



E SUCTION CUPS AND COMPONENT SERIES

139 HOP series

141 HNP series

143 HNT series

146 SCG series

149 HXN series

153 HGP series

165 ZP series

185 ZP3 series

190 ZP3E series

200 ZP3P series

206 ZP3P-JT3 series

208 ZP3P-JT5 series

210 MAF series

213 MAB series

216 MAOF series

218 MAOB series

220 BK series

HOP SERIES SPONGE SUCTION CUP



PRODUCT FEATURES

- *Circular foam sponge
- *The support plate is made of metal material.
- *Optional NF (black) foam chloroprene rubber, OF (orange) Geranium foam rubber.
- *The size specifications are complete.
- *Long lifespan, good sealing, high adsorption capacity, large area support plate, light weight, high load
- *Suitable for workpieces of various sizes and shapes.

MODEL SPECIFICATIONS

HOP 64 NF — □

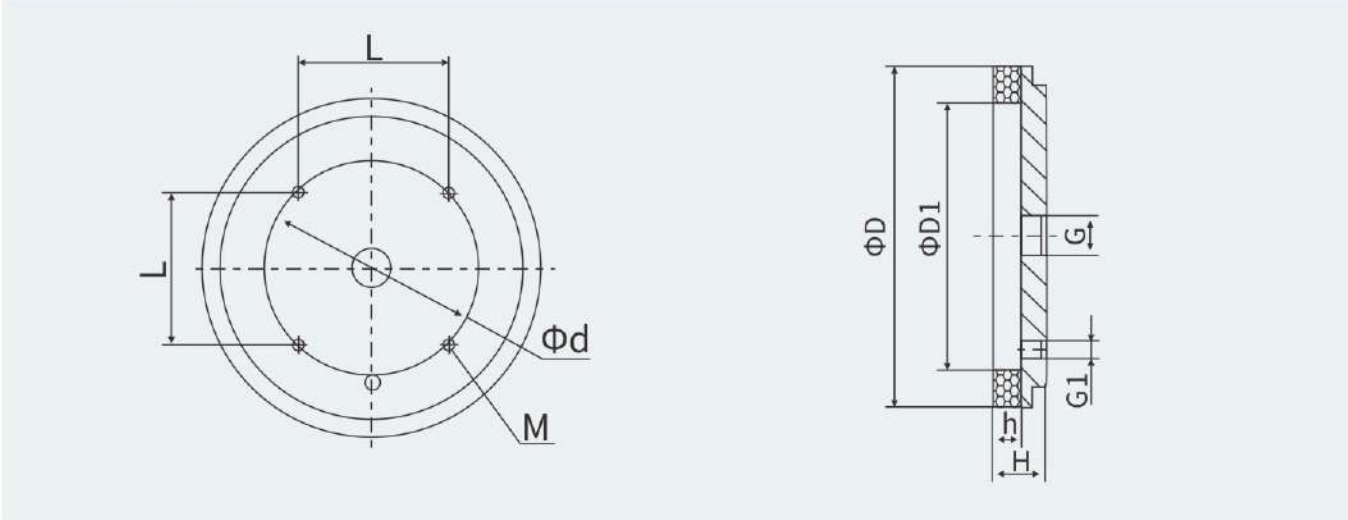
① ② ③ ④

| ① Product Series | ② Specifications and dimensions | ③ Material of suction cup | ④ sponge thickness |
|------------------|---------------------------------|---|--------------------|
| HOP | 40-Φ40mm | NF (black) foamed chloroprene rubber | 5-5mm |
| | 64-Φ64mm | | 10-10mm |
| | 92-Φ92mm | OF (orange) Geranium foam rubber | 15-15mm(default) |
| | 127-Φ127mm | | 20-20mm |
| | 180-Φ180mm | | |
| 220-Φ220mm | | | |

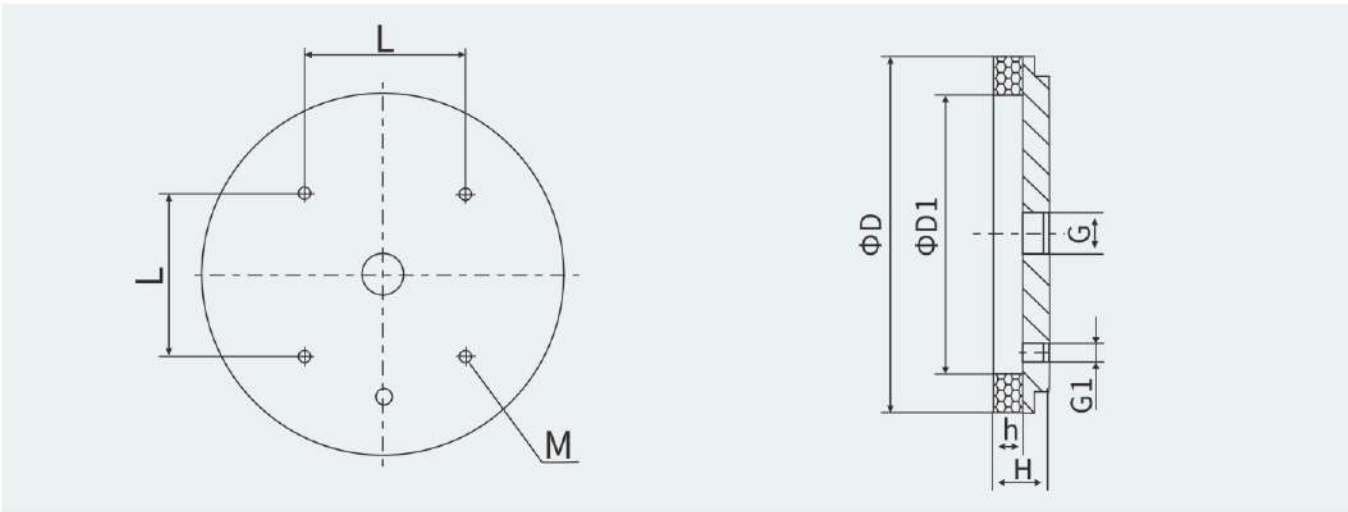
| Model | Connection specifications G2F | Connection specifications G3F | Connection specifications G4F | Minimum packaging PCS |
|----------|-------------------------------|-------------------------------|-------------------------------|-----------------------|
| HOP40 □ | HOP40□-G2F | / | / | 1 |
| HOP64 □ | HOP64□-G2F | / | / | 1 |
| HOP92 □ | / | HOP92□-G3F | / | 1 |
| HOP127 □ | / | / | HOP127□-G4F | 1 |
| HOP180 □ | / | / | HOP180□-G4F | 1 |
| HOP220 □ | / | / | HOP220□-G4F | 1 |

SPECIFICATION AND SIZE (MM)

HOP40~HOP180



HOP220



| Model | D | D1 | H | h | G | G1 | d | L | M | Single weight g | pull-out force N |
|-------------|-----|-----|----|----|------|------|----|----|----------------|--------------------|---------------------|
| HOP40□-G2F | 40 | 20 | 25 | 15 | G1/4 | / | / | / | / | 34.9 | 7.8 |
| HOP64□-G2F | 64 | 40 | 25 | 15 | G1/4 | / | 40 | / | / | 82.1 | 35 |
| HOP92□-G3F | 92 | 64 | 26 | 15 | G3/8 | / | 70 | / | 4-M5x0.8deep6 | 191.1 | 85 |
| HOP127□-G4F | 127 | 92 | 30 | 15 | G1/2 | G1/8 | / | 70 | 4-M5x0.8deep6 | 482.1 | 175 |
| HOP180□-G4F | 180 | 127 | 27 | 15 | G1/2 | G1/8 | / | 80 | 4-M5x0.8deep6 | 754.1 | 385 |
| HOP220□-G4F | 220 | 180 | 42 | 15 | G1/2 | G1/4 | / | 85 | 4-M8x1.25deep6 | 1570.9 | 635 |

Note: 1. Measure the vacuum degree to -60kPa, and the surface of the workpiece is smooth and clean. The above pull out force data does not include safety factors. The data may vary depending on the surface condition of the workpiece. It is recommended to keep the vacuum tube as short as possible, with a length not exceeding 2m.
2. The dimensional tolerance comply with the requirements of GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard.



PRODUCT FEATURES

- *Square foam sponge.
- *The support plate is made of metal material.
- *NF (Black) foamed neoprene rubber and OF (Orange) Geranium foam rubber are optional.
- *The size specifications are complete.
- *Long lifespan, good sealing, high adsorption capacity, large area support plate, light weight, and high load.
- *Suitable for workpieces of various sizes and shapes.

MODEL SPECIFICATIONS

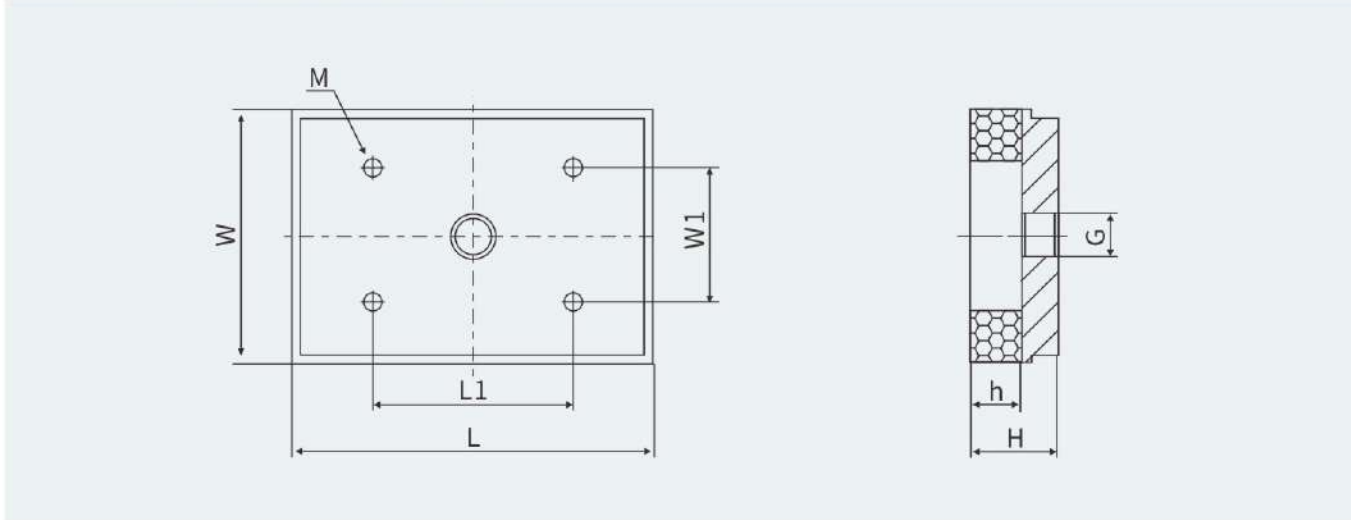
HNP 50x135 NF - □

| ① Product series | ② Specifications and dimensions | ③ Material of suction cup | ④ sponge thickness |
|------------------|---|--|---|
| HNP | 50x135 60x135 75x107 68x290 140x290 | NF (Black) Foamed chloroprene rubber OF (Orange) Geranium Foam rubber | 5-5mm 10-10mm 15-15mm(default) 20-20mm |

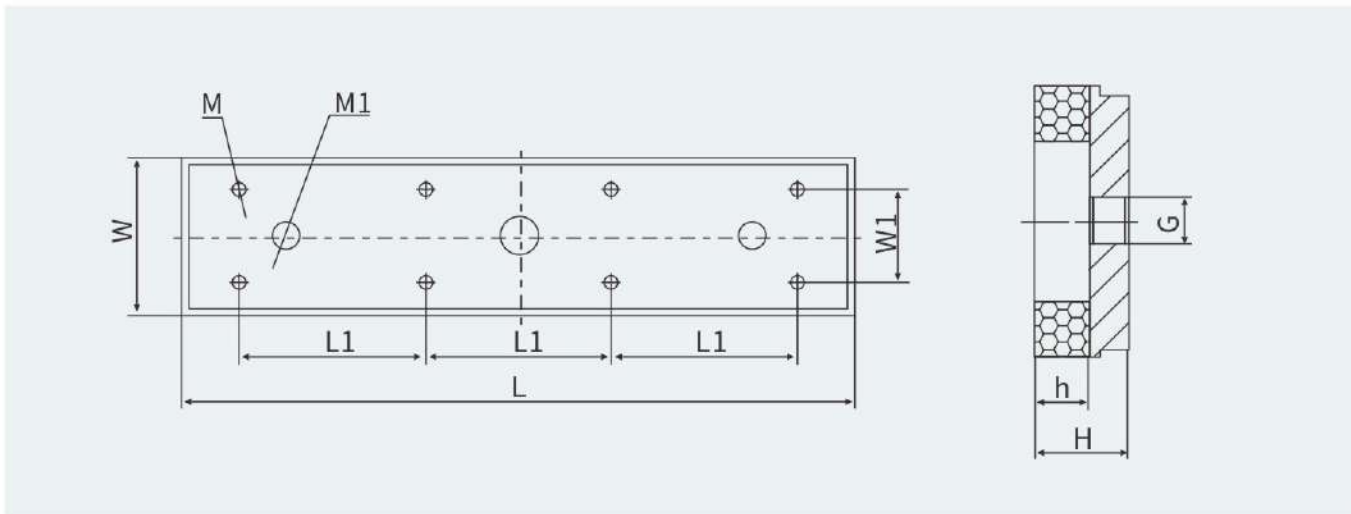
| Model | Connection specifications G2F | Connection specifications G3F | Connection specifications G4F | Minimum packaging PCS |
|-------------|----------------------------------|----------------------------------|----------------------------------|--------------------------|
| HNP50x135□ | HNP50x135□-G2F | / | / | 1 |
| HNP60x135□ | HNP60x135□-G2F | / | / | 1 |
| HNP75x107□ | HNP75x107□-G2F | / | / | 1 |
| HNP68x290□ | / | HNP68x290□-G3F | / | 1 |
| HNP140x290□ | / | / | HNP140x290□-G4F | 1 |

SPECIFICATION AND SIZE (MM)

HNP50x135/HNP60x135/HNP75x107



HNP68x290/HNP140x290



| Model | L | W | L1 | W1 | G | H | h | M | M1 | Single weightg | pull-out force N |
|-----------------|-----|-----|----|-----|------|----|----|---------------|------------|----------------|------------------|
| HNP50x135□-G2F | 135 | 50 | 80 | 30 | G1/4 | 26 | 15 | 4-M5x0.8deep7 | / | 202 | 60 |
| HNP60x135□-G2F | 135 | 60 | 80 | 40 | G1/4 | 26 | 15 | 4-M5x0.8deep7 | / | 246 | 80 |
| HNP75x107□-G2F | 107 | 75 | 60 | 40 | G1/4 | 26 | 15 | 4-M5x0.8deep7 | / | 234 | 90 |
| HNP68x290□-G3F | 290 | 68 | 80 | 40 | G3/8 | 26 | 15 | 8-M5x0.8deep7 | 2-M12x1.75 | 587 | 250 |
| HNP140x290□-G4F | 290 | 140 | 80 | 100 | G1/2 | 26 | 15 | 8-M5x0.8deep7 | 2-M12x1.75 | 1235 | 720 |

Note: 1. Measure the vacuum degree to -60kPa, and the surface of the workpiece is smooth and clean. The above pull out force data does not include safety factors. The data may vary depending on the surface condition of the workpiece. It is recommended to keep the vacuum tube as short as possible, with a length not exceeding 2m.
2. The dimensional tolerance comply with the requirements of GB/T3672.1-2002-1 M3 rubber product dimensional tolerance standard.



PRODUCT FEATURES

- *Low vacuum, high flow rate, with good leakage compensation performance.
- *able to safely separate lightweight and breathable workpieces
- *Built in vacuum generating device based on Bernoulli principle, no need to configure a vacuum generator.
- *Connect compressed air to use.

MODEL SPECIFICATIONS

HNT 20 - □ - S - N

① ② ③ ④ ⑤

| ① Product Series | ② Outer diameter of the body | ③ Body Material |
|------------------------|--|------------------------|
| HNT | 20 - Ø20mm 30 - Ø30mm 40 - Ø40mm 60 - Ø60mm 80 - Ø80mm 100 - Ø100mm 120 - Ø120mm | Blank - Aluminum Alloy |
| ④ Traffic type | ⑤ Cushion material | |
| S - Standard flow rate | N - nbr S - Silica gel PK - PEEK(Traceless material) | |

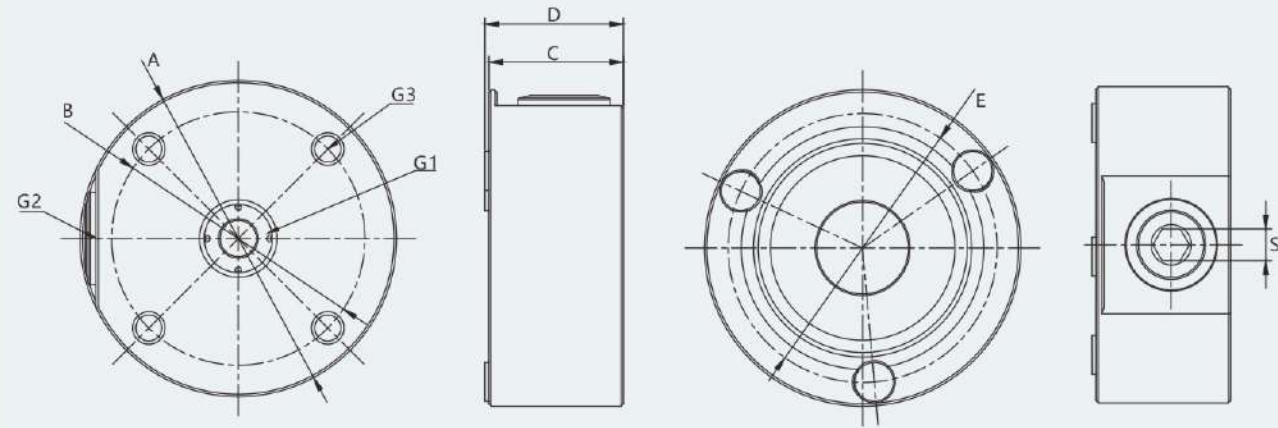
PERFORMANCE PARAMETER

| Model | Gas supply pressure (bar) | Pull-out Force (N) | Gas consumption (NL/min) | Operation Temperature (°C) | Weight (g) |
|--------|---------------------------|--------------------|--------------------------|----------------------------|------------|
| HNT20 | 5 | 2 | 80 | 0-60 | 16 |
| HNT30 | | 4 | 100 | 0-60 | 29.8 |
| HNT40 | | 6.5 | 140 | 0-60 | 48.4 |
| HNT60 | | 13 | 200 | 0-60 | 128 |
| HNT80 | | 26 | 260 | 0-60 | 246 |
| HNT100 | | 46 | 350 | 0-60 | 366 |
| HNT120 | | 89 | 420 | 0-60 | 510 |

Note: The test workpiece is a non breathable rigid load, with a gas supply pressure range of 1-6 bar and vertical movement. The above pull-out force data does not include the safety factor.

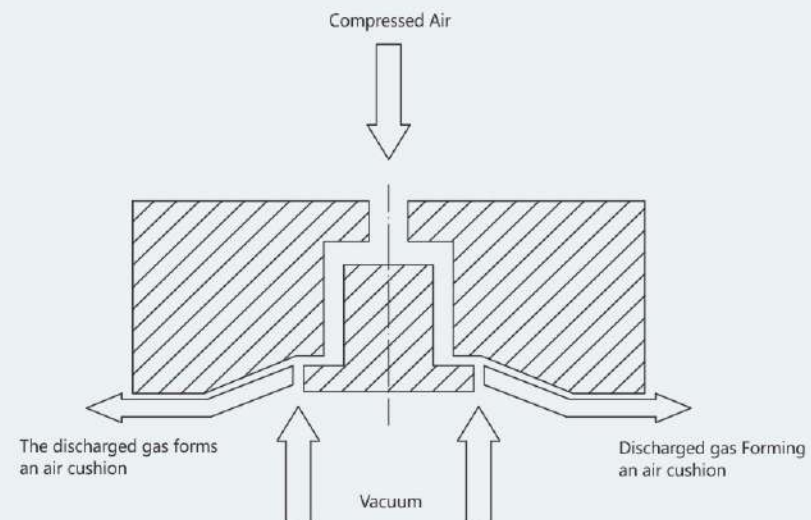
SPECIFICATION AND SIZE (MM)

HNT20~120



| Model | A | B | C | D | E | S | G1 | G2 | G3 |
|--------|-----|-----|----|------|-----|-----|------|------|-------------|
| HNT20 | 20 | 14 | 15 | 15.5 | 16 | 2.5 | M5 | M5 | M3 deep 5.5 |
| HNT30 | 30 | 22 | 17 | 17.7 | 25 | 2.5 | M5 | M5 | M4 deep 6 |
| HNT40 | 40 | 32 | 17 | 17.7 | 34 | 4 | G1/8 | G1/8 | M4 deep 6 |
| HNT60 | 60 | 45 | 17 | 17.7 | 53 | 4 | G1/8 | G1/8 | M4 deep 6 |
| HNT80 | 80 | 60 | 17 | 17.7 | 73 | 4 | G1/8 | G1/8 | M4 deep 6 |
| HNT100 | 100 | 75 | 17 | 17.7 | 92 | 4 | G1/8 | G1/8 | M4 deep 6 |
| HNT120 | 120 | 105 | 17 | 17.7 | 110 | 4 | G1/8 | G1/8 | M4 deep 6 |

PRINCIPLE OF USE



PRODUCT FEATURES

- *Low vacuum, high flow rate, with good leakage compensation performance.
- *it can safely separate lightweight and breathable workpieces.
- *Built in vacuum generating device based on Bernoulli principle, no need to configure a vacuum generator.
- *Connect compressed air to use.

MODEL SPECIFICATIONS

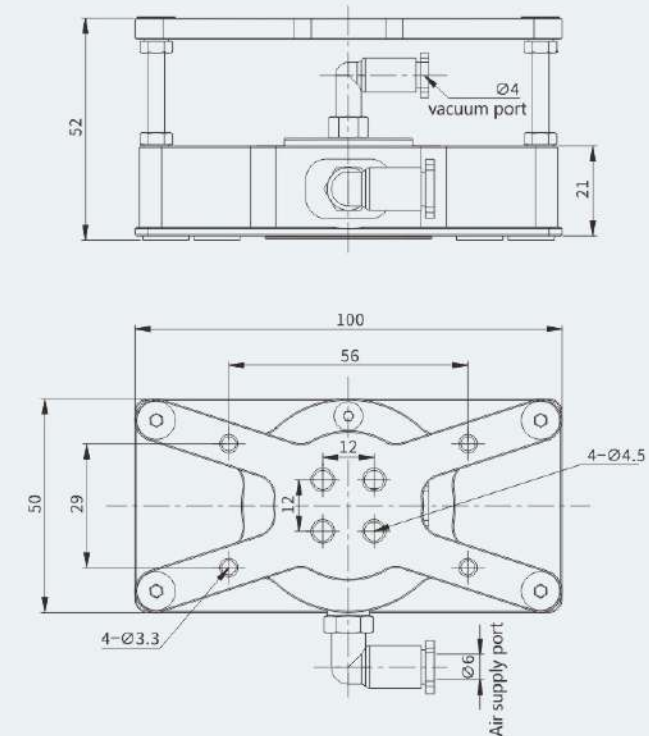
HNT 50×100

① ②

| ① Product Series | ② Specifications and dimensions |
|------------------|---------------------------------|
| HNT | 50×100 |

SPECIFICATION AND SIZE (MM)

HNT50×100



SCG SERIES COMPOSITE VACUUM SUCTION CUP



PRODUCT FEATURES

- *Integrated vacuum generation function, capable of picking up porous materials
- *Handling composite fiber fabrics
- *Handling non rigid and unstable products
- *Used for handling Blank or assembled printed circuit boards
- *Handling extremely thin and fragile plastic films and glass

MODEL SPECIFICATIONS

SCG - 10 MA - 40UM N

| ① Product series | ② Minimum diameter | ③ Installation method | ④ Sucker size | ⑤ Material of suction cup |
|------------------|--------------------|--|--|--------------------------------|
| SCG | 10-Φ10 | MA-axial installation MS-Lateral installation | SF40-Φ42 SF60-Φ60 | P-POM N-NBR S-Silica gel |
| | | | 32UM-Φ32 Single-deck suction cup 40UM-Φ40 Single-deck suction cup 50UM-Φ50 Single-deck suction cup 32BM-Φ32 Double-deck suction cup 40BM-Φ40 Double-deck suction cup 50BM-Φ50 Double-deck suction cup | |

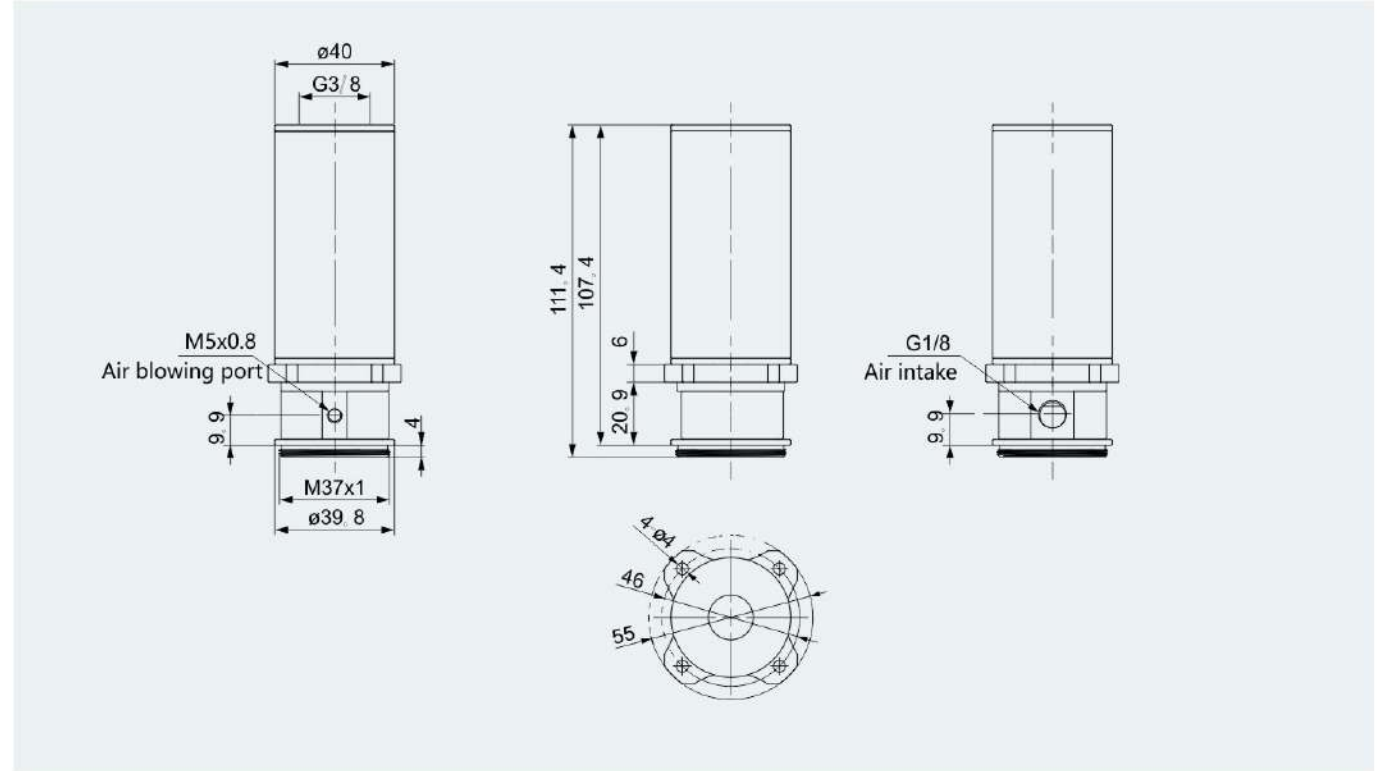
PERFORMANCE PARAMETER

| Model | Minimum diameter mm | Maximum vacuum flow rate NL/min | Vacuum consumption NL/min | Recommended hose inner diameter mm | Standard supply pressure bar |
|----------|---------------------|---------------------------------|---------------------------|------------------------------------|------------------------------|
| SCG-10MA | Φ10 | 270-650 | 40-200 | 4 | 1-5 |
| SCG-10MS | Φ10 | 270-650 | 40-200 | 4 | 1-5 |

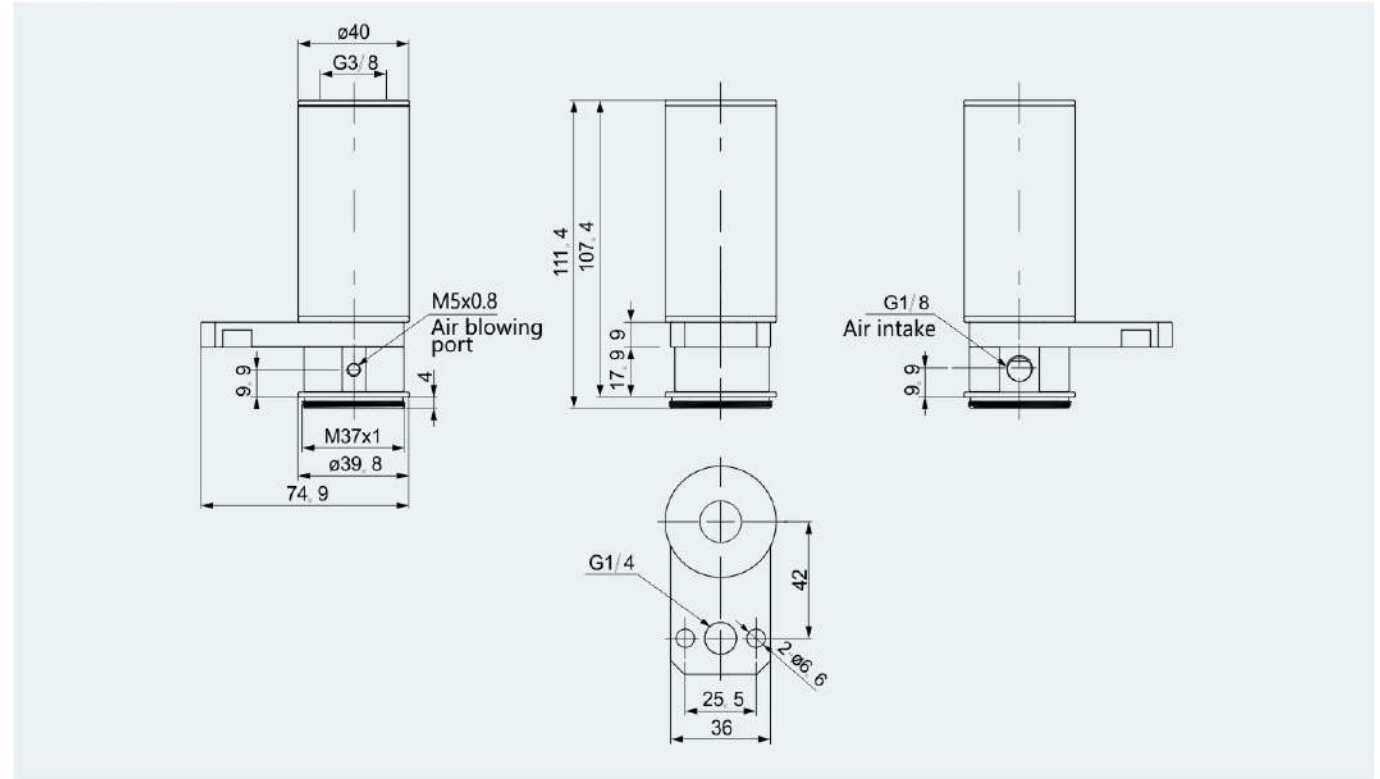
SCG SERIES COMPOSITE VACUUM SUCTION CUP

SPECIFICATION AND SIZE (MM)

SVG-10MA



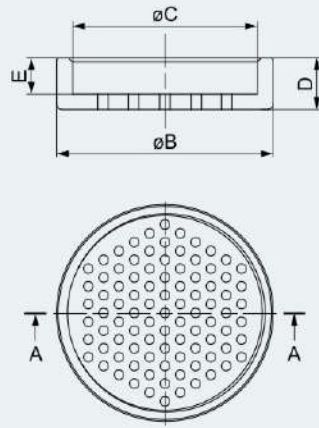
SVG-10MS



- HOP
- HNP
- HNT
- SCG**
- HXN
- HGP
- ZP
- ZP3
- ZP3E
- ZP3P
- ZP3P-JT2
- ZP3P-JT5
- MAF
- MAB
- MAOF
- MAOB
- BK

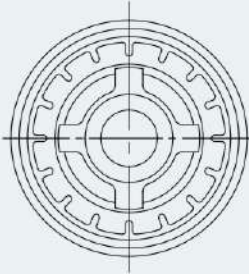
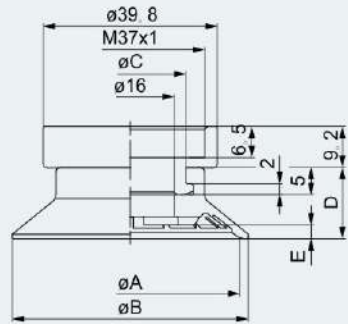
SCG SERIES COMPOSITE VACUUM SUCTION CUP

SF suction cup size



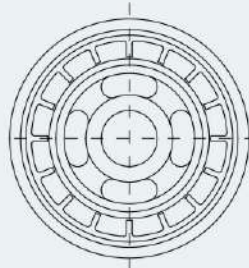
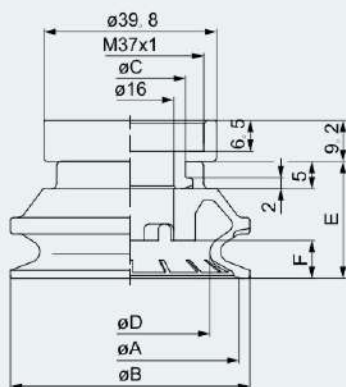
| Model | B | C | D | E | Weight g |
|-------|----|---------|-----|-----|----------|
| SF40P | 42 | M37 x 1 | 9.5 | 6.5 | 7.5 |
| SF60P | 60 | | | 6.8 | 23 |

Single-deck Suction Cup



| Model | | | | A | B | C | D | E | |
|-------|----|----|--------|-----|----|-----|----|------|---|
| ZP3E | 32 | UM | N S | B37 | 32 | 35 | 20 | 13 | 2 |
| | 40 | | | | 43 | 2.5 | | | |
| | 50 | | | | 53 | 27 | | 13.5 | 3 |

Double-deck Suction Cup



| Model | | | | A | B | C | D | E | F | |
|-------|----|----|--------|-----|----|------|----|------|------|----|
| ZP3E | 32 | BM | N S | B37 | 32 | 35 | 20 | 23.3 | 19.5 | 5 |
| | 40 | | | | 44 | 29.4 | | 21.5 | 7 | |
| | 50 | | | | 54 | 27 | | 37 | 25 | 10 |

HXN SERIES SUCTION DEVICE



PRODUCT FEATURES

- *We use both built-in and external vacuum sources for customers to choose from.
- *Mainly used for parts gripping and carrying
- *Easy to install and maintain, cost-effective, customizable.

MODEL SPECIFICATIONS

HXN 22×38 - A □ - □ - □

① ② ③ ④ ⑤ ⑥

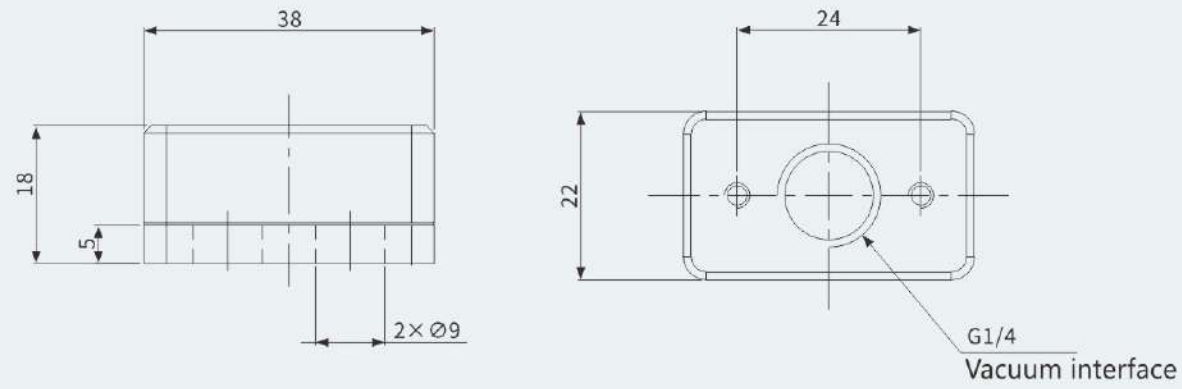
| ① Product Series | ② Specifications and dimensions | ③ Type of adsorption surface | ④ Material of suction cup | ⑤ Vacuum Type | ⑥ Check Valve |
|------------------|--|---|------------------------------------|--|------------------------------------|
| HXN | 22×38 22×76 | A - Conventional sponge | - | Blank - No Vacuum Source | - |
| | 60×120 | A - Conventional sponge | - | X - Built in vacuum source | - |
| | 15×76 15×90 | 051 PCG05Single Row 052 PCG05Double row 071 PCG07Single Row 072 PCG07Double row | Blank - nbr WS - White silicone | X - Built in vacuum source | - |
| | 27×90 | 054 PCG05Four rows 074 PCG07Four rows | | | |
| | 120×120 120×240 180×180 150×240 | A - Conventional sponge 05 - PCG05 07 - PCG07 0503 - PCG05+0.3Leakage hole 0703 - PCG07+0.3Leakage hole 0505 - PCG05+0.5Leakage hole 0705 - PCG07+0.5Leakage hole | Blank - nbr WS - White silicone | Blank - No vacuum source F - Fan suction device X - Built in vacuum source | Blank - No valve Z - With valve |

Note: No fan suction for sizes blow 120 suction cups can not be selected once you chose sponge
Only sponge suction system can be equipped with a check valve.

