4.5 bellows cups for significantly curved or angled parts. Remember, 4.5 bellows cups have a significant volume of air to evacuate before vacuum can be generated to grip the part, so attach and release times are greater.

These vacuum cups now include retention rings.

\* 12mm Compressed

| Quick#                            | Part#        | Pad øD                 | Price  |
|-----------------------------------|--------------|------------------------|--------|
| 1390                              | GSV-4BS-20   | 20mm                   | \$8.40 |
| <b>Nipples - Order Separately</b> |              |                        |        |
| 412                               | GSF-NF2-G8M5 | Male G1/8" / Female M5 | \$5.25 |

\* 14mm Compressed

| Quick#                            | Part#      | Pad øD       | Price   |
|-----------------------------------|------------|--------------|---------|
| 1391                              | GSV-4BS-30 | 30mm         | \$10.25 |
| <b>Nipples - Order Separately</b> |            |              |         |
| 413                               | GSF-NF3-G8 | G1/8" Female | \$6.56  |

\* 22mm Compressed

| Quick#                            | Part#      | Pad øD       | Price   |
|-----------------------------------|------------|--------------|---------|
| 1392                              | GSV-4BS-40 | 40mm         | \$12.25 |
| <b>Nipples - Order Separately</b> |            |              |         |
| 413                               | GSF-NF3-G8 | G1/8" Female | \$6.56  |

**4.5 Bellows – Silicone**

(Shown Actual Size)

\* 24mm Compressed

| Quick#                            | Part#       | Pad øD       | Price   |
|-----------------------------------|-------------|--------------|---------|
| 1393                              | GSV-4BS-50  | 50mm         | \$17.45 |
| <b>Nipples - Order Separately</b> |             |              |         |
| 646                               | GSF-NF5-G8F | G1/8" Female | \$5.78  |

**#412**

Male G1/8" / Female M5

Dimensions: 8, 3, 14.5, 6.5, 15, G1/8, M5

**#413**

Dimensions: 10, 3.5, 15.3, 7, 15, G1/8

**#646**

Dimensions: 15, 17.3, 11, 4.5, 15, G1/8

**Nipples for 4.5 Bellow Cups**

| Quick# | Part#        | Nipple        | Thread     | Price  |
|--------|--------------|---------------|------------|--------|
| 412    | GSF-NF2-G8M5 | Male / Female | G1/8" / M5 | \$5.25 |
| 413    | GSF-NF3-G8   | Female        | G1/8"      | \$6.56 |
| 646    | GSF-NF5-G8F  | Female        | G1/8"      | \$5.78 |