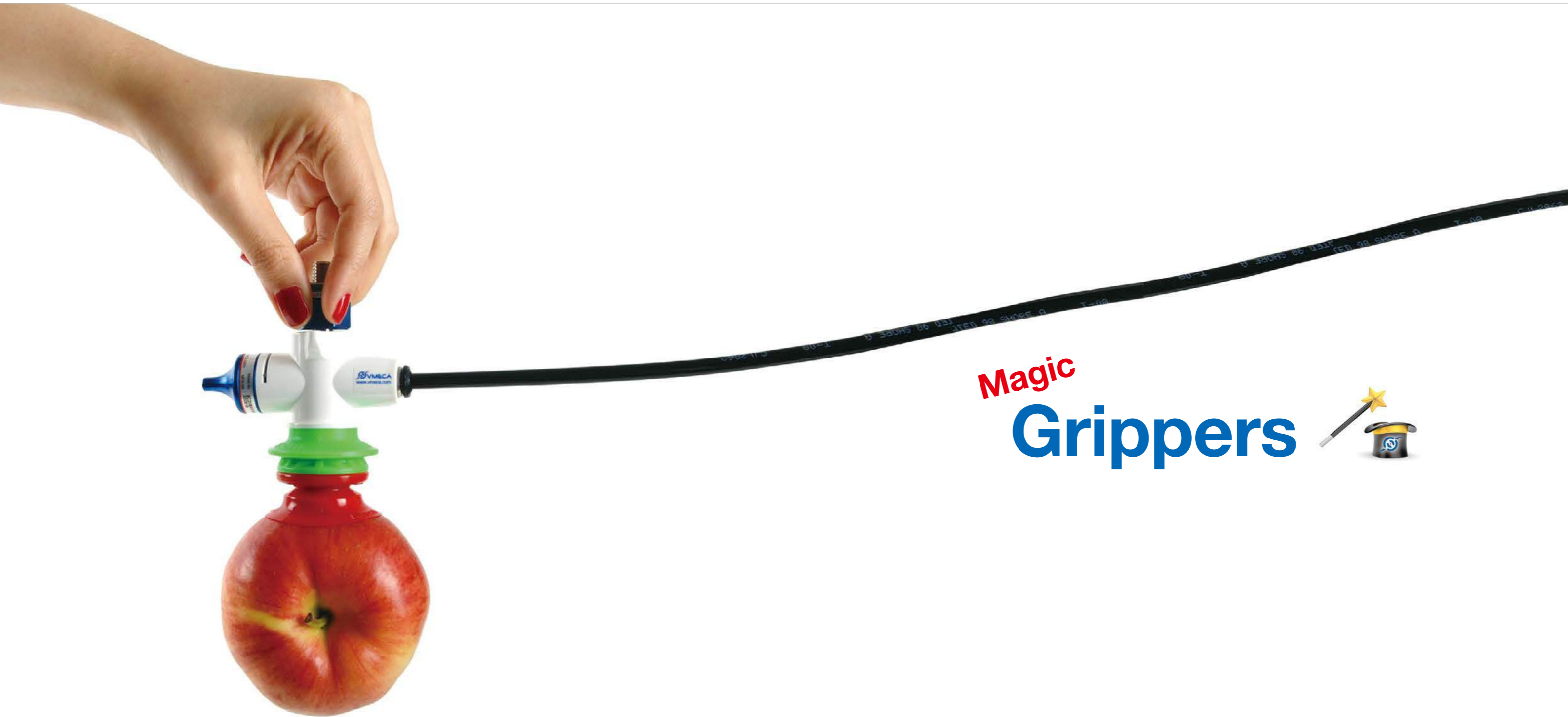




EASY, EFFICIENT, RELIABLE and COMPACT!!



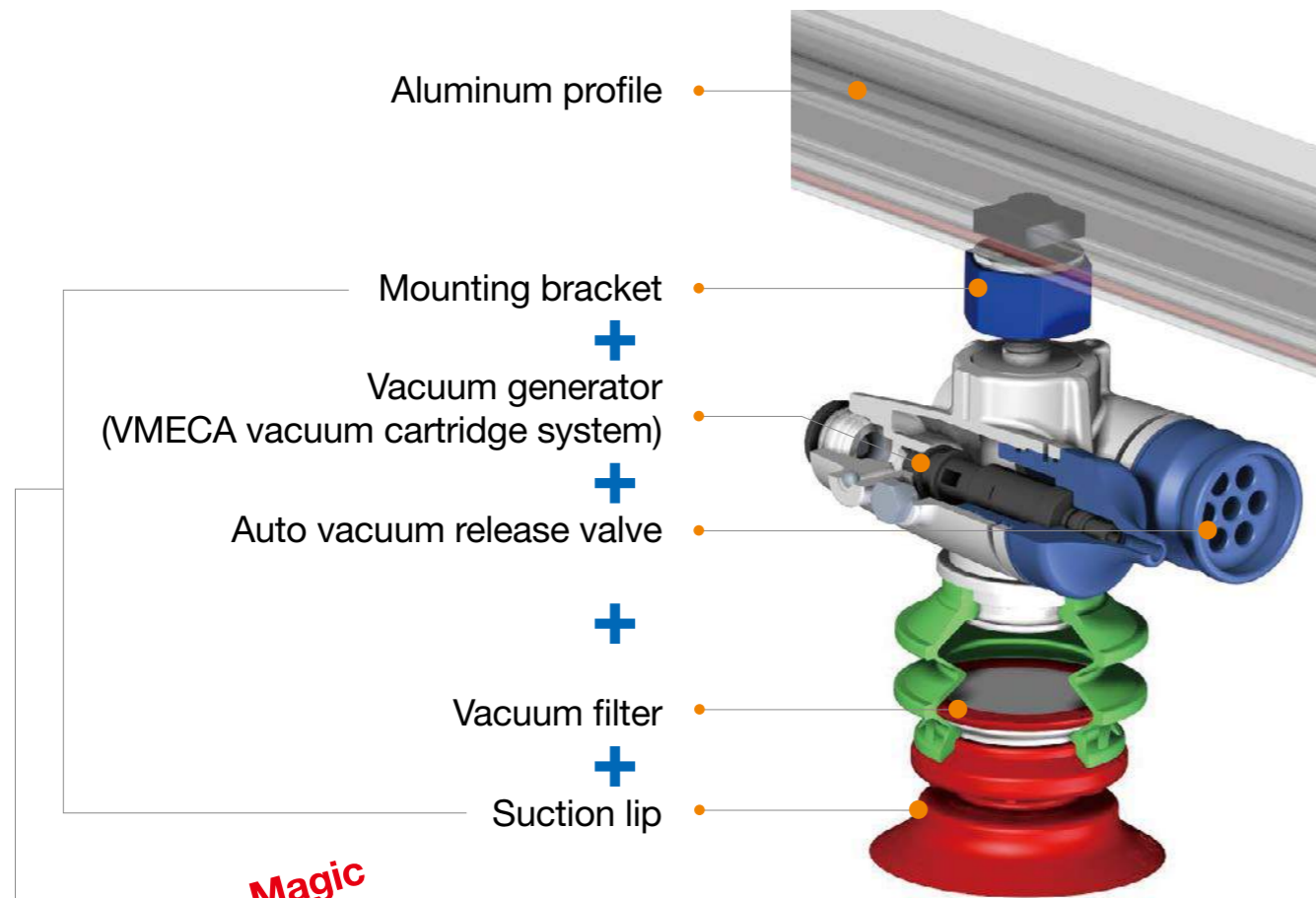
Magic
Grippers





Patent & Patent pending

What is the **Magic Gripper**?