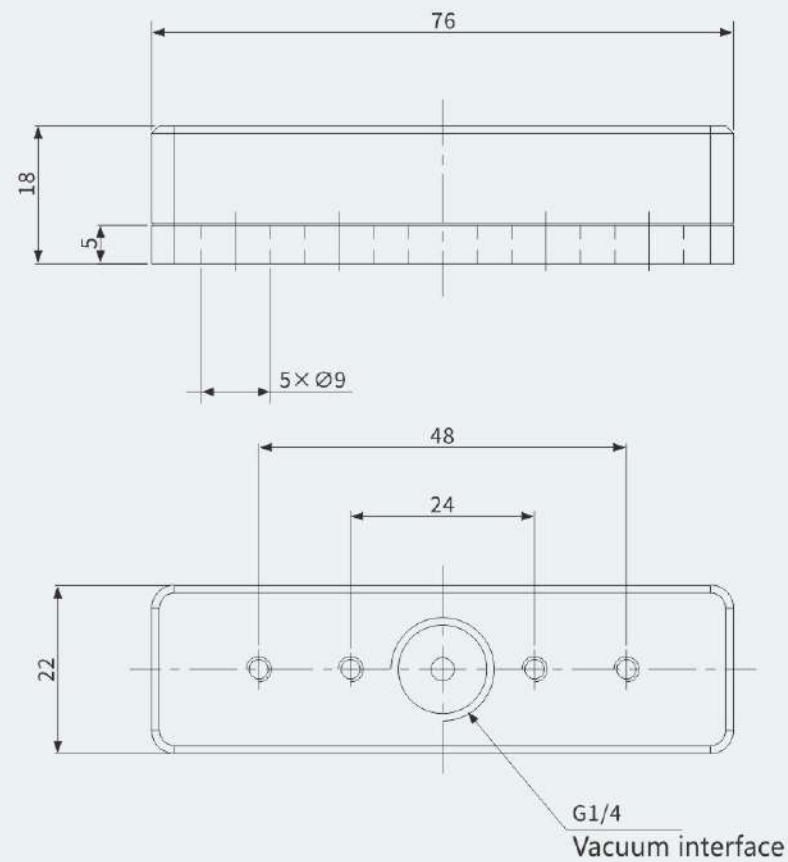
- HOP
- HNP
- HNT
- SCG
- HXN
- HGP
- ZP
- ZP3
- ZP3E
- ZP3P
- ZP3P-JT2
- ZP3P-JT5
- MAF
- MAB
- MAOF
- MAOB
- BK

SPECIFICATION AND SIZE (MM)

HXN22×38-A

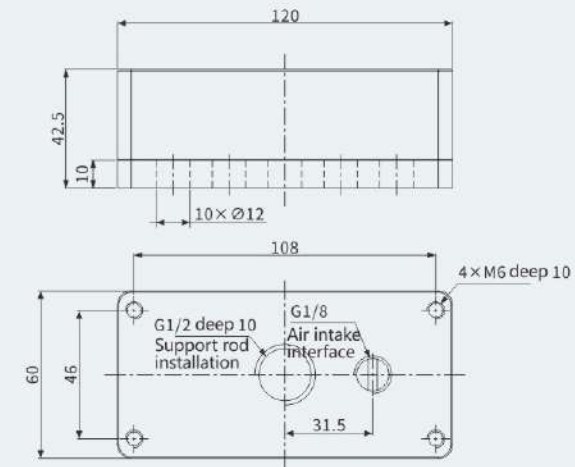


HXN22×76-A

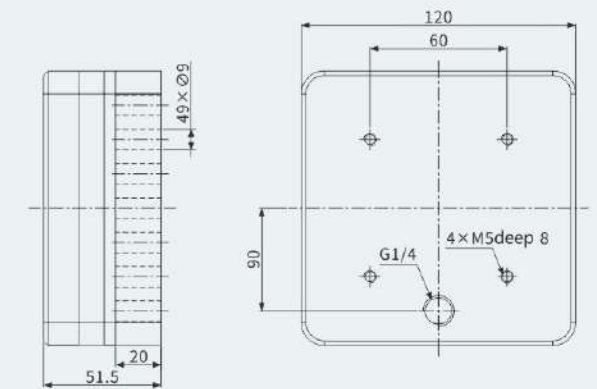


SPECIFICATION SIZE (MM)

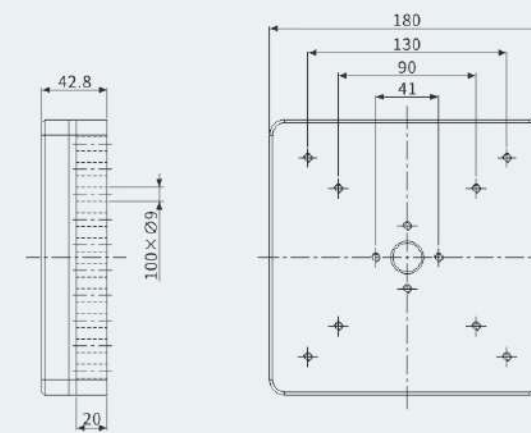
HXN60×120-AX



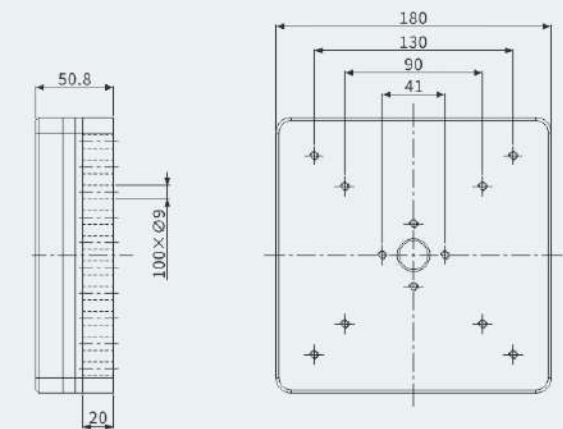
HXN120×120-AZ



HXN180×180-A

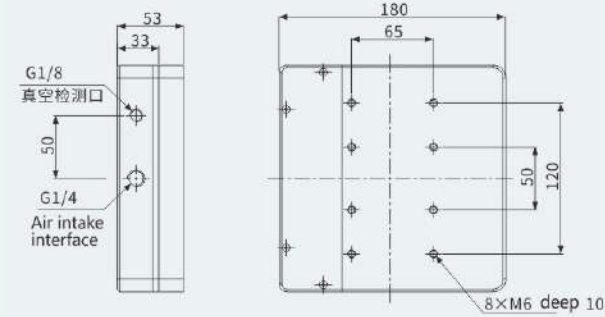


HXN180×180-AZ

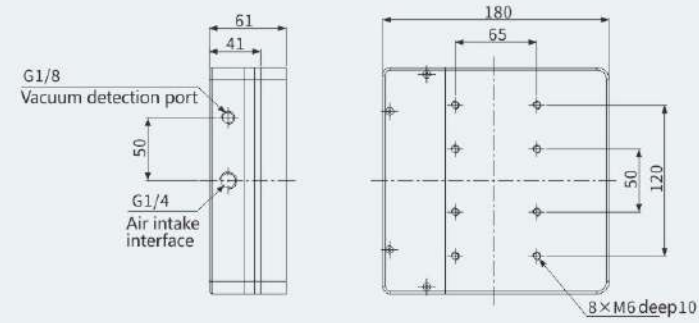


SPECIFICATION AND SIZE (MM)

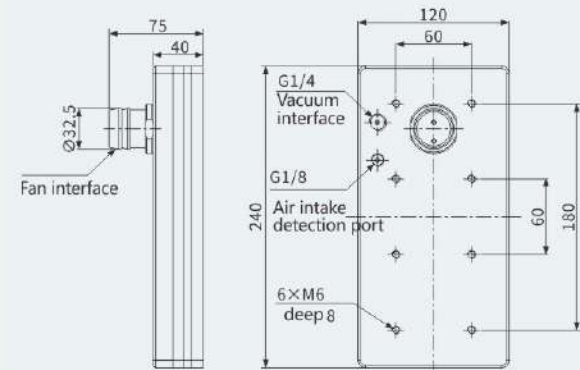
HXN180×180 - AX



HXN180×180 - AXZ



HXN120×240 - AFZ



PRODUCT FEATURES

- *Medium sized standardized design
- *Adopting lightweight and tough high-strength aluminum profiles with built-in multi-stage vacuum generator modules
- *Adopting H-TAN's unique valve body technology
- *Different hole shape technologies are suitable for more workpiece applications
- *European original imported sealing sponge pads have a longer lifespan

MODEL SPECIFICATIONS

HGP 130 - 1234 V - 3 F 20 - A

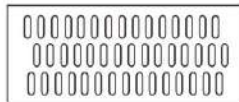
| ① Product series | ② Suction device Width | ③ Sucker length | ④ Vacuum valve specifications | ⑤ Sponge design Types of |
|-------------------------|---|-----------------|-------------------------------|--------------------------|
| HGP | 130mm | 182-182mm | V: self-closing valve | 3: PAO3 |
| | | 218-218mm | L: Flow valve | 4: PAO4 |
| | | 262-262mm | S: High speed valve | 5: PAO5 |
| | | 316-316mm | | 1: PAO1 |
| | | 352-352mm | | |
| | | 442-442mm | | |
| | | 550-550mm | | |
| | | 640-640mm | | |
| | | 712-712mm | | |
| | | 838-838mm | | |
| | | 910-910mm | | |
| | | 1000-1000mm | | |
| 1234-1234mm | | | | |
| 1432-1432mm | | | | |
| ⑥ Types of suction pads | ⑦ Dimensions and Types of Sponge Seals | | ⑧ Vacuum source configuration | |
| F: sponge | 20:20mm 30:30mm 20F: With filtering function 30F: With filtering function M: Traceless type | | A: generator | |

- HOP
- HNP
- HNT
- SCG
- HXN**
- HGP**
- ZP
- ZP3
- ZP3E
- ZP3P
- ZP3P-JT2
- ZP3P-JT5
- MAF
- MAB
- MAOF
- MAOB
- BK

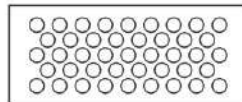
SELECTION CODE FOR SEALING SPONGE GASKET

HGP 130 – 1234 PA03 20 FM

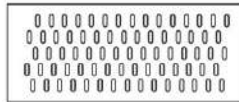
| ①Width | ②Length | ③Sponge Type | ④Width | ⑤Cushion Types |
|--------|---------|------------------------------|--------|-----------------------------------|
| mm | mm | PA03 PA04 PA05 PA01 | mm | Blank:basic Type F:filter Type |



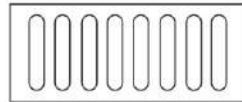
- * HGP130standard Sponge design
- * Types of: PA03
- * General



- * HGP130customization Sponge design
- * Types of: PA04
- * Special occasion applications require customization



- * HGP130customization Sponge design
- * Types of: PA05
- * Special occasion applications require customization



- * HGP130customization Sponge design
- * Types of: PA01
- * Special occasion applications require customization

PERFORMANCE PARAMETER

PA03series

| Model | Types of | Number of holes | Air supply pressure bar | Gas consumption NL/min | vacuum degree kPa | Vacuum flow rate NL/min | Suction force N | Weight kg |
|---------------------|----------|-----------------|-------------------------|------------------------|-------------------|-------------------------|-----------------|-----------|
| HGP130-262V-3F★★-A | PA03 | 36 | 4~6 | 100 | -60 | 350 | 393 | 2.5 |
| HGP130-316V-3F★★-A | PA03 | 45 | 4~6 | 100 | -60 | 350 | 491 | 2.7 |
| HGP130-352V-3F★★-A | PA03 | 51 | 4~6 | 100 | -60 | 350 | 557 | 2.9 |
| HGP130-442V-3F★★-A | PA03 | 66 | 4~6 | 200 | -60 | 600 | 721 | 3.3 |
| HGP130-550V-3F★★-A | PA03 | 84 | 4~6 | 200 | -60 | 600 | 917 | 3.7 |
| HGP130-640V-3F★★-A | PA03 | 99 | 4~6 | 300 | -60 | 1050 | 1081 | 4.1 |
| HGP130-712V-3F★★-A | PA03 | 111 | 4~6 | 300 | -60 | 1050 | 1212 | 4.5 |
| HGP130-838V-3F★★-A | PA03 | 132 | 4~6 | 300 | -60 | 1050 | 1441 | 5.1 |
| HGP130-910V-3F★★-A | PA03 | 144 | 4~6 | 400 | -60 | 1400 | 1572 | 5.4 |
| HGP130-1000V-3F★★-A | PA03 | 159 | 4~6 | 400 | -60 | 1400 | 1736 | 5.7 |
| HGP130-1234V-3F★★-A | PA03 | 198 | 4~6 | 600 | -60 | 2100 | 2162 | 7.3 |
| HGP130-1432V-3F★★-A | PA03 | 231 | 4~6 | 600 | -60 | 2100 | 2522 | 8.6 |

PA04series

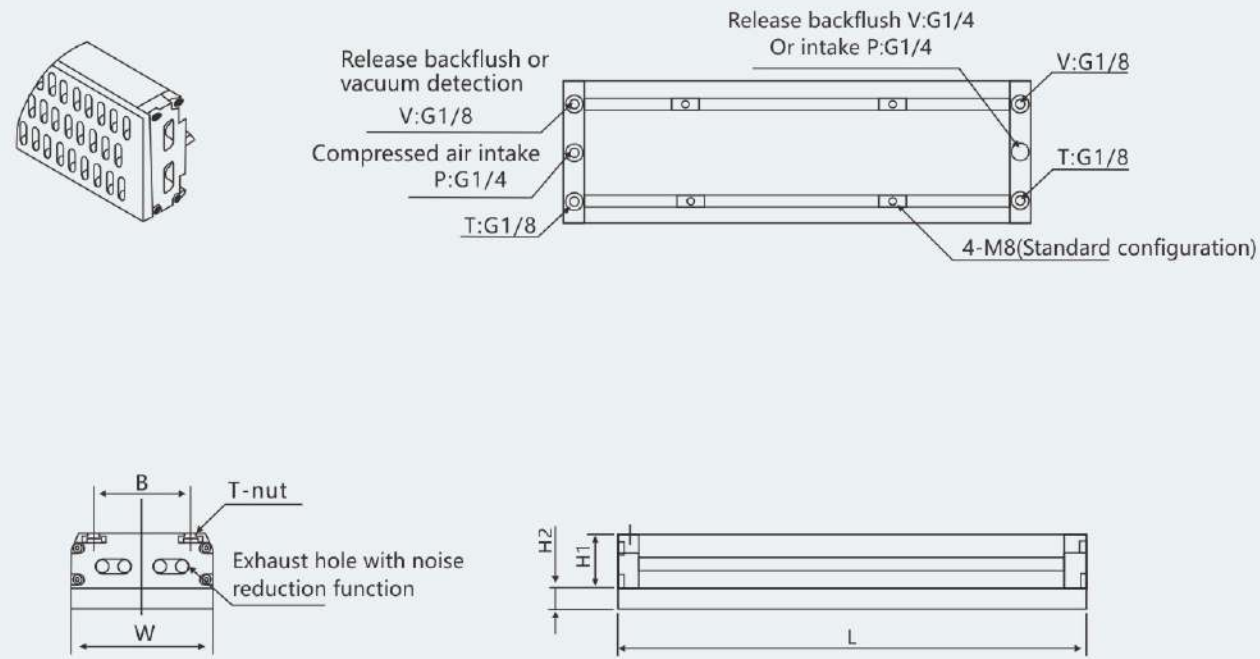
| Model | Types of | Number of holes | Air supply pressure bar | Gas consumption NL/min | vacuum degree kPa | Vacuum flow rate NL/min | Suction force N | Weight kg |
|---------------------|----------|-----------------|-------------------------|------------------------|-------------------|-------------------------|-----------------|-----------|
| HGP130-295V-4F★★-A | PA04 | 53 | 4~6 | 100 | -60 | 350 | 490 | 2.6 |
| HGP130-434V-4F★★-A | PA04 | 83 | 4~6 | 200 | -60 | 600 | 767 | 3.3 |
| HGP130-572V-4F★★-A | PA04 | 113 | 4~6 | 300 | -60 | 1050 | 1044 | 3.8 |
| HGP130-711V-4F★★-A | PA04 | 143 | 4~6 | 300 | -60 | 1050 | 1321 | 4.5 |
| HGP130-849V-4F★★-A | PA04 | 173 | 4~6 | 400 | -60 | 1400 | 1598 | 5.2 |
| HGP130-988V-4F★★-A | PA04 | 203 | 4~6 | 400 | -60 | 1400 | 1875 | 5.6 |
| HGP130-1126V-4F★★-A | PA04 | 233 | 4~6 | 600 | -60 | 2100 | 2152 | 7.0 |
| HGP130-1265V-4F★★-A | PA04 | 263 | 4~6 | 600 | -60 | 2450 | 2429 | 7.4 |
| HGP130-1403V-4F★★-A | PA04 | 293 | 4~6 | 600 | -60 | 2450 | 2606 | 8.5 |
| HGP130-1542V-4F★★-A | PA04 | 323 | 4~6 | 800 | -60 | 2800 | 2983 | 9.1 |

PA05series

| Model | Types of | Number of holes | Air supply pressure bar | Gas consumption NL/min | vacuum degree kPa | Vacuum flow rate NL/min | Suction force N | Weight kg |
|---------------------|----------|-----------------|-------------------------|------------------------|-------------------|-------------------------|-----------------|-----------|
| HGP130-262V-5F★★-A | PA05 | 60 | 4~6 | 100 | -60 | 350 | 287 | 2.5 |
| HGP130-316V-5F★★-A | PA05 | 75 | 4~6 | 200 | -60 | 600 | 358 | 2.7 |
| HGP130-352V-5F★★-A | PA05 | 85 | 4~6 | 200 | -60 | 600 | 406 | 2.9 |
| HGP130-442V-5F★★-A | PA05 | 110 | 4~6 | 300 | -60 | 1050 | 526 | 3.3 |
| HGP130-550V-5F★★-A | PA05 | 140 | 4~6 | 400 | -60 | 1400 | 669 | 3.7 |
| HGP130-640V-5F★★-A | PA05 | 165 | 4~6 | 400 | -60 | 1400 | 788 | 4.1 |
| HGP130-712V-5F★★-A | PA05 | 185 | 4~6 | 400 | -60 | 1400 | 884 | 4.5 |
| HGP130-838V-5F★★-A | PA05 | 220 | 4~6 | 400 | -60 | 1400 | 1051 | 5.1 |
| HGP130-910V-5F★★-A | PA05 | 245 | 4~6 | 600 | -60 | 2100 | 1171 | 5.4 |
| HGP130-1000V-5F★★-A | PA05 | 265 | 4~6 | 600 | -60 | 2450 | 1266 | 5.7 |
| HGP130-1234V-5F★★-A | PA05 | 330 | 4~6 | 800 | -60 | 2800 | 1577 | 7.3 |
| HGP130-1432V-5F★★-A | PA05 | 380 | 4~6 | 800 | -60 | 2800 | 1840 | 8.6 |

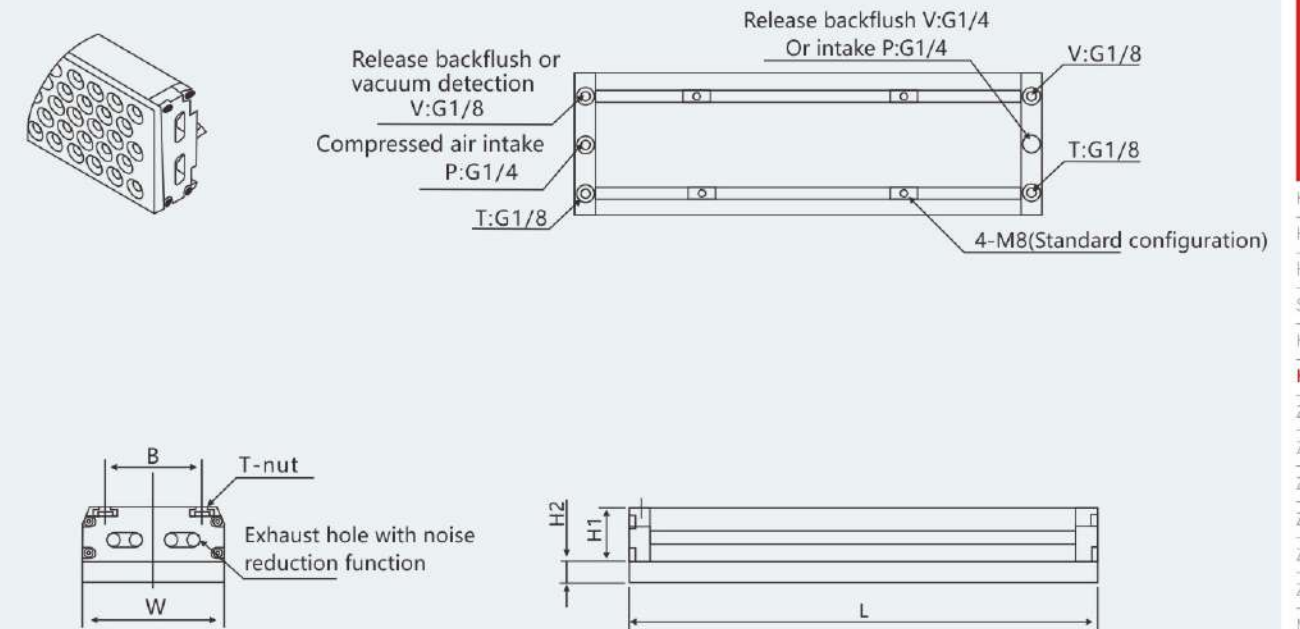
SPECIFICATION AND SIZE (MM)

PA03series



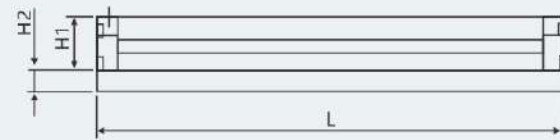
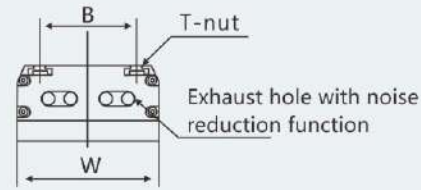
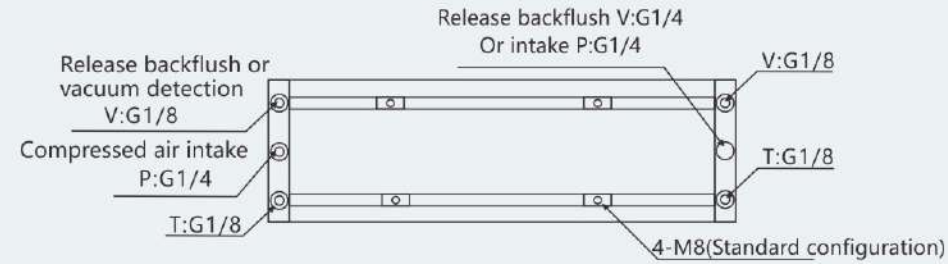
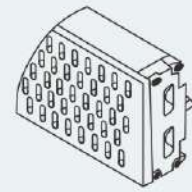
| Model | B | H1 | H2(★★) | | | W | L |
|---------------------|----|----|--------|----|----|-----|------|
| HGP130-262V-3F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 262 |
| HGP130-316V-3F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 316 |
| HGP130-352V-3F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 352 |
| HGP130-442V-3F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 442 |
| HGP130-550V-3F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 550 |
| HGP130-640V-3F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 640 |
| HGP130-712V-3F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 712 |
| HGP130-838V-3F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 838 |
| HGP130-910V-3F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 910 |
| HGP130-1000V-3F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 1000 |
| HGP130-1234V-3F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 1234 |
| HGP130-1432V-3F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 1432 |

PA04series



| Model | B | H1 | H2(★★) | | | W | L |
|---------------------|----|----|--------|----|----|-----|------|
| HGP130-295V-4F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 295 |
| HGP130-434V-4F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 434 |
| HGP130-572V-4F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 572 |
| HGP130-711V-4F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 711 |
| HGP130-849V-4F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 849 |
| HGP130-988V-4F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 988 |
| HGP130-1126V-4F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 1126 |
| HGP130-1265V-4F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 1265 |
| HGP130-1403V-4F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 1403 |
| HGP130-1542V-4F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 1542 |

PA05series



| Model | B | H1 | H2(★★) | | | W | L |
|---------------------|----|----|--------|----|----|-----|------|
| HGP130-262V-5F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 262 |
| HGP130-316V-5F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 316 |
| HGP130-352V-5F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 352 |
| HGP130-442V-5F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 442 |
| HGP130-550V-5F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 550 |
| HGP130-640V-5F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 640 |
| HGP130-712V-5F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 712 |
| HGP130-838V-5F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 838 |
| HGP130-910V-5F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 910 |
| HGP130-1000V-5F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 1000 |
| HGP130-1234V-5F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 1234 |
| HGP130-1432V-5F★★-A | 90 | 50 | 10 | 15 | 20 | 130 | 1432 |



PRODUCT FEATURES

- *Medium sized standardized design
- *Convenient and simple maintenance and repair
- *Adopting lightweight and tough high-strength aluminum profiles with built-in multi-stage vacuum generator modules
- *Adopting H-TAN's unique valve body technology
- *Different hole shape technologies are suitable for more workpiece applications
- *European original imported sealing sponge pads have a longer lifespan

MODEL SPECIFICATIONS

HGP 130 – 1234 V – 3 F 20 – E – □

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Product series ② Suction Width ③ Sucker length ④ Vacuum valve specifications ⑤ Sponge design Types of

| | | | | |
|-------------|-------|-------------|---|---------|
| HGP | 130mm | 262-262mm | V: self-closing valve L: Flow valve S: High speed valve | 3: PA03 |
| | | 316-316mm | | 4: PA04 |
| | | 352-352mm | | 5: PA05 |
| | | 442-442mm | | 1: PA01 |
| | | 550-550mm | | |
| | | 640-640mm | | |
| | | 712-712mm | | |
| | | 838-838mm | | |
| | | 910-910mm | | |
| | | 1000-1000mm | | |
| 1234-1234mm | | | | |
| 1432-1432mm | | | | |

⑥ Types of suction pads ⑦ Dimensions and Types of Sponge Seals ⑧ Vacuum source configuration ⑨ Bellows joint

| | | | |
|-----------|------------------------------|--------------------|----------|
| F: sponge | 20: 20mm | E: Vacuum fan pump | 32: 32mm |
| | 30: 30mm | | 60: 60mm |
| | 20F: With filtering function | | |
| | 30F: With filtering function | | |

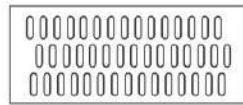
SELECTION CODE FOR SEALING SPONGE GASKET

HGP 130 – 1234 PA03 20 FM

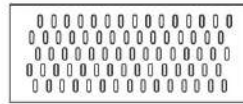
① Width ② length ③ Sponge Types ④ Width ⑤ Cushion Types

mm mm PA03
 PA04
 PA05
 PA01

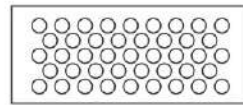
Blank:Basic type
F:Filter type



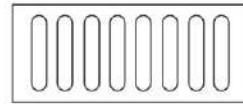
* HGP130 standard Sponge design
* Types of: PA03
* General



* HGP130 standard Sponge design
* Types of: PA05
* Special occasion applications require customization



* HGP130 customization Sponge design
* Types of: PA04
* Special occasion applications require customization



* HGP130 standard Sponge design
* Types of: PA01
* Special occasion applications require customization

PERFORMANCE PARAMETER

PA03series

| Model | Types of | Number of holes | Required pumping volume NL/min | vacuum degree kPa | Suction force N(-40kPa) | Weight kg |
|---------------------|----------|-----------------|--------------------------------|-------------------|-------------------------|-----------|
| HGP130-262V-3F★★-E | PA03 | 36 | 110 | 40 | 262 | 2.2 |
| HGP130-316V-3F★★-E | PA03 | 45 | 150 | 40 | 328 | 2.4 |
| HGP130-352V-3F★★-E | PA03 | 51 | 220 | 40 | 371 | 2.6 |
| HGP130-442V-3F★★-E | PA03 | 66 | 300 | 40 | 480 | 3.0 |
| HGP130-550V-3F★★-E | PA03 | 84 | 390 | 40 | 611 | 3.4 |
| HGP130-640V-3F★★-E | PA03 | 99 | 450 | 40 | 721 | 3.8 |
| HGP130-712V-3F★★-E | PA03 | 111 | 510 | 40 | 808 | 4.2 |
| HGP130-838V-3F★★-E | PA03 | 132 | 600 | 40 | 961 | 4.8 |
| HGP130-910V-3F★★-E | PA03 | 144 | 680 | 40 | 1048 | 4.9 |
| HGP130-1000V-3F★★-E | PA03 | 159 | 750 | 40 | 1157 | 5.2 |
| HGP130-1234V-3F★★-E | PA03 | 198 | 900 | 40 | 1441 | 6.8 |
| HGP130-1432V-3F★★-E | PA03 | 231 | 1050 | 40 | 1682 | 8.1 |

PA04series

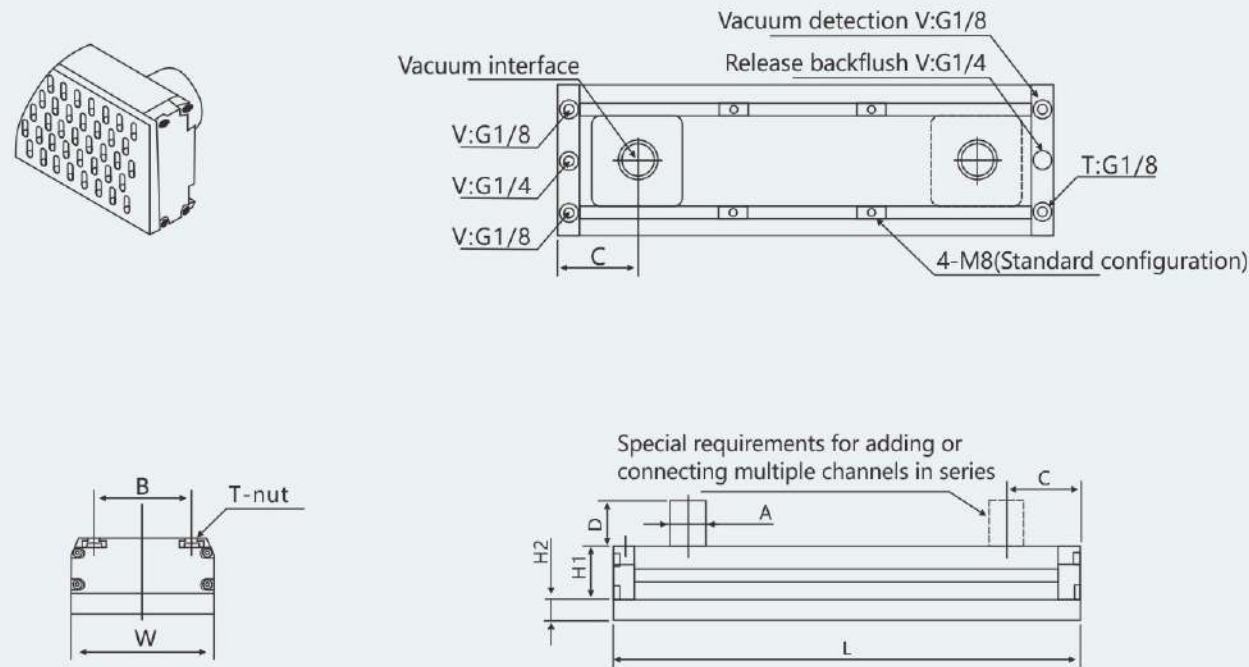
| Model | Types of | Number of holes | Required pumping volume NL/min | vacuum degree kPa | Suction force N(-40kPa) | Weight kg |
|---------------------|----------|-----------------|--------------------------------|-------------------|-------------------------|-----------|
| HGP130-295V-4F★★-A | PA04 | 53 | 150 | 40 | 326 | 2.6 |
| HGP130-434V-4F★★-A | PA04 | 83 | 300 | 40 | 511 | 3.3 |
| HGP130-572V-4F★★-A | PA04 | 113 | 400 | 40 | 696 | 3.8 |
| HGP130-711V-4F★★-A | PA04 | 143 | 510 | 40 | 881 | 4.5 |
| HGP130-849V-4F★★-A | PA04 | 173 | 600 | 40 | 1065 | 5.2 |
| HGP130-988V-4F★★-A | PA04 | 203 | 750 | 40 | 1250 | 5.6 |
| HGP130-1126V-4F★★-A | PA04 | 233 | 850 | 40 | 1435 | 7.0 |
| HGP130-1265V-4F★★-A | PA04 | 263 | 950 | 40 | 1619 | 7.4 |
| HGP130-1403V-4F★★-A | PA04 | 293 | 1050 | 40 | 1804 | 8.5 |
| HGP130-1542V-4F★★-A | PA04 | 323 | 1250 | 40 | 1989 | 9.1 |

PA05series

| Model | Types of | Number of holes | Required pumping volume NL/min | vacuum degree kPa | Suction force N(-40kPa) | Weight kg |
|---------------------|----------|-----------------|--------------------------------|-------------------|-------------------------|-----------|
| HGP130-262V-5F★★-E | PA05 | 60 | 110 | 40 | 191 | 2.2 |
| HGP130-316V-5F★★-E | PA05 | 75 | 150 | 40 | 239 | 2.4 |
| HGP130-352V-5F★★-E | PA05 | 85 | 220 | 40 | 271 | 2.6 |
| HGP130-442V-5F★★-E | PA05 | 110 | 300 | 40 | 350 | 3.0 |
| HGP130-550V-5F★★-E | PA05 | 140 | 390 | 40 | 446 | 3.4 |
| HGP130-640V-5F★★-E | PA05 | 165 | 450 | 40 | 526 | 3.8 |
| HGP130-712V-5F★★-E | PA05 | 185 | 510 | 40 | 589 | 4.2 |
| HGP130-838V-5F★★-E | PA05 | 220 | 600 | 40 | 701 | 4.8 |
| HGP130-910V-5F★★-E | PA05 | 245 | 680 | 40 | 780 | 4.9 |
| HGP130-1000V-5F★★-E | PA05 | 265 | 750 | 40 | 844 | 5.2 |
| HGP130-1234V-5F★★-E | PA05 | 330 | 900 | 40 | 1051 | 6.8 |
| HGP130-1432V-5F★★-E | PA05 | 385 | 1050 | 40 | 1226 | 8.1 |

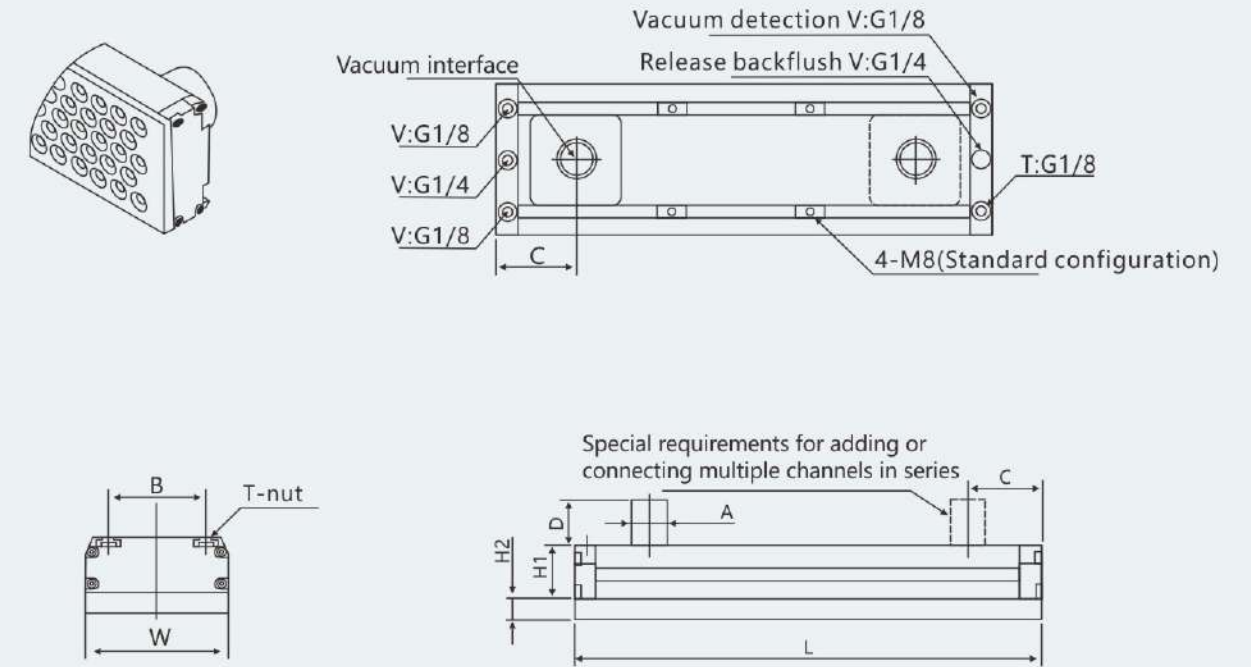
SPECIFICATION AND SIZE (MM)

PA03series



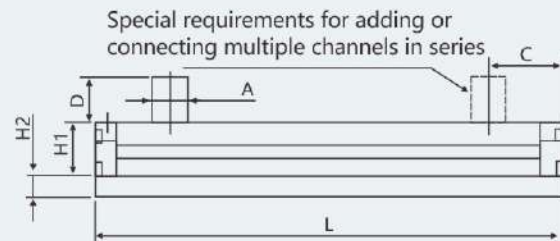
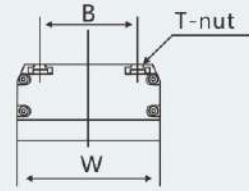
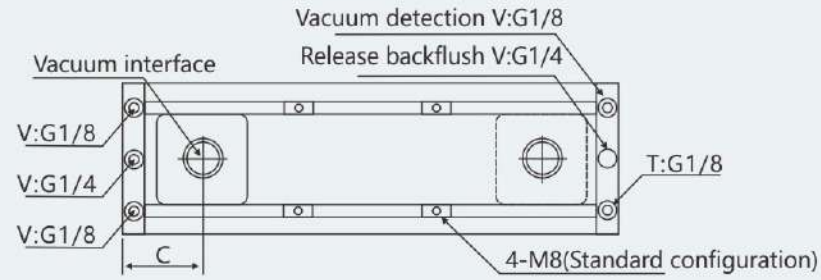
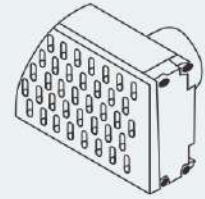
| Model | A | B | C | D | H1 | H2(★★) | | | W | L |
|---------------------|--------|----|----|----|----|--------|----|----|-----|------|
| HGP130-262V-3F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 262 |
| HGP130-316V-3F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 316 |
| HGP130-352V-3F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 352 |
| HGP130-442V-3F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 442 |
| HGP130-550V-3F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 550 |
| HGP130-640V-3F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 640 |
| HGP130-712V-3F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 712 |
| HGP130-838V-3F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 838 |
| HGP130-910V-3F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 910 |
| HGP130-1000V-3F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 1000 |
| HGP130-1234V-3F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 1234 |
| HGP130-1432V-3F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 1432 |

PA04series



| Model | A | B | C | D | H1 | H2(★★) | | | W | L |
|---------------------|--------|----|----|----|----|--------|----|----|-----|------|
| HGP130-295V-4F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 295 |
| HGP130-434V-4F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 434 |
| HGP130-572V-4F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 572 |
| HGP130-711V-4F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 711 |
| HGP130-849V-4F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 849 |
| HGP130-988V-4F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 988 |
| HGP130-1126V-4F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 1126 |
| HGP130-1265V-4F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 1265 |
| HGP130-1403V-4F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 1403 |
| HGP130-1542V-4F★★-E | 60(32) | 90 | 69 | 54 | 50 | 10 | 15 | 20 | 130 | 1542 |

PA05series



| Model | A | B | C | D | H1 | H2(★★) | W | L |
|---------------------|--------|----|----|----|----|----------|-----|------|
| HGP130-262V-5F★★-A | 60(32) | 90 | 69 | 54 | 50 | 10 15 20 | 130 | 262 |
| HGP130-316V-5F★★-A | 60(32) | 90 | 69 | 54 | 50 | 10 15 20 | 130 | 316 |
| HGP130-352V-5F★★-A | 60(32) | 90 | 69 | 54 | 50 | 10 15 20 | 130 | 352 |
| HGP130-442V-5F★★-A | 60(32) | 90 | 69 | 54 | 50 | 10 15 20 | 130 | 442 |
| HGP130-550V-5F★★-A | 60(32) | 90 | 69 | 54 | 50 | 10 15 20 | 130 | 550 |
| HGP130-640V-5F★★-A | 60(32) | 90 | 69 | 54 | 50 | 10 15 20 | 130 | 640 |
| HGP130-712V-5F★★-A | 60(32) | 90 | 69 | 54 | 50 | 10 15 20 | 130 | 712 |
| HGP130-838V-5F★★-A | 60(32) | 90 | 69 | 54 | 50 | 10 15 20 | 130 | 838 |
| HGP130-910V-5F★★-A | 60(32) | 90 | 69 | 54 | 50 | 10 15 20 | 130 | 910 |
| HGP130-1000V-5F★★-A | 60(32) | 90 | 69 | 54 | 50 | 10 15 20 | 130 | 1000 |
| HGP130-1234V-5F★★-A | 60(32) | 90 | 69 | 54 | 50 | 10 15 20 | 130 | 1234 |
| HGP130-1432V-5F★★-A | 60(32) | 90 | 69 | 54 | 50 | 10 15 20 | 130 | 1432 |



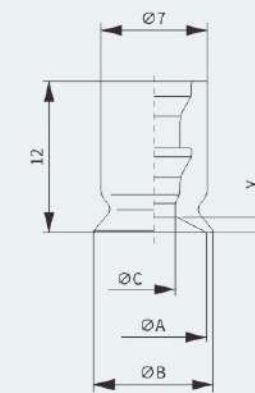
MODEL SPECIFICATIONS

ZP 02 U N
① ② ③

| ① Diameter of sucker | ② Sucker style | ③ Material of suction cup |
|----------------------|-----------------|---------------------------------|
| 02 - Ø2 | U - Flat type | N - Nitrile Rubber |
| 04 - Ø4 | B - Double-deck | S - Silicon Rubber |
| 06 - Ø6 | | GN - Conductive Nitrile Rubber |
| 08 - Ø8 | | GS - Conductive Silicone Rubber |

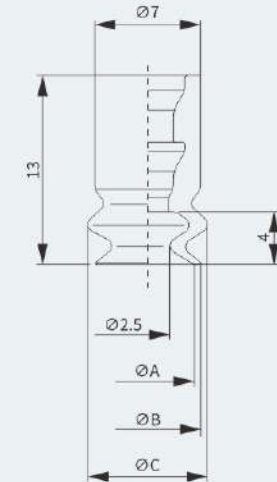
SPECIFICATION AND SIZE (MM)

Flat type



| Model | ØA | ØB | ØC | Y | weight g |
|--------|----|-----|-----|-----|----------|
| ZP02U□ | 2 | 2.6 | 1.2 | 0.8 | 0.4 |
| ZP04U□ | 4 | 4.8 | 1.6 | | |
| ZP06U□ | 6 | 7 | 2.5 | | |
| ZP08U□ | 8 | 9 | | | |

Double-deck



| Model | ØA | ØB | ØC | weight g |
|--------|----|----|------|----------|
| ZP06B□ | 6 | 7 | 9.1 | 0.4 |
| ZP08B□ | 8 | 9 | 10.1 | |

- HOP
- HNP
- HNT
- SCG
- HXN
- HGP**
- ZP**
- ZP3
- ZP3E
- ZP3P
- ZP3P-JT2
- ZP3P-JT5
- MAF
- MAB
- MAOF
- MAOB
- BK
- PAG



MODEL SPECIFICATIONS

ZP T 02 U N - B5 - □

① ② ③ ④ ⑤ ⑥

| ① Vacuum port direction | ② Sucker diameter | ③ Type of suction cup | ④ Material of suction cup |
|--------------------------------|-------------------|-----------------------|---------------------------------|
| T - Portrait | 02 - Ø2 | U - Flat type | N - Nitrile Rubber |
| R - Horizontal Quick Connector | 04 - Ø4 | B - Double-deck | S - Silicon Rubber |
| Y - Transverse | 06 - Ø6 | | GN - Conductive Nitrile Rubber |
| | 08 - Ø8 | | GS - Conductive Silicone Rubber |

| ⑤ Vacuum port specifications | ⑥ Installation thread |
|------------------------------|-----------------------|
|------------------------------|-----------------------|

Table 1

Table 2

Table 1

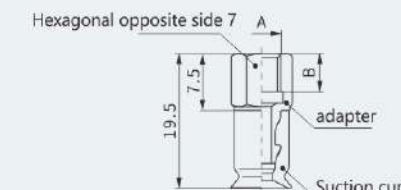
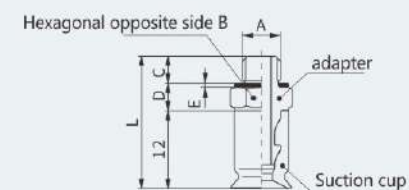
| Vacuum port specifications | Model | specifications | ZPT | ZPR | ZPY |
|----------------------------|-------|----------------|-----|-----|-----|
| External Thread | A5 | M5×0.8 | ● | - | - |
| | A6 | M6×1.0 | ● | - | - |
| Internal Thread | B4 | M4×0.7 | ● | - | - |
| | B5 | M5×0.8 | ● | - | ● |
| Barb Joint | U4 | Ø4PU Tube | - | - | ● |
| | N4 | Ø4 Nylon Tube | - | - | ● |
| | U6 | Ø6PU Tube | - | - | ● |
| | N6 | Ø6 Nylon Tube | - | - | ● |
| Quick Connector | 04 | Ø4 Tube | - | ● | - |
| | 06 | Ø6 Tube | - | ● | - |

Table 2

| Installation thread | Model | specifications | ZPT | ZPR | ZPY |
|---------------------|-------|----------------|-----|-----|-----|
| External Thread | A5 | M5×0.8 | - | ● | ● |
| | A6 | M6×1.0 | - | ● | ● |
| Internal Thread | B4 | M4×0.7 | - | ● | ● |
| | B5 | M5×0.8 | - | ● | ● |

SPECIFICATION AND SIZE (MM)

ZPTO

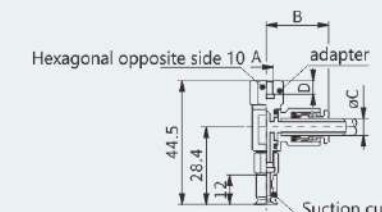
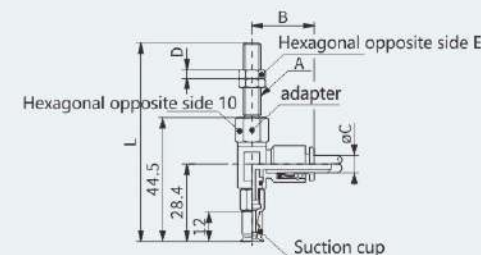


| Model | A | B | C | D | E | L |
|----------|--------|---|---|---|-----|----|
| ZPTO□-A5 | M5×0.8 | 7 | 3 | 4 | 0.5 | 19 |
| ZPTO□-A6 | M6×1.0 | 8 | 4 | | | 20 |

| Model | A | B |
|----------|--------|---|
| ZPTO□-B4 | M4×0.7 | 4 |
| ZPTO□-B5 | M5×0.8 | 5 |

○ Sucker diameter symbol: 02, 04, 06, 08
 □ Material of suction cups: nitrile rubber (N), silicone rubber (S), conductive nitrile rubber (GN), conductive silicone rubber (GS)

ZPRO

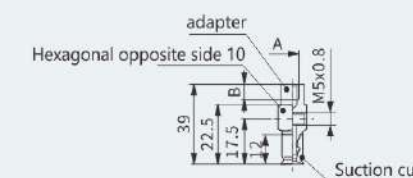
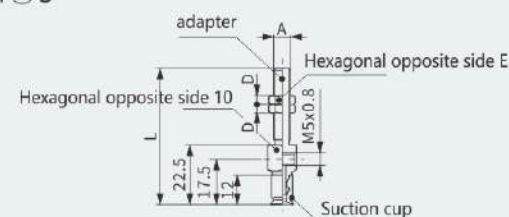


| Model | A | B | C | D | E | L |
|-------------|--------|------|---|---|---|------|
| ZPRO□-04-A5 | M5×0.8 | 20.6 | 4 | 4 | 7 | 65.5 |
| ZPRO□-06-A5 | | 21.6 | 6 | | | |
| ZPRO□-04-A6 | M6×1.0 | 20.6 | 4 | 3 | 8 | 70.5 |
| ZPRO□-06-A6 | | 21.6 | 6 | | | |

| Model | A | B | C | D |
|-------------|--------|------|---|---|
| ZPRO□-04-B4 | M4×0.7 | 20.6 | 4 | 4 |
| ZPRO□-06-B4 | | 21.6 | 6 | |
| ZPRO□-04-B5 | M5×0.8 | 20.6 | 4 | 5 |
| ZPRO□-06-B5 | | 21.6 | 6 | |

○ Sucker diameter symbol: 02, 04, 06, 08
 □ Material of suction cups: nitrile rubber (N), silicone rubber (S), conductive nitrile rubber (GN), conductive silicone rubber (GS)

ZPYO



| Model | A | D | E | L |
|-------------|--------|---|---|------|
| ZPYO□-B5-A5 | M5×0.8 | 4 | 7 | 44 |
| ZPYO□-B5-A6 | M6×1.0 | 3 | 8 | 49.5 |

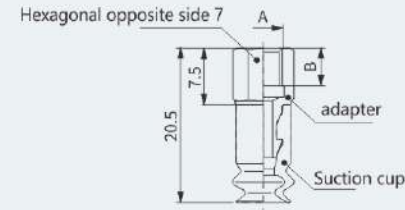
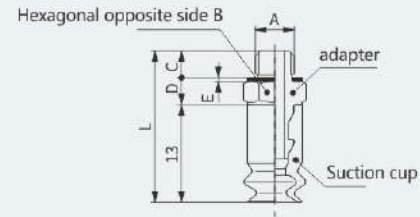
| Model | A | B |
|-------------|--------|---|
| ZPYO□-B5-B4 | M4×0.7 | 4 |
| ZPYO□-B5-B5 | M5×0.8 | 5 |

○ Sucker diameter symbol: 02, 04, 06, 08
 □ Material of suction cups: nitrile rubber (N), silicone rubber (S), conductive nitrile rubber (GN), conductive silicone rubber (GS)

- HXD
- HOP
- HNP
- HNT
- SCG
- HXN
- HGP
- ZP
- ZP3
- ZP3E
- ZP3P
- ZP3P-JT2
- ZP3P-JT5
- MAF
- MAB
- MAOF
- MAOB
- BK

SPECIFICATION AND SIZE (MM)

ZPTOB

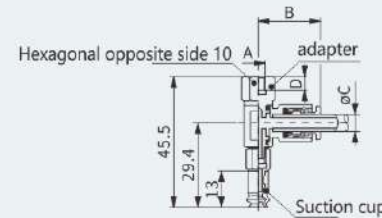
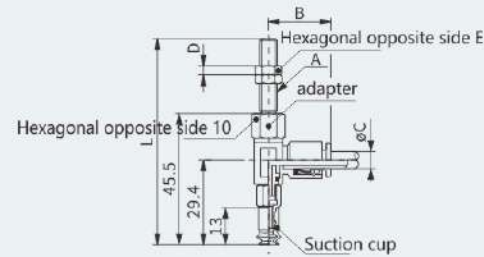


| Model | A | B | C | D | E | L |
|-----------|--------|---|---|---|-----|----|
| ZPTOB□-A5 | M5×0.8 | 7 | 3 | 4 | 0.5 | 20 |
| ZPTOB□-A6 | M6×1.0 | 8 | 4 | | | 21 |

| Model | A | B |
|-----------|--------|---|
| ZPTOB□-B4 | M4×0.7 | 4 |
| ZPTOB□-B5 | M5×0.8 | 5 |

- Sucker diameter symbol: 06, 08
- Material of suction cups: nitrile rubber (N), silicone rubber (S), conductive nitrile rubber (GN), conductive silicone rubber (GS)

ZPROB

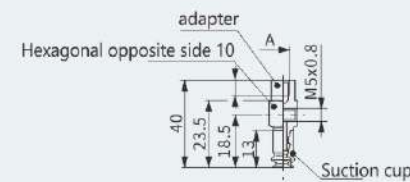
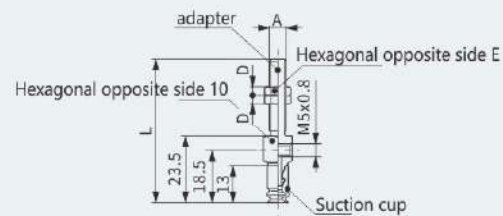


| Model | A | B | C | D | E | L |
|--------------|--------|------|---|---|---|------|
| ZPROB□-04-A5 | M5×0.8 | 20.6 | 4 | 4 | 7 | 66.5 |
| ZPROB□-06-A5 | | 21.6 | 6 | | | |
| ZPROB□-04-A6 | M6×1.0 | 20.6 | 4 | 3 | 8 | 71.5 |
| ZPROB□-06-A6 | | 21.6 | 6 | | | |

| Model | A | B | C | D |
|--------------|--------|------|---|---|
| ZPROB□-04-B4 | M4×0.7 | 20.6 | 4 | 4 |
| ZPROB□-06-B4 | | 21.6 | 6 | |
| ZPROB□-04-B5 | M5×0.8 | 20.6 | 4 | 5 |
| ZPROB□-06-B5 | | 21.6 | 6 | |

- Sucker diameter symbol: 06, 08
- Material of suction cups: nitrile rubber (N), silicone rubber (S), conductive nitrile rubber (GN), conductive silicone rubber (GS)

ZPYOB



| Model | A | D | E | L |
|--------------|--------|---|---|------|
| ZPYOB□-B5-A5 | M5×0.8 | 4 | 7 | 45 |
| ZPYOB□-B5-A6 | M6×1.0 | 3 | 8 | 50.5 |

| Model | A | B |
|--------------|--------|---|
| ZPYOB□-B5-B4 | M4×0.7 | 4 |
| ZPYOB□-B5-B5 | M5×0.8 | 5 |

- Sucker diameter symbol: 02, 04, 06, 08
- Material of suction cups: nitrile rubber (N), silicone rubber (S), conductive nitrile rubber (GN), conductive silicone rubber (GS)



MODEL SPECIFICATIONS

ZP T 02 U N J 6 - B5 - A8
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Vacuum port direction ② Sucker diameter ③ Type of suction cup

- T – Portrait 02 – Ø2 U – Flat type
- R – Horizontal Quick Connector 04 – Ø4 B – Double-deck
- Y – Transverse 06 – Ø6 08 – Ø8

④ Material of suction cup ⑤ Buffering Type ⑥ Buffer stroke ⑧ Installation thread

- N – Nitrile Rubber J – Returnable transformation 6 – 6mm A8 – M8×1.0
- S – Silicon Rubber K – Irreversible transformation 10 – 10mm
- GN – Conductive Nitrile Rubber 15 – 15mm
- GS – Conductive Silicone Rubber 25 – 25mm

⑦ Vacuum port specifications

Table 1

Table 1

| Vacuum port specifications | Model | specifications | ZPT | ZPR | ZPY |
|----------------------------|-------|----------------|-----|-----|-----|
| External Thread | A5 | M5×0.8 | - | - | - |
| | A6 | M6×1.0 | - | - | - |
| Internal Thread | B3 | M3×0.5 | ● | - | - |
| | B5 | M5×0.8 | ● | - | ● |
| Barb Joint | U4 | Ø4 PU Tube | ● | - | ● |
| | N4 | Ø4 Nylon Tube | ● | - | ● |
| | U6 | Ø6 PU Tube | ● | - | ● |
| | N6 | Ø6 Nylon Tube | ● | - | ● |
| Quick Connector | 04 | Ø4 Tube | ● | ● | - |
| | 06 | Ø6 Tube | ● | ● | - |

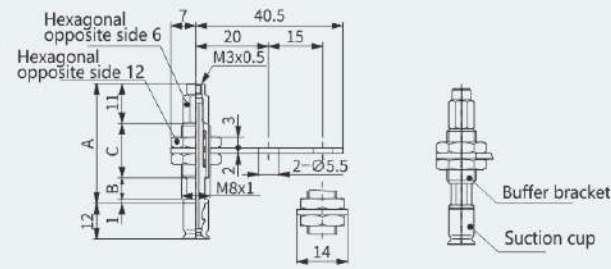
- HXD
- HOP
- HNP
- HNT
- SCG
- HXN
- HGP
- ZP
- ZP3
- ZP3E
- ZP3P
- ZP3P-JT2
- ZP3P-JT5
- MAF
- MAB
- MAOF
- MAOB
- BK

SPECIFICATION AND SIZE (MM)

ZPT○U – B3

Returnable transformation

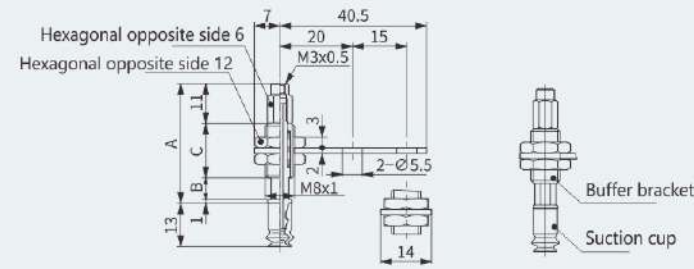
Irreversible transformation



ZPT○B – B3

Returnable transformation

Irreversible transformation



| Model | A | B | C |
|-----------------|----|----|----|
| ZPT○U□●6-B3-A8 | 32 | 6 | 15 |
| ZPT○U□●10-B3-A8 | 65 | 10 | 43 |
| ZPT○U□●15-B3-A8 | 70 | 15 | 43 |
| ZPT○U□●25-B3-A8 | 80 | 25 | 43 |

- Sucker diameter symbol:02, 04, 06, 08
- Material of suction cups: nitrile rubber (N), silicone rubber (S), conductive nitrile rubber (GN), conductive silicone rubber (GS)
- Buffer types: reversible transformation (J), irreversible transformation (K)

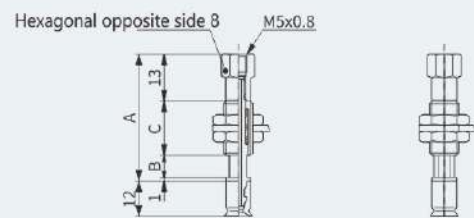
| Model | A | B | C |
|-----------------|----|----|----|
| ZPT○B□●6-B3-A8 | 32 | 6 | 15 |
| ZPT○B□●10-B3-A8 | 65 | 10 | 43 |
| ZPT○B□●15-B3-A8 | 70 | 15 | 43 |
| ZPT○B□●25-B3-A8 | 80 | 25 | 43 |

- Sucker diameter symbol:06, 08
- Material of suction cups: nitrile rubber (N), silicone rubber (S), conductive nitrile rubber (GN), conductive silicone rubber (GS)
- Buffer types: reversible transformation (J), irreversible transformation (K)

ZPT○U – B5

Returnable transformation

Irreversible transformation



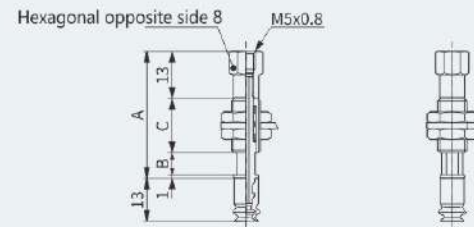
| Model | A | B | C |
|-----------------|----|----|----|
| ZPT○U□●6-B5-A8 | 34 | 6 | 15 |
| ZPT○U□●10-B5-A8 | 67 | 10 | 43 |
| ZPT○U□●15-B5-A8 | 72 | 15 | 43 |
| ZPT○U□●25-B5-A8 | 82 | 25 | 43 |

- Sucker diameter symbol:02, 04, 06, 08
- Material of suction cups: nitrile rubber (N), silicone rubber (S), conductive nitrile rubber (GN), conductive silicone rubber (GS)
- Buffer types: reversible transformation (J), irreversible transformation (K)

ZPT○B – B5

Returnable transformation

Irreversible transformation

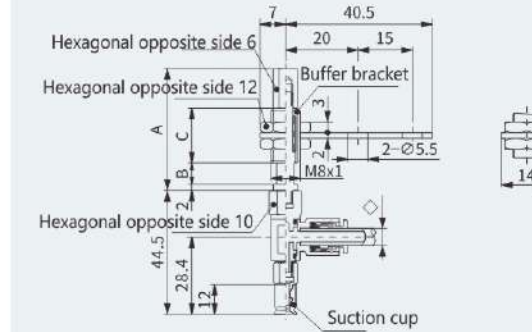


| Model | A | B | C |
|-----------------|----|----|----|
| ZPT○B□●6-B5-A8 | 34 | 6 | 15 |
| ZPT○B□●10-B5-A8 | 67 | 10 | 43 |
| ZPT○B□●15-B5-A8 | 72 | 15 | 43 |
| ZPT○B□●25-B5-A8 | 82 | 25 | 43 |

- Sucker diameter symbol:06, 08
- Material of suction cups: nitrile rubber (N), silicone rubber (S), conductive nitrile rubber (GN), conductive silicone rubber (GS)
- Buffer types: reversible transformation (J), irreversible transformation (K)

SPECIFICATION AND SIZE (MM)

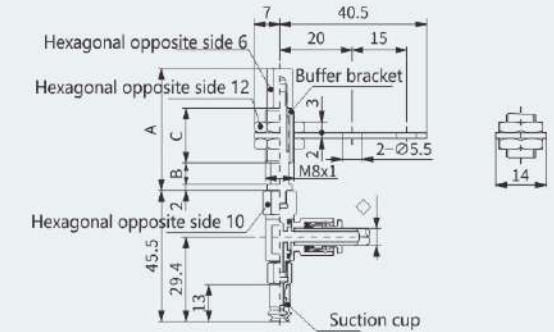
ZPR○U



| Model | A | B | C |
|----------------|----|----|----|
| ZPR○U□●6-◇-A8 | 34 | 6 | 15 |
| ZPR○U□●10-◇-A8 | 66 | 10 | 43 |
| ZPR○U□●15-◇-A8 | 71 | 15 | 43 |
| ZPR○U□●25-◇-A8 | 81 | 25 | 43 |

- Sucker diameter symbol:06, 08 ◇ Vacuum port connection:04, 06
- Material of suction cups: nitrile rubber (N), silicone rubber (S), conductive nitrile rubber (GN), conductive silicone rubber (GS)
- Buffer types: reversible transformation (J), irreversible transformation (K)

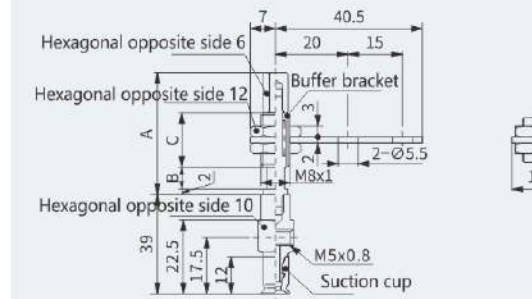
ZPR○B



| Model | A | B | C |
|----------------|----|----|----|
| ZPR○B□●6-◇-A8 | 34 | 6 | 15 |
| ZPR○B□●10-◇-A8 | 66 | 10 | 43 |
| ZPR○B□●15-◇-A8 | 71 | 15 | 43 |
| ZPR○B□●25-◇-A8 | 81 | 25 | 43 |

- Sucker diameter symbol:06, 08 ◇ Vacuum port connection:04, 06
- Material of suction cups: nitrile rubber (N), silicone rubber (S), conductive nitrile rubber (GN), conductive silicone rubber (GS)
- Buffer types: reversible transformation (J), irreversible transformation (K)

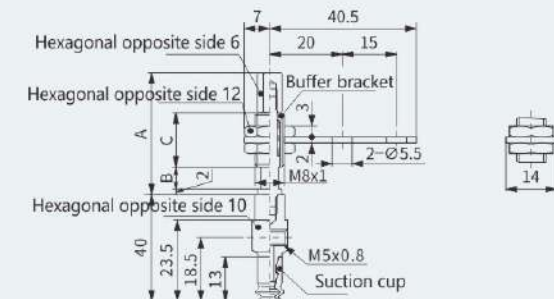
ZPY○U



| Model | A | B | C |
|-----------------|----|----|----|
| ZPY○U□●6-B5-A8 | 34 | 6 | 15 |
| ZPY○U□●10-B5-A8 | 66 | 10 | 43 |
| ZPY○U□●15-B5-A8 | 71 | 15 | 43 |
| ZPY○U□●25-B5-A8 | 81 | 25 | 43 |

- Sucker diameter symbol:02, 04, 06, 08
- Material of suction cups: nitrile rubber (N), silicone rubber (S), conductive nitrile rubber (GN), conductive silicone rubber (GS)
- Buffer types: reversible transformation (J), irreversible transformation (K)

ZPY○B



| Model | A | B | C |
|-----------------|----|----|----|
| ZPY○B□●6-B5-A8 | 34 | 6 | 15 |
| ZPY○B□●10-B5-A8 | 66 | 10 | 43 |
| ZPY○B□●15-B5-A8 | 71 | 15 | 43 |
| ZPY○B□●25-B5-A8 | 81 | 25 | 43 |

- Sucker diameter symbol:06, 08
- Material of suction cups: nitrile rubber (N), silicone rubber (S), conductive nitrile rubber (GN), conductive silicone rubber (GS)
- Buffer types: reversible transformation (J), irreversible transformation (K)



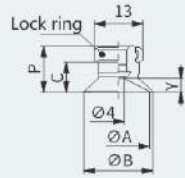
MODEL SPECIFICATIONS

ZP 10 U N - □
① ② ③ ④

| ① Sucker diameter | ② Type of suction cup | ③ Material of suction cup | ④ Lock ring |
|--|--|--|---|
| 10 - Ø10 13 - Ø13 16 - Ø16 20 - Ø20 | 25 - Ø25 32 - Ø32 40 - Ø40 50 - Ø50 | U - Flat C - single layer with stiffener B - Double-deck | N - Nitrile Rubber S - Silicon Rubber Blank - With Locking Ring X19 - Unlocking Ring |

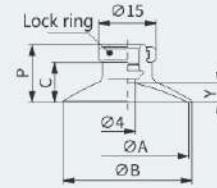
SPECIFICATION AND SIZE (MM)

ZP10/13/16U



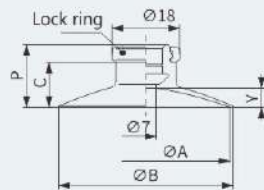
| Model | ØA | ØB | C | P | Y | weight g |
|-------|----|----|-----|------|-----|----------|
| ZP10U | 10 | 12 | 7.7 | 12 | 3 | 2.6 |
| ZP13U | 13 | 15 | | | | 2.8 |
| ZP16U | 16 | 18 | 8.2 | 12.5 | 3.5 | |

ZP20/25/32U



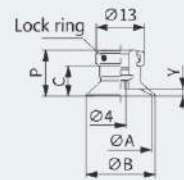
| Model | ØA | ØB | C | P | Y | weight g |
|-------|----|----|-----|------|-----|----------|
| ZP20U | 20 | 23 | 9.5 | 14 | 4 | 4.1 |
| ZP25U | 25 | 28 | | | | 4.5 |
| ZP32U | 32 | 35 | 10 | 14.5 | 4.5 | 5.5 |

ZP40/50U



| Model | ØA | ØB | C | P | Y | weight g |
|-------|----|----|------|------|-----|----------|
| ZP40U | 40 | 43 | 13.7 | 18.5 | 6.5 | 8.1 |
| ZP50U | 50 | 53 | 14.7 | 19.5 | 7.5 | 11 |

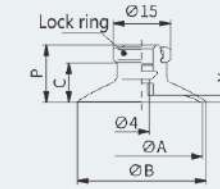
ZP10/13/16C



| Model | ØA | ØB | C | P | Y | weight g |
|-------|----|----|-----|------|-----|----------|
| ZP10C | 10 | 12 | 7.7 | 12 | 1.7 | 2.8 |
| ZP13C | 13 | 15 | | | 1.2 | |
| ZP16C | 16 | 18 | 8.2 | 12.5 | 1.2 | |

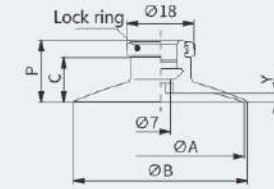
SPECIFICATION AND SIZE (MM)

ZP20/25/32C



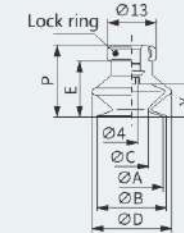
| Model | ØA | ØB | C | P | Y | weight g |
|-------|----|----|-----|------|-----|----------|
| ZP20C | 20 | 23 | 9.5 | 14 | 1.7 | 4.2 |
| ZP25C | 25 | 28 | | | 1.8 | 4.7 |
| ZP32C | 32 | 35 | 10 | 14.5 | 2.3 | 5 |

ZP40/50C



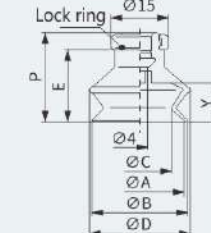
| Model | ØA | ØB | C | P | Y | weight g |
|-------|----|----|------|------|-----|----------|
| ZP40C | 40 | 43 | 13.7 | 18.5 | 3.3 | 8.1 |
| ZP50C | 50 | 53 | 14.7 | 19.5 | 3.8 | 10.7 |

ZP10/13/16U



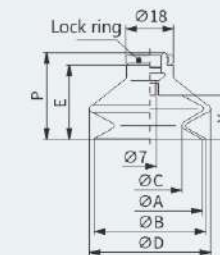
| Model | ØA | ØB | ØC | ØD | E | P | Y | weight g |
|-------|----|----|----|----|------|------|-----|----------|
| ZP10B | 10 | 12 | 6 | 14 | 11.7 | 16 | 5.5 | 2.8 |
| ZP13B | 13 | 15 | 9 | 19 | 14.2 | 18.5 | 7.5 | 4.4 |
| ZP16B | 16 | 18 | 10 | 21 | 15.7 | 20 | 8.5 | 4.7 |

ZP20/25/32U



| Model | ØA | ØB | ØC | ØD | E | P | Y | weight g |
|-------|----|----|----|----|------|------|------|----------|
| ZP20B | 20 | 22 | 12 | 25 | 19 | 23.5 | 10.5 | 5.4 |
| ZP25B | 25 | 27 | 16 | 28 | 19.5 | 24 | | 6.4 |
| ZP32B | 32 | 34 | 19 | 37 | 24.5 | 29 | | 14 |

ZP40/50U



| Model | ØA | ØB | ØC | ØD | E | P | Y | weight g |
|-------|----|----|----|----|------|----|----|----------|
| ZP40C | 40 | 43 | 24 | 48 | 29.2 | 34 | 16 | 16.3 |
| ZP50C | 50 | 53 | 32 | 57 | 33.2 | 38 | 19 | 21.5 |



MODEL SPECIFICATIONS

ZP T 10 U N - B5 - □

① ② ③ ④ ⑤ ⑥

| ① Vacuum port direction | ② Sucker diameter | ③ Type of suction cup |
|--------------------------------|-------------------|-----------------------|
| T - Portrait | 10 - Ø10 25 - Ø25 | U - Flat |
| R - Horizontal Quick Connector | 13 - Ø13 32 - Ø32 | C - Single layer |
| Y - Transverse | 16 - Ø16 40 - Ø40 | With stiffener |
| | 20 - Ø20 50 - Ø50 | B - Double-deck |

| Material of suction cup | ⑤ Vacuum port specifications | ⑥ Installation thread |
|-------------------------|------------------------------|-------------------------|
| N - Nitrile Rubber | See Table 1 for details | See Table 2 for details |
| S - Silicon Rubber | | |

Table 1

| Vacuum port specifications | Model | specifications | Ø10~Ø16 | Ø20~Ø32 | Ø40~Ø50 | |
|------------------------------------|------------------------------------|----------------|---------------|---------|---------|---|
| T type | External Thread | A5 | M5×0.8 | ● | - | - |
| | | A6 | M6×1.0 | ● | ● | ● |
| | | A8 | M8×1.0 | - | ● | ● |
| | | AG1 | G1/8 | ● | ● | ● |
| | Internal Thread | B5 | M5×0.8 | ● | ● | - |
| | | B6 | M6×1.0 | ● | ● | ● |
| | | B8 | M8×1.0 | - | ● | ● |
| | | B01 | Rc1/8 | ● | ● | ● |
| R type | Quick Connector | Ø4 | Ø4 | ● | ● | - |
| | | Ø6 | Ø6 | ● | ● | ● |
| | Barb Joint | B5 | M5×0.8 | ● | ● | ● |
| | | U4 | Ø4 Pu Tube | ● | ● | - |
| | | N4 | Ø4 Nylon Tube | ● | ● | - |
| | | U6 | Ø6 Pu Tube | ● | ● | ● |
| Y type | External Hexagonal Quick Connector | N6 | Ø6 Nylon Tube | ● | ● | ● |
| | | Ø3 | Ø3 | ● | - | - |
| | | 23 | Ø3.2 | ● | - | - |
| | Internal Hexagonal Quick Connector | Ø4 | Ø4 | ● | ● | - |
| | | Ø6 | Ø6 | ● | ● | ● |
| | | 03S | Ø3 | ● | - | - |
| Internal Hexagonal Quick Connector | 23S | Ø3.2 | ● | - | - | |
| | Ø4S | Ø4 | ● | ● | - | |
| | Ø6S | Ø6 | ● | ● | ● | |

Table 2

| Installation thread | Model | Specifications | Ø10~Ø16 | Ø20~Ø32 | Ø40~Ø50 |
|---------------------|-----------------|----------------|---------|---------|---------|
| R type | External Thread | A5 | M5×0.8 | ● | - |
| | | A6 | M6×1.0 | ● | ● |
| | | A8 | M8×1.0 | - | ● |
| | Internal Thread | B5 | M5×0.8 | ● | ● |
| | | B6 | M6×1.0 | ● | ● |
| | | B8 | M8×1.25 | - | ● |
| Y type | External Thread | A5 | M5×0.8 | ● | - |
| | | A6 | M6×1.0 | ● | ● |
| | | A8 | M8×1.0 | - | ● |
| | Internal Thread | B5 | M5×0.8 | ● | ● |
| | | B6 | M6×1.0 | ● | ● |
| | | B8 | M8×1.25 | - | ● |

SPECIFICATION AND SIZE (MM)

ZPT10/13/16
A5, A6

AG1

B5, B6

B01

| Model | A | B | C | L | Sucker diameter P | | |
|-----------------|--------|---|---|----|-------------------|------|------|
| ZPT ○ ☆ □ - A5 | M5×0.8 | 7 | 4 | 26 | 12 | 12 | 12.5 |
| ZPT ○ ☆ □ - A6 | M6×1.0 | 8 | 3 | 31 | | | |
| ZPT ○ ☆ □ - AG1 | - | - | - | - | 16 | 18.5 | 20 |
| ZPT ○ B □ - A5 | M5×0.8 | 7 | 4 | 26 | | | |
| ZPT ○ B □ - A6 | M6×1.0 | 8 | 3 | 31 | | | |
| ZPT ○ B □ - AG1 | - | - | - | - | | | |

| Model | A | B | Sucker diameter P | | |
|-----------------|--------|---|-------------------|------|------|
| ZPT ○ ☆ □ - B5 | M5×0.8 | 5 | 10 | 13 | 16 |
| ZPT ○ ☆ □ - B6 | M6×1.0 | 6 | 12 | 12 | 12.5 |
| ZPT ○ ☆ □ - B01 | - | - | - | - | - |
| ZPT ○ B □ - B5 | M5×0.8 | 5 | 10 | 13 | 16 |
| ZPT ○ B □ - B6 | M6×1.0 | 6 | 16 | 18.5 | 20 |
| ZPT ○ B □ - B01 | - | - | - | - | - |