All in **Magic Gripper**

Conventional systems

- ✓ High cost for installation and process
- ✓ Various piping & connectors needed
- ✓ High energy consumption
- ✓ Difficult installation and complicated structure
- ✓ Difficult to select suitable model without vacuum knowledge
- ✓ Not available as an individual vacuum system



Features

- ✓ Cost efficient
- ✓ Easy to build vacuum systems
- ✓ Various suction lips
- ✓ Fast response & excellent performance
- ✓ Individual vacuum systems
- ✓ 73% less energy consumption
- ✓ Custom profile options - Easy mounting
- ✓ Various flow rate options available
- ✓ VMECA multi-stage vacuum cartridge integrated



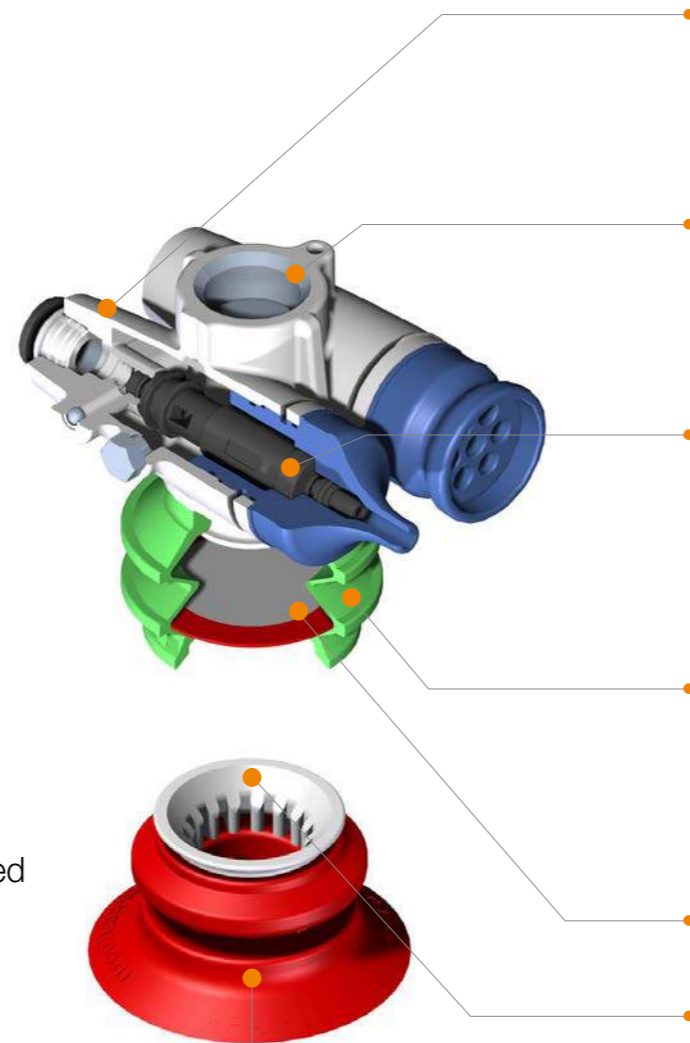


Magic Grippers

Excellent Gripping systems

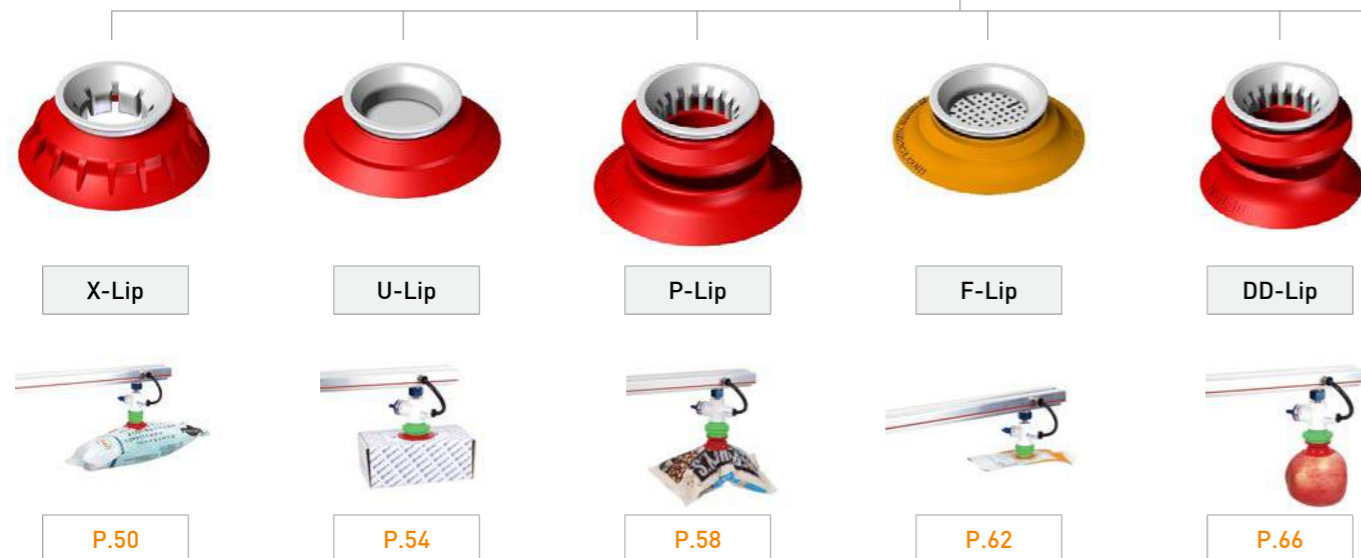
Features

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7 Suction lip
- See page 20

Various Suction Lips



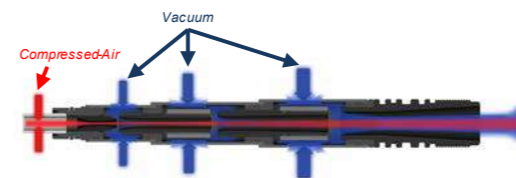
1 Type - See page 12



2 Mount options - See page 14



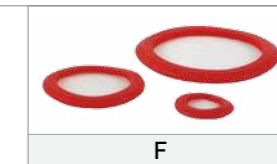
3 Cartridge - See page 16



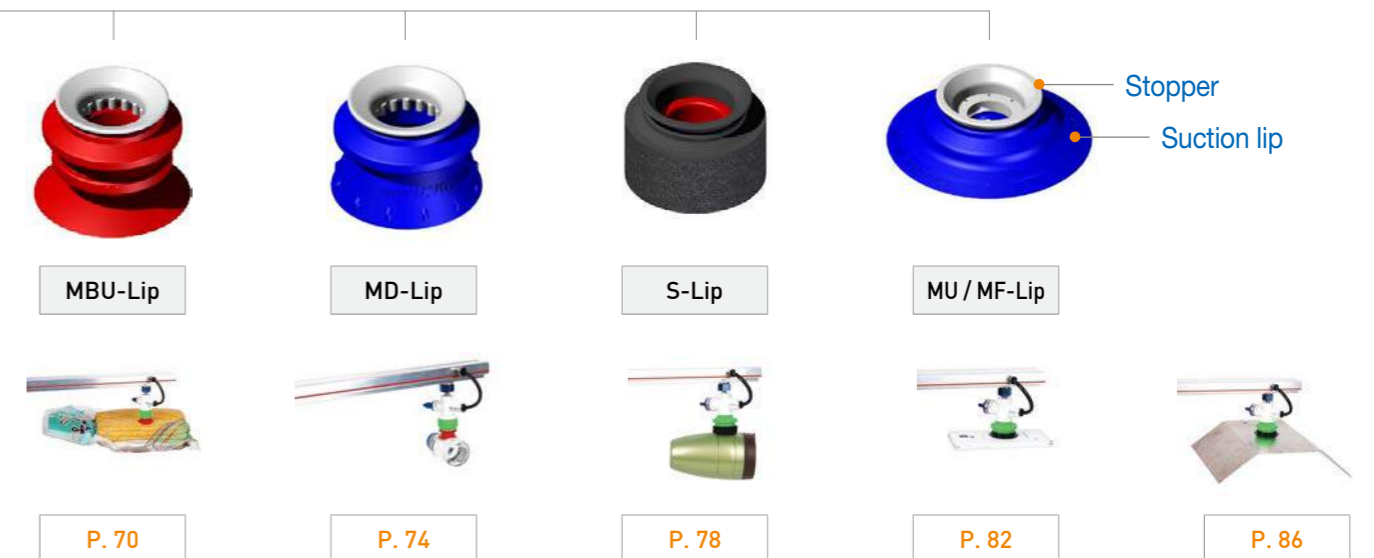
4 Top bellows options - See page 18



5 Vacuum filter - See page 18



6 Stopper options - See page 19



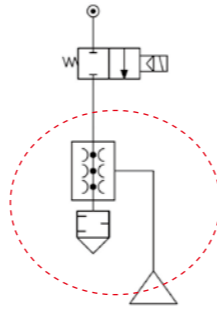


1 Vacuum Generator options

1. Single cartridge – “A-TYPE”



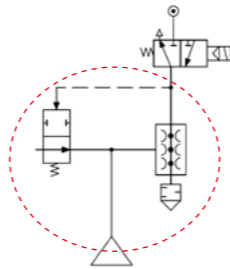
- Single cartridge



2. Single cartridge & Automatic vacuum release function – “B-TYPE”



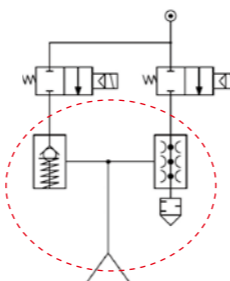
- Automatic vacuum release function is available.
- Vacuum release valve is not necessary.
- 3/2 way valve is required for air control valve.



3. Single cartridge & Check valve – “C-TYPE”



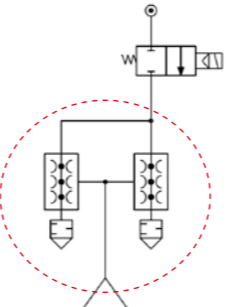
- Check valve integrated and it makes fast evacuation time.
- Vacuum release control valve is required.



4. Dual cartridges – “D-TYPE”



- Dual cartridges for large vacuum flow



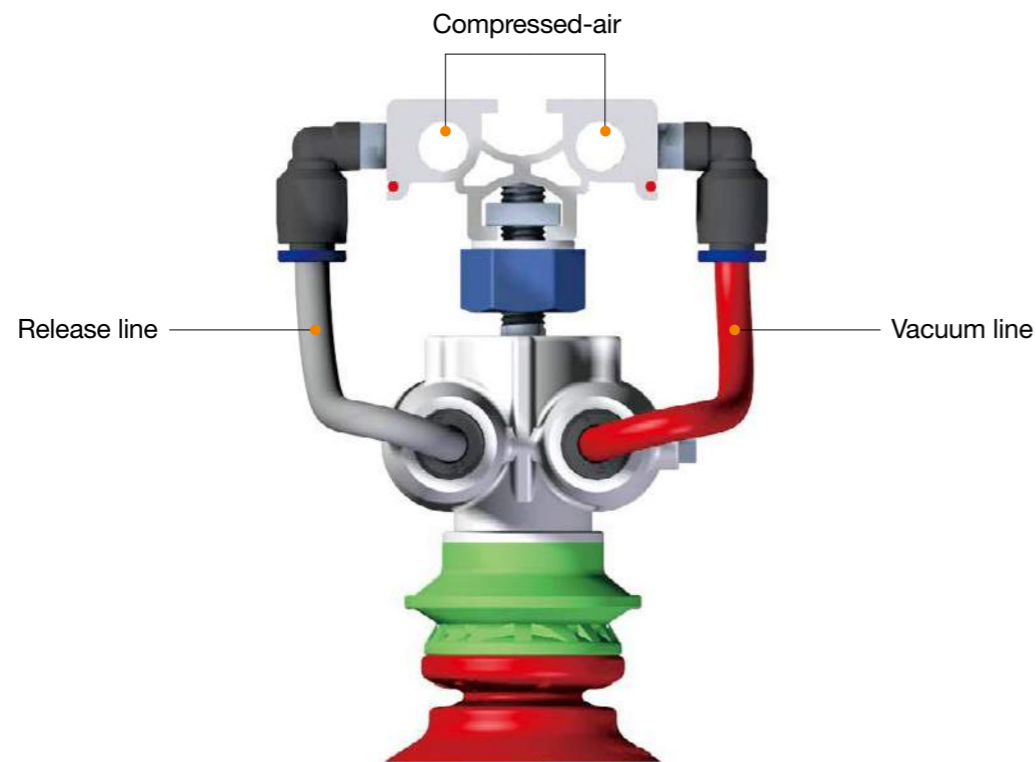
1 Magic Gripper Characteristics