ZPR10/13/16
A5, A6

B5, B6

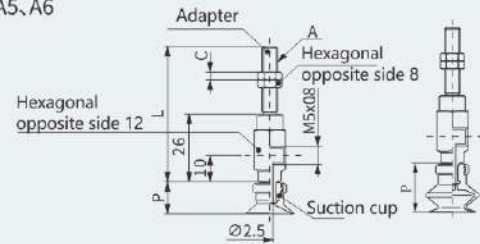
| Model | A | D | E | L | Sucker diameter P | | |
|----------------|--------|---|---|----|-------------------|------|------|
| ZPT ○ ☆ □ - A5 | M5×0.8 | 4 | 7 | 55 | 12 | 12 | 12.5 |
| ZPT ○ ☆ □ - A6 | M6×1.0 | 3 | 8 | 60 | | | |
| ZPT ○ B □ - A5 | M5×0.8 | 4 | 7 | 55 | 16 | 18.5 | 20 |
| ZPT ○ B □ - A6 | M6×1.0 | 3 | 8 | 60 | | | |

| Model | A | D | Sucker diameter P | | |
|----------------|--------|---|-------------------|------|------|
| ZPT ○ ☆ □ - B5 | M5×0.8 | 5 | 10 | 13 | 16 |
| ZPT ○ ☆ □ - B6 | M6×1.0 | 6 | 12 | 12 | 12.5 |
| ZPT ○ B □ - B5 | M5×0.8 | 5 | 10 | 13 | 16 |
| ZPT ○ B □ - B6 | M6×1.0 | 6 | 16 | 18.5 | 20 |

○ Sucker diameter symbol: 10, 13, 16
 ☆ Suction cup type: flat (U) ribbed flat (C)
 □ Material of suction cup: nitrile rubber (N), silicone rubber (S)

SPECIFICATION AND SIZE (MM)

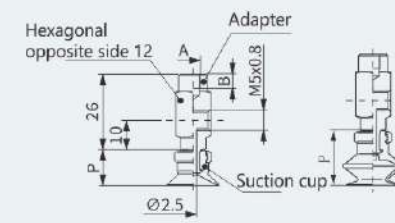
ZPY10/13/16
A5, A6



| Model | A | B | C | L | Sucker diameter P | | |
|---------------------|--------|---|---|----|-------------------|------|------|
| | | | | | 10 | 13 | 16 |
| ZPT ☆ □ - B5 - A5 | M5×0.8 | 7 | 4 | 47 | 12 | 12 | 12.5 |
| ZPT ☆ □ - B5 - A6 | M6×1.0 | 8 | 3 | 52 | | | |
| ZPT ○ B □ - B5 - A5 | M5×0.8 | 7 | 4 | 47 | 16 | 18.5 | 20 |
| ZPT ○ B □ - B5 - A6 | M6×1.0 | 8 | 3 | 52 | | | |

○ Sucker diameter symbol: 10, 13, 16
☆ Suction cup type: flat (U) ribbed flat (C)
□ Material of suction cup: nitrile rubber (N), silicone rubber (S)

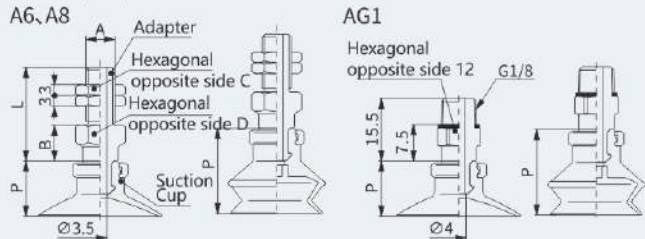
B5, B6



| Model | A | B | Sucker diameter P | | |
|---------------------|--------|---|-------------------|------|------|
| | | | 10 | 13 | 16 |
| ZPT ☆ □ - B5 - B5 | M5×0.8 | 5 | 12 | 12 | 12.5 |
| ZPT ☆ □ - B5 - B6 | M6×1.0 | 6 | | | |
| ZPT ○ B □ - B5 - B5 | M5×0.8 | 5 | 16 | 18.5 | 20 |
| ZPT ○ B □ - B5 - B6 | M6×1.0 | 6 | | | |

○ Sucker diameter symbol: 10, 13, 16
☆ Suction cup type: flat (U) ribbed flat (C)
□ Material of suction cup: nitrile rubber (N), silicone rubber (S)

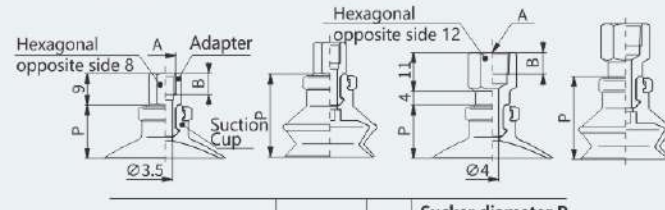
ZPT20/25/32
A6, A8



| Model | A | B | C | D | L | Sucker diameter P | | |
|-----------------|--------|----|----|----|----|-------------------|----|------|
| | | | | | | 20 | 25 | 32 |
| ZPT ☆ □ - A6 | M6×1.0 | 5 | 8 | 8 | 31 | | | |
| ZPT ☆ □ - A8 | M8×1.0 | 10 | 12 | 12 | 26 | 14 | 14 | 14.5 |
| ZPT ☆ □ - AG1 | - | - | - | - | - | | | |
| ZPT ○ B □ - A6 | M6×1.0 | 5 | 8 | 8 | 31 | | | |
| ZPT ○ B □ - A8 | M8×1.0 | 10 | 12 | 12 | 26 | 23.5 | 24 | 29 |
| ZPT ○ B □ - AG1 | - | - | - | - | - | | | |

○ Sucker diameter symbol: 20, 25, 32
☆ Suction cup type: flat (U) ribbed flat (C)
□ Material of suction cup: nitrile rubber (N), silicone rubber (S)

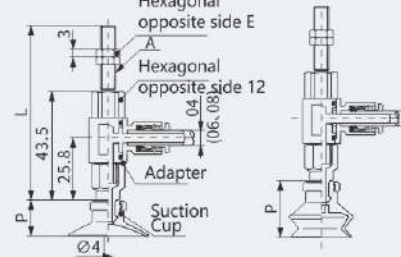
B5, B6



| Model | A | B | Sucker diameter P | | |
|-----------------|---------|-----|-------------------|----|------|
| | | | 20 | 25 | 32 |
| ZPT ☆ □ - B5 | M5×0.8 | 5 | | | |
| ZPT ☆ □ - B6 | M6×1.0 | 6 | 14 | 14 | 14.5 |
| ZPT ☆ □ - B8 | M8×1.25 | 8 | | | |
| ZPT ☆ □ - B01 | Rc1/8 | 6.2 | | | |
| ZPT ○ B □ - B5 | M5×0.8 | 5 | | | |
| ZPT ○ B □ - B6 | M6×1.0 | 6 | 23.5 | 24 | 29 |
| ZPT ○ B □ - B8 | M8×1.25 | 8 | | | |
| ZPT ○ B □ - B01 | Rc1/8 | 6.2 | | | |

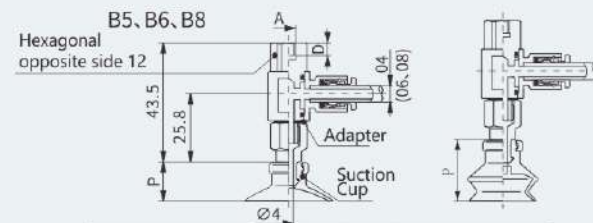
○ Sucker diameter symbol: 20, 25, 32
☆ Suction cup type: flat (U) ribbed flat (C)
□ Material of suction cup: nitrile rubber (N), silicone rubber (S)

ZPR20/25/32
A6, A8



| Model | A | E | L | Sucker diameter P | | |
|---------------------|--------|----|------|-------------------|------|------|
| | | | | 20 | 25 | 32 |
| ZPT ☆ □ - B5 - A6 | M6×1.0 | 8 | 69.5 | 12 | 12 | 12.5 |
| ZPT ☆ □ - B5 - A8 | M8×1.0 | 12 | 59.5 | | | |
| ZPT ○ B □ - B5 - A6 | M6×1.0 | 8 | 69.5 | 16 | 18.5 | 20 |
| ZPT ○ B □ - B5 - A8 | M8×1.0 | 12 | 59.5 | | | |

○ Sucker diameter symbol: 20, 25, 32
☆ Suction cup type: flat (U) ribbed flat (C)
□ Material of suction cup: nitrile rubber (N), silicone rubber (S)

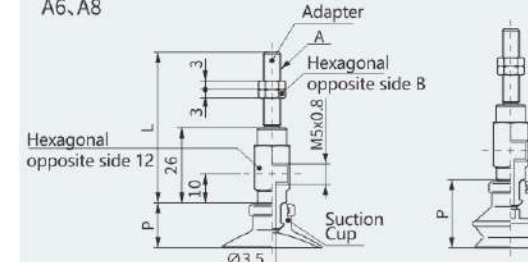


| Model | A | D | Sucker diameter P | | |
|-----------------|---------|---|-------------------|----|------|
| | | | 20 | 25 | 32 |
| ZPR ☆ □ - B5 | M5×0.8 | 5 | | | |
| ZPR ☆ □ - B6 | M6×1.0 | 6 | 14 | 14 | 14.5 |
| ZPR ☆ □ - B8 | M8×1.25 | 8 | | | |
| ZPR ○ B □ - A6 | M5×0.8 | 5 | | | |
| ZPR ○ B □ - A8 | M6×1.0 | 6 | 23.5 | 24 | 29 |
| ZPR ○ B □ - AG1 | M8×1.25 | 8 | | | |

○ Sucker diameter symbol: 20, 25, 32
☆ Suction cup type: flat (U) ribbed flat (C)
□ Material of suction cup: nitrile rubber (N), silicone rubber (S)

SPECIFICATION AND SIZE (MM)

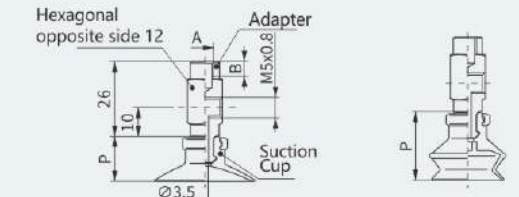
ZPY20/25/32
A6, A8



| Model | A | B | L | Sucker diameter P | | |
|---------------------|--------|----|----|-------------------|----|------|
| | | | | 20 | 25 | 32 |
| ZPY ☆ □ - B5 - A6 | M6×1.0 | 8 | 54 | 14 | 14 | 14.5 |
| ZPT ☆ □ - B5 - A8 | M8×1.0 | 12 | 44 | | | |
| ZPT ○ B □ - B5 - A6 | M6×1.0 | 8 | 54 | 23.5 | 24 | 29 |
| ZPT ○ B □ - B5 - A8 | M8×1.0 | 12 | 44 | | | |

○ Sucker diameter symbol: 20, 25, 32
☆ Suction cup type: flat (U) ribbed flat (C)
□ Material of suction cup: nitrile rubber (N), silicone rubber (S)

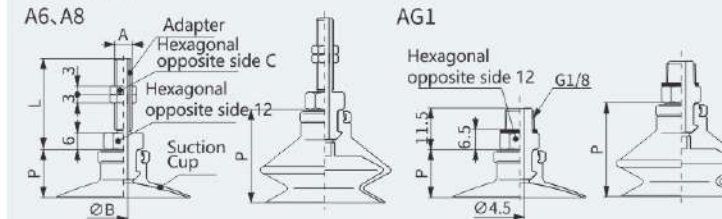
B5, B6, B8



| Model | A | D | Sucker diameter P | | |
|---------------------|---------|---|-------------------|----|------|
| | | | 20 | 25 | 32 |
| ZPY ☆ □ - B5 - B5 | M5×0.8 | 5 | | | |
| ZPY ☆ □ - B5 - B6 | M6×1.0 | 6 | 14 | 14 | 14.5 |
| ZPY ☆ □ - B5 - B8 | M8×1.25 | 8 | | | |
| ZPY ○ B □ - B5 - B5 | M5×0.8 | 5 | | | |
| ZPY ○ B □ - B5 - B6 | M6×1.0 | 6 | 23.5 | 24 | 29 |
| ZPY ○ B □ - B5 - B8 | M8×1.25 | 8 | | | |

○ Sucker diameter symbol: 20, 25, 32
☆ Suction cup type: flat (U) ribbed flat (C)
□ Material of suction cup: nitrile rubber (N), silicone rubber (S)

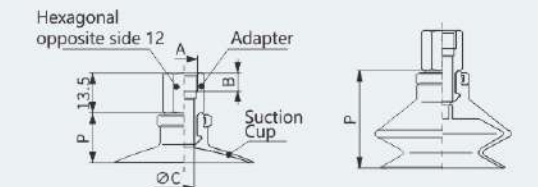
ZPT40/50
A6, A8



| Model | A | B | C | L | Sucker diameter P | |
|-----------------|--------|-----|----|----|-------------------|------|
| | | | | | 40 | 50 |
| ZPT ☆ □ - A6 | M6×1.0 | 3.5 | 8 | 32 | | |
| ZPT ☆ □ - A8 | M8×1.0 | 4.5 | 12 | 22 | 18.5 | 19.5 |
| ZPT ☆ □ - AG1 | - | - | - | - | | |
| ZPT ○ B □ - A6 | M6×1.0 | 3.5 | 8 | 32 | | |
| ZPT ○ B □ - A8 | M8×1.0 | 4.5 | 12 | 22 | 34 | 38 |
| ZPT ○ B □ - AG1 | - | - | - | - | | |

○ Sucker diameter symbol: 40, 50
☆ Suction cup type: flat (U) ribbed flat (C)
□ Material of suction cup: nitrile rubber (N), silicone rubber (S)

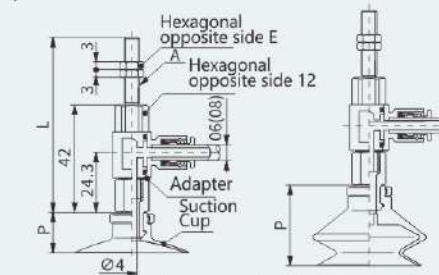
B5, B6, B01



| Model | A | B | C | Sucker diameter P | |
|-----------------|---------|-----|-----|-------------------|------|
| | | | | 40 | 50 |
| ZPT ☆ □ - B6 | M6×1.0 | 6 | 4.5 | | |
| ZPT ☆ □ - B8 | M8×1.25 | 8 | 6.8 | 18.5 | 19.5 |
| ZPT ☆ □ - B01 | Rc1/8 | 6.2 | 6.8 | | |
| ZPT ○ B □ - B6 | M6×1.0 | 6 | 4.5 | | |
| ZPT ○ B □ - B8 | M8×1.25 | 8 | 6.8 | 34 | 38 |
| ZPT ○ B □ - B01 | Rc1/8 | 6.2 | 6.8 | | |

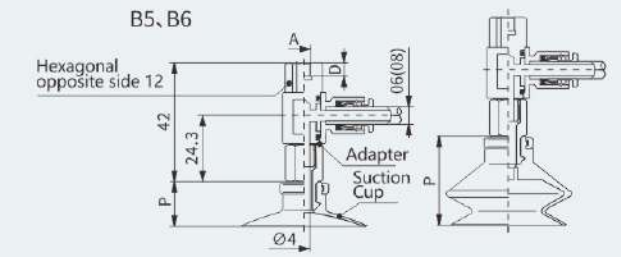
○ Sucker diameter symbol: 40, 50
☆ Suction cup type: flat (U) ribbed flat (C)
□ Material of suction cup: nitrile rubber (N), silicone rubber (S)

ZPR40/50
A6, A8



| Model | A | E | L | Sucker diameter P | |
|---------------------|--------|----|----|-------------------|------|
| | | | | 40 | 50 |
| ZPT ☆ □ - B5 - A6 | M6×1.0 | 8 | 68 | 18.5 | 19.5 |
| ZPT ☆ □ - B5 - A8 | M8×1.0 | 12 | 58 | | |
| ZPT ○ B □ - B5 - A6 | M6×1.0 | 8 | 68 | 34 | 38 |
| ZPT ○ B □ - B5 - A8 | M8×1.0 | 12 | 58 | | |

○ Sucker diameter symbol: 40, 50
☆ Suction cup type: flat (U) ribbed flat (C)
□ Material of suction cup: nitrile rubber (N), silicone rubber (S)

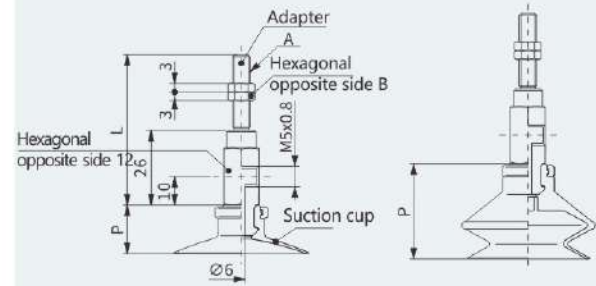


| Model | A | D | Sucker diameter P | |
|---------------------|---------|---|-------------------|------|
| | | | 40 | 50 |
| ZPT ☆ □ - B5 - B6 | M6×1.0 | 6 | 18.5 | 19.5 |
| ZPT ☆ □ - B5 - B8 | M8×1.25 | 8 | | |
| ZPT ○ B □ - B5 - B6 | M6×1.0 | 6 | 34 | 38 |
| ZPT ○ B □ - B5 - B8 | M8×1.25 | 8 | | |

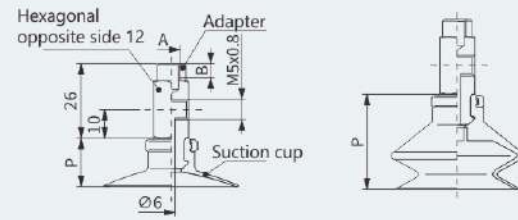
○ Sucker diameter symbol: 40, 50
☆ Suction cup type: flat (U) ribbed flat (C)
□ Material of suction cup: nitrile rubber (N), silicone rubber (S)

SPECIFICATION AND SIZE (MM)

ZPY40/50
A6, A8



B6, B8



| Model | A | B | L | Sucker diameter P | |
|---------------------|--------|----|----|-------------------|------|
| | | | | 40 | 50 |
| ZPY ○ ☆ □ - B5 - A6 | M6×1.0 | 8 | 54 | 18.5 | 19.5 |
| ZPT ○ ☆ □ - B5 - A8 | M8×1.0 | 12 | 44 | 18.5 | 19.5 |
| ZPT ○ B □ - B5 - A6 | M6×1.0 | 8 | 54 | 34 | 38 |
| ZPT ○ B □ - B5 - A8 | M8×1.0 | 12 | 44 | 34 | 38 |

- Sucker diameter symbol: 40, 50
- ☆ Suction cup type: flat (U) ribbed flat (C)
- Material of suction cup: nitrile rubber (N), silicone rubber (S)

| Model | A | B | Sucker diameter P | |
|---------------------|---------|---|-------------------|------|
| | | | 40 | 50 |
| ZPY ○ ☆ □ - B5 - B6 | M6×1.0 | 6 | 18.5 | 19.5 |
| ZPY ○ ☆ □ - B5 - B8 | M8×1.25 | 8 | 18.5 | 19.5 |
| ZPY ○ B □ - B5 - B6 | M6×1.0 | 6 | 34 | 38 |
| ZPY ○ B □ - B5 - B8 | M8×1.25 | 8 | 34 | 38 |

- Sucker diameter symbol: 40, 50
- ☆ Suction cup type: flat (U) ribbed flat (C)
- Material of suction cup: nitrile rubber (N), silicone rubber (S)



型号规格

ZP T 10 U N J 10 - B5 - □

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Vacuum port direction ② Sucker diameter ③ Type of suction cup ④ Material of suction cup

T - Portrait 10 - Ø10 25 - Ø25 U - Flat N - Nitrile Rubber
 R - Horizontal Quick Connector 13 - Ø13 32 - Ø32 C - single layer S - Silicone Rubber
 Y - Transverse 16 - Ø16 40 - Ø40 with stiffener
 20 - Ø20 50 - Ø50 B - Double-deck

⑤ Buffering Type ⑥ Buffer stroke ⑦ Vacuum port specifications ⑧ Installation thread

J - Returnable transformation 10 - 10mm See Table 1 for details See Table 2 for details
 K - Irreversible transformation 20 - 20mm
 30 - 30mm
 40 - 40mm
 50 - 50mm

Table 1

| Vacuum port specifications | Model | specifications | Ø10~Ø16 | Ø20~Ø32 | Ø40~Ø50 | |
|----------------------------|------------------------------------|----------------|---------|---------|---------|---|
| Internal Thread | B5 | M5×0.8 | ● | ● | ● | |
| | B01 | Rc1/8 | - | - | ● | |
| | U4 | Ø4 Pu Tube | ● | - | - | |
| Barb Joint | N4 | Ø4 Nylon Tube | ● | - | - | |
| | U6 | Ø6 Pu Tube | ● | ● | ● | |
| | N6 | Ø6 Nylon Tube | ● | ● | ● | |
| T type | 03 | Ø3 | ● | - | - | |
| | 23 | Ø3.2 | ● | - | - | |
| | External Hexagonal Quick Connector | 04 | Ø4 | ● | ● | - |
| | | 06 | Ø6 | ● | ● | ● |
| | | 03S | Ø3 | ● | - | - |
| | Internal Hexagonal Quick Connector | 23S | Ø3.2 | ● | - | - |
| 04S | | Ø4 | ● | ● | - | |
| 06S | | Ø6 | ● | ● | ● | |
| R type Quick Connector | 04 | Ø4 | ● | ● | - | |
| | 06 | Ø6 | ● | ● | ● | |
| Internal Thread | B5 | M5×0.8 | ● | ● | ● | |
| | U4 | Ø4 Pu Tube | ● | ● | - | |
| | N4 | Ø4 Nylon Tube | ● | ● | - | |
| Barb Joint | U6 | Ø6 Pu Tube | ● | ● | ● | |
| | N6 | Ø6 Nylon Tube | ● | ● | ● | |
| | 03 | Ø3 | ● | - | - | |
| Y type | External Hexagonal Quick Connector | 23 | Ø3.2 | ● | - | |
| | | 04 | Ø4 | ● | ● | - |
| | | 06 | Ø6 | ● | ● | ● |
| | 03S | Ø3 | ● | - | - | |
| | Internal Hexagonal Quick Connector | 23S | Ø3.2 | ● | - | - |
| | | 04S | Ø4 | ● | ● | - |
| 06S | Ø6 | ● | ● | ● | | |

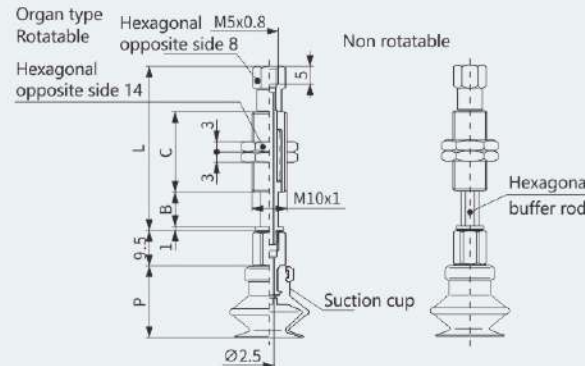
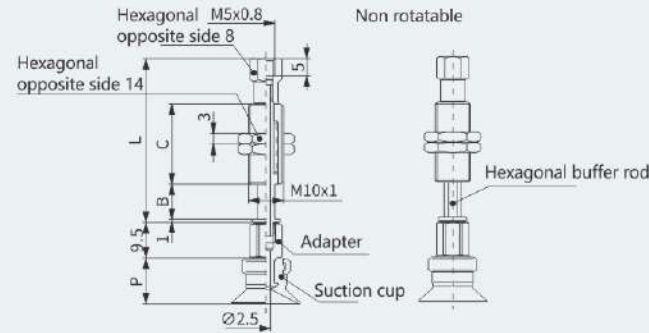
Table 2

| Installation thread | Model | Thread Specification | Ø10~Ø16 | Ø20~Ø32 | Ø40~Ø50 |
|---------------------|-------|----------------------|---------|---------|---------|
| External thread | A10 | M10×1.0 | ● | ● | - |
| | A14 | M14×1.0 | - | ● | ● |

SPECIFICATION AND SIZE (MM)

ZPT10/13/16

Flat, ribbed flat
Rotatable



| Model | B | C | L | Sucker diameter P | | |
|---------------------------|----|----|-----|-------------------|----|------|
| | | | | 10 | 13 | 16 |
| ZPT ○ ☆ □ ● 10 - B5 - A10 | 10 | 23 | 47 | | | |
| ZPT ○ ☆ □ ● 20 - B5 - A10 | 20 | 51 | 85 | | | |
| ZPT ○ ☆ □ ● 30 - B5 - A10 | 30 | 51 | 95 | 12 | 12 | 12.5 |
| ZPT ○ ☆ □ ● 40 - B5 - A10 | 40 | 77 | 131 | | | |
| ZPT ○ ☆ □ ● 50 - B5 - A10 | 50 | 77 | 141 | | | |

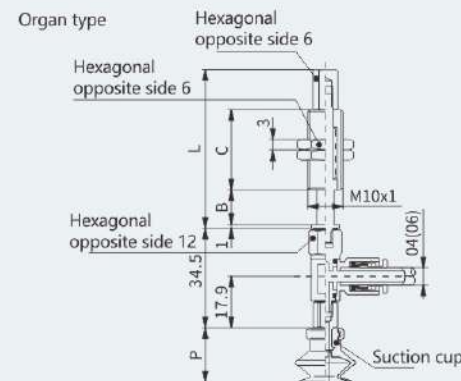
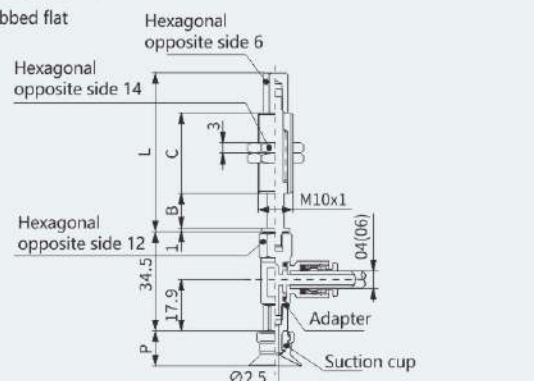
○ Sucker diameter symbol: 10, 13, 16
☆ Suction cup type: flat (U) ribbed flat (C)
□ Material of suction cup: nitrile rubber (N), silicone rubber (S)
● Buffer types: reversible transformation (J), irreversible transformation (K)

| Model | B | C | L | Sucker diameter P | | |
|---------------------------|----|----|-----|-------------------|------|----|
| | | | | 10 | 13 | 16 |
| ZPT ○ B □ ● 10 - B5 - A10 | 10 | 23 | 47 | | | |
| ZPT ○ B □ ● 20 - B5 - A10 | 20 | 51 | 85 | | | |
| ZPT ○ B □ ● 30 - B5 - A10 | 30 | 51 | 95 | 16 | 18.5 | 20 |
| ZPT ○ B □ ● 40 - B5 - A10 | 40 | 77 | 131 | | | |
| ZPT ○ B □ ● 50 - B5 - A10 | 50 | 77 | 141 | | | |

○ Sucker diameter symbol: 10, 13, 16
□ Material of suction cup: nitrile rubber (N), silicone rubber (S)
● Buffer types: reversible transformation (J), irreversible transformation (K)

ZPR10/13/16

Flat, ribbed flat



| Model | B | C | L | Sucker diameter P | | |
|---------------------------|----|----|-----|-------------------|----|------|
| | | | | 10 | 13 | 16 |
| ZPR ○ ☆ □ ● 10 - B5 - A10 | 10 | 23 | 45 | | | |
| ZPR ○ ☆ □ ● 20 - B5 - A10 | 20 | 51 | 83 | | | |
| ZPR ○ ☆ □ ● 30 - B5 - A10 | 30 | 51 | 93 | 12 | 12 | 12.5 |
| ZPR ○ ☆ □ ● 40 - B5 - A10 | 40 | 77 | 129 | | | |
| ZPR ○ ☆ □ ● 50 - B5 - A10 | 50 | 77 | 139 | | | |

○ Sucker diameter symbol: 10, 13, 16
☆ Suction cup type: flat (U) ribbed flat (C)
□ Material of suction cup: nitrile rubber (N), silicone rubber (S)
● Buffer types: reversible transformation (J), irreversible transformation (K)

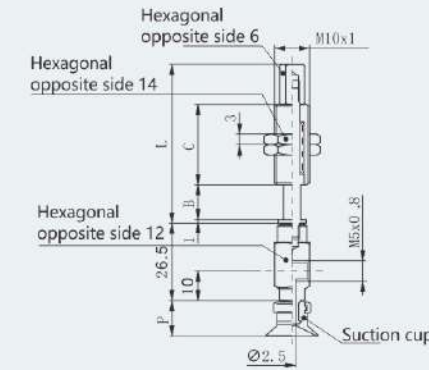
| Model | B | C | L | Sucker diameter P | | |
|---------------------------|----|----|-----|-------------------|------|----|
| | | | | 10 | 13 | 16 |
| ZPR ○ B □ ● 10 - B5 - A10 | 10 | 23 | 45 | | | |
| ZPR ○ B □ ● 20 - B5 - A10 | 20 | 51 | 83 | | | |
| ZPR ○ B □ ● 30 - B5 - A10 | 30 | 51 | 93 | 16 | 18.5 | 20 |
| ZPR ○ B □ ● 40 - B5 - A10 | 40 | 77 | 129 | | | |
| ZPR ○ B □ ● 50 - B5 - A10 | 50 | 77 | 139 | | | |

○ Sucker diameter symbol: 10, 13, 16
□ Material of suction cup: nitrile rubber (N), silicone rubber (S)
● Buffer types: reversible transformation (J), irreversible transformation (K)

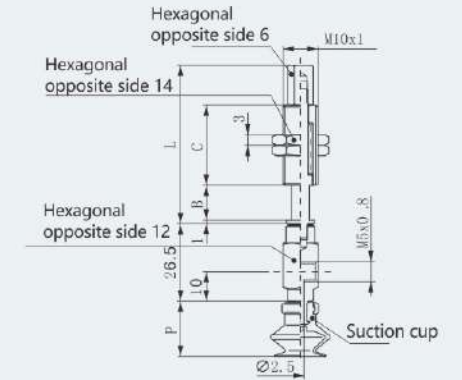
SPECIFICATION AND SIZE (MM)

ZPY10/13/16

Flat, ribbed flat



Organ type



| Model | B | C | L | Sucker diameter P | | |
|---------------------------|----|----|-----|-------------------|----|------|
| | | | | 10 | 13 | 16 |
| ZPY ○ ☆ □ ● 10 - B5 - A10 | 10 | 23 | 45 | | | |
| ZPY ○ ☆ □ ● 20 - B5 - A10 | 20 | 51 | 83 | | | |
| ZPY ○ ☆ □ ● 30 - B5 - A10 | 30 | 51 | 93 | 12 | 12 | 12.5 |
| ZPY ○ ☆ □ ● 40 - B5 - A10 | 40 | 77 | 129 | | | |
| ZPY ○ ☆ □ ● 50 - B5 - A10 | 50 | 77 | 139 | | | |

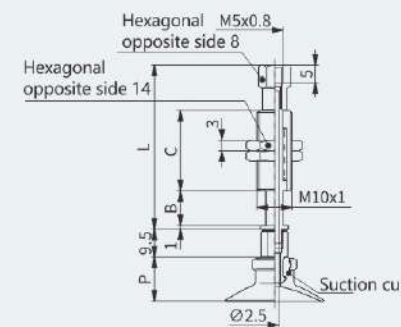
○ Sucker diameter symbol: 10, 13, 16
☆ Suction cup type: flat (U) ribbed flat (C)
□ Material of suction cup: nitrile rubber (N), silicone rubber (S)

| Model | B | C | L | Sucker diameter P | | |
|---------------------------|----|----|-----|-------------------|------|----|
| | | | | 10 | 13 | 16 |
| ZPY ○ B □ ● 10 - B5 - A10 | 10 | 23 | 45 | | | |
| ZPY ○ B □ ● 20 - B5 - A10 | 20 | 51 | 83 | | | |
| ZPY ○ B □ ● 30 - B5 - A10 | 30 | 51 | 93 | 16 | 18.5 | 20 |
| ZPY ○ B □ ● 40 - B5 - A10 | 40 | 77 | 129 | | | |
| ZPY ○ B □ ● 50 - B5 - A10 | 50 | 77 | 139 | | | |

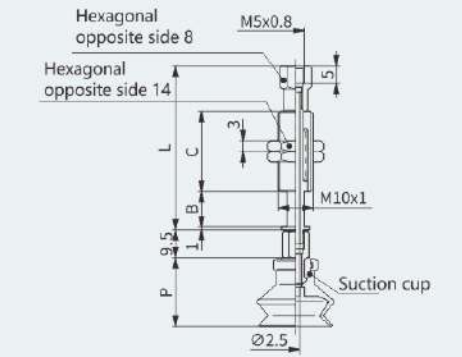
○ Sucker diameter symbol: 10, 13, 16
□ Material of suction cup: nitrile rubber (N), silicone rubber (S)
● Buffer types: reversible transformation (J), irreversible transformation (K)

ZPT20/25/32 - A10

Flat, ribbed flat



Organ type



| Model | B | C | L | Sucker diameter P | | |
|---------------------------|----|----|-----|-------------------|----|------|
| | | | | 20 | 25 | 32 |
| ZPT ○ ☆ □ ● 10 - B5 - A10 | 10 | 23 | 47 | | | |
| ZPT ○ ☆ □ ● 20 - B5 - A10 | 20 | 51 | 85 | | | |
| ZPT ○ ☆ □ ● 30 - B5 - A10 | 30 | 51 | 95 | 14 | 14 | 14.5 |
| ZPT ○ ☆ □ ● 40 - B5 - A10 | 40 | 77 | 131 | | | |
| ZPT ○ ☆ □ ● 50 - B5 - A10 | 50 | 77 | 141 | | | |

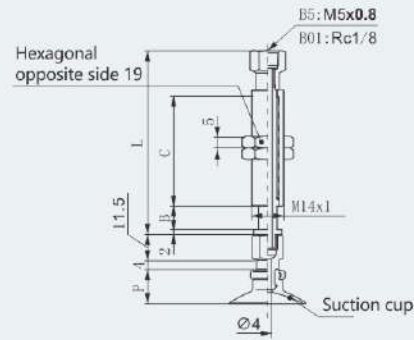
○ Sucker diameter symbol: 20, 25, 32
☆ Suction cup type: flat (U) ribbed flat (C)
□ Material of suction cup: nitrile rubber (N), silicone rubber (S)
● Buffer types: reversible transformation (J), irreversible transformation (K)

| Model | B | C | L | Sucker diameter P | | |
|---------------------------|----|----|-----|-------------------|----|----|
| | | | | 20 | 25 | 32 |
| ZPT ○ B □ ● 10 - B5 - A10 | 10 | 23 | 47 | | | |
| ZPT ○ B □ ● 20 - B5 - A10 | 20 | 51 | 85 | | | |
| ZPT ○ B □ ● 30 - B5 - A10 | 30 | 51 | 95 | 23.5 | 24 | 29 |
| ZPT ○ B □ ● 40 - B5 - A10 | 40 | 77 | 131 | | | |
| ZPT ○ B □ ● 50 - B5 - A10 | 50 | 77 | 141 | | | |

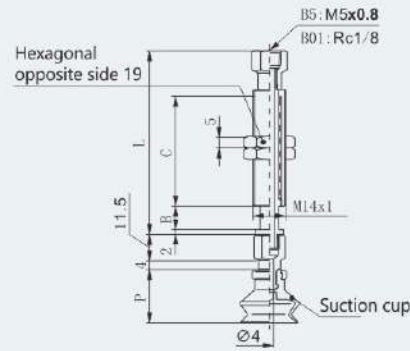
○ Sucker diameter symbol: 10, 13, 16
□ Material of suction cup: nitrile rubber (N), silicone rubber (S)
● Buffer types: reversible transformation (J), irreversible transformation (K)

SPECIFICATION AND SIZE (MM)

ZPT20/25/32 – A14
Flat, ribbed flat



Organ type



| Model | B | C | L | Sucker diameter P | | |
|---------------------------|----|----|------|-------------------|----|------|
| | | | | 20 | 25 | 32 |
| ZPT ○ ☆ □ ● 10 – B5 – A14 | 10 | 50 | 77 | 14 | 14 | 14.5 |
| ZPT ○ ☆ □ ● 20 – B5 – A14 | 20 | 50 | 81 | | | |
| ZPT ○ ☆ □ ● 30 – B5 – A14 | 30 | 50 | 91 | | | |
| ZPT ○ ☆ □ ● 50 – B5 – A14 | 50 | 75 | 136 | | | |
| ZPT ○ ☆ □ ● 10 – B5 – A14 | 10 | 50 | 78.5 | | | |
| ZPT ○ ☆ □ ● 20 – B5 – A14 | 20 | 50 | 84 | | | |
| ZPT ○ ☆ □ ● 30 – B5 – A14 | 30 | 50 | 94 | | | |
| ZPT ○ ☆ □ ● 50 – B5 – A14 | 50 | 75 | 139 | | | |

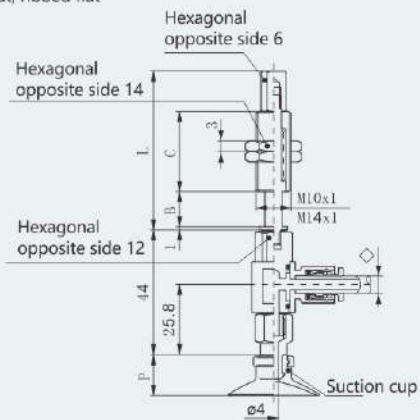
- Sucker diameter symbol: 20, 25, 32
- ☆ Suction cup type: flat (U) ribbed flat (C)
- Material of suction cup: nitrile rubber (N), silicone rubber (S)
- Buffer types: reversible transformation (J), irreversible transformation (K)

| Model | B | C | L | Sucker diameter P | | |
|---------------------------|----|----|------|-------------------|----|----|
| | | | | 20 | 25 | 32 |
| ZPT ○ B □ ● 10 – B5 – A14 | 10 | 50 | 77 | 23.5 | 24 | 29 |
| ZPT ○ B □ ● 20 – B5 – A14 | 20 | 50 | 81 | | | |
| ZPT ○ B □ ● 30 – B5 – A14 | 30 | 50 | 91 | | | |
| ZPT ○ B □ ● 50 – B5 – A14 | 50 | 75 | 136 | | | |
| ZPT ○ B □ ● 10 – B5 – A14 | 10 | 50 | 78.5 | | | |
| ZPT ○ B □ ● 20 – B5 – A14 | 20 | 50 | 84 | | | |
| ZPT ○ B □ ● 30 – B5 – A14 | 30 | 50 | 94 | | | |
| ZPT ○ B □ ● 50 – B5 – A14 | 50 | 75 | 139 | | | |

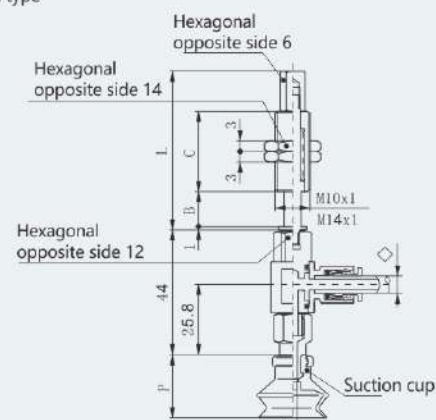
- Sucker diameter symbol: 20, 25, 32
- Material of suction cup: nitrile rubber (N), silicone rubber (S)
- Buffer types: reversible transformation (J), irreversible transformation (K)

ZPR20/25/32

Flat, ribbed flat



Organ type



| Model | B | C | L | Sucker diameter P | | |
|--------------------------|----|----|-----|-------------------|----|------|
| | | | | 20 | 25 | 32 |
| ZPR ○ ☆ □ ● 10 – ◇ – A10 | 10 | 23 | 45 | 14 | 14 | 14.5 |
| ZPR ○ ☆ □ ● 20 – ◇ – A10 | 20 | 51 | 83 | | | |
| ZPR ○ ☆ □ ● 30 – ◇ – A10 | 30 | 51 | 93 | | | |
| ZPR ○ ☆ □ ● 40 – ◇ – A10 | 40 | 77 | 129 | | | |
| ZPR ○ ☆ □ ● 50 – ◇ – A10 | 50 | 77 | 139 | | | |

- Sucker diameter symbol: 20, 25, 32
- ☆ Suction cup type: flat (U) ribbed flat (C)
- Material of suction cup: nitrile rubber (N), silicone rubber (S)
- Buffer types: reversible transformation (J), irreversible transformation (K)
- ◇ Vacuum port connection: 04, 06, 08

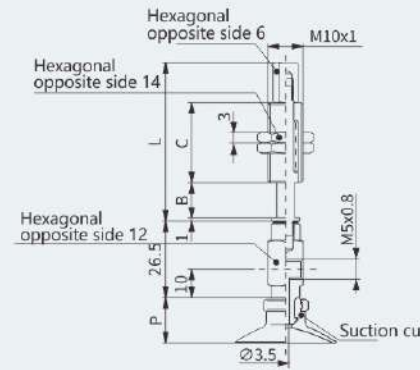
| Model | B | C | L | Sucker diameter P | | |
|--------------------------|----|----|-----|-------------------|----|----|
| | | | | 20 | 25 | 32 |
| ZPR ○ B □ ● 10 – ◇ – A10 | 10 | 23 | 45 | 23.5 | 24 | 29 |
| ZPR ○ B □ ● 20 – ◇ – A10 | 20 | 51 | 83 | | | |
| ZPR ○ B □ ● 30 – ◇ – A10 | 30 | 51 | 93 | | | |
| ZPR ○ B □ ● 40 – ◇ – A10 | 40 | 77 | 129 | | | |
| ZPR ○ B □ ● 50 – ◇ – A10 | 50 | 77 | 139 | | | |

- Sucker diameter symbol: 20, 25, 32
- Material of suction cup: nitrile rubber (N), silicone rubber (S)
- Buffer types: reversible transformation (J), irreversible transformation (K)
- ◇ Vacuum port connection: 04, 06, 08

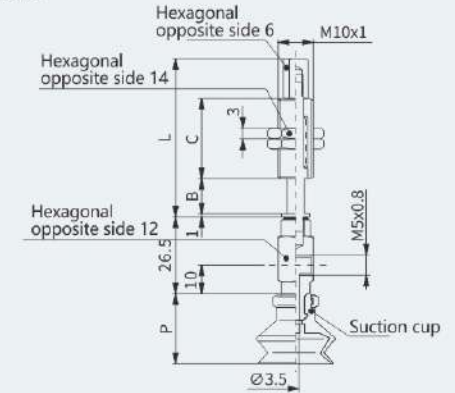
SPECIFICATION AND SIZE (MM)

ZPY20/25/32

Flat, ribbed flat



Organ type



| Model | B | C | L | Sucker diameter P | | |
|---------------------------|----|----|-----|-------------------|----|------|
| | | | | 20 | 25 | 32 |
| ZPY ○ ☆ □ ● 10 – B5 – A10 | 10 | 23 | 45 | 14 | 14 | 14.5 |
| ZPY ○ ☆ □ ● 20 – B5 – A10 | 20 | 51 | 83 | | | |
| ZPY ○ ☆ □ ● 30 – B5 – A10 | 30 | 51 | 93 | | | |
| ZPY ○ ☆ □ ● 40 – B5 – A10 | 40 | 77 | 129 | | | |
| ZPY ○ ☆ □ ● 50 – B5 – A10 | 50 | 77 | 139 | | | |

- Sucker diameter symbol: 20, 25, 32
- ☆ Suction cup type: flat (U) ribbed flat (C)
- Material of suction cup: nitrile rubber (N), silicone rubber (S)
- Buffer types: reversible transformation (J), irreversible transformation (K)

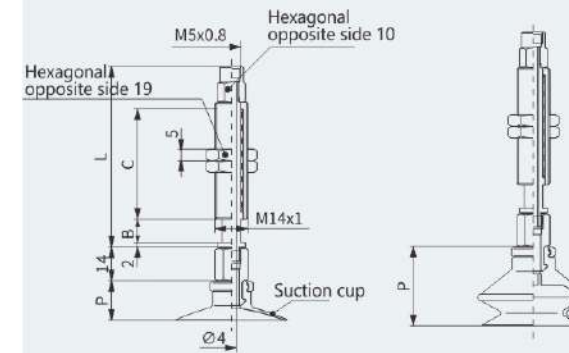
| Model | B | C | L | Sucker diameter P | | |
|---------------------------|----|----|-----|-------------------|----|----|
| | | | | 20 | 25 | 32 |
| ZPY ○ B □ ● 10 – B5 – A10 | 10 | 23 | 45 | 23.5 | 24 | 29 |
| ZPY ○ B □ ● 20 – B5 – A10 | 20 | 51 | 83 | | | |
| ZPY ○ B □ ● 30 – B5 – A10 | 30 | 51 | 93 | | | |
| ZPY ○ B □ ● 40 – B5 – A10 | 40 | 77 | 129 | | | |
| ZPY ○ B □ ● 50 – B5 – A10 | 50 | 77 | 139 | | | |

- Sucker diameter symbol: 20, 25, 32
- Material of suction cup: nitrile rubber (N), silicone rubber (S)
- Buffer types: reversible transformation (J), irreversible transformation (K)

ZPT40/50 – B5

Flat, ribbed flat

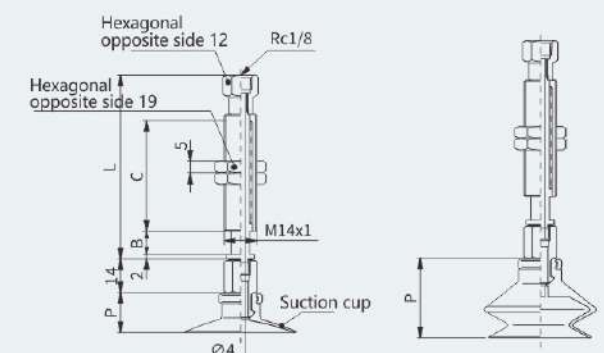
Organ type



ZPT40/50 – B01

Flat, ribbed flat

Organ type



| Model | B | C | L | Sucker diameter P | |
|---------------------------|----|----|-----|-------------------|------|
| | | | | 40 | 50 |
| ZPT ○ ☆ □ ● 10 – B5 – A14 | 10 | 50 | 77 | 18.5 | 19.5 |
| ZPT ○ ☆ □ ● 20 – B5 – A14 | 20 | 50 | 81 | | |
| ZPT ○ ☆ □ ● 30 – B5 – A14 | 30 | 50 | 91 | | |
| ZPT ○ ☆ □ ● 50 – B5 – A14 | 50 | 75 | 136 | | |
| ZPT ○ B □ ● 10 – B5 – A14 | 10 | 50 | 77 | | |
| ZPT ○ B □ ● 20 – B5 – A14 | 20 | 50 | 81 | | |
| ZPT ○ B □ ● 30 – B5 – A14 | 30 | 50 | 91 | | |
| ZPT ○ B □ ● 50 – B5 – A14 | 50 | 75 | 136 | | |

- Sucker diameter symbol: 40, 50
- ☆ Suction cup type: flat (U) ribbed flat (C)
- Material of suction cup: nitrile rubber (N), silicone rubber (S)
- Buffer types: reversible transformation (J), irreversible transformation (K)

| Model | B | C | L | Sucker diameter P | |
|----------------------------|----|----|------|-------------------|------|
| | | | | 40 | 50 |
| ZPT ○ ☆ □ ● 10 – B01 – A14 | 10 | 50 | 78.5 | 18.5 | 19.5 |
| ZPT ○ ☆ □ ● 20 – B01 – A14 | 20 | 50 | 84 | | |
| ZPT ○ ☆ □ ● 30 – B01 – A14 | 30 | 50 | 94 | | |
| ZPT ○ ☆ □ ● 50 – B01 – A14 | 50 | 75 | 139 | | |
| ZPT ○ B □ ● 10 – B01 – A14 | 10 | 50 | 78.5 | | |
| ZPT ○ B □ ● 20 – B01 – A14 | 20 | 50 | 84 | | |
| ZPT ○ B □ ● 30 – B01 – A14 | 30 | 50 | 94 | | |
| ZPT ○ B □ ● 50 – B01 – A14 | 50 | 75 | 139 | | |

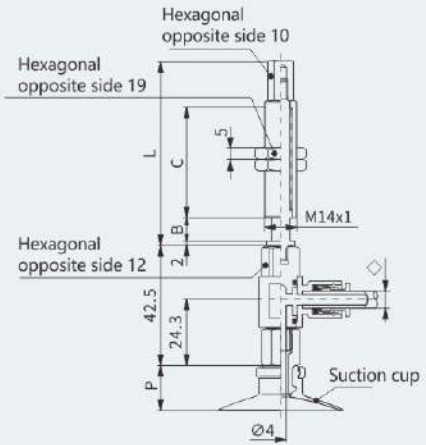
- Sucker diameter symbol: 40, 50
- Material of suction cup: nitrile rubber (N), silicone rubber (S)
- Buffer types: reversible transformation (J), irreversible transformation (K)

- HXD
- HOP
- HNP
- HNT
- SCG
- HXN
- HGP
- ZP
- ZP3
- ZP3E
- ZP3P
- ZP3P-JT2
- ZP3P-JT5
- MAF
- MAB
- MAOF
- MAOB
- BK

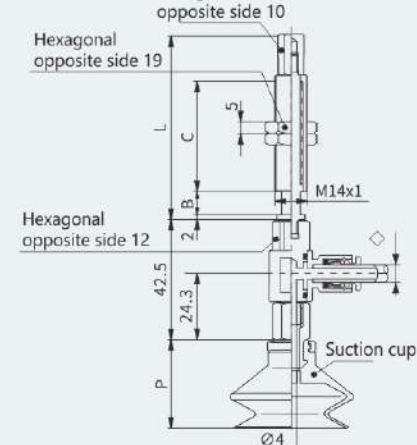
SPECIFICATION AND SIZE (MM)

ZPR40/50

Flat, ribbed flat



Organ type



| Model | B | C | L | Sucker diameter P | |
|--------------------------|----|----|-----|-------------------|------|
| | | | | 40 | 50 |
| ZPR ○ ☆ □ ● 10 - ◇ - A10 | 10 | 50 | 80 | 18.5 | 19.5 |
| ZPR ○ ☆ □ ● 20 - ◇ - A10 | 20 | 50 | 77 | | |
| ZPR ○ ☆ □ ● 30 - ◇ - A10 | 30 | 50 | 87 | | |
| ZPR ○ ☆ □ ● 50 - ◇ - A10 | 50 | 75 | 132 | | |

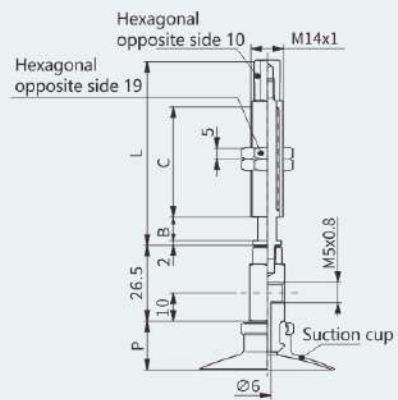
- Sucker diameter symbol: 40, 50
- ☆ Suction cup type: flat (U) ribbed flat (C)
- Material of suction cup: nitrile rubber (N), silicone rubber (S)
- Buffer types: reversible transformation (J), irreversible transformation (K)
- ◇ Vacuum port connection: 06, 08

| Model | B | C | L | Sucker diameter P | |
|--------------------------|----|----|-----|-------------------|----|
| | | | | 40 | 50 |
| ZPR ○ B □ ● 10 - ◇ - A10 | 10 | 50 | 80 | 34 | 38 |
| ZPR ○ B □ ● 20 - ◇ - A10 | 20 | 50 | 77 | | |
| ZPR ○ B □ ● 30 - ◇ - A10 | 30 | 50 | 87 | | |
| ZPR ○ B □ ● 50 - ◇ - A10 | 50 | 75 | 132 | | |

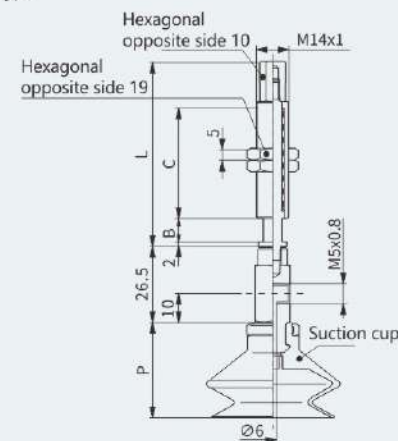
- Sucker diameter symbol: 40, 50
- Material of suction cup: nitrile rubber (N), silicone rubber (S)
- Buffer types: reversible transformation (J), irreversible transformation (K)
- ◇ Vacuum port connection: 06, 08

ZPY40/50

Flat, ribbed flat



Organ type



| Model | B | C | L | Sucker diameter P | |
|---------------------------|----|----|-----|-------------------|------|
| | | | | 40 | 50 |
| ZPR ○ ☆ □ ● 10 - B5 - A10 | 10 | 50 | 80 | 18.5 | 19.5 |
| ZPR ○ ☆ □ ● 20 - B5 - A10 | 20 | 50 | 77 | | |
| ZPR ○ ☆ □ ● 30 - B5 - A10 | 30 | 50 | 87 | | |
| ZPR ○ ☆ □ ● 50 - B5 - A10 | 50 | 75 | 132 | | |

- Sucker diameter symbol: 40, 50
- ☆ Suction cup type: flat (U) ribbed flat (C)
- Material of suction cup: nitrile rubber (N), silicone rubber (S)
- Buffer types: reversible transformation (J), irreversible transformation (K)

| Model | B | C | L | Sucker diameter P | |
|---------------------------|----|----|-----|-------------------|----|
| | | | | 40 | 50 |
| ZPR ○ B □ ● 10 - B5 - A10 | 10 | 50 | 80 | 34 | 38 |
| ZPR ○ B □ ● 20 - B5 - A10 | 20 | 50 | 77 | | |
| ZPR ○ B □ ● 30 - B5 - A10 | 30 | 50 | 87 | | |
| ZPR ○ B □ ● 50 - B5 - A10 | 50 | 75 | 132 | | |

- Sucker diameter symbol: 40, 50
- Material of suction cup: nitrile rubber (N), silicone rubber (S)
- Buffer types: reversible transformation (J), irreversible transformation (K)



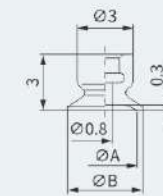
MODEL SPECIFICATIONS

ZP3 - 02 U N
① ② ③

| ① Sucker Diameter | | ② Type of suction cup | ③ Material of suction cup |
|-------------------|----------|----------------------------------|---------------------------------|
| 015 - Ø1.5 | 08 - Ø8 | U - Flat | N - Nitrile rubber |
| 02 - Ø2 | 10 - Ø10 | UM - single layer with stiffener | S - silicone rubber |
| 035 - Ø3.5 | 13 - Ø13 | B - Double-deck | U - Polyurethane rubber |
| 04 - Ø4 | 16 - Ø16 | | F - Fluororubber |
| 06 - Ø6 | | | GN - Conductive nitrile rubber |
| | | | GS - Conductive silicone rubber |

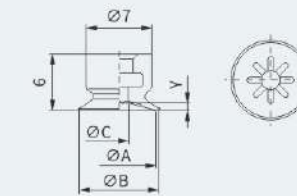
SPECIFICATION AND SIZE (MM)

Flat type

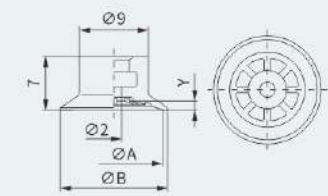


| Model | ØA | ØB | weight g |
|----------|-----|-----|----------|
| ZP3-015U | 1.5 | 2 | 0.1 |
| ZP3-02U | 2 | 2.5 | |
| ZP3-035U | 3.5 | 4 | |

Trench flat type

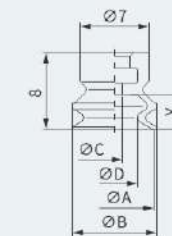


| Model | ØA | ØB | ØC | Y | weight g |
|----------|----|-----|-----|-----|----------|
| ZP3-04UM | 4 | 4.5 | 1.2 | 0.5 | 0.3 |
| ZP3-06UM | 6 | 6.5 | 2 | 0.8 | |
| ZP3-08UM | 8 | 8.5 | 2 | 0.8 | |

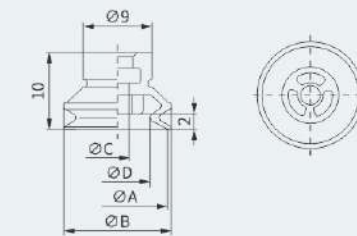


| Model | ØA | ØB | ØC | weight g |
|----------|----|----|-----|----------|
| ZP3-10UM | 10 | 11 | 1 | 0.3 |
| ZP3-13UM | 13 | 14 | 1.2 | |
| ZP3-16UM | 16 | 17 | 1.2 | |

Organ type



| Model | ØA | ØB | ØC | ØD | Y | weight g |
|---------|----|-----|-----|-----|-----|----------|
| ZP3-04B | 4 | 4.5 | 1.8 | 1.8 | 2.2 | 0.3 |
| ZP3-06B | 6 | 7 | 2 | 3.4 | 3 | 0.3 |
| ZP3-08B | 8 | 9 | 2 | 5.2 | 3 | 0.4 |



| Model | ØA | ØB | ØC | ØD | weight g |
|---------|----|----|----|------|----------|
| ZP3-10B | 10 | 11 | 2 | 6 | 0.8 |
| ZP3-13B | 13 | 14 | 3 | 8.4 | 1.0 |
| ZP3-16B | 16 | 17 | 3 | 11.4 | 1.1 |



MODEL SPECIFICATIONS

ZP3 - T 04 UM N - A6 - B5

① ② ③ ④ ⑤ ⑥

| ① Vacuum port direction | ② Sucker Diameter | ③ Type of suction cup |
|-------------------------|---|----------------------------------|
| T - Portrait | 015 - $\varnothing 1.5$ 08 - $\varnothing 8$ | U - Flat |
| Y - Transverse | 02 - $\varnothing 2$ 10 - $\varnothing 10$ | UM - single layer with stiffener |
| | 035 - $\varnothing 3.5$ 13 - $\varnothing 13$ | B - Double-deck |
| | 04 - $\varnothing 4$ 16 - $\varnothing 16$ | |
| | 06 - $\varnothing 6$ | |

| ④ Material of suction cup | ⑤ Vacuum port specifications | ⑥ Installation thread |
|---------------------------------|------------------------------|-------------------------|
| N - Nitrile rubber | See Table 1 for details | See Table 2 for details |
| S - silicon rubber | | |
| U - Polyurethane rubber | | |
| F - Fluororubber | | |
| GN - Conductive nitrile rubber | | |
| GS - Conductive silicone rubber | | |

Table 1

| Threaded | Model | Thread Diameter | $\varnothing 1.5 \sim \varnothing 3.5$ | $\varnothing 4 \sim \varnothing 8$ | $\varnothing 10 \sim \varnothing 16$ |
|----------------------------|-------|-----------------|--|------------------------------------|--------------------------------------|
| Portrait External Thread | A6 | M6x0.75 | ● | - | - |
| | A10 | M10x1 | - | ● | - |
| | A12 | M12x1 | - | - | ● |
| Transverse Internal Thread | B3 | M3x0.5 | ● | - | - |
| | B5 | M5x0.8 | - | ● | ● |

Table 2

| Vacuum port connection | Model | Thread Diameter | $\varnothing 1.5 \sim \varnothing 3.5$ | $\varnothing 4 \sim \varnothing 8$ | $\varnothing 10 \sim \varnothing 16$ |
|------------------------|-------|----------------------|--|------------------------------------|--------------------------------------|
| External Thread | A3 | M3x0.5 | ● | - | - |
| | A5 | M5x0.8 | - | ● | ● |
| Internal Thread | B3 | M3x0.5 | ● | - | - |
| | B5 | M5x0.8 | - | ● | ● |
| Portrait Barb Joint | U2 | $\varnothing 2$ Pipe | ● | ● | ● |
| | U4 | $\varnothing 4$ Pipe | ● | ● | ● |
| | U6 | $\varnothing 6$ Pipe | - | - | ● |
| Quick Connector | 04 | $\varnothing 4$ Pipe | ● | ● | ● |
| | 06 | $\varnothing 6$ Pipe | - | - | ● |
| Internal Thread | B3 | M3x0.5 | ● | - | - |
| | B5 | M5x0.8 | - | ● | ● |
| Transverse Barb Joint | U2 | $\varnothing 2$ Pipe | ● | ● | ● |
| | U4 | $\varnothing 4$ Pipe | ● | ● | ● |
| | U6 | $\varnothing 6$ Pipe | - | - | ● |
| Quick Connector | 04 | $\varnothing 4$ Pipe | ● | ● | ● |
| | 06 | $\varnothing 6$ Pipe | - | - | ● |

SPECIFICATION AND SIZE (MM)

Suction cup specifications Adapter specifications

| Model | A | $\varnothing B$ | $\varnothing C$ | E | H | Q | weight g |
|--------|--------|-----------------|-----------------|-----|-----|-----|----------|
| M-3AU2 | M3x0.5 | 4 | 0.9 | 2.5 | 4.5 | 6.5 | 0.7 |
| M-5AU2 | M5x0.8 | 4 | 0.9 | 3 | 7 | 6.5 | 1.5 |
| M-3AU4 | M3x0.5 | 3.4 | 1.2 | 2.5 | 5 | 7.5 | 0.7 |
| M-5AN4 | M5x0.8 | 2.8 | 1.8 | 3 | 7 | 5 | 1.6 |
| M-5AU4 | M5x0.8 | 3.4 | 2.5 | 3 | 7 | 7 | 1.7 |
| M-5AN6 | M5x0.8 | 4.5 | 2.5 | 3 | 7 | 7 | 1.8 |
| M-5AU6 | M5x0.8 | 4.95 | 2.5 | 3 | 7 | 7 | 1.8 |

| $\varnothing D$ | Model | A | $\varnothing B$ | H | L | Q | weight g |
|-----------------|------------|--------|-----------------|----|------|------|----------|
| 4 | KJH04-M3 | M3x0.5 | 1.5 | 8 | 16.4 | 13.8 | 1.9 |
| | KJH04-M5 | M5x0.8 | 2.5 | 10 | 17.1 | 14.6 | 2.4 |
| 6 | KQ2H04-01S | Rc1/8 | 4.5 | 12 | 22.5 | 18.5 | 16 |
| | KJH06-M5 | M5x0.8 | 4.5 | 14 | 28 | 24 | 21 |

- HXD
- HOP
- HNP
- HNT
- SCG
- HXN
- HGP
- ZP
- ZP3**
- ZP3E
- ZP3P
- ZP3P-JT2
- ZP3P-JT5
- MAF
- MAB
- MAOF
- MAOB
- BK



MODEL SPECIFICATIONS

ZP3 - T 04 U N J 6 - B5

① ② ③ ④ ⑤ ⑥ ⑦

① Vacuum port direction ② Sucker Diameter ③ Type of suction cup

| | | |
|--------------------------------|--|---|
| T - Portrait Y - Transverse | 015 - Ø1.5 08 - Ø8 02 - Ø2 10 - Ø10 035 - Ø3.5 13 - Ø13 04 - Ø4 16 - Ø16 06 - Ø6 | U - Flat UM - single layer with stiffener B - Double-deck |
|--------------------------------|--|---|

④ Material of suction cup ⑤ Buffering Type ⑥ Buffer stroke

| | | |
|--|--|---|
| N - Nitrile Rubber S - Silicon Rubber U - Polyurethane Rubber F - Fluororubber GN - Conductive Nitrile Rubber GS - Conductive Silicone Rubber | J - Returnable transformation JB - Reversible transformation (with lining) K - Irreversible transformation | 3 - 3mm 6 - 6mm 10 - 10mm 15 - 15mm 20 - 20mm |
|--|--|---|

⑦ Vacuum port specifications

See Table 1 for details

Table 1

| Vacuum port connection | Model | Thread Diameter | Ø1.5~Ø3.5 | Ø4~Ø8 | Ø10~Ø16 |
|------------------------|-------|-----------------|-----------|-------|---------|
| Internal Thread | B3 | M3×0.5 | ● | - | - |
| | B5 | M5×0.8 | - | ● | ● |
| Barb Joint | U2 | Ø2Pipe | ● | ● | ● |
| | U4 | Ø4Pipe | ● | ● | ● |
| | U6 | Ø6Pipe | - | - | ● |
| Quick Connector | 04 | Ø4Pipe | ● | ● | ● |
| | 06 | Ø6Pipe | - | - | ● |

Parameter Table

| Sucker diameter | Buffer type | Cushion Stroke | Installation thread | Tightening Torque For Installing Nuts(N.m) | Spring buffering force (N) 0 Journey full stroke |
|-----------------|-------------|------------------|---------------------|--|--|
| Ø1.5~Ø3.5 | J | 3, 6 | M6×0.75 | 1.5 - 1.8 | 0.2 0.4 |
| | K | 3, 6 | M8×0.75 | 2.0 - 2.5 | 0.2 0.5 |
| Ø4~Ø16 | J | 3, 6, 10 | M8×0.75 | 2.0 - 2.5 | 0.2 0.5 |
| | JB | 15, 20 | M8×0.75 | 2.0 - 2.5 | 0.2 0.5 |
| | K | 3, 6, 10, 15, 20 | M8×0.75 | 2.0 - 2.5 | 0.2 0.5 |

SPECIFICATION AND SIZE (MM)

Suction cup specifications Buffer specifications

ZP3-015U
ZP3-02U
ZP3-035U

| Model | A | B | C | weight g |
|--------------|------|---|------|----------|
| ZP3B-T1J3-B3 | 21 | 4 | 10 | 4.2 |
| ZP3B-T1J6-B3 | 28 | 7 | 14 | 4.6 |
| ZP3B-T1K3-B3 | 22.5 | 4 | 11 | 6.9 |
| ZP3B-T1K6-B3 | 29 | 7 | 14.5 | 8.1 |

ZP3-04UM
ZP3-06UM
ZP3-08UM

| Model | A | B | C | weight g |
|-----------------|------|------|------|------------|
| ZP3B-T2A●3-B5 | 23.5 | 4 | 11 | 7.4(7.1) |
| ZP3B-T2A●6-B5 | 30 | 7 | 14.5 | 8.7(8.5) |
| ZP3B-T2A●10-B5 | 40 | 11 | 20.5 | 10.8(10.1) |
| ZP3B-T2AJB15-B5 | 43 | 24.5 | - | 10.1 |
| ZP3B-T2AJB20-B5 | 50.5 | 32 | - | 10.8 |
| ZP3B-T2AK15-B5 | 43 | 24.5 | - | 12.2 |
| ZP3B-T2AK20-B5 | 50.5 | 32 | - | 13.3 |

● Buffer bracket type: reversible transformation (J), non reversible transformation (K)
Weight in parentheses is K-type

ZP3-10UB
ZP3-13UB
ZP3-16UB

| Model | A | B | C | weight g |
|-----------------|------|------|------|------------|
| ZP3B-T2B●3-B5 | 23.5 | 4 | 11 | 8.1(7.8) |
| ZP3B-T2B●6-B5 | 30 | 7 | 14.5 | 9.3(9.2) |
| ZP3B-T2B●10-B5 | 40 | 11 | 20.5 | 11.5(10.8) |
| ZP3B-T2BJB15-B5 | 43 | 24.5 | - | 12.6 |
| ZP3B-T2BJB20-B5 | 50.5 | 32 | - | 13.3 |
| ZP3B-T2BK15-B5 | 43 | 24.5 | - | 14.7 |
| ZP3B-T2BK20-B5 | 50.5 | 32 | - | 15.9 |

● Buffer bracket type: reversible transformation (J), non reversible transformation (K)
Weight in parentheses is K-type

- HXD
- HOP
- HNP
- HNT
- SCG
- HXN
- HGP
- ZP
- ZP3**
- ZP3E
- ZP3P
- ZP3P-JT2
- ZP3P-JT5
- MAF
- MAB
- MAOF
- MAOB
- BK

ZP3E SERIES HEAVY LOADS VACUUM SUCTION CUPS



MODEL SPECIFICATIONS

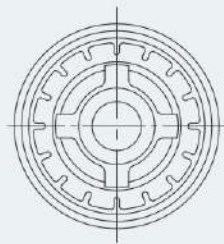
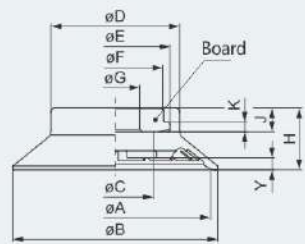
ZP3E - 32 UM N - □
① ② ③ ④

| ① Sucker Diameter | ② Type of suction cup | ③ Material of suction cup | ④ board |
|---------------------|---------------------------------|---------------------------|------------------|
| 32 - Ø32 80 - Ø80 | UM - Single-deck with stiffener | N - Nitrile Rubber | Blank - No Board |
| 40 - Ø40 100 - Ø100 | BM - Double-deck With Stiffener | S - Silicon Rubber | P - With plate |
| 50 - Ø50 125 - Ø125 | | | |
| 63 - Ø63 | | | |

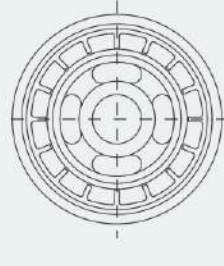
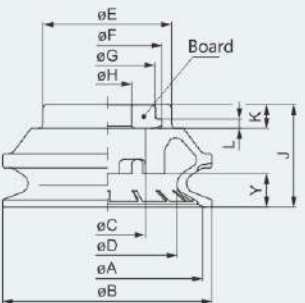
Board Model

| Model | 32 | 40 | 50 | 63 | 80 | 100 | 125 | 32 | 40 | 50 | 63 | 80 | 100 | 125 |
|---------|----|----|----|----|----|-----|-----|----|----|----|----|----|-----|-----|
| ZP3E-P1 | ● | ● | - | - | - | - | - | ● | ● | - | - | - | - | - |
| ZP3E-P2 | - | - | ● | - | - | - | - | - | - | ● | - | - | - | - |
| ZP3E-P3 | - | - | - | ● | ● | - | - | - | - | - | ● | - | - | - |
| ZP3E-P4 | - | - | - | - | - | ● | - | - | - | - | - | ● | - | - |
| ZP3E-P5 | - | - | - | - | - | - | ● | - | - | - | - | - | ● | - |
| ZP3E-P6 | - | - | - | - | - | - | - | - | - | - | - | - | - | ● |

SPECIFICATION AND SIZE (MM)



| Model | A | B | C | D | E | F | G | H | J | K | Y | |
|-------------|-----|-----|------|------|------|----|------|------|---|---|------|------|
| ZP3E-32-BM | 32 | 35 | 16 | 27 | 23 | 20 | 10.3 | 13 | 5 | 2 | 2 | |
| ZP3E-40-BM | 40 | 43 | | 29.4 | 27 | 23 | | | | | 20 | 21.5 |
| ZP3E-50-BM | 50 | 53 | 37 | 36 | 31 | 27 | 13.5 | | | | 3 | |
| ZP3E-63-BM | 63 | 66 | 24 | 45 | 39 | 34 | 16.3 | 19.5 | 8 | 3 | 5 | |
| ZP3E-80-BM | 80 | 83 | | 56 | 49.5 | 43 | | | | | 41 | |
| ZP3E-100-BM | 100 | 103 | | 71.5 | 65 | 58 | | | | | 50.5 | 22 |
| ZP3E-125-BM | 125 | 128 | 90.3 | 88 | 80 | 71 | 60 | | | | | |



| Model | A | B | C | D | E | F | G | H | J | K | L | Y | |
|-------------|-----|-----|------|------|----|------|------|------|------|---|---|------|----|
| ZP3E-32-BM | 32 | 35 | 16 | 23.3 | 27 | 23 | 20 | 10.3 | 19.5 | 5 | 2 | 5 | |
| ZP3E-40-BM | 40 | 44 | | 29.4 | 27 | 23 | 20 | | | | | 21.5 | 7 |
| ZP3E-50-BM | 50 | 54 | 37 | 36 | 31 | 27 | 13.5 | | | | | 10 | |
| ZP3E-63-BM | 63 | 68 | 24 | 45.8 | 45 | 39 | 34 | 16.3 | 19.5 | 8 | 3 | 12.5 | |
| ZP3E-80-BM | 80 | 85 | | 57 | 56 | 49.5 | 43 | | | | | 41 | 18 |
| ZP3E-100-BM | 100 | 106 | | 71.5 | 73 | 65 | 58 | | | | | 50.5 | 22 |
| ZP3E-125-BM | 125 | 133 | 90.3 | 88 | 80 | 71 | 60 | | | | | | |

ZP3E SERIES HEAVY LOADS VACUUM SUCTION CUP WITH ADAPTER



MODEL SPECIFICATIONS

ZP3E - T 32 UM N - A10
① ② ③ ④ ⑤

| ① Vacuum port direction | ② Sucker Diameter | ③ Type of suction cup | ④ Material Of Suction Cup | ⑤ Installation Thread |
|-------------------------|---------------------|---------------------------------|---------------------------|-----------------------|
| T - Portrait | 32 - Ø32 80 - Ø80 | UM - Single-deck with stiffener | N - Nitrile Rubber | Table 1 |
| Y - Transverse | 40 - Ø40 100 - Ø100 | BM - Double-deck With Stiffener | S - Silicon Rubber | |
| | 50 - Ø50 125 - Ø125 | | | |
| | 63 - Ø63 | | | |

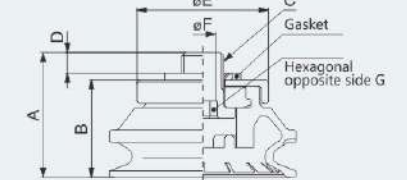
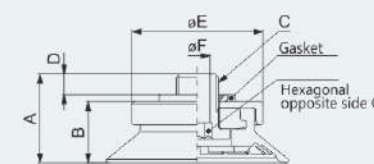
Table 1

| Installation thread | Model | Thread Diameter | Portrait Ø32~Ø50 | Direction Ø63~Ø125 | Transverse Ø32~Ø50 | Transverse Ø63~Ø125 |
|---------------------|-------|-----------------|------------------|--------------------|--------------------|---------------------|
| External Thread | A10 | M10×1 | ● | - | - | - |
| | AG1 | G1/8 | ● | - | - | - |
| | A16 | M16×1.5 | - | ● | - | - |
| | AL14 | M14×1 | ● | - | ● | - |
| Internal Thread | AL16 | M16×1.5 | - | ● | - | ● |
| | B8 | M8×1.25 | ● | - | ● | - |
| | B10 | M10×.5 | ● | - | - | - |
| | B12 | M12×1.75 | - | ● | - | ● |
| | B18 | M18×1.5 | - | ● | - | - |

SPECIFICATION AND SIZE (MM)