| Model | Type | Product view | Symbol | Supply Air Pressure (bar) | Max. Vacuum (- kPa) | Max. Vacuum Flow (NI/m) | Air Consumption (NI/m) | Page |
|-------|------|--------------|--------|---------------------------|---------------------|-------------------------|------------------------|-------|
| MC10 | A | | MC10A | 1.1 | 48 | 9.2 | 5.9 | P. 26 |
| | | | | 1.8 | 83 | 12.3 | 8.7 | |
| | | | | 2.2 | 81 | 14 | 9.9 | |
| | B | | MC10B | 1.1 | 48 | 9.2 | 5.9 | P. 32 |
| | | | | 1.8 | 83 | 12.3 | 8.7 | |
| | | | | 2.2 | 81 | 14 | 9.9 | |
| | C | | MC10C | 1.1 | 48 | 9.2 | 5.9 | P. 38 |
| | | | | 1.8 | 83 | 12.3 | 8.7 | |
| | | | | 2.2 | 81 | 14 | 9.9 | |
| | D | | MC10D | 1.1 | 48 | 16.4 | 11.3 | P. 44 |
| | | | | 1.8 | 83 | 20.2 | 16.4 | |
| | | | | 2.2 | 81 | 23.0 | 20.3 | |
| MC20 | A | | MC20A | 2.2 | 63 | 36.8 | 21 | P. 26 |
| | | | | 3.3 | 92 | 40.5 | 27 | |
| | | | | 4.0 | 91 | 42.2 | 32 | |
| | B | | MC20B | 2.2 | 63 | 36.8 | 21 | P. 32 |
| | | | | 3.3 | 92 | 40.5 | 27 | |
| | | | | 4.0 | 91 | 42.2 | 32 | |
| | C | | MC20C | 2.2 | 63 | 36.8 | 21 | P. 38 |
| | | | | 3.3 | 92 | 40.5 | 27 | |
| | | | | 4.0 | 91 | 42.2 | 32 | |
| | D | | MC20D | 2.2 | 63 | 66.2 | 40 | P. 44 |
| | | | | 3.3 | 92 | 74 | 55 | |
| | | | | 4.0 | 91 | 75.7 | 56 | |
| MC23 | A | | MC23A | 2.2 | 63 | 62.4 | 21 | P. 26 |
| | | | | 3.3 | 91 | 80 | 27 | |
| | | | | 4.0 | 90 | 85 | 32 | |
| | B | | MC23B | 2.2 | 63 | 62.4 | 21 | P. 32 |
| | | | | 3.3 | 91 | 80 | 27 | |
| | | | | 4.0 | 90 | 85 | 32 | |
| | C | | MC23C | 2.2 | 63 | 62.4 | 21 | P. 38 |
| | | | | 3.3 | 91 | 80 | 27 | |
| | | | | 4.0 | 90 | 85 | 32 | |
| | D | | MC23D | 2.2 | 63 | 90.5 | 40.1 | P. 44 |
| | | | | 3.3 | 91 | 111.9 | 53.3 | |
| | | | | 4.0 | 90 | 139.0 | 56.2 | |
| MC25 | A | | MC25A | 4.5 | 87.5 | 109 | 65 | P. 26 |
| | | | | 5.5 | 94.5 | 113 | 77 | |
| | | | | 6.0 | 94 | 111 | 83.5 | |
| | B | | MC25B | 4.5 | 87.5 | 109 | 65 | P. 32 |
| | | | | 5.5 | 94.5 | 113 | 77 | |
| | | | | 6.0 | 94 | 111 | 83.5 | |
| | C | | MC25C | 4.5 | 87.5 | 109 | 65 | P. 38 |
| | | | | 5.5 | 94.5 | 113 | 77 | |
| | | | | 6.0 | 94 | 111 | 83.5 | |