UM with locking screw - longitudinal

BM with locking screws - longitudinal



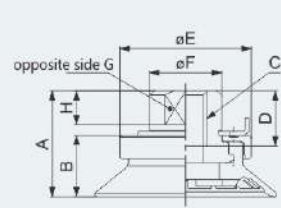
| Model | Thread | A | B | C | D | E | F | G | | | |
|---------------|--------|------|------|--------------|-----|------|----|----|------|------|------|
| ZP3E-T-32-UM | A10 | 21 | 14.5 | M10 x 1 G1/8 | 4.9 | 31 | 6 | 6 | | | |
| ZP3E-T-40-UM | AG1 | 21.5 | 15 | | | | | | 40 | | |
| ZP3E-T-50-UM | A16 | 30.5 | 21.1 | M16 x 1.5 | 7.4 | 48.9 | 10 | 10 | | | |
| ZP3E-T-63-UM | | | | | | | | | 52 | 42.6 | 60.1 |
| ZP3E-T-80-UM | | | | | | | | | 61.5 | 52.1 | 77.8 |
| ZP3E-T-100-UM | A16 | 33 | 23.6 | M16 x 1.5 | 7.4 | 77.8 | 10 | 10 | | | |
| ZP3E-T-125-UM | | | | | | | | | 71 | 61.6 | 93 |

| Model | Thread | A | B | C | D | E | F | G | | | |
|---------------|--------|------|------|--------------|-----|------|----|----|------|------|------|
| ZP3E-T-32-BM | A10 | 27.5 | 21 | M10 x 1 G1/8 | 4.9 | 31 | 6 | 6 | | | |
| ZP3E-T-40-BM | AG1 | 29.5 | 23 | | | | | | 40 | | |
| ZP3E-T-50-BM | A16 | 44 | 34.6 | M16 x 1.5 | 7.4 | 48.9 | 10 | 10 | | | |
| ZP3E-T-63-BM | | | | | | | | | 52 | 42.6 | 60.1 |
| ZP3E-T-80-BM | | | | | | | | | 61.5 | 52.1 | 77.8 |
| ZP3E-T-100-BM | A16 | 71 | 61.6 | M16 x 1.5 | 7.4 | 77.8 | 10 | 10 | | | |
| ZP3E-T-125-BM | | | | | | | | | 93 | | |

- HXD
- HOP
- HNP
- HNT
- SCG
- HXN
- HGP
- ZP
- ZP3
- ZP3E**
- ZP3P
- ZP3P-JT2
- ZP3P-JT5
- MAF
- MAB
- MAOF
- MAOB
- BK

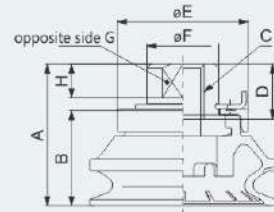
SPECIFICATION AND SIZE (MM)

UM Internal Thread Installation - Longitudinal



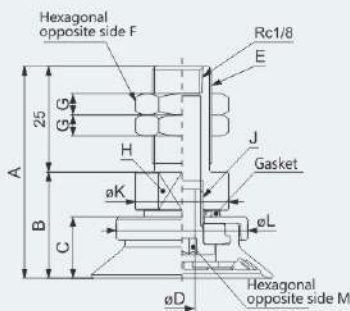
| Model | Thread | A | B | C | D | E | F | G | H |
|---------------|--------|------|------|------------|-----|------|----|----|----|
| ZP3E-T-32-UM | B8 | 25 | 14.5 | M8 x 1.25 | 9.5 | 31 | 17 | 14 | 8 |
| ZP3E-T-40-UM | | 25.5 | 15 | | | | | | |
| ZP3E-T-50-UM | B10 | 25 | 14.5 | M10 x 1.5 | 13 | 31 | 32 | 24 | 12 |
| ZP3E-T-32-UM | | 25.5 | 15 | | | | | | |
| ZP3E-T-40-UM | B12 | 36 | 21.5 | M12 x 1.75 | 12 | 50 | 32 | 24 | 12 |
| ZP3E-T-50-UM | | 38.5 | 24 | | | | | | |
| ZP3E-T-63-UM | B18 | 36 | 21.5 | M18 x 1.5 | 18 | 50 | 32 | 24 | 12 |
| ZP3E-T-80-UM | | 38.5 | 24 | | | | | | |
| ZP3E-T-100-UM | | | | | | 61 | | | |
| ZP3E-T-125-UM | | | | | | 78.6 | | | |

BM Internal Thread Installation - Longitudinal



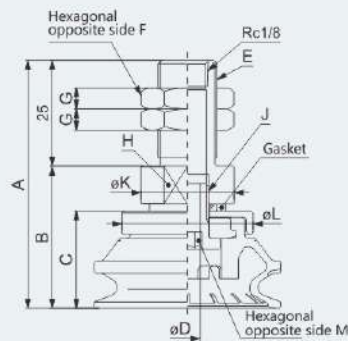
| Model | Thread | A | B | C | D | E | F | G | H |
|---------------|--------|------|------|------------|-----|------|----|----|----|
| ZP3E-T-32-BM | B8 | 31.5 | 21 | M8 x 1.25 | 9.5 | 31 | 17 | 14 | 8 |
| ZP3E-T-40-BM | | 33.5 | 23 | | | | | | |
| ZP3E-T-50-BM | B10 | 37 | 26.5 | M10 x 1.5 | 13 | 31 | 32 | 24 | 12 |
| ZP3E-T-32-BM | | 31.5 | 21 | | | | | | |
| ZP3E-T-40-BM | B12 | 33.5 | 23 | M12 x 1.75 | 12 | 50 | 32 | 24 | 12 |
| ZP3E-T-50-BM | | 37 | 26.5 | | | | | | |
| ZP3E-T-63-BM | B18 | 49.5 | 35 | M18 x 1.5 | 18 | 50 | 32 | 24 | 12 |
| ZP3E-T-80-BM | | 57.5 | 43 | | | | | | |
| ZP3E-T-100-BM | | 67 | 52.5 | | | 78.6 | | | |
| ZP3E-T-125-BM | | 76.5 | 62 | | | 93.8 | | | |

UM external thread installation - longitudinal



| Model | Thread | A | B | C | D | E | F | G | H | J | K | L | M |
|---------------|--------|------|------|------|----|-----------|----|---|----|-----------|----|------|----|
| ZP3E-T-32-UM | AL14 | 50.1 | 25.1 | 14.5 | 6 | M14 x 1 | 19 | 4 | 22 | M10 x 1 | 22 | 31 | 6 |
| ZP3E-T-40-UM | | 50.6 | 25.6 | 15 | | | | | | | | | |
| ZP3E-T-50-UM | AL16 | 63.1 | 38.1 | 21.1 | 10 | M16 x 1.5 | 22 | 6 | 24 | M16 x 1.5 | 22 | 48.9 | 10 |
| ZP3E-T-63-UM | | 65.6 | 40.6 | 23.6 | | | | | | | | | |
| ZP3E-T-80-UM | | | | | | | | | | | | 60.1 | |
| ZP3E-T-100-UM | | | | | | | | | | | | 77.8 | |
| ZP3E-T-125-UM | | | | | | | | | | | | | 93 |

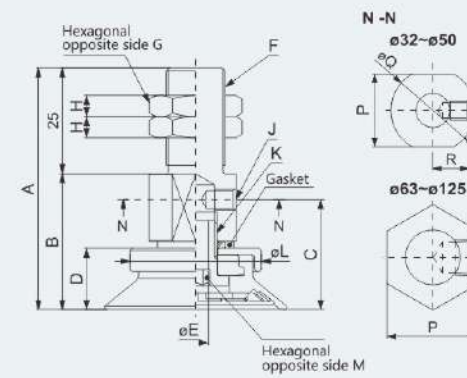
BM external thread installation - longitudinal



| Model | Thread | A | B | C | D | E | F | G | H | J | K | L | M |
|---------------|--------|-------|------|------|----|-----------|----|---|----|-----------|----|------|----|
| ZP3E-T-32-BM | AL14 | 56.6 | 31.6 | 21 | 6 | M14 x 1 | 19 | 4 | 22 | M10 x 1 | 22 | 31 | 6 |
| ZP3E-T-40-BM | | 58.6 | 33.6 | 23 | | | | | | | | | |
| ZP3E-T-50-BM | AL16 | 62.1 | 37.1 | 26.5 | 10 | M16 x 1.5 | 22 | 6 | 24 | M16 x 1.5 | 22 | 48.9 | 10 |
| ZP3E-T-63-BM | | 64.6 | 39.6 | 28.6 | | | | | | | | | |
| ZP3E-T-80-BM | | 76.6 | 51.6 | 34.6 | | | | | | | | 60.1 | |
| ZP3E-T-100-BM | | 84.6 | 59.6 | 42.6 | | | | | | | | 77.8 | |
| ZP3E-T-125-BM | | 103.6 | 78.6 | 61.6 | | | | | | | | 93 | |

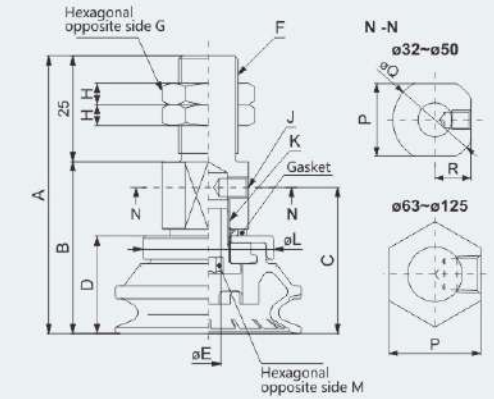
SPECIFICATION AND SIZE (MM)

UM External Thread Installation - Horizontal



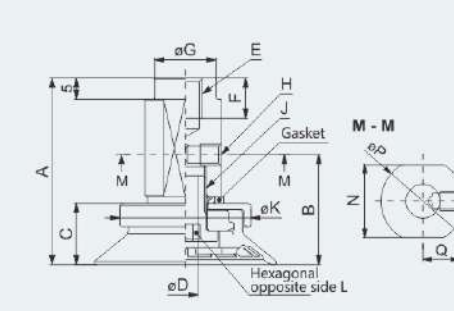
| Model | Thread | A | B | C | D | E | F | G | H | J | K | L | M | P | Q | R |
|---------------|--------|------|------|------|------|----|-----------|----|---|----------|-----------|------|------|----|----|------|
| ZP3E-Y-32-UM | AL14 | 57.1 | 32.1 | 26 | 14.5 | 6 | M14 x 1 | 19 | 4 | M5 x 0.8 | M10 x 1 | 31 | 40 | 6 | 22 | 9.5 |
| ZP3E-Y-40-UM | | 57.6 | 32.6 | 26.5 | 15 | 6 | M14 x 1 | 19 | 4 | M5 x 0.8 | M10 x 1 | 31 | 40 | 6 | 22 | 9.5 |
| ZP3E-Y-50-UM | AL16 | 72.6 | 47.6 | 37.6 | 21.1 | 10 | M16 x 1.5 | 22 | 6 | Rc1/8 | M16 x 1.5 | 48.9 | 77.8 | 10 | 24 | 12.5 |
| ZP3E-Y-63-UM | | 75.1 | 50.1 | 40.1 | 23.6 | 10 | M16 x 1.5 | 22 | 6 | Rc1/8 | M16 x 1.5 | 60.1 | 77.8 | 10 | 24 | 12.5 |
| ZP3E-Y-80-UM | | | | | | | | | | | | | | | | |
| ZP3E-Y-100-UM | | | | | | | | | | | | | | | | |
| ZP3E-Y-125-UM | | | | | | | | | | | | | | | | |

BM External Thread Installation - Horizontal



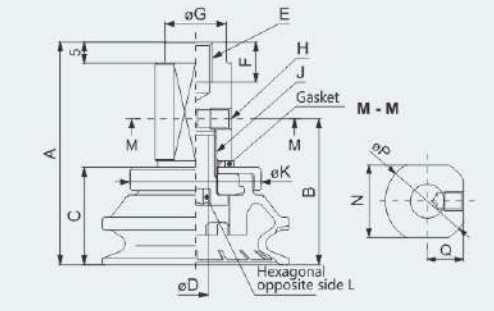
| Model | Thread | A | B | C | D | E | F | G | H | J | K | L | M | P | Q | R |
|---------------|--------|-------|------|------|------|----|-----------|----|---|----------|-----------|------|-------|----|----|------|
| ZP3E-Y-32-BM | AL14 | 63.6 | 38.6 | 32.5 | 21 | 6 | M14 x 1 | 19 | 4 | M5 x 0.8 | M10 x 1 | 31 | 40 | 6 | 22 | 9.5 |
| ZP3E-Y-40-BM | | 66.6 | 40.6 | 34.5 | 23 | 6 | M14 x 1 | 19 | 4 | M5 x 0.8 | M10 x 1 | 31 | 40 | 6 | 22 | 9.5 |
| ZP3E-Y-50-BM | AL16 | 69.1 | 44.1 | 38 | 26.5 | 10 | M16 x 1.5 | 22 | 6 | Rc1/8 | M16 x 1.5 | 48.9 | 77.8 | 10 | 24 | 12.5 |
| ZP3E-Y-63-BM | | 72.6 | 47.6 | 40.6 | 28.6 | 10 | M16 x 1.5 | 22 | 6 | Rc1/8 | M16 x 1.5 | 60.1 | 77.8 | 10 | 24 | 12.5 |
| ZP3E-Y-80-BM | | 84.6 | 59.6 | 52.1 | 42.6 | 10 | M16 x 1.5 | 22 | 6 | Rc1/8 | M16 x 1.5 | 77.8 | 93 | 10 | 24 | 12.5 |
| ZP3E-Y-100-BM | | 103.6 | 78.6 | 68.6 | 52.1 | 10 | M16 x 1.5 | 22 | 6 | Rc1/8 | M16 x 1.5 | 93 | 113.6 | 10 | 24 | 12.5 |
| ZP3E-Y-125-BM | | 113.1 | 88.1 | 78.1 | 61.6 | 10 | M16 x 1.5 | 22 | 6 | Rc1/8 | M16 x 1.5 | 93 | 113.6 | 10 | 24 | 12.5 |

UM Internal Thread Installation - Horizontal



| Model | Thread | A | B | C | D | E | F | G | H | J | K | L | N | P | Q | |
|---------------|--------|------|------|------|----|------------|-----|------|----------|-----------|------|------|----|----|----|------|
| ZP3E-Y-32-UM | B8 | 44.1 | 26 | 14.5 | 6 | M8 x 1.25 | 9.5 | 14.5 | M5 x 0.8 | M10 x 1 | 31 | 40 | 6 | 16 | 19 | 8.5 |
| ZP3E-Y-40-UM | | 44.6 | 26.5 | 15 | | | | | | | | | | | | |
| ZP3E-Y-50-UM | B12 | 61.6 | 37.6 | 21.1 | 10 | M12 x 1.75 | 12 | 19 | Rc1/8 | M16 x 1.5 | 48.9 | 60.1 | 10 | 24 | 28 | 12.5 |
| ZP3E-Y-63-UM | | 64.1 | 40.1 | 23.6 | | | | | | | | | | | | |
| ZP3E-Y-80-UM | | | | | | | | | | | | | | | | |
| ZP3E-Y-100-UM | | | | | | | | | | | | | | | | |
| ZP3E-Y-125-UM | | | | | | | | | | | | | | | | |

BM Internal Thread Installation - Horizontal



| Model | Thread | A | B | C | D | E | F | G | H | J | K | L | N | P | Q | |
|---------------|--------|------|------|------|----|------------|-----|------|----------|-----------|------|------|----|----|----|------|
| ZP3E-Y-32-BM | B8 | 50.6 | 32.5 | 21 | 6 | M8 x 1.25 | 9.5 | 14.5 | M5 x 0.8 | M10 x 1 | 31 | 40 | 6 | 16 | 19 | 8.5 |
| ZP3E-Y-40-BM | | 52.6 | 34.5 | 23 | | | | | | | | | | | | |
| ZP3E-Y-50-BM | B12 | 56.1 | 38 | 26.5 | 10 | M12 x 1.75 | 12 | 19 | Rc1/8 | M16 x 1.5 | 48.9 | 60.1 | 10 | 24 | 28 | 12.5 |
| ZP3E-Y-63-BM | | 58.1 | 40 | 28.6 | | | | | | | | | | | | |
| ZP3E-Y-80-BM | | 63.1 | 44.1 | 34.6 | | | | | | | | | | | | |
| ZP3E-Y-100-BM | | 72.6 | 52.1 | 42.6 | | | | | | | | | | | | |
| ZP3E-Y-125-BM | | 82.6 | 62.1 | 52.1 | | | | | | | | | | | | |

ZP3E SERIES HEAVY LOADS VACUUM SUCTION CUP WITH BUFFER



MODEL SPECIFICATIONS

ZP3E - T 32 UM N JB 10
① ② ③ ④ ⑤ ⑥

| ① Vacuum port direction | ② Sucker Diameter | ③ Type of suction cup |
|-------------------------|------------------------|---------------------------------|
| T - Portrait | 32 - Ø32 80 - Ø80 | UM - Single-deck with stiffener |
| Y - Transverse | 40 - Ø40 100 - Ø100 | BM - Double-deck With Stiffener |
| | 50 - Ø50 125 - Ø125 | |
| 63 - Ø63 | | |

| ④ Material of suction cup | ⑤ Buffering Type | ⑥ Cushion Stroke |
|---------------------------|-----------------------------|-------------------------|
| N - Nitrile Rubber | JB - Rotatable, with lining | See Table 1 for details |
| S - Silicon Rubber | | |

Table 1

| Model | Cushion Stroke | Ø32~Ø50 | Ø63~Ø125 |
|-------|----------------|---------|----------|
| 10 | 10mm | ● | ● |
| 25 | 25mm | ● | ● |
| 30 | 30mm | ● | ● |
| 50 | 50mm | ● | ● |
| 75 | 75mm | ● | ● |
| 100 | 100mm | - | ● |

Parameter Table

| Sucker diameter | Installation thread | Tightening torque for installing nuts(N/m) | Cushion Stroke | Spring buffering force (N) 0 Journey | full stroke |
|-----------------|---------------------|--|----------------|---|-------------|
| Ø32~Ø50 | M18×1.5 | 28~32 | 10 | 5 | 6.5 |
| | | | 25 | 6.9 | 11.8 |
| | | | 30 | 5 | 8.5 |
| | | | 50, 70 | 6.9 | 11.8 |
| | | | 10 | 10 | 11.5 |
| Ø63~Ø125 | M22×1.5 | 48~52 | 25 | 10 | 15 |
| | | | 30 | 10 | 13.5 |
| | | | 50, 75, 100 | 10 | 15 |

ZP3E SERIES HEAVY LOADS VACUUM SUCTION CUP WITH BUFFER

SPECIFICATION AND SIZE (MM)

UM with buffer - longitudinal

| Sucker Diameter | C | D |
|-----------------|------|------|
| 32 | 14.5 | 31 |
| 40 | 14.5 | 31 |
| 50 | 15 | 40 |
| 63 | 21.1 | 48.9 |
| 80 | 21.1 | 48.9 |
| 100 | 23.6 | 60.1 |
| 125 | 23.6 | 77.8 |

BM with buffer - longitudinal

| Sucker Diameter | C | D |
|-----------------|------|------|
| 32 | 21 | 31 |
| 40 | 23 | 31 |
| 50 | 26.5 | 40 |
| 63 | 34.6 | 48.9 |
| 80 | 42.6 | 60.1 |
| 100 | 52.1 | 77.8 |
| 125 | 61.6 | 93 |

| Model | Cushion Stroke | A | B | E | F | G | H | J | K | L | M | N | P |
|-----------|----------------|-------|-------|-----------|----|----|----|----|-----------|----|---|----|----|
| ZP3E-T-32 | 10 | 101.1 | 49.1 | M18 x 1.5 | 35 | 27 | 11 | 16 | M10 x 1 | 19 | 3 | 6 | 14 |
| | 25 | 111.1 | 59.1 | | | | | | | | | | |
| | 30 | 126.1 | 74.1 | | | | | | | | | | |
| | 50 | 146.1 | 94.1 | | | | | | | | | | |
| | 75 | 182.1 | 130.1 | | | | | | | | | | |
| ZP3E-T-80 | 10 | 130 | 60 | M22 x 1.5 | 50 | 30 | 8 | 24 | M16 x 1.5 | 28 | 4 | 10 | 17 |
| | 25 | 139 | 69 | | | | | | | | | | |
| | 30 | 155 | 85 | | | | | | | | | | |
| | 50 | 175 | 105 | | | | | | | | | | |
| | 75 | 215 | 145 | | | | | | | | | | |
| 100 | 250 | 180 | | | | | | | | | | | |

UM with buffer - horizontal

| Sucker Diameter | C | D | M |
|-----------------|------|------|------|
| 32 | 14.5 | 31 | 26 |
| 40 | 14.5 | 31 | 26 |
| 50 | 15 | 40 | 26.5 |
| 63 | 21.1 | 48.9 | 37.6 |
| 80 | 21.1 | 48.9 | 37.6 |
| 100 | 23.6 | 60.1 | 40.1 |
| 125 | 23.6 | 77.8 | 40.1 |

BM with buffer - lateral

| Sucker Diameter | C | D | M |
|-----------------|------|------|------|
| 32 | 21 | 31 | 32.5 |
| 40 | 23 | 31 | 34.5 |
| 50 | 26.5 | 40 | 38 |
| 63 | 34.6 | 48.9 | 51.1 |
| 80 | 42.6 | 60.1 | 59.1 |
| 100 | 52.1 | 77.8 | 68.6 |
| 125 | 61.6 | 93 | 78.1 |

| Model | Cushion Stroke | A | B | E | F | G | H | J | K | L | N | P | R | S | T |
|-----------|----------------|-------|-------|----|-----------|----|----|----|----------|-----------|----|----|----|----|------|
| ZP3E-Y-32 | 10 | 96.1 | 52.1 | 8 | M18 x 1.5 | 35 | 27 | 11 | M5 x 0.8 | M10 x 1 | 6 | 14 | 16 | 19 | 8.5 |
| | 25 | 106.1 | 62.1 | | | | | | | | | | | | |
| | 30 | 121.1 | 77.1 | | | | | | | | | | | | |
| | 50 | 141.1 | 97.1 | | | | | | | | | | | | |
| | 75 | 177.1 | 133.1 | | | | | | | | | | | | |
| ZP3E-Y-63 | 10 | 127 | 67 | 10 | M22 x 1.5 | 50 | 30 | 8 | Rc1/8 | M16 x 1.5 | 10 | 17 | 24 | 28 | 12.5 |
| | 25 | 136 | 76 | | | | | | | | | | | | |
| | 30 | 152 | 92 | | | | | | | | | | | | |
| | 50 | 172 | 112 | | | | | | | | | | | | |
| | 75 | 212 | 152 | | | | | | | | | | | | |
| 100 | 247 | 187 | | | | | | | | | | | | | |

ZP3E SERIES HEAVY LOADS VACUUM SUCTION CUP WITH SWINGING ADAPTER



MODEL SPECIFICATIONS

ZP3E - T F 32 UM N - AL14

① ② ③ ④ ⑤ ⑥

| ① Vacuum port direction | ② Connection form | ③ Sucker Diameter | |
|-------------------------|-------------------|-------------------|------------|
| T - Portrait | F - Swinging type | 32 - Ø32 | 80 - Ø80 |
| Y - Transverse | | 40 - Ø40 | 100 - Ø100 |
| | | 50 - Ø50 | 125 - Ø125 |
| | | 63 - Ø63 | |

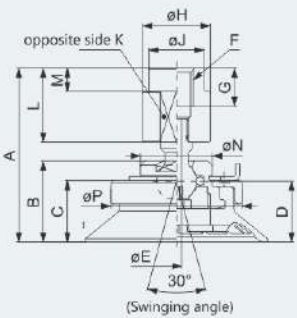
| ④ Type of suction cup | ⑤ Material of suction cup | ⑥ Installation thread |
|---------------------------------|---------------------------|-------------------------|
| UM - Single-deck with stiffener | N - Nitrile Rubber | See Table 1 for details |
| BM - Double-deck With Stiffener | S - Silicon Rubber | |

Table 1

| Threaded link | Model | Thread size | Portrait | | Transverse | |
|-----------------|-------|-------------|----------|----------|------------|----------|
| | | | Ø32~Ø50 | Ø63~Ø125 | Ø32~Ø50 | Ø63~Ø125 |
| External Thread | AL14 | M14×1 | ● | - | ● | - |
| Internal Thread | B8 | M8×1.25 | ● | - | ● | - |
| External Thread | B12 | M12×1.75 | - | ● | - | ● |

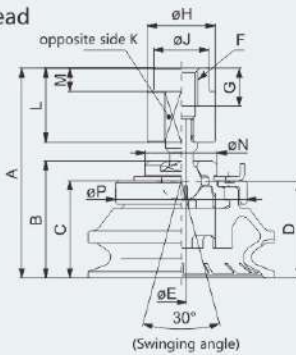
SPECIFICATION AND SIZE (MM)

UM Internal Thread Installation - Longitudinal



| Model | Thread | A | B | C | D | E | F | G | H | J | K | L | M | N | P |
|----------------|--------|------|------|------|------|-----|------------|----|----|----|----|------|-----|----|------|
| ZP3E-TF-32-UM | B8 | 41.1 | 19.2 | 14.5 | 14.4 | 2.5 | M8 | 9 | 16 | 13 | 14 | 17.5 | 5.5 | 17 | 31 |
| ZP3E-TF-40-UM | | 41.6 | 19.7 | 15 | 14.9 | | M8 x 1.25 | | | | | | | | 40 |
| ZP3E-TF-50-UM | B12 | 63.5 | 30.5 | 21.5 | 22.6 | 4 | M12 | 11 | 26 | 18 | 22 | 27 | 6 | 32 | 50 |
| ZP3E-TF-63-UM | | 66 | 33 | 24 | 25.1 | | M12 x 1.75 | | | | | | | | 61 |
| ZP3E-TF-80-UM | | | | | | | | | | | | | | | 78.6 |
| ZP3E-TF-100-UM | | | | | | | | | | | | | | | 81 |
| ZP3E-TF-125-UM | | | | | | | | | | | | | | | 78.6 |

BM Internal Thread Installation - Longitudinal

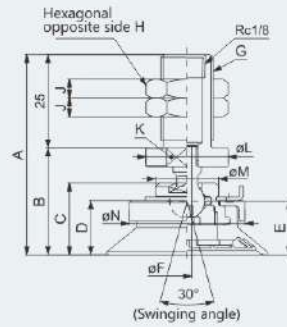


| Model | Thread | A | B | C | D | E | F | G | H | J | K | L | M | N | P |
|----------------|--------|------|------|------|------|-----|------------|----|----|----|----|------|-----|----|------|
| ZP3E-TF-32-BM | B8 | 47.6 | 25.7 | 21 | 20.9 | 2.5 | M8 | 9 | 16 | 13 | 14 | 17.5 | 5.5 | 17 | 31 |
| ZP3E-TF-40-BM | | 49.6 | 27.7 | 23 | 22.9 | | M8 x 1.25 | | | | | | | | 40 |
| ZP3E-TF-50-BM | B12 | 63.1 | 31.2 | 26.5 | 26.4 | 4 | M12 | 11 | 26 | 18 | 22 | 27 | 6 | 32 | 50 |
| ZP3E-TF-63-BM | | 77 | 44 | 35 | 36.1 | | M12 x 1.75 | | | | | | | | 61 |
| ZP3E-TF-80-BM | | 85 | 52 | 43 | 44.1 | 4 | M12 | 11 | 26 | 18 | 22 | 27 | 6 | 32 | 61 |
| ZP3E-TF-100-BM | | 94.5 | 61.5 | 52.5 | 53.6 | | | | | | | | | | 78.6 |
| ZP3E-TF-125-BM | | 104 | 71 | 62 | 63.1 | | | | | | | | | | 93.8 |

ZP3E SERIES HEAVY LOADS VACUUM SUCTION CUP WITH SWINGING ADAPTER

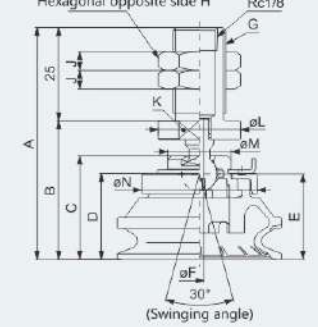
SPECIFICATION AND SIZE (MM)

UM external thread installation - longitudinal



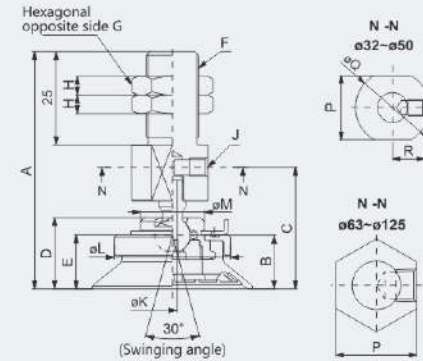
| Model | Thread | A | B | C | D | E | F | G | H | J | K | L | M | N |
|----------------|--------|------|------|------|------|------|-----|-----------|----|---|----|----|----|------|
| ZP3E-TF-32-UM | AL14 | 53.6 | 28.6 | 19.2 | 14.5 | 14.4 | 2.5 | M14 | 19 | 4 | 22 | 17 | 31 | |
| ZP3E-TF-40-UM | | 54.1 | 29.1 | 19.7 | 15 | 14.9 | | M14 x 1 | | | | | | 40 |
| ZP3E-TF-50-UM | AL16 | 66.5 | 41.5 | 30.5 | 21.5 | 22.6 | 4 | M16 | 22 | 6 | 32 | 17 | 50 | |
| ZP3E-TF-63-UM | | 69 | 44 | 33 | 24 | 25.1 | | M16 x 1.5 | | | | | | 61 |
| ZP3E-TF-80-UM | | | | | | | | | | | | | | 78.6 |
| ZP3E-TF-100-UM | | | | | | | | | | | | | | 81 |
| ZP3E-TF-125-UM | | | | | | | | | | | | | | 78.6 |

BM external thread installation - longitudinal



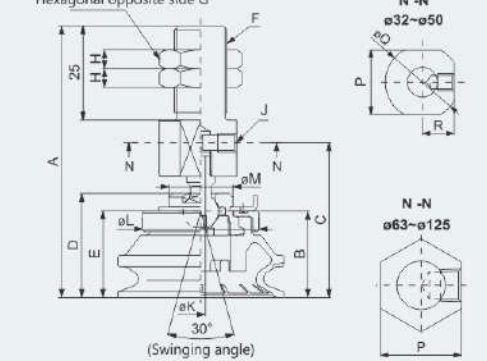
| Model | Thread | A | B | C | D | E | F | G | H | J | K | L | M | N |
|----------------|--------|------|------|------|------|------|-----|-----------|----|---|----|----|----|------|
| ZP3E-TF-32-BM | AL14 | 60.1 | 35.1 | 25.7 | 21 | 20.9 | 2.5 | M14 | 19 | 4 | 22 | 17 | 31 | |
| ZP3E-TF-40-BM | | 62.1 | 37.1 | 27.7 | 23 | 22.9 | | M14 x 1 | | | | | | 40 |
| ZP3E-TF-50-BM | AL16 | 65.6 | 40.6 | 31.2 | 26.5 | 26.4 | 4 | M16 | 22 | 6 | 32 | 17 | 50 | |
| ZP3E-TF-63-BM | | 80 | 55 | 44 | 35 | 36.1 | | M16 x 1.5 | | | | | | 61 |
| ZP3E-TF-80-BM | | 88 | 63 | 52 | 43 | 44.1 | 4 | M16 | 22 | 6 | 32 | 17 | 50 | 61 |
| ZP3E-TF-100-BM | | 97.5 | 72.5 | 61.5 | 52.5 | 53.6 | | | | | | | | 78.6 |
| ZP3E-TF-125-BM | | 107 | 82 | 71 | 62 | 63.1 | | | | | | | | 93.8 |

UM External Thread Installation - Horizontal



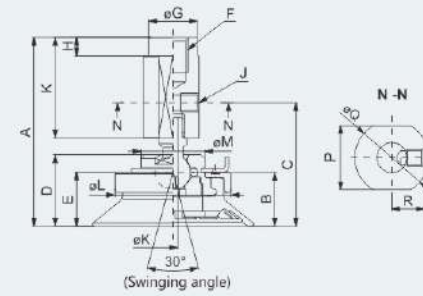
| Model | Thread | A | B | C | D | E | F | G | H | J | K | L | M | P | Q | R |
|----------------|--------|------|------|------|------|------|-------|-------|---|-------|-----|----|----|----|-----|---|
| ZP3E-YF-32-UM | AL14 | 63.6 | 14.4 | 32.6 | 19.2 | 14.5 | M14 | 19 | 4 | M5 | 2.5 | 31 | 17 | 22 | 9.5 | |
| ZP3E-YF-40-UM | | 64.1 | 14.9 | 33.1 | 19.7 | 15 | x 1 | x 0.8 | 4 | | | 40 | | | | |
| ZP3E-YF-50-UM | AL16 | 88.5 | 22.6 | 53.5 | 30.5 | 21.5 | M16 | 22 | 6 | Rc1/8 | 4 | 50 | 32 | | | |
| ZP3E-YF-63-UM | | 91 | 25.1 | 56 | 33 | 24 | x 1.5 | x 1.5 | 6 | | | 61 | 32 | | | |
| ZP3E-YF-80-UM | | | | | | | | | | | | | | | | |
| ZP3E-YF-100-UM | | | | | | | | | | | | | | | | |
| ZP3E-YF-125-UM | | | | | | | | | | | | | | | | |

BM External Thread Installation - Horizontal



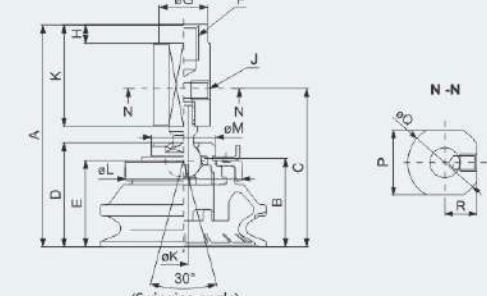
| Model | Thread | A | B | C | D | E | F | G | H | J | K | L | M | P | Q | R |
|----------------|--------|-------|------|------|------|------|-------|-------|---|-------|-----|------|----|----|-----|---|
| ZP3E-YF-32-BM | AL14 | 70.1 | 20.9 | 39.1 | 25.7 | 21 | M14 | 19 | 4 | M5 | 2.5 | 31 | 17 | 22 | 9.5 | |
| ZP3E-YF-40-BM | | 72.1 | 22.9 | 41.1 | 27.7 | 23 | x 1 | x 0.8 | 4 | | | 40 | | | | |
| ZP3E-YF-50-BM | AL16 | 75.6 | 26.4 | 44.6 | 31.2 | 26.5 | M16 | 22 | 6 | Rc1/8 | 4 | 50 | 32 | | | |
| ZP3E-YF-63-BM | | 102 | 36.1 | 67 | 44 | 35 | x 1.5 | x 1.5 | 6 | | | 61 | 32 | | | |
| ZP3E-YF-80-BM | | 110 | 44.1 | 75 | 52 | 43 | M16 | 22 | 6 | Rc1/8 | 4 | 61 | 32 | | | |
| ZP3E-YF-100-BM | | 119.5 | 53.6 | 84.5 | 61.5 | 52.5 | x 1.5 | x 1.5 | 6 | | | 78.6 | 32 | | | |
| ZP3E-YF-125-BM | | 129 | 63.1 | 94 | 71 | 62 | | | | | | 93.8 | 32 | | | |

UM Internal Thread Installation - Horizontal



| Model | Thread | A | B | C | D | E | F | G | H | J | K | L | M | P | Q | R |
|----------------|--------|------|------|------|------|------|--------|--------|---|-------|-----|----|----|----|-----|---|
| ZP3E-YF-32-UM | AL14 | 50.6 | 14.4 | 33.1 | 19.2 | 14.5 | M8 | 13 | 5 | M5 | 2.5 | 31 | 17 | 22 | 9.5 | |
| ZP3E-YF-40-UM | | 51.1 | 14.9 | 33.6 | 19.7 | 15 | x 1.25 | x 1.25 | 5 | | | 40 | | | | |
| ZP3E-YF-50-UM | AL16 | 76.5 | 22.6 | 53.5 | 30.5 | 21.5 | M12 | 18 | 6 | Rc1/8 | 4 | 50 | 32 | | | |
| ZP3E-YF-63-UM | | 79 | 25.1 | 56 | 33 | 24 | x 1.75 | x 1.75 | 6 | | | 61 | 32 | | | |
| ZP3E-YF-80-UM | | | | | | | | | | | | | | | | |
| ZP3E-YF-100-UM | | | | | | | | | | | | | | | | |
| ZP3E-YF-125-UM | | | | | | | | | | | | | | | | |

BM Internal Thread Installation - Horizontal



| Model | Thread | A | B | C | D | E | F | G | H | J | K | L | M | P | Q | R |
|----------------|--------|-------|------|------|------|------|--------|--------|---|-------|-----|------|----|----|-----|---|
| ZP3E-YF-32-BM | AL14 | 57.1 | 20.9 | 39.6 | 25.7 | 21 | M8 | 13 | 5 | M5 | 2.5 | 31 | 17 | 22 | 9.5 | |
| ZP3E-YF-40-BM | | 59.1 | 22.9 | 41.6 | 27.7 | 23 | x 1.25 | x 1.25 | 5 | | | 40 | | | | |
| ZP3E-YF-50-BM | AL16 | 62.6 | 26.4 | 45.1 | 31.2 | 26.5 | M12 | 18 | 6 | Rc1/8 | 4 | 50 | 32 | | | |
| ZP3E-YF-63-BM | | 90 | 36.1 | 67 | 44 | 35 | x 1.75 | x 1.75 | 6 | | | 61 | 32 | | | |
| ZP3E-YF-80-BM | | 98 | 44.1 | 75 | 52 | 43 | M12 | 18 | 6 | Rc1/8 | 4 | 61 | 32 | | | |
| ZP3E-YF-100-BM | | 107.5 | 53.6 | 84.5 | 61.5 | 52.5 | x 1.75 | x 1.75 | 6 | | | 78.6 | 32 | | | |
| ZP3E-YF-125-BM | | 117 | 63.1 | 94 | 71 | 62 | | | | | | 93.8 | 32 | | | |