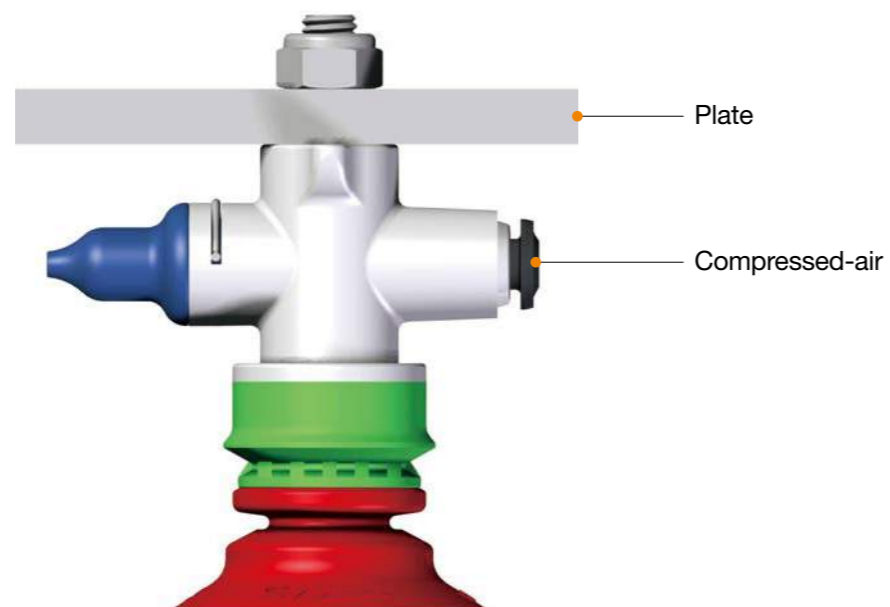


2 Mounting options

1. Aluminum profile mount



2. Direct mount



Applications

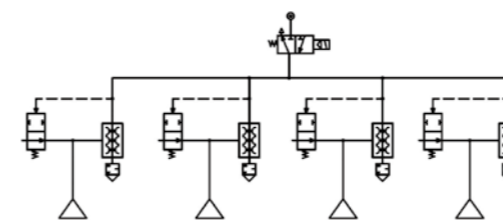
— Compressed air (Vacuum on)
— Vacuum release (Vacuum off)



B-type Grippers on aluminum profile



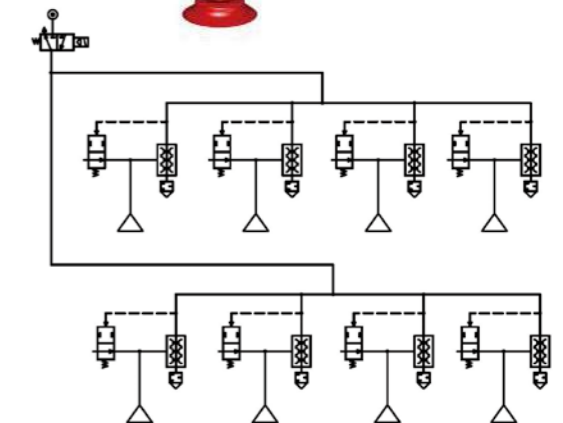
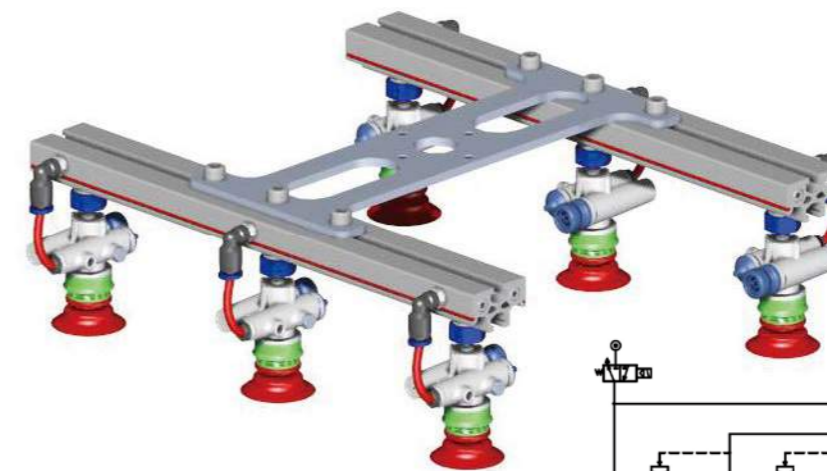
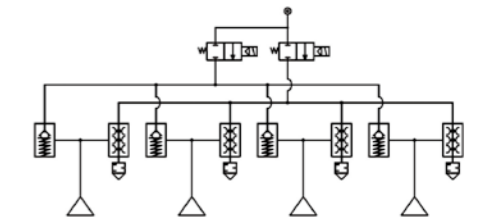
- Auto vacuum release function integrated
- Vacuum release valve is not required



C-type Grippers on aluminum profile



- Check valve integrated at vacuum release port for fast evacuation time
- Air control valve for vacuum release is required



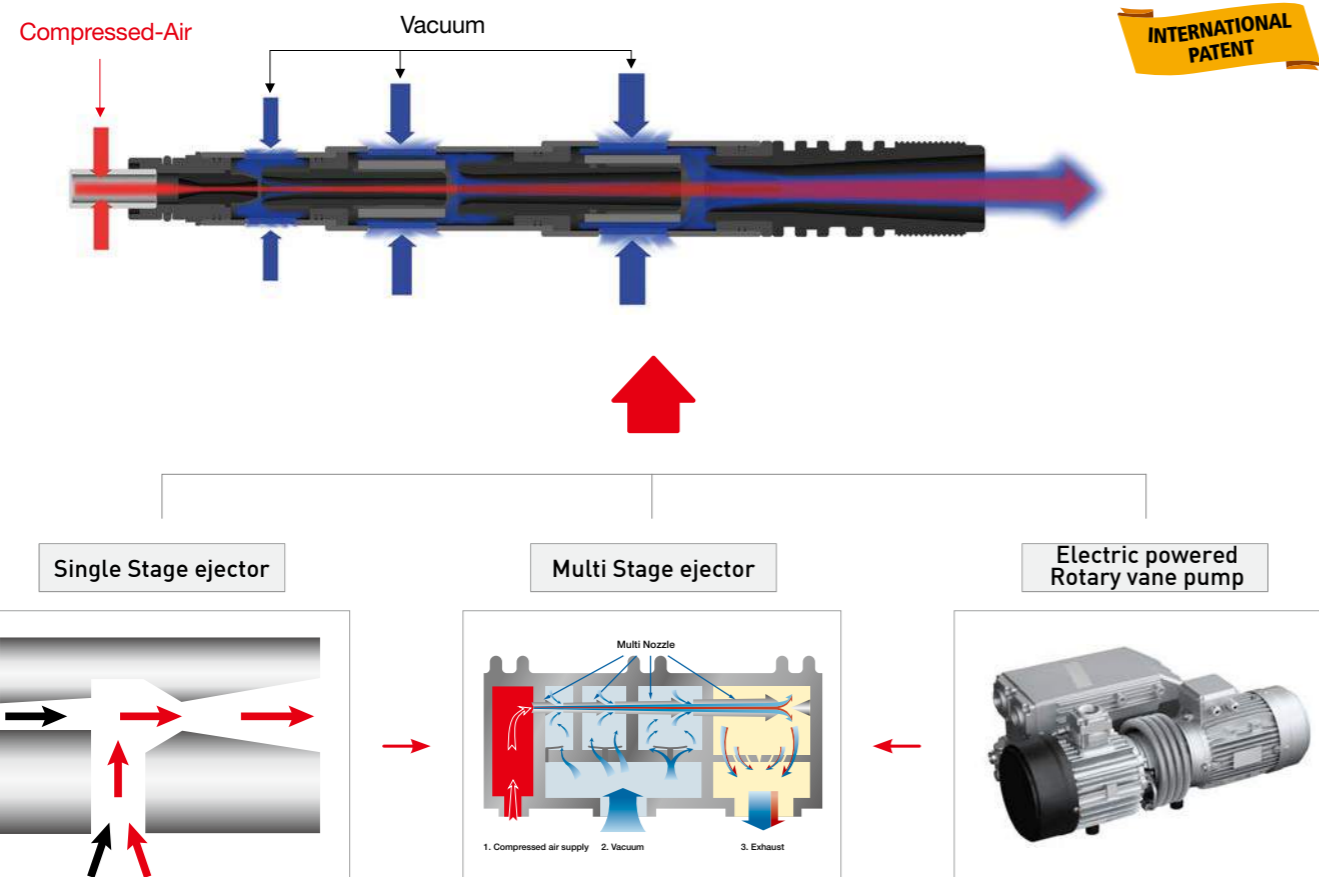


3 Integrated with Innovative VMECA Vacuum cartridge systems

- ✓ Low energy consumption
- ✓ Excellent performance
 - High vacuum flow and vacuum level
- ✓ Stable performance despite fluctuation or dropping compressed air pressure
- ✓ Easy installation
- ✓ Long lifetime