- HXD
- HOP
- HNP
- HNT
- SCG
- HXN
- HGP
- ZP
- ZP3
- ZP3E
- ZP3P
- ZP3P-JT2
- ZP3P-JT5
- MAF
- MAB
- MAOF
- MAOB
- BK

ZP3E SERIES HEAVY LOADS VACUUM SUCTION CUP WITH SWINGING BUFFER



MODEL SPECIFICATIONS

ZP3E - T F 32 UM N JB 10
 ① ② ③ ④ ⑤ ⑥ ⑦

① Vacuum port direction ② Connection form ③ Sucker diameter

| | | | |
|----------------|-------------------|----------|------------|
| T - Portrait | F - Swinging type | 32 - Ø32 | 80 - Ø80 |
| Y - Transverse | | 40 - Ø40 | 100 - Ø100 |
| | | 50 - Ø50 | 125 - Ø125 |
| | | 63 - Ø63 | |

④ Type of suction cup ⑤ Material of suction cup ⑥ Buffering Type ⑦ Cushion Stroke

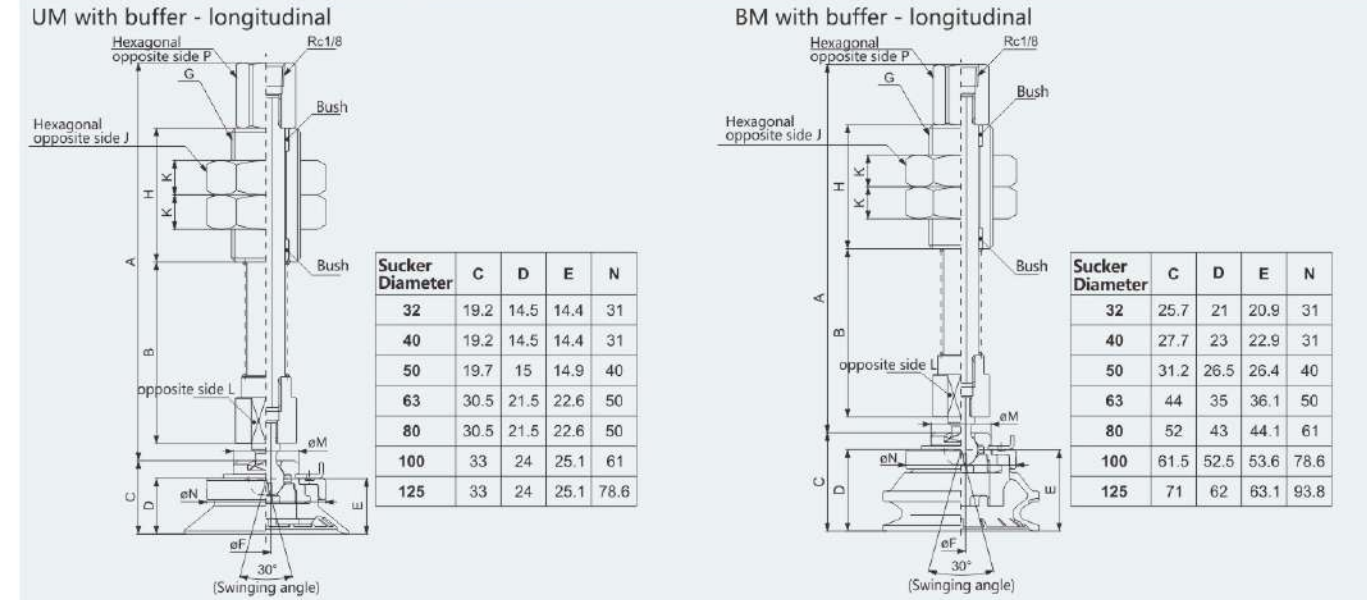
| | | | |
|---------------------------------|--------------------|-----------------------------|-------------------------|
| UM - Single-deck with stiffener | N - Nitrile Rubber | JB - Rotatable, With Lining | See Table 1 for details |
| BM - Double-deck With Stiffener | S - Silicon Rubber | | |

Table 1

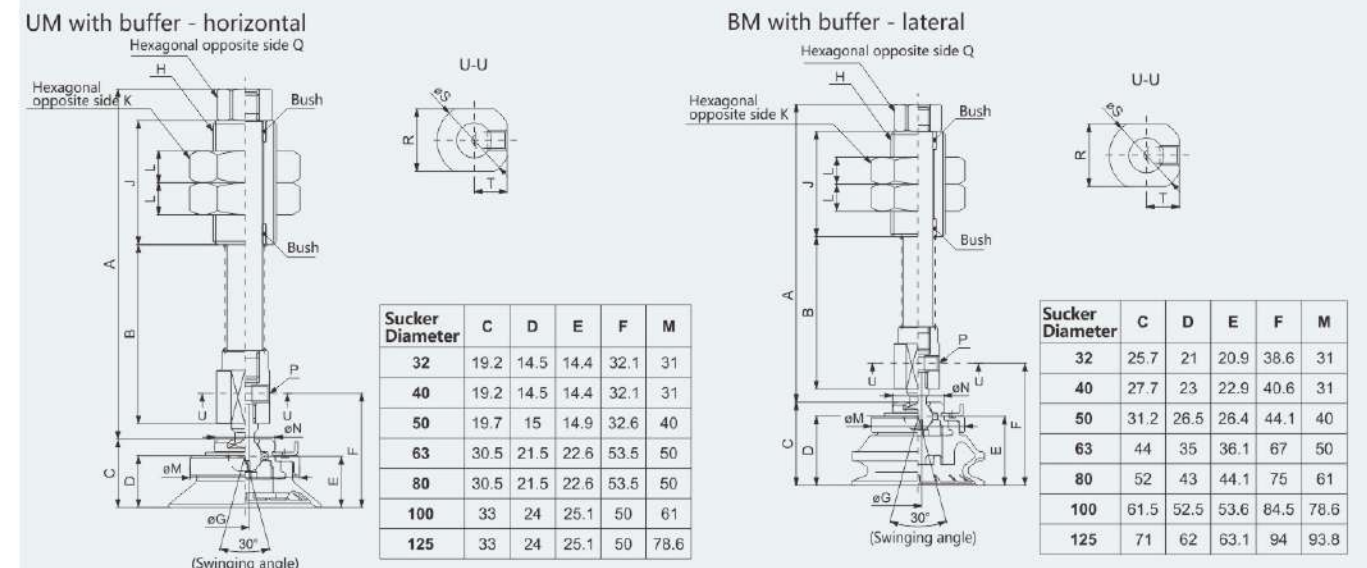
| Model | Buffer stroke | Ø32-Ø50 | Ø63-Ø125 |
|-------|---------------|---------|----------|
| 10 | 10mm | ● | ● |
| 25 | 25mm | ● | ● |
| 30 | 30mm | ● | ● |
| 50 | 50mm | ● | ● |
| 75 | 75mm | ● | ● |
| 100 | 100mm | - | ● |

ZP3E SERIES HEAVY LOADS VACUUM SUCTION CUP WITH SWINGING BUFFER

SPECIFICATION AND SIZE (MM)



| Model | Cushion Stroke | A | B | F | G | H | J | K | L | M | P |
|-------------|----------------|-------|-------|-----|-----------|----|----|----|----|----|----|
| ZP3E-TF-32 | 10 | 103.9 | 46.1 | 2.5 | M18 x 1.5 | 35 | 27 | 11 | 14 | 17 | 14 |
| ZP3E-TF-40 | 25 | 113.9 | 56.1 | | | | | | | | |
| ZP3E-TF-50 | 30 | 128.9 | 71.1 | | | | | | | | |
| ZP3E-TF-63 | 50 | 148.9 | 91.1 | 4 | M22 x 1.5 | 50 | 30 | 8 | 22 | 32 | 17 |
| ZP3E-TF-80 | 75 | 184.9 | 127.1 | | | | | | | | |
| ZP3E-TF-100 | 10 | 138 | 57 | | | | | | | | |
| ZP3E-TF-125 | 25 | 147 | 66 | | | | | | | | |



| Model | Cushion Stroke | A | B | G | H | J | K | L | N | P | Q | R | S | T |
|-------------|----------------|-------|-------|-----|-----------|----|----|----|----|----------|----|----|----|------|
| ZP3E-TF-32 | 10 | 98.9 | 52.1 | 2.5 | M18 x 1.5 | 35 | 27 | 11 | 17 | M5 x 0.8 | 14 | 16 | 19 | 8.5 |
| ZP3E-TF-40 | 25 | 108.9 | 62.1 | | | | | | | | | | | |
| ZP3E-TF-50 | 30 | 123.9 | 77.1 | | | | | | | | | | | |
| ZP3E-TF-63 | 50 | 143.9 | 97.1 | 4 | M22 x 1.5 | 50 | 30 | 8 | 32 | Rc1/8 | 17 | 24 | 28 | 12.5 |
| ZP3E-TF-80 | 75 | 179.9 | 133.1 | | | | | | | | | | | |
| ZP3E-TF-100 | 10 | 134.5 | 70.5 | | | | | | | | | | | |
| ZP3E-TF-125 | 25 | 143.5 | 79.5 | | | | | | | | | | | |

- HXD
- HOP
- HNP
- HNT
- SCG
- HXN
- HGP
- ZP
- ZP3
- ZP3E
- ZP3P
- ZP3P-JT2
- ZP3P-JT5
- MAF
- MAB
- MAOF
- MAOB
- BK

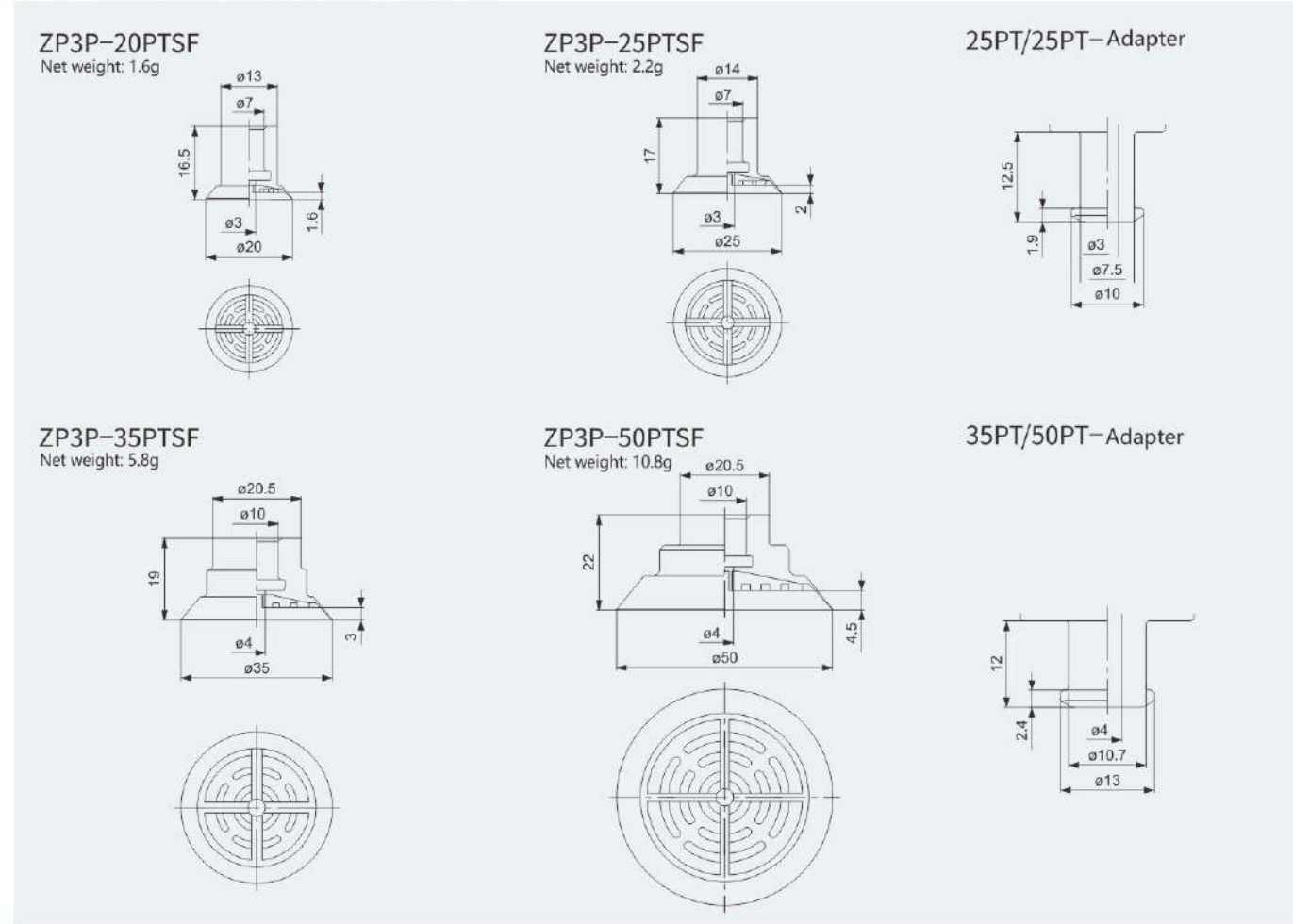


MODEL SPECIFICATIONS

ZP3P - 20 PT SF
① ② ③

| ① Sucker Diameter | ② Type of suction cup | ③ Material of suction cup |
|-------------------|---|--------------------------------|
| 20 - Ø20 | PT - Thin Edge Single-layer Ribbed Type | SF - Blue transparent silicone |
| 25 - Ø25 | | |
| 35 - Ø35 | | |
| 50 - Ø50 | | |

SPECIFICATION AND SIZE (MM)



MODEL SPECIFICATIONS

ZP3P - T 20 PT SF - A10
① ② ③ ④ ⑤

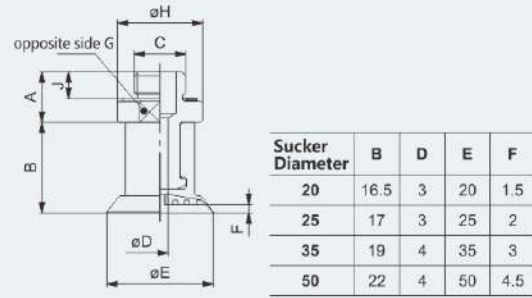
| ① Vacuum port direction | ② Sucker Diameter | ③ Type of suction cup | ④ Material of suction cup | ⑤ Installation thread |
|--------------------------------|--|---|--------------------------------|-------------------------|
| T - Portrait Y - Transverse | 20 - Ø20 25 - Ø25 35 - Ø35 50 - Ø50 | PT - Thin Edge Single-layer Ribbed Type | SF - Blue transparent silicone | See Table 1 for details |

Table 1

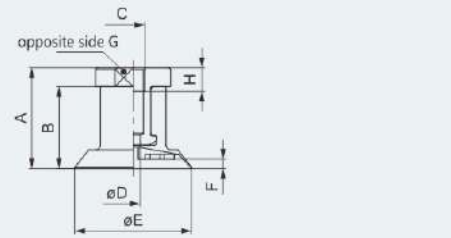
| Installation thread | Model | Thread Diameter | Ø20 | Ø25 | Ø35 | Ø50 |
|---------------------|--------|-----------------|-----|-----|-----|-----|
| External Thread | A5 | M5×0.8 | ● | ● | - | - |
| | A10 | M10×1 | - | - | ● | ● |
| | A12 | M12×1.75 | - | - | ● | ● |
| | AG1 | G1/8 | ● | ● | ● | ● |
| | AG2 | G1/4 | - | - | ● | ● |
| Internal Thread | B5 | M5×0.8 | ● | ● | - | - |
| | B8 | M8×1.25 | - | - | ● | ● |
| Partition type | A12-B5 | M12×1 | ● | ● | - | - |
| | A12-B6 | M12×1 | ● | ● | - | - |
| | AL14 | M14×1 | - | - | ● | ● |

SPECIFICATION AND SIZE (MM)

External Thread



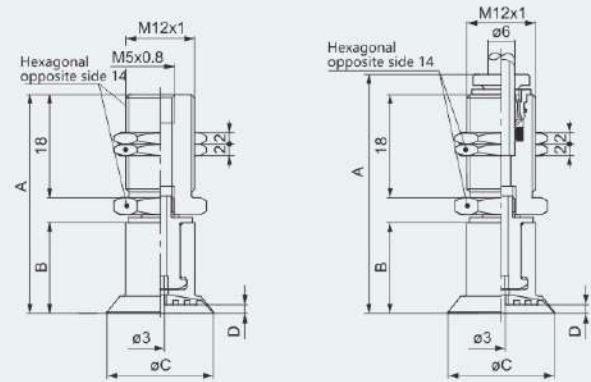
Internal Thread



| Model | Thread | A | C | G | H | J |
|--------------|--------|------|------------|----|----|-----|
| ZP3P-T20PTSF | A5 | 5 | M5 x 0.8 | - | 12 | 3.5 |
| ZP3P-T25PTSF | AG1 | 9.5 | G1/8 | 14 | 16 | 5 |
| | A10 | 14.5 | M10 x 1 | | | 7 |
| ZP3P-T35PTSF | A12 | 12.7 | M12 x 1.75 | 21 | 24 | 7.7 |
| ZP3P-T50PTSF | AG1 | 10.5 | G1/8 | | | 5 |
| | AG2 | 11.5 | G1/4 | | | 6.5 |

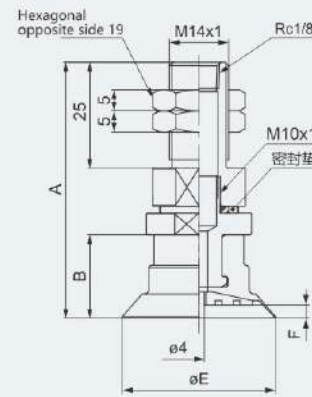
| Model | Thread | A | B | C | D | E | F | G | H |
|--------------|--------|------|------|-----------|---|----|-----|----|---|
| ZP3P-T20PTSF | B5 | 20.5 | 16.5 | M5 x 0.8 | 3 | 20 | 1.5 | 14 | 5 |
| ZP3P-T25PTSF | | 21 | 17 | | | 25 | 2 | | |
| ZP3P-T35PTSF | B8 | 25 | 19 | M8 x 1.25 | 4 | 35 | 3 | 21 | 8 |
| ZP3P-T50PTSF | | 28 | 22 | | | 50 | 4.5 | | |

20PT/25PT-Partition type



| Model | Thread | A | B | C | D |
|--------------|--------|------|------|----|-----|
| ZP3P-T20PTSF | A12-B5 | 38.7 | 16.5 | 20 | 1.5 |
| | A12-06 | 41.9 | | | |
| ZP3P-T25PTSF | A12-B5 | 39.2 | 17 | 25 | 2 |
| | A12-06 | 42.4 | | | |

35PT/50PT-Partition type



| Model | Thread | A | B | C | D |
|--------------|--------|------|----|----|-----|
| ZP3P-T35PTSF | AL14 | 60.5 | 19 | 35 | 3 |
| ZP3P-T50PTSF | | 63.5 | 22 | 50 | 4.5 |



MODEL SPECIFICATIONS

ZP3P - T 20 PT SF J 10 - B5

① ② ③ ④ ⑤ ⑥ ⑦

① Vacuum port direction ② Sucker diameter ③ Type of suction cup ④ Material of suction cup

| | | | |
|----------------|----------|----------------|--------------------------------|
| T - Portrait | 20 - Ø20 | PT - Thin Edge | SF - Blue Transparent Silicone |
| Y - Transverse | 25 - Ø25 | Single-layer | |
| | 35 - Ø35 | Ribbed Type | |
| | 50 - Ø50 | | |

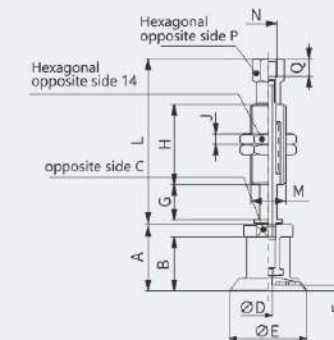
⑤ Buffering Type ⑥ Cushion Stroke ⑦ Vacuum port connection

| | | |
|---------------------------------|-----------|---------|
| J - Returnable Transformation | 10 - 10mm | Table 1 |
| K - Irreversible Transformation | 20 - 20mm | |
| | 30 - 30mm | |
| | 40 - 40mm | |
| | 50 - 50mm | |

Table 1

| Installation thread | Model | Thread Diameter | Ø20 | Ø25 | Ø35 | Ø50 |
|---------------------|-------|-----------------|-----|-----|-----|-----|
| Internal Thread | B5 | M5 x 0.8 | ● | ● | - | - |
| | B01 | Rc1/8 | - | - | ● | ● |

SPECIFICATION AND SIZE (MM)



| Sucker Diameter | A | B | C | D | E | F |
|-----------------|------|------|----|---|----|-----|
| 20 | 20.5 | 16.5 | 14 | 3 | 20 | 1.5 |
| 25 | 21 | 17 | 14 | 3 | 25 | 2 |
| 35 | 25 | 19 | 21 | 4 | 35 | 3 |
| 50 | 28 | 22 | 21 | 4 | 50 | 4.5 |

| Model | Cushion Stroke | G | H | J | K | L | M | N | P | Q |
|--------------------------------------|----------------|----|-------|---|----|-------|---------|----------|----|-----|
| ZP3P-T20PTSF-B5 ZP3P-T25PTSF-B5 | 10 | 10 | 23 | 3 | 14 | 47.5 | M10 x 1 | M5 x 0.8 | 8 | 5 |
| | 20 | 20 | 51 | | | 85.5 | | | | |
| | 30 | 30 | 74.1 | | | 95.5 | | | | |
| | 40 | 40 | 77 | | | 131.5 | | | | |
| | 50 | 50 | 130.1 | | | 141.5 | | | | |
| ZP3P-T35PTSF-B01 ZP3P-T50PTSF-B01 | 10 | 10 | 50 | 5 | 19 | 20 | M14 x 1 | Rc1/8 | 12 | 6.2 |
| | 20 | 20 | 64.6 | | | 25 | | | | |
| | 30 | 30 | 79.6 | | | 35 | | | | |
| | 40 | 40 | 75 | | | 50 | | | | |

- HXD
- HOP
- HNP
- HNT
- SCG
- HXN
- HGP
- ZP
- ZP3
- ZP3E
- ZP3P
- ZP3P-JT2
- ZP3P-JT5
- MAF
- MAB
- MAOF
- MAOB
- BK

ZP3P-JT SERIES 2.5 LAYER ORGAN TYPE VACUUM SUCTION CUP



PRODUCT FEATURES

- * Suitable for adsorption and transportation of soft film packaging workpieces
- * The suction cup color is blue (Imported food grade silicone)
- * Thin film skirt edge and special rib arch shape
- * Reduce the vibration of the workpiece during transportation before adsorption
- * Increase the opening area to ensure sufficient suction flow
- * Equipped with guiding accessories, effectively preventing workpieces such as bags or films from being sucked into the vacuum port

MODEL SPECIFICATIONS

ZP3P – 20 JT 2 SF WG – A16 – B01

Vacuum suction cup

ZP3P – T 20 JT 2 SF WG – A16 – B01

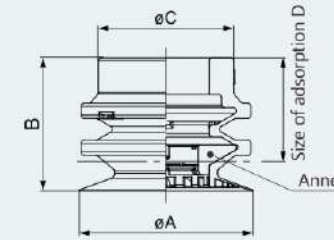
Suction cup with adapter

| ① Product Series | ② Vacuum port direction | ③ Sucker diameter | ④ Sucker shape | ⑤ Number of storey |
|------------------|-------------------------|--|-------------------|--------------------|
| ZP3P | T-Direction | 20-Φ20mm 25-Φ25mm 32-Φ32mm 40-Φ40mm 50-Φ50mm | JT-multideck Type | 2-2.5storey |

| ⑥ Material of suction cup | ⑦ With attachments | ⑧ Installation thread | ⑧ Vacuum Port |
|------------------------------|--|--|---|
| SF-Blue transparent silicone | W-Large port accessories WG-Multi hole attachment | A16-M16X1.0 External thread A20-M20X1.0 External thread | AG01-G1/8External thread AG02-G1/4External thread AG01-G3/8External thread AG01-G1/2External thread BG01-G1/8Internal thread BG02-G1/4Internal thread B01-RC1/8Internal thread B02-RC1/4Internal thread 08-8mmQuick connector 10-10mmQuick connector |

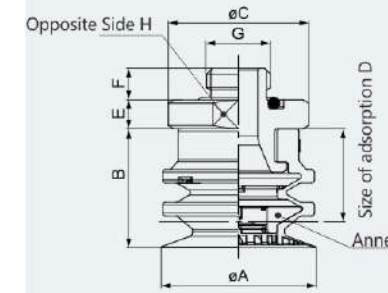
ZP3P-JT SERIES 2.5 LAYER ORGAN TYPE VACUUM SUCTION CUP

SPECIFICATION AND SIZE (MM)



| Model | | | | | øA | B | øC | D | Weight g |
|-------|----|---|----|----|----|------|----|------|----------|
| ZP3P | JT | 2 | SF | WG | 20 | 17.7 | 16 | 15.2 | 2.8 |
| | | | | | 25 | 18.8 | | 15.8 | 3.5 |
| | | | | | 32 | 24.6 | 25 | 20.6 | 8.3 |
| | | | | | 40 | 26.9 | | 21.9 | 11 |
| | | | | | 50 | 28.7 | | 22.2 | 13.8 |

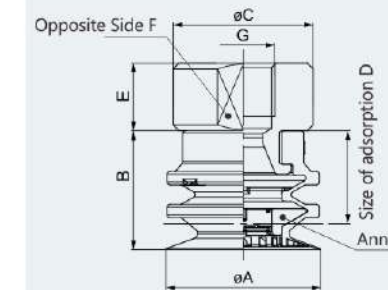
EXTERNAL THREAD CONNECTION



| Sucker Diameter | 20 | 25 | 32 | 40 | 50 |
|-----------------|------|------|------|------|------|
| øA | 20 | 25 | 32 | 40 | 50 |
| B | 17.7 | 18.8 | 24.6 | 26.9 | 28.7 |
| D | 15.2 | 15.8 | 20.6 | 21.9 | 22.2 |

| Model | | | | | øC | E | F | G | H | | |
|-------|---|----|---|----|----|------|-----|------|-----|------|----|
| ZP3P | T | JT | 2 | SF | WG | AG01 | 18 | 4 | 5.5 | G1/8 | 17 |
| | | | | | | AG02 | 23 | 5 | 6.5 | G1/4 | 21 |
| | | | | | | AG03 | 29 | 5.9 | 7.5 | G3/8 | 27 |
| | | | | | | AG01 | 29 | 5.9 | 5.5 | G1/8 | 27 |
| | | | | | | AG02 | | | 6.5 | G1/4 | |
| | | | | | | AG03 | 7.5 | G3/8 | | | |
| | | | | | | AG04 | 32 | 6.9 | 9 | G1/2 | 30 |

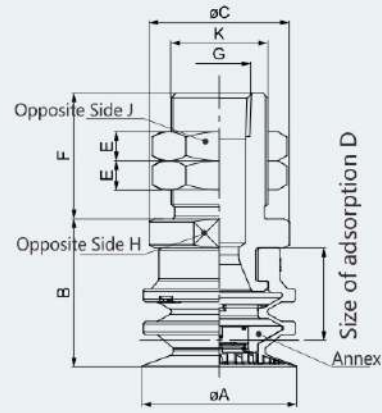
FEMALE CONNECTION



| Model | | | | | øA | B | øC | D | E | F | G | | |
|-------|---|----|---|----|----|------|------|------|------|------|-----|------|------|
| ZP3P | T | JT | 2 | SF | WG | BG01 | 20 | 17.7 | 18 | 15.2 | 7.4 | 17 | G1/8 |
| | | | | | | 25 | 18.8 | 15.8 | | | | | |
| | | | | | | 32 | 24.6 | 29 | 20.6 | 11 | 27 | G1/4 | |
| | | | | | | 40 | 26.9 | | 21.9 | | | | |
| | | | | | | 50 | 28.7 | | 22.2 | | | | |

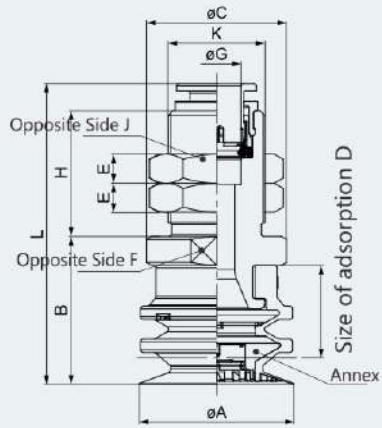
- HXD
- HOP
- HNP
- HNT
- SCG
- HXN
- HGP
- ZP
- ZP3
- ZP3E
- ZP3P
- ZP3P-JT2**
- ZP3P-JT5
- MAF
- MAB
- MAOF
- MAOB
- BK

Internal thread partition installation



| | | Model | | A | B | C | D | E | F | G | H | J | K | | | | | | | |
|------|---|-------|----|---|----|---|----|-----|------|------|------|----|------|--------|----|--------|-----|----|-----|----|
| ZP3P | T | 20 | JT | 2 | SF | W | WG | A16 | B01 | 20 | 17.7 | 18 | 15.2 | 3.5 | 17 | Rc 1/8 | 22 | 19 | M16 | x1 |
| | | 25 | | | | | | 25 | 18.8 | 15.8 | 4 | 5 | 27 | Rc 1/4 | 26 | 24 | M20 | x1 | | |
| | | 32 | | | | | | 32 | 24.6 | 20.6 | 4 | 5 | 27 | Rc 1/4 | 26 | 24 | M20 | x1 | | |
| | | 40 | | | | | | 40 | 26.9 | 21.9 | 4 | 5 | 27 | Rc 1/4 | 26 | 24 | M20 | x1 | | |
| | | 50 | | | | | | 50 | 28.7 | 22.2 | | | | | | | | | | |

Quick connector partition installation



| | | Model | | A | B | C | D | E | F | G | H | J | K | L | | | | | | |
|------|---|-------|----|---|----|---|----|-----|------|------|------|----|------|-----|----|----|-----|------|-----|------|
| ZP3P | T | 20 | JT | 2 | SF | W | WG | A16 | O8 | 20 | 17.7 | 18 | 15.2 | 3.5 | 17 | 8 | 22 | 19 | M16 | 48.6 |
| | | 25 | | | | | | 25 | 18.8 | 15.8 | 4 | 5 | 27 | 10 | 26 | 24 | M20 | 49.7 | | |
| | | 32 | | | | | | 32 | 24.6 | 20.6 | 4 | 5 | 27 | 10 | 26 | 24 | M20 | 62 | | |
| | | 40 | | | | | | 40 | 26.9 | 21.9 | 4 | 5 | 27 | 10 | 26 | 24 | M20 | 64.3 | | |
| | | 50 | | | | | | 50 | 28.7 | 22.2 | | | | | | | | | | 66.1 |



MODEL SPECIFICATIONS

ZP3P - 20 JT 5 SF - WG
① ② ③ ④ ⑤

① Sucker diameter ② Type of suction cup ③ Number of storey

20 - Ø20 JT - multideck
25 - Ø25 type
32 - Ø32
40 - Ø40
50 - Ø50

④ Material of suction cup ⑤ Guide Accessories

SF - Blue transparent silicone Blank - Unguided attachments
WG - Guided attachments

PERFORMANCE PARAMETER

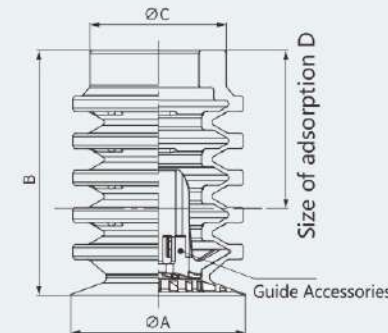
Operating temperature range -30~90℃

Suction cup material quality Food Grade Silicone Rubber Imported From Germany

Suction cup Colour Blue
Hardness HS(±5°) A40/S

Guide Accessories Material Quality Synthetic Resin
Colour White

SPECIFICATION AND SIZE (MM)



| Model | ØA | B | ØC | D | Weight g |
|----------|----|------|----|------|----------|
| ZP3P-T20 | 20 | 31.2 | 16 | 21.2 | 4.6 |
| ZP3P-T25 | 25 | 35 | | 23 | 6.3 |
| ZP3P-T32 | 32 | 45 | 25 | 29 | 14.8 |
| ZP3P-T40 | 40 | 51.5 | | 31.5 | 20.3 |
| ZP3P-T50 | 50 | 59 | | 33 | 26.9 |

- HXD
- HOP
- HNP
- HNT
- SCG
- HXN
- HGP
- ZP
- ZP3
- ZP3E
- ZP3P
- ZP3P-JT2
- ZP3P-JT5**
- MAF
- MAB
- MAOF
- MAOB
- BK

ZP3P-JT SERIES 5.5 LAYER ORGAN TYPE VACUUM SUCTION CUP WITH ADAPTER



MODEL SPECIFICATIONS

ZP3P - T 20 JT 5 SF - A16 - B01

① ② ③ ④ ⑤ ⑥ ⑦

① Vacuum port direction ② Sucker diameter ③ Type of suction cup Number of storey

| | | | |
|---------------|--|---------------------|---------------|
| T - direction | 20 - Ø20 25 - Ø25 32 - Ø32 40 - Ø40 50 - Ø50 | JT - multideck type | 5 - 5.5storey |
|---------------|--|---------------------|---------------|

⑤ Material of suction cup ⑥ Guide sleeve external thread ⑦ Vacuum port connection

| | |
|--------------------------------|--|
| SF - Blue transparent silicone | Blank - No installation thread Table 1 A16 - M16×1.0 A20 - M20×1.0 |
|--------------------------------|--|

Table 1

| | | Model | Specifications | Ø20~25 | Ø32~50 |
|------------------------------|-----------------|-------|----------------|--------|--------|
| Guide sleeve external thread | External thread | A16 | M16×1.0 | ● | - |
| | External thread | A20 | M20×1.0 | - | ● |
| Vacuum Port Connection | External thread | AG01 | G1/8 | ● | - |
| | | AG02 | G1/4 | - | ● |
| | Internal Thread | BG01 | G1/8 | ● | - |
| | | BG02 | G1/4 | - | ● |
| | Quick Connector | B01 | Rc1/8 | ● | - |
| | | B02 | Rc1/4 | - | ● |
| | 08 | 8mm | ● | - | |
| | 10 | 10mm | - | ● | |

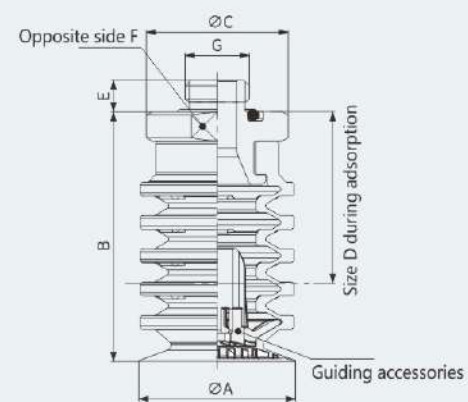
Related parameters

| | | |
|------------------------------------|-------------------|--|
| Operating temperature range | | -30~90°C |
| Sucker | material quality | Food grade silicone rubber imported from Germany |
| | colour | blue |
| | hardness Hs (±5°) | A40/S |
| Guiding Accessories | material | synthetic resin |
| | colour | white |

ZP3P-JT SERIES 5.5 LAYER ORGAN TYPE VACUUM SUCTION CUP WITH ADAPTER

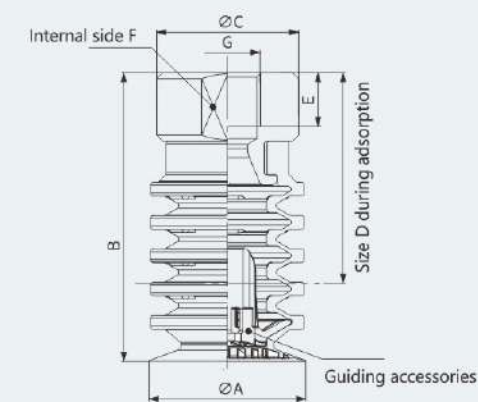
SPECIFICATION AND SIZE (MM)

External thread connection



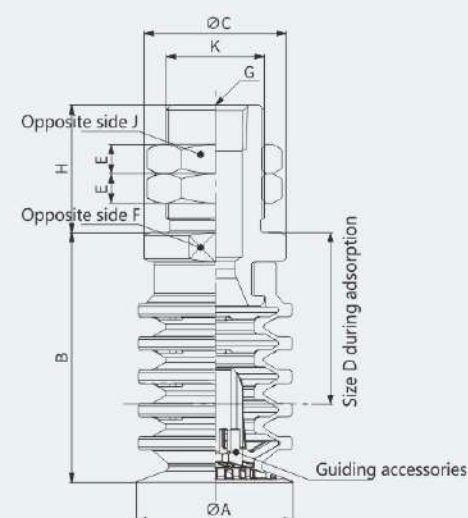
| Model | Connecting threads | ØA | B | ØC | D | E | F | G |
|----------|--------------------|----|------|----|------|-----|----|------|
| ZP3P-T20 | AG01 | 20 | 35.2 | 18 | 25.2 | 5.5 | 17 | G1/8 |
| ZP3P-T25 | | 25 | 39 | 18 | 27 | | | |
| ZP3P-T32 | AG02 | 32 | 51 | 29 | 35 | 6.5 | 27 | G1/4 |
| ZP3P-T40 | | 40 | 57.5 | 29 | 37.5 | | | |
| ZP3P-T50 | | 50 | 65 | 29 | 39 | | | |

Internal Connection



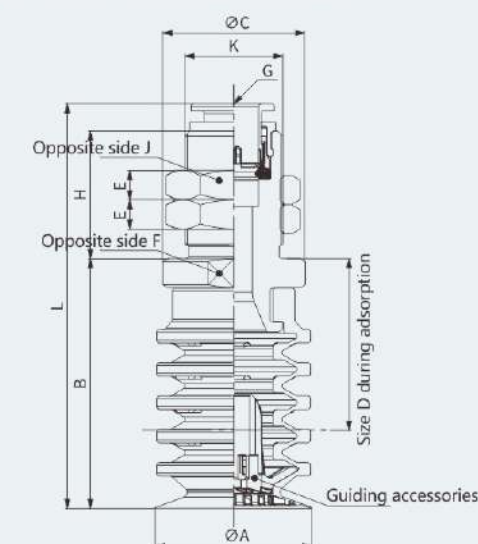
| Model | Connecting threads | ØA | B | ØC | D | E | F | G |
|----------|--------------------|----|------|----|------|-----|----|------|
| ZP3P-T20 | BG01 | 20 | 42.2 | 18 | 32.2 | 7.4 | 17 | G1/8 |
| ZP3P-T25 | | 25 | 46 | 18 | 34 | | | |
| ZP3P-T32 | BG02 | 32 | 59 | 29 | 43 | 11 | 27 | G1/4 |
| ZP3P-T40 | | 40 | 65.5 | 29 | 45.5 | | | |
| ZP3P-T50 | | 50 | 73 | 29 | 47 | | | |