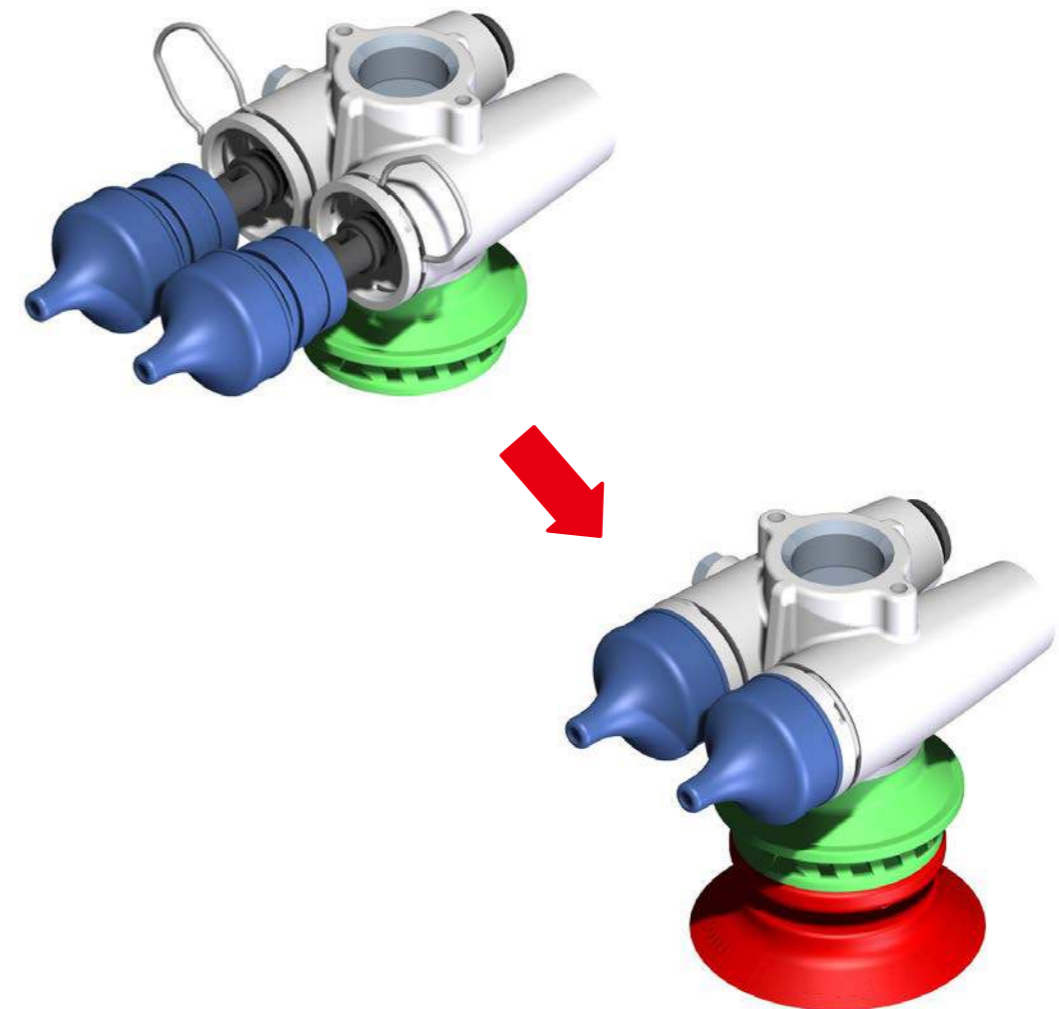


73% less energy consumption & **3 times higher** vacuum flow



Compact and Light weight

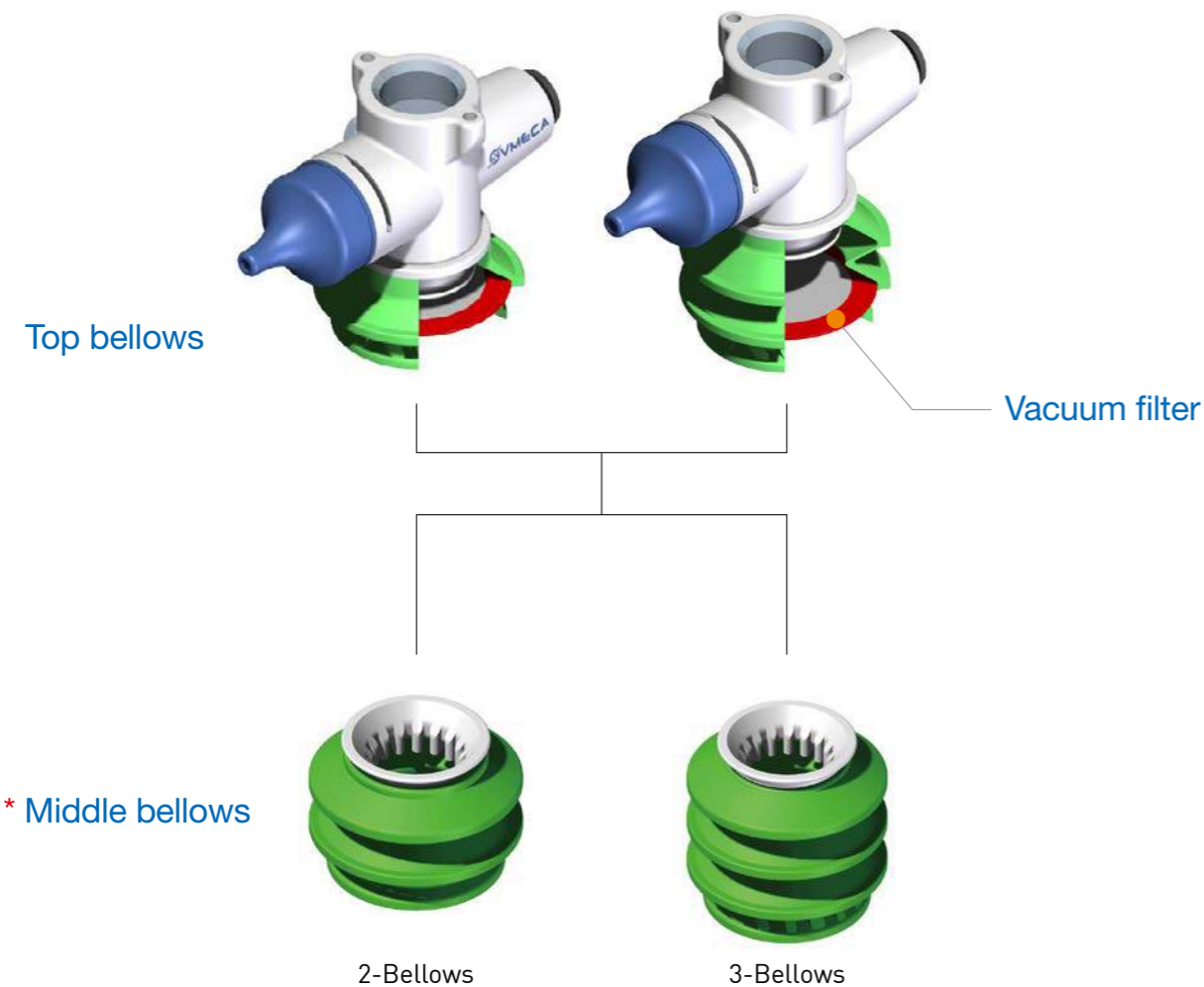
70% more energy saving & **40%** less weight





4 Top & Middle bellows / 5 Vacuum filter

- ✓ Easy to connect with suction lips
- ✓ Several bellows folds options available
- ✓ Compensating different height
- ✓ Long lifetime
- ✓ Vacuum filter integrated (Optional)



* Middle bellows









* See page 50-89 for more information.



6 Stoppers

| Stopper A | Stopper B |
|--|--|
| | |
| <ul style="list-style-type: none"> • Recommended with X suction lip • Suitable for thin and light plastic bags | <ul style="list-style-type: none"> • Recommended with X, U & F suction lip • Suitable for plastic bags, flexible objects • Minimized mark for plastic bags |
| Stopper C | Stopper D |
| | |
| <ul style="list-style-type: none"> • Recommended with X, U & F suction lip • Vacuum filter (PE) integrated • No mark for film, aluminum foil, and thin sheets | <ul style="list-style-type: none"> • Recommended with X, U, F, P, MBU, DD & MD suction lip • Use for connecting each bellows cartridge • Suitable for flat and thin objects |
| Stopper F | Stopper G |
| | |
| <ul style="list-style-type: none"> • Recommended with S suction lip • Sponge suction lip | <ul style="list-style-type: none"> • Recommended with MU & MF suction lip • Stopper is not visible when used with suction lip "MU" and "MF" type |



7 Suction lips

| "X" suction lip | "U" suction lip |
|--|---|
|  |  |
| <ul style="list-style-type: none"> • X suction lip is excellent in handing thin and light plastic bag applications • Ice cream bags, Aluminum foil | <ul style="list-style-type: none"> • U suction lip is excellent in handing flat and slightly curved object applications • Carton boxes, Flat objects |
|  |  |
| "F" suction lip | "P" suction lip |
|  |  |
| <ul style="list-style-type: none"> • F suction lip is excellent in handing flat object applications • Thin boxes, Wooden panel | <ul style="list-style-type: none"> • P suction lip is excellent for handling heavy or thick plastic bag applications • Liquid filled plastic bags, Powder filled plastic bags |
|  |  |

| "DD" suction lip | "MBU" suction lip |
|--|---|
|  |  |
| <ul style="list-style-type: none"> • DD suction lip is excellent for irregular curved surface, rough surface, and dual lip design offers a safety factor against suction lip wear and tear. | <ul style="list-style-type: none"> • MBU suction lip is excellent in compensating the height difference for curved objects |
|  |  |
| "MD" suction lip | "S" suction lip |
|  |  |
| <ul style="list-style-type: none"> • MD suction lip is suitable for curved or uneven surface with excellent performance for rounded corners and edges | <ul style="list-style-type: none"> • S suction lip is excellent in handling uneven surface and porous material |
|  |  |



Applications

| "MU" suction lip | "MF" suction lip |
|---|--|
| | |
| <ul style="list-style-type: none"> • MU suction lip offers great gripping force for flat and stable surfaces • Metal sheets, Carton boxes, Glass, Veneer sheets | <ul style="list-style-type: none"> • MF suction lip offers great gripping force for both horizontal and vertical applications |
| | |



"P" suction lip



"DD" suction lip



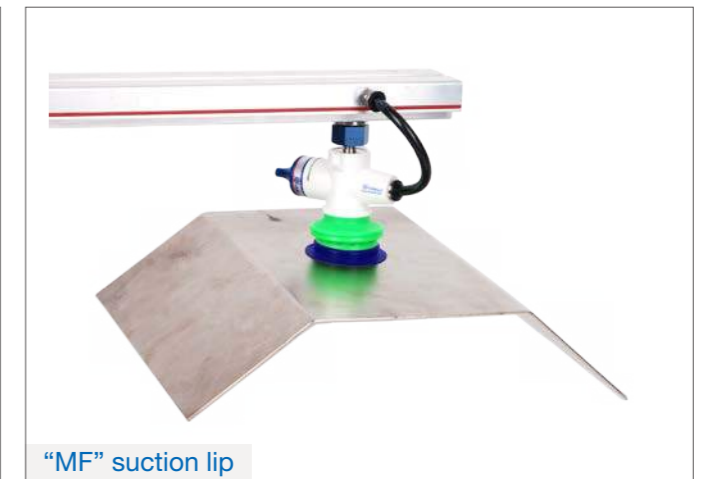
"X" suction lip



"MD" suction lip



"S" suction lip



"MF" suction lip



Build an Ordering No.