Internal thread partition installation



| Model | Guide sleeve external thread | Connecting threads | ØA | B | ØC | D | E | F | G | H | J | K |
|----------|------------------------------|--------------------|----|------|----|------|-----|----|-------|----|----|-------|
| ZP3P-T20 | A16 | B01 | 20 | 35.2 | 18 | 25.2 | 3.5 | 17 | Rc1/8 | 22 | 19 | M16×1 |
| ZP3P-T25 | | | 25 | 39 | 18 | 27 | | | | | | |
| ZP3P-T32 | A20 | B02 | 32 | 51 | 29 | 35 | 4.5 | 27 | Rc1/4 | 26 | 24 | M20×1 |
| ZP3P-T40 | | | 40 | 57.5 | 29 | 37.5 | | | | | | |
| ZP3P-T50 | | | 50 | 65 | 29 | 39 | | | | | | |

Quick connector partition installation



| Model | Guide sleeve external thread | Connecting threads | ØA | B | ØC | D | E | F | G | H | J | K | L | |
|----------|------------------------------|--------------------|----|------|----|------|-----|----|----|----|----|-------|------|------|
| ZP3P-T20 | A16 | 08 | 20 | 35.2 | 18 | 25.2 | 3.5 | 17 | 8 | 22 | 19 | M16×1 | 62.1 | |
| ZP3P-T25 | | | 25 | 39 | 18 | 27 | | | | | | | | 65.9 |
| ZP3P-T32 | A20 | 10 | 32 | 51 | 29 | 35 | 4.5 | 27 | 10 | 26 | 24 | M20×1 | 82.4 | |
| ZP3P-T40 | | | 40 | 57.5 | 29 | 37.5 | | | | | | | | 88.9 |
| ZP3P-T50 | | | 50 | 65 | 29 | 39 | | | | | | | | 96.4 |

- HXD
- HOP
- HNP
- HNT
- SCG
- HXN
- HGP
- ZP
- ZP3
- ZP3E
- ZP3P
- ZP3P-JT2
- ZP3P-JT5**
- MAF
- MAB
- MAOF
- MAOB
- BK



MODEL SPECIFICATIONS

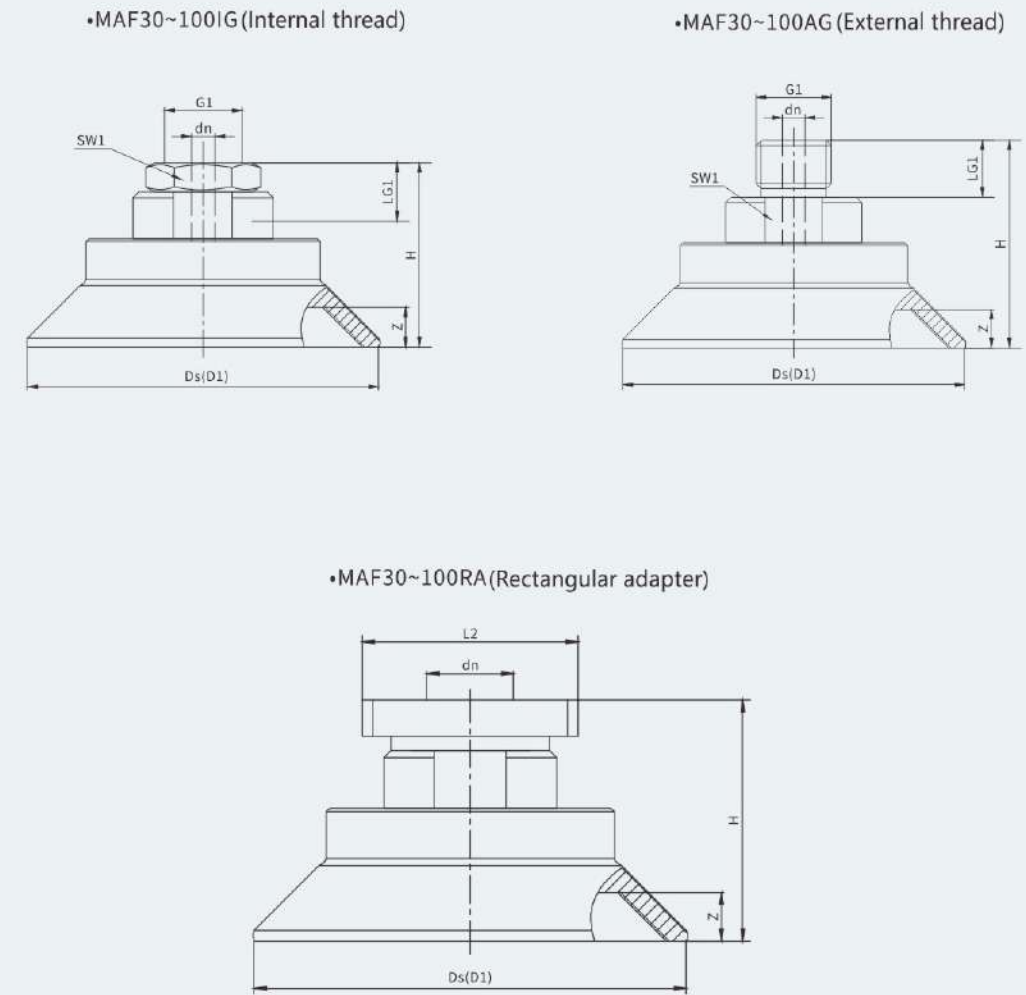
MAF - 30 - NBR-45 - G1/4-AG

| ① Product Series | ② Sucker diameter | ③ Sucker hardness | ④ Connecting threads |
|------------------------|-----------------------------------|------------------------------------|--|
| MAF - Flat suction cup | 30 40 50 60 80 100 | NBR-45 - nbr 45 NBR-60 - nbr 60 | G1/4-AG - G1/4 External thread G1/4-IG - G1/4 Internal Thread G3/8-IG - G3/8 Internal Thread M10x1.5-AG - M10 External thread M14x1.5-AG - M14 External thread RA - Rectangular adapter |

PERFORMANCE PARAMETER

| Model | suction (N) | lateral force (N) | Lateral force on oily surfaces (N) | Internal volume (cm ³) | Minimum curvature radius of the workpiece (mm) | Recommended hose diameter (mm) |
|--------|-------------|-------------------|------------------------------------|------------------------------------|--|--------------------------------|
| MAF30 | 38 | 30 | 28 | 1.7 | 40 | 4 |
| MAF40 | 69 | 52 | 50 | 3.8 | 50 | 4 |
| MAF50 | 100 | 80 | 76 | 7.0 | 65 | 4 |
| MAF60 | 150 | 105 | 85 | 13.0 | 75 | 6 |
| MAF80 | 272 | 205 | 180 | 36.0 | 100 | 6 |
| MAF100 | 430 | 310 | 300 | 58.0 | 135 | 6 |

SPECIFICATION AND SIZE (MM)



| Model | Size mm | D1 | DN | Ds | G1 | H | LG1 | L2 | SW1 | Z |
|------------------|---------|----|----|----|----------|------|-----|----|-----|-----|
| MAF30G1/4-AG | | 34 | 4 | 32 | G1/4M | 20.0 | 10 | - | 17 | 3.0 |
| MAF30G1/4-IG | | 34 | 4 | 32 | G1/4F | 20.0 | 12 | - | 17 | 3.0 |
| MAF30G3/8-IG | | 34 | 4 | 32 | G3/8F | 36.0 | 9 | - | 22 | 3.0 |
| MAF30GM10x1.5-AG | | 34 | 4 | 32 | M10x1.5M | 20.0 | 12 | - | 17 | 3.0 |
| MAF30GM14x1.5-AG | | 34 | 4 | 32 | M14x1.5M | 22.0 | 12 | - | 17 | 3.0 |
| MAF30RA | | 34 | 4 | 32 | - | 23.2 | - | 32 | - | 3.0 |
| MAF40G1/4-AG | | 46 | 4 | 42 | G1/4M | 22.0 | 10 | - | 17 | 4.0 |
| MAF40G1/4-IG | | 46 | 4 | 42 | G1/4F | 22.0 | 12 | - | 17 | 4.0 |
| MAF40G3/8-IG | | 46 | 4 | 42 | G3/8F | 38.0 | 9 | - | 22 | 4.0 |
| MAF40GM10x1.5-AG | | 46 | 4 | 42 | M10x1.5M | 22.0 | 12 | - | 17 | 4.0 |
| MAF40GM14x1.5-AG | | 46 | 4 | 42 | M14x1.5M | 22.0 | 12 | - | 17 | 4.0 |
| MAF40RA | | 46 | 4 | 42 | - | 25.0 | - | 32 | - | 4.0 |

MAF SERIES VACUUM SUCTION CUP

| Model | Size/mm | D1 | DN | Ds | G1 | H | LG1 | L2 | SW1 | Z |
|-------------------|---------|-----|----|-----|----------|------|-----|----|-----|-----|
| MAF50G1/4-AG | | 56 | 6 | 52 | G1/4M | 28.0 | 10 | - | 22 | 5.0 |
| MAF50G1/4-IG | | 56 | 6 | 52 | G1/4F | 33.0 | 15 | - | 22 | 5.0 |
| MAF50G3/8-IG | | 56 | 6 | 52 | G3/8F | 28.0 | 15 | - | 22 | 5.0 |
| MAF50GM10x1.5-AG | | 56 | 4 | 52 | M10x1.5M | 28.0 | 12 | - | 22 | 5.0 |
| MAF50GM14x1.5-AG | | 56 | 6 | 52 | M14x1.5M | 28.0 | 12 | - | 22 | 5.0 |
| MAF50RA | | 56 | 6 | 52 | - | 27.5 | - | 32 | - | 5.0 |
| MAF60G1/4-AG | | 67 | 6 | 63 | G1/4M | 31.0 | 10 | - | 22 | 6.0 |
| MAF60G1/4-IG | | 67 | 6 | 63 | G1/4F | 36.0 | 15 | - | 22 | 6.0 |
| MAF60G3/8-IG | | 67 | 6 | 63 | G3/8F | 31.0 | 15 | - | 22 | 6.0 |
| MAF60GM10x1.5-AG | | 67 | 4 | 63 | M10x1.5M | 31.0 | 12 | - | 22 | 6.0 |
| MAF60GM14x1.5-AG | | 67 | 6 | 63 | M14x1.5M | 31.0 | 12 | - | 22 | 6.0 |
| MAF60RA | | 67 | 6 | 63 | - | 30.5 | - | 32 | - | 6.0 |
| MAF80G1/4-AG | | 89 | 6 | 83 | G1/4M | 35.0 | 10 | - | 22 | 7.6 |
| MAF80G1/4-IG | | 89 | 6 | 83 | G1/4F | 40.0 | 20 | - | 22 | 7.6 |
| MAF80G3/8-IG | | 89 | 6 | 83 | G3/8F | 35.0 | 15 | - | 22 | 7.6 |
| MAF80GM10x1.5-AG | | 89 | 4 | 83 | M10x1.5M | 35.0 | 12 | - | 22 | 7.6 |
| MAF80GM14x1.5-AG | | 89 | 6 | 83 | M14x1.5M | 35.0 | 12 | - | 22 | 7.6 |
| MAF80RA | | 89 | 6 | 83 | - | 34.5 | - | 32 | - | 7.6 |
| MAF100G1/4-AG | | 110 | 6 | 103 | G1/4M | 36.0 | 10 | - | 22 | 9.5 |
| MAF100G1/4-IG | | 110 | 6 | 103 | G1/4F | 41.0 | 20 | - | 22 | 9.5 |
| MAF100G3/8-IG | | 110 | 6 | 103 | G3/8F | 36.0 | 15 | - | 22 | 9.5 |
| MAF100GM10x1.5-AG | | 110 | 4 | 103 | M10x1.5M | 36.0 | 12 | - | 22 | 9.5 |
| MAF100GM14x1.5-AG | | 110 | 6 | 103 | M14x1.5M | 36.0 | 12 | - | 22 | 9.5 |
| MAF100RA | | 110 | 6 | 103 | - | 35.5 | - | 32 | - | 9.5 |

MAB SERIES VACUUM SUCTION CUP



MODEL SPECIFICATIONS

MAB - 30 - NBR-60 - G1/4-AG

① ② ③ ④

| ① Product Series | ② Sucker diameter | ③ Sucker hardness | ④ Connecting threads |
|------------------------------|-----------------------------------|-------------------|---|
| MAB - Corrugated suction cup | 30 40 50 60 80 100 | NBR-60 | G1/4-AG G1/4-IG G3/8-IG M10x1.5-AG M14x1.5-AG RA |

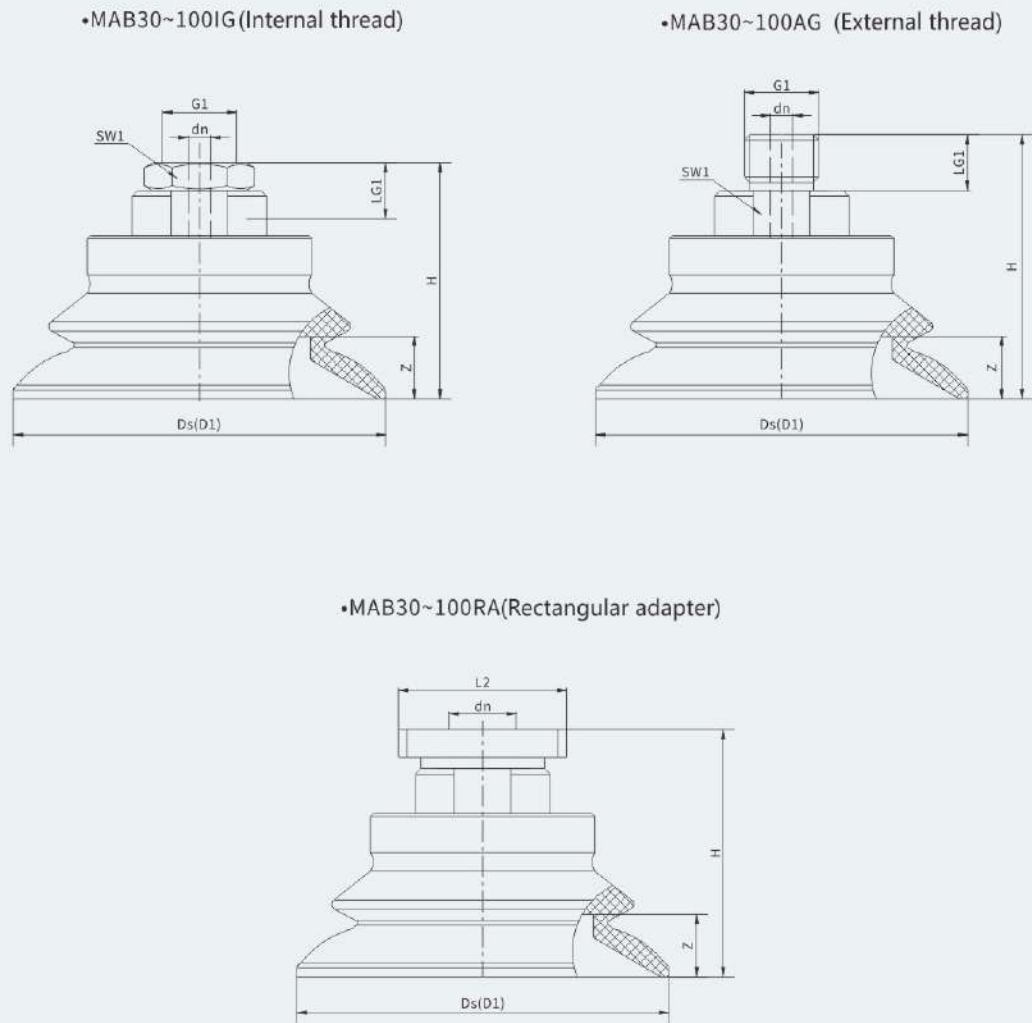
Lateral force on oily surfaces

PERFORMANCE PARAMETER

| Model | suction (N) | pull-out force (N) | lateral force (N) | Lateral force on oily surfaces (N) | Internal volume (cm ³) | Minimum curvature radius of the workpiece (mm) | Recommended hose diameter (mm) |
|--------|-------------|--------------------|-------------------|------------------------------------|------------------------------------|--|--------------------------------|
| MAB30 | 22 | 33 | 30 | 13 | 5.9 | 40 | 4 |
| MAB40 | 38 | 59 | 36 | 33 | 7.0 | 40 | 4 |
| MAB50 | 53 | 87 | 55 | 52 | 11.5 | 50 | 4 |
| MAB60 | 82 | 130 | 82 | 77 | 24.0 | 65 | 6 |
| MAB80 | 135 | 221 | 145 | 140 | 56.5 | 75 | 6 |
| MAB100 | 190 | 357 | 220 | 214 | 92.5 | 90 | 6 |

- HXD
- HOP
- HNP
- HNT
- SCG
- HXN
- HGP
- ZP
- ZP3
- ZP3E
- ZP3P
- ZP3P-JT2
- ZP3P-JT5
- MAF
- MAB**
- MAOF
- MAOB
- BK

SPECIFICATION AND SIZE (MM)



| Model | Size mm | D1 | DN | Ds | G1 | H | LG1 | L2 | SW1 | Z |
|------------------|---------|----|----|----|----------|------|-----|----|-----|------|
| MAB30G1/4-AG | | 34 | 4 | 32 | G1/4M | 28.0 | 10 | - | 17 | 9.0 |
| MAB30G1/4-IG | | 34 | 4 | 32 | G1/4F | 28.0 | 12 | - | 17 | 9.0 |
| MAB30G3/8-IG | | 34 | 4 | 32 | G3/8F | 44.0 | 9.5 | - | 22 | 9.0 |
| MAB30GM10x1.5-AG | | 34 | 4 | 32 | M10x1.5M | 28.0 | 12 | - | 17 | 9.0 |
| MAB30GM14x1.5-AG | | 34 | 4 | 32 | M14x1.5M | 28.0 | 12 | - | 17 | 9.0 |
| MAB30RA | | 34 | 4 | 32 | - | 31.2 | - | 32 | - | 9.0 |
| MAB40G1/4-AG | | 45 | 4 | 42 | G1/4M | 29.0 | 10 | - | 17 | 10.0 |
| MAB40G1/4-IG | | 45 | 4 | 42 | G1/4F | 29.0 | 12 | - | 17 | 10.0 |
| MAB40G3/8-IG | | 45 | 4 | 42 | G3/8F | 44.0 | 9.5 | - | 22 | 10.0 |
| MAB40GM10x1.5-AG | | 45 | 4 | 42 | M10x1.5M | 29.0 | 12 | - | 17 | 10.0 |
| MAB40GM14x1.5-AG | | 45 | 4 | 42 | M14x1.5M | 29.0 | 12 | - | 17 | 10.0 |
| MAB40RA | | 45 | 4 | 42 | - | 31.2 | - | 32 | - | 10.0 |

| Model | Size mm | D1 | DN | DS | G1 | H | LG1 | L2 | SW1 | Z |
|-------------------|---------|-----|----|-----|----------|------|-----|----|-----|------|
| MAB50G1/4-AG | | 56 | 6 | 52 | G1/4M | 37.0 | 10 | - | 22 | 11.5 |
| MAB50G1/4-IG | | 56 | 6 | 52 | G1/4F | 42.0 | 20 | - | 22 | 11.5 |
| MAB50G3/8-IG | | 56 | 6 | 52 | G3/8F | 37.0 | 15 | - | 22 | 11.5 |
| MAB50GM10x1.5-AG | | 56 | 4 | 52 | M10x1.5M | 37.0 | 12 | - | 22 | 11.5 |
| MAB50GM14x1.5-AG | | 56 | 6 | 52 | M14x1.5M | 37.0 | 12 | - | 22 | 11.5 |
| MAB50RA | | 56 | 6 | 52 | - | 36.5 | - | 32 | - | 11.5 |
| MAB60G1/4-AG | | 67 | 6 | 63 | G1/4M | 41.5 | 10 | - | 22 | 14.5 |
| MAB60G1/4-IG | | 67 | 6 | 63 | G1/4F | 46.5 | 20 | - | 22 | 14.5 |
| MAB60G3/8-IG | | 67 | 6 | 63 | G3/8F | 41.5 | 15 | - | 22 | 14.5 |
| MAB60GM10x1.5-AG | | 67 | 4 | 63 | M10x1.5M | 41.5 | 12 | - | 22 | 14.5 |
| MAB60GM14x1.5-AG | | 67 | 6 | 63 | M14x1.5M | 41.5 | 12 | - | 22 | 14.5 |
| MAB60RA | | 67 | 6 | 63 | - | 41.0 | - | 32 | - | 14.5 |
| MAB80G1/4-AG | | 89 | 6 | 83 | G1/4M | 50.0 | 10 | - | 22 | 22.0 |
| MAB80G1/4-IG | | 89 | 6 | 83 | G1/4F | 55.0 | 20 | - | 22 | 22.0 |
| MAB80G3/8-IG | | 89 | 6 | 83 | G3/8F | 50.0 | 15 | - | 22 | 22.0 |
| MAB80GM10x1.5-AG | | 89 | 4 | 83 | M10x1.5M | 50.0 | 12 | - | 22 | 22.0 |
| MAB80GM14x1.5-AG | | 89 | 6 | 83 | M14x1.5M | 50.0 | 12 | - | 22 | 22.0 |
| MAB80RA | | 89 | 6 | 83 | - | 49.5 | - | 32 | - | 22.0 |
| MAB100G1/4-AG | | 110 | 6 | 103 | G1/4M | 57.0 | 10 | - | 22 | 26.0 |
| MAB100G1/4-IG | | 110 | 6 | 103 | G1/4F | 62.0 | 20 | - | 22 | 26.0 |
| MAB100G3/8-IG | | 110 | 6 | 103 | G3/8F | 57.0 | 15 | - | 22 | 26.0 |
| MAB100GM10x1.5-AG | | 110 | 4 | 103 | M10x1.5M | 57.0 | 12 | - | 22 | 26.0 |
| MAB100GM14x1.5-AG | | 110 | 6 | 103 | M14x1.5M | 57.0 | 12 | - | 22 | 26.0 |
| MAB100RA | | 110 | 6 | 103 | - | 56.5 | - | 32 | - | 26.0 |



MODEL SPECIFICATIONS

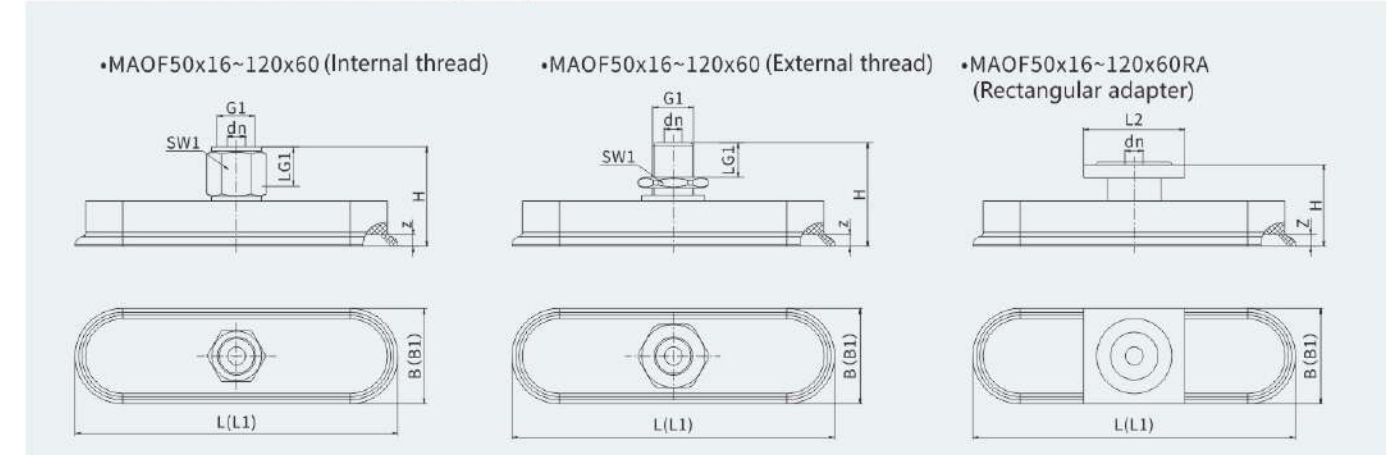
MAOF - 50x16 - NBR-45 - G1/4-AG

| ① Product Series | ② Sucker diameter | ③ Sucker hardness | ④ Connecting threads |
|-------------------------------------|--|-------------------|---|
| MAOF- Flat suction cup (oval shape) | 50x16 60x23 90x30 80x40 100x50 120x60 | NBR-45 NBR-60 | G1/4-AG G1/4-IG G3/8-IG M10x1.5-AG M14x1.5-AG RA |

PERFORMANCE PARAMETER

| Model | suction (N) | lateral force (N) | Lateral force on oily surfaces (N) | Internal volume (cm ³) | Minimum curvature radius of the workpiece (mm) | Recommended hose diameter (mm) |
|------------|-------------|-------------------|------------------------------------|------------------------------------|--|--------------------------------|
| MAOF50x16 | 31 | 24 | 12 | 2.0 | 8 | 4 |
| MAOF60x23 | 57 | 37 | 33 | 3.0 | 20 | 4 |
| MAOF90x30 | 122 | 96 | 64 | 7.0 | 40 | 4 |
| MAOF80x40 | 140 | 110 | 100 | 10.7 | 50 | 4 |
| MAOF100x50 | 217 | 181 | 121 | 20.0 | 75 | 6 |
| MAOF120x60 | 312 | 254 | 170 | 35.0 | 75 | 6 |

SPECIFICATION AND SIZE (MM)



| Model | Size mm | B | B1 | dn | G1 | H | L | L1 | L2 | LG1 | SW1 | Z |
|----------------------|---------|----|----|----|----------|----|-----|------|----|-----|-----|---|
| MAOF50x16G1/4-AG | | 16 | 18 | 5 | G1/4M | 26 | 50 | 51.5 | - | 8 | 17 | 3 |
| MAOF50x16G1/4-IG | | 16 | 18 | 6 | G1/4F | 33 | 50 | 51.5 | - | 8 | 17 | 3 |
| MAOF50x16G3/8-IG | | 16 | 18 | 6 | G3/8F | 34 | 50 | 51.5 | - | 9 | 22 | 3 |
| MAOF50x16M10x1.5-AG | | 16 | 18 | 4 | M10x1.5M | 26 | 50 | 51.5 | - | 10 | 16 | 3 |
| MAOF50x16M14x1.5-AG | | 16 | 18 | 5 | M14x1.5M | 28 | 50 | 51.5 | - | 10 | 22 | 3 |
| MAOF50x16RA | | 16 | 18 | 4 | - | 29 | 50 | 51.5 | 32 | - | - | 3 |
| MAOF60x23G1/4-AG | | 23 | 25 | 5 | G1/4M | 18 | 62 | 64 | - | 8 | 17 | 3 |
| MAOF60x23G1/4-IG | | 23 | 25 | 6 | G1/4F | 26 | 62 | 64 | - | 8 | 17 | 3 |
| MAOF60x23G3/8-IG | | 23 | 25 | 6 | G3/8F | 26 | 62 | 64 | - | 9 | 22 | 3 |
| MAOF60x23M10x1.5-AG | | 23 | 25 | 4 | M10x1.5M | 18 | 62 | 64 | - | 10 | 16 | 3 |
| MAOF60x23M14x1.5-AG | | 23 | 25 | 5 | M14x1.5M | 20 | 62 | 64 | - | 10 | 22 | 3 |
| MAOF60x23RA | | 23 | 25 | 4 | - | 21 | 62 | 64 | 32 | - | - | 3 |
| MAOF90x30G1/4-AG | | 32 | 34 | 5 | G1/4M | 19 | 92 | 94 | - | 8 | 17 | 3 |
| MAOF90x30G1/4-IG | | 32 | 34 | 6 | G1/4F | 26 | 92 | 94 | - | 8 | 17 | 3 |
| MAOF90x30G3/8-IG | | 32 | 34 | 6 | G3/8F | 27 | 92 | 94 | - | 9 | 22 | 3 |
| MAOF90x30M10x1.5-AG | | 32 | 34 | 4 | M10x1.5M | 19 | 92 | 94 | - | 10 | 16 | 3 |
| MAOF90x30M14x1.5-AG | | 32 | 34 | 5 | M14x1.5M | 21 | 92 | 94 | - | 10 | 22 | 3 |
| MAOF90x30RA | | 32 | 34 | 4 | - | 22 | 92 | 94 | 32 | - | - | 3 |
| MAOF80x40G1/4-AG | | 40 | 43 | 5 | G1/4M | 20 | 82 | 85 | - | 8 | 17 | 4 |
| MAOF80x40G1/4-IG | | 40 | 43 | 6 | G1/4F | 28 | 82 | 85 | - | 8 | 17 | 4 |
| MAOF80x40G3/8-IG | | 40 | 43 | 6 | G3/8F | 28 | 82 | 85 | - | 9 | 22 | 4 |
| MAOF80x40M10x1.5-AG | | 40 | 43 | 4 | M10x1.5M | 20 | 82 | 85 | - | 10 | 16 | 4 |
| MAOF80x40M14x1.5-AG | | 40 | 43 | 5 | M14x1.5M | 22 | 82 | 85 | - | 10 | 22 | 4 |
| MAOF80x40RA | | 40 | 43 | 4 | - | 23 | 82 | 85 | 32 | - | - | 4 |
| MAOF100x50G1/4-AG | | 50 | 54 | 6 | G1/4M | 22 | 102 | 106 | - | 8 | 17 | 5 |
| MAOF100x50G1/4-IG | | 50 | 54 | 8 | G1/4F | 30 | 102 | 106 | - | 8 | 17 | 5 |
| MAOF100x50G3/8-IG | | 50 | 54 | 8 | G3/8F | 31 | 102 | 106 | - | 9 | 22 | 5 |
| MAOF100x50M10x1.5-AG | | 50 | 54 | 4 | M10x1.5M | 22 | 102 | 106 | - | 10 | 16 | 5 |
| MAOF100x50M14x1.5-AG | | 50 | 54 | 6 | M14x1.5M | 24 | 102 | 106 | - | 10 | 22 | 5 |
| MAOF100x50RA | | 50 | 54 | 6 | - | 25 | 102 | 106 | 32 | - | - | 5 |
| MAOF120x60G1/4-AG | | 60 | 65 | 6 | G1/4M | 24 | 123 | 128 | - | 8 | 17 | 6 |
| MAOF120x60G1/4-IG | | 60 | 65 | 8 | G1/4F | 32 | 123 | 128 | - | 8 | 17 | 6 |
| MAOF120x60G3/8-IG | | 60 | 65 | 8 | G3/8F | 33 | 123 | 128 | - | 9 | 22 | 6 |
| MAOF120x60M10x1.5-AG | | 60 | 65 | 4 | M10x1.5M | 24 | 123 | 128 | - | 10 | 16 | 6 |
| MAOF120x60M14x1.5-AG | | 60 | 65 | 6 | M14x1.5M | 26 | 123 | 128 | - | 10 | 22 | 6 |
| MAOF120x60RA | | 60 | 65 | 6 | - | 27 | 123 | 128 | 32 | - | - | 6 |



MODEL SPECIFICATIONS

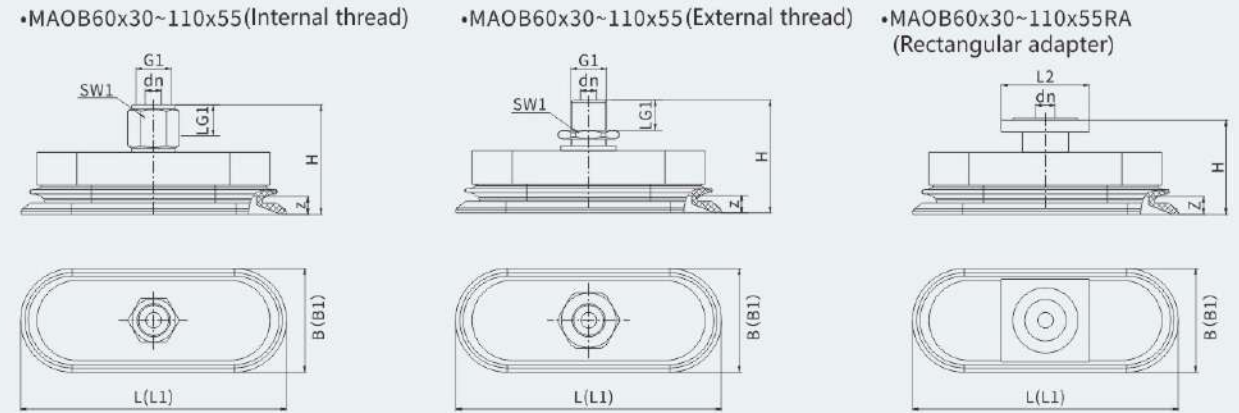
MAOB - 60x30 - NBR-45 - G1/4-AG

| ① Product Series | ② Sucker diameter | ③ Sucker hardness | ④ Connecting threads |
|-------------------------------------|--------------------------|-------------------|---|
| MAOB- Flat suction cup (oval shape) | 60x30 80x40 110x55 | NBR-45 NBR-60 | G1/4-AG G1/4-IG G3/8-IG M10x1.5-AG M14x1.5-AG RA |

PERFORMANCE PARAMETER

| Model | suction (N) | Pull-out Force (N) | lateral force (N) | Lateral force on oily surfaces (N) | Internal volume (cm ³) | Minimum curvature radius of the workpiece (mm) | Recommended hose diameter (mm) |
|------------|-------------|--------------------|-------------------|------------------------------------|------------------------------------|--|--------------------------------|
| MAOB60x30 | 38 | 55 | 57 | 52 | 9.6 | 30 | 4 |
| MAOB80x40 | 65 | 100 | 100 | 95 | 20.6 | 40 | 6 |
| MAOB110x55 | 100 | 185 | 180 | 161 | 50.8 | 50 | 6 |

SPECIFICATION AND SIZE (MM)



| Model | Size mm | B | B1 | dn | G1 | H | L | L1 | L2 | LG1 | SW1 | Z |
|---------------------|---------|----|----|----|----------|------|-----|-----|----|-----|-----|----|
| MAOB50x16G1/4-AG | | 32 | 33 | 5 | G1/4M | 27 | 62 | 63 | - | 8 | 17 | 7 |
| MAOB50x16G1/4-IG | | 32 | 33 | 6 | G1/4F | 34.5 | 62 | 63 | - | 8 | 17 | 7 |
| MAOB50x16G3/8-IG | | 32 | 33 | 6 | G3/8F | 35 | 62 | 63 | - | 9 | 22 | 7 |
| MAOB50x16M10x1.5-AG | | 32 | 33 | 4 | M10x1.5M | 27 | 62 | 63 | - | 10 | 17 | 7 |
| MAOB50x16M14x1.5-AG | | 32 | 33 | 5 | M14x1.5M | 29 | 62 | 63 | - | 10 | 22 | 7 |
| MAOB50x16RA | | 32 | 33 | 4 | - | 30 | 62 | 63 | 32 | - | - | 7 |
| MAOB60x23G1/4-AG | | 42 | 43 | 5 | G1/4M | 29.7 | 82 | 83 | - | 8 | 17 | 9 |
| MAOB60x23G1/4-IG | | 42 | 43 | 6 | G1/4F | 37.2 | 82 | 83 | - | 8 | 17 | 9 |
| MAOB60x23G3/8-IG | | 42 | 43 | 6 | G3/8F | 37.7 | 82 | 83 | - | 9 | 22 | 9 |
| MAOB60x23M10x1.5-AG | | 42 | 43 | 4 | M10x1.5M | 29.7 | 82 | 83 | - | 10 | 17 | 9 |
| MAOB60x23M14x1.5-AG | | 42 | 43 | 5 | M14x1.5M | 31.7 | 82 | 83 | - | 10 | 22 | 9 |
| MAOB60x23RA | | 42 | 43 | 4 | - | 32.7 | 82 | 83 | 32 | - | - | 9 |
| MAOB90x30G1/4-AG | | 57 | 59 | 6 | G1/4M | 35.5 | 112 | 114 | - | 8 | 17 | 13 |
| MAOB90x30G1/4-IG | | 57 | 59 | 8 | G1/4F | 43 | 112 | 114 | - | 8 | 17 | 13 |
| MAOB90x30G3/8-IG | | 57 | 59 | 8 | G3/8F | 43.5 | 112 | 114 | - | 9 | 22 | 13 |
| MAOB90x30M10x1.5-AG | | 57 | 59 | 4 | M10x1.5M | 35.5 | 112 | 114 | - | 10 | 17 | 13 |
| MAOB90x30M14x1.5-AG | | 57 | 59 | 6 | M14x1.5M | 37.5 | 112 | 114 | - | 10 | 22 | 13 |
| MAOB90x30RA | | 57 | 59 | 6 | - | 38.5 | 112 | 114 | 32 | - | - | 13 |

HXD
HOP
HNP
HNT
SCG
HXN
HGP
ZP
ZP3
ZP3E
ZP3P
ZP3P-JT2
ZP3P-JT5
MAF
MAB
MAOF
MAOB
BK

BK SERIES VACUUM SUCTION CUP



MODEL SPECIFICATIONS

BK 26 - 01M

| ① Product Series | ② Sucker diameter | ③ Connection method |
|------------------------------|------------------------|----------------------------|
| BK - Bag opening suction cup | 26 - 26mm 33 - 33mm | 01M - G1/8 External thread |

SPECIFICATION AND SIZE (MM)