① Base pump

| Symbol | Description |
|--------|--------------------------------|
| MC10 | Micro cartridge 2-Stage |
| MC20 | Mini cartridge 2-Stage |
| MC23 | Mini cartridge 3-Stage |
| MC25 | Mini premium cartridge 2-Stage |

② Body type

| Symbol | Description |
|--------|--|
| A | Single vacuum cartridge (Page 26.) |
| B | Single vacuum cartridge, Automatic vacuum release (Page 32.) |
| C | Single vacuum cartridge, Check valve (Page 38.) |
| D | Dual vacuum cartridge (Page 44.) |

③ Mounting

| Symbol | Description |
|--------|------------------------|
| X | No mount |
| M | Direct mount |
| P | Aluminum profile mount |

④ Sealing

| Symbol | Description |
|--------|-------------|
| N | NBR |
| E | EPDM |
| V | Viton |

⑤ Top bellows

| Symbol | Description |
|--------|---|
| 1B20 | Top bellows 1 fold, 20mm: Available pump: MC10 |
| 1B40 | Top bellows 1fold, 40mm: Available pump: MC10, MC20 and MC25 |
| 1B60 | Top bellows 1 fold, 60mm: Available pump: MC20 and MC25 |
| 2B20 | Top bellows 2 folds, 20mm: Available pump: MC10 |
| 2B40 | Top bellows 2 folds, 40mm: Available pump: MC10, MC20 and MC25 |
| 2B60 | Top bellows 2folds, 60mm: Available pump: MC20 and MC25 |

⑥ Vacuum filter

| Symbol | Description |
|--------|-------------------|
| X | No filter |
| F | Filter (200 mesh) |

⑦ Suction lip

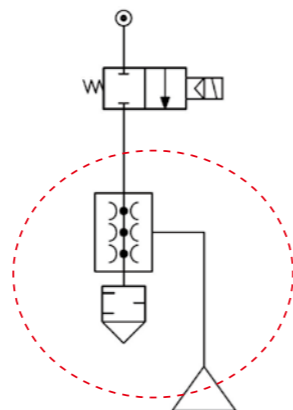
| Symbol | Description | Bellows size | | | Suction lip material | | Stopper | | | |
|--------|---|--------------|------|------|----------------------|------------------------------------|------------------|---|---|--------|
| | | 20mm | 40mm | 60mm | Symbol | Material | Symbol | Description | | |
| X25 | "X" suction lip, 25mm dia. | ○ | | | N6 | NBR (Nitrile) | A B C D | A type B type C type D type | | |
| X30 | "X" suction lip, 30mm dia. | ○ | | | S3 | Silicone, 30° hardness | | | | |
| X45 | "X" suction lip, 45mm dia. | | ○ | | S5 | Silicone, 50° hardness | | | | |
| X55 | "X" suction lip, 55mm dia. | | ○ | | W3 | White Silicone, 30° hardness | | | | |
| X65 | "X" suction lip, 65mm dia. | | | ○ | W5 | White Silicone, 50° hardness | | | | |
| X75 | "X" suction lip, 75mm dia. | | | ○ | W3(FDA) | White Silicone, 30° hardness (FDA) | | | | |
| | | | | | W5(FDA) | White Silicone, 50° hardness (FDA) | | | | |
| U25 | "U" suction lip, 25mm dia. | ○ | | | U6 | Urethane | B C D | B type C type D type | | |
| U30 | "U" suction lip, 30mm dia. | ○ | | | PU | Polyurethane | | | | |
| U45 | "U" suction lip, 45mm dia. | | ○ | | N6 | NBR (Nitrile) | | | | |
| U55 | "U" suction lip, 55mm dia. | | ○ | | S3 | Silicone, 30° hardness | | | | |
| U65 | "U" suction lip, 65mm dia. | | | ○ | S5 | Silicone, 50° hardness | | | | |
| U75 | "U" suction lip, 75mm dia. | | | ○ | W3 | White Silicone, 30° hardness | | | | |
| | | | | | W5 | White Silicone, 50° hardness | | | | |
| P15 | "P" suction lip, 15mm dia. | ○ | | | W3(FDA) | White Silicone, 30° hardness (FDA) | D | D type | | |
| P17 | "P" suction lip, 17mm dia. | ○ | | | W5(FDA) | White Silicone, 50° hardness (FDA) | | | | |
| P20 | "P" suction lip, 20mm dia. | ○ | | | U6 | Urethane | | | | |
| P27 | "P" suction lip, 27mm dia. | ○ | | | N6 | NBR (Nitrile) | | | | |
| P32 | "P" suction lip, 32mm dia. | ○ | | | S3 | Silicone, 30° hardness | | | | |
| P48 | "P" suction lip, 48mm dia. | | ○ | | S5 | Silicone, 50° hardness | | | | |
| P60 | "P" suction lip, 60mm dia. | | ○ | | W3 | White Silicone, 30° hardness | | | | |
| P72 | "P" suction lip, 72mm dia. | | | ○ | W5 | White Silicone, 50° hardness | | | | |
| P85 | "P" suction lip, 85mm dia. | | | ○ | W3(FDA) | White Silicone, 30° hardness (FDA) | B C D | B type C type D type | | |
| F25 | "F" suction lip, 25mm dia. | ○ | | | W5(FDA) | White Silicone, 50° hardness (FDA) | | | | |
| F30 | "F" suction lip, 30mm dia. | ○ | | | U6 | Urethane | | | | |
| F45 | "F" suction lip, 45mm dia. | | ○ | | PU | Polyurethane | | | | |
| F55 | "F" suction lip, 55mm dia. | | ○ | | N6 | NBR (Nitrile) | | | | |
| DD4030 | "DD" suction lip, inner lip 30mm dia, outer lip 41mm dia. | | ○ | | S3 | Silicone, 30° hardness | | | D | D type |
| MBU17 | "MBU" suction lip, 17mm dia. | ○ | | | S5 | Silicone, 50° hardness | | | | |
| MBU23 | "MBU" suction lip, 23mm dia. | ○ | | | W3 | White Silicone, 30° hardness | | | | |
| MBU27 | "MBU" suction lip, 27mm dia. | ○ | | | W5 | White Silicone, 50° hardness | | | | |
| MD22 | "MD" suction lip, 22mm dia. | ○ | | | W3(FDA) | White Silicone, 30° hardness (FDA) | | | | |
| S30 | "S" suction lip, 30mm dia. | ○ | | | W5(FDA) | White Silicone, 50° hardness (FDA) | | | | |
| S50 | "S" suction lip, 50mm dia. | | ○ | | U6 | Urethane | | | | |
| S60 | "S" suction lip, 60mm dia. | | | ○ | E | Sponge lip EPDM | F | F type: Only for S suction lip | | |
| MU45 | "MU" suction lip, 45mm dia. | | ○ | | N6 | NBR (Nitrile) | G | G type: Only for MU & MF suction lip | | |
| MU55 | "MU" suction lip, 55mm dia. | | ○ | | S3 | Silicone, 30° hardness | | | | |
| MU65 | "MU" suction lip, 65mm dia. | | | ○ | S5 | Silicone, 50° hardness | | | | |
| MU75 | "MU" suction lip, 75mm dia. | | | ○ | W3 | White Silicone, 30° hardness | | | | |
| MU80 | "MU" suction lip, 80mm dia. | | | ○ | W5 | White Silicone, 50° hardness | | | | |
| MF45 | "MF" suction lip, 45mm dia. | | ○ | | W3(FDA) | White Silicone, 30° hardness (FDA) | | | | |
| MF55 | "MF" suction lip, 55mm dia. | | ○ | | W5(FDA) | White Silicone, 50° hardness (FDA) | | | | |
| MF65 | "MF" suction lip, 65mm dia. | | | ○ | U6 | Urethane | G | G type: Only for MU & MF suction lip | | |
| MF75 | "MF" suction lip, 75mm dia. | | | ○ | N6 | NBR (Nitrile) | | | | |
| MF80 | "MF" suction lip, 80mm dia. | | | ○ | S3 | Silicone, 30° hardness | | | | |
| | | | | | S5 | Silicone, 50° hardness | | | | |



A-type

Features

- ✓ VMECA cartridge integrated
 - Reliable performance despite inconsistent compressed air pressure
- ✓ Extremely compact and light weight
- ✓ Low air consumption
- ✓ Various mounting options
- ✓ Excellent gripping power
- ✓ Various suction lips for different applications



Vacuum Flow

| Model | Max. vacuum (-kPa) | Feed Pressure (bar) | Air Consumption (N/min) | Vacuum flow (NI/min) at different vacuum levels (-kPa) | | | | | | | | | |
|-------|--------------------|---------------------|-------------------------|--|-------|------|------|------|------|------|------|------|-----|
| | | | | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 |
| MC10A | 48 | 1.1 | 5.9 | 9.2 | 5.7 | 2.1 | 1.4 | 0.6 | - | - | - | - | - |
| | 83 | 1.8 | 8.7 | 12.3 | 7.5 | 3.2 | 2.5 | 2.0 | 1.5 | 0.8 | 0.3 | - | - |
| | 81 | 2.2 | 9.9 | 14.0 | 9.4 | 5.0 | 2.5 | 2.0 | 1.3 | 0.6 | 0.2 | - | - |
| MC20A | 63 | 2.2 | 21 | 36.8 | 27 | 17.8 | 16.8 | 12.7 | 7.6 | 2.0 | - | - | - |
| | 92 | 3.3 | 27 | 40.5 | 33.6 | 23.7 | 16.5 | 13.8 | 11.9 | 7.8 | 3.8 | 2.3 | - |
| | 91 | 4.0 | 32 | 42.2 | 40.2 | 26.5 | 19.3 | 14.3 | 11.6 | 8.8 | 5.8 | 2.6 | - |
| MC23A | 63 | 2.2 | 21 | 62.4 | 32.7 | 18.5 | 16.7 | 12.4 | 6.4 | 0.7 | - | - | - |
| | 91 | 3.3 | 27 | 80 | 40 | 26.6 | 17 | 14.8 | 13 | 10.5 | 7.3 | 4.0 | - |
| | 90 | 4.0 | 32 | 85 | 49.5 | 34.4 | 22 | 16.5 | 13 | 10.5 | 7.5 | 3.0 | - |
| MC25A | 87.5 | 4.5 | 65 | 134.0 | 106.0 | 58.0 | 42.0 | 36.0 | 28.0 | 22.0 | 17.0 | 12.6 | - |
| | 94.5 | 5.5 | 77 | 141.0 | 109.0 | 71.0 | 51.0 | 32.0 | 26.0 | 22.0 | 17.5 | 11.0 | 2.8 |
| | 94 | 6.0 | 83.5 | 146.0 | 108.0 | 75.0 | 60.0 | 42.0 | 25.0 | 21.0 | 16.0 | 9.6 | 2.3 |

Specifications

| Description | MC10A | MC20A | MC23A | MC25A |
|--------------------|-------------|-------------|-------------|-------------|
| Max. Vacuum level | -83 kPa | -92 kPa | -91 kPa | -94.5 kPa |
| Open Vacuum flow | 14.0 NI/min | 42.2 NI/min | 85.0 NI/min | 146 NI/min |
| Max. Feed pressure | 4 Bar | 7 Bar | 7 Bar | 7 Bar |
| Temperature | -20 ~ 80 °C | -20 ~ 80 °C | -20 ~ 80 °C | -20 ~ 80 °C |
| Noise level | 44~53 dBA | 51 ~ 60 dBA | 58 ~ 68 dBA | 67 ~ 71 dBA |
| Weight | 17.4 g | 25.5 g | 60.0 g | 81.5 g |

* Weight is calculated without top bellows and suction lip.

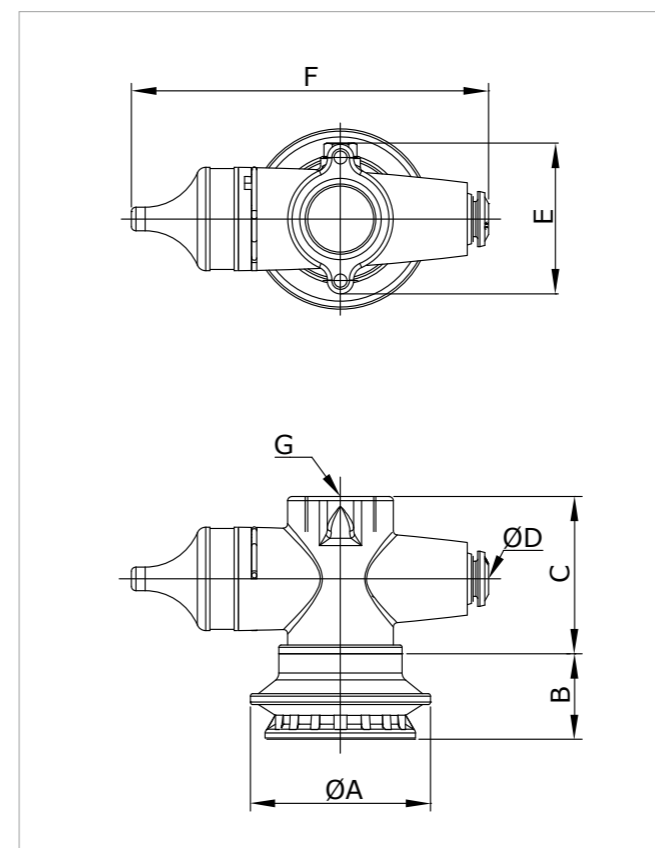


Evacuation time

| Model | Max. vacuum (-kPa) | Feed Pressure (bar) | Evacuation time (sec) at different vacuum levels (-kPa) | | | | | | | | |
|---------------|--------------------|---------------------|---|------|------|------|------|------|------|------|------|
| | | | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 |
| MC10AX-N1B20X | 48 | 1.1 | 0.12 | 0.15 | 0.18 | 0.22 | 0.31 | - | - | - | - |
| | 83 | 1.8 | 0.09 | 0.11 | 0.13 | 0.16 | 0.20 | 0.27 | 0.42 | 0.86 | - |
| | 81 | 2.2 | 0.08 | 0.10 | 0.13 | 0.16 | 0.20 | 0.28 | 0.45 | 1.04 | - |
| MC10AX-N2B20X | 48 | 1.1 | 0.13 | 0.16 | 0.20 | 0.26 | 0.33 | - | - | - | - |
| | 83 | 1.8 | 0.10 | 0.12 | 0.15 | 0.18 | 0.23 | 0.29 | 0.44 | 0.89 | - |
| | 81 | 2.2 | 0.09 | 0.11 | 0.14 | 0.17 | 0.22 | 0.30 | 0.47 | 1.10 | - |
| MC10AX-N1B40X | 48 | 1.1 | 0.15 | 0.22 | 0.28 | 0.37 | 0.47 | - | - | - | - |
| | 83 | 1.8 | 0.12 | 0.16 | 0.21 | 0.28 | 0.33 | 0.41 | 0.59 | 1.13 | - |
| | 81 | 2.2 | 0.10 | 0.14 | 0.19 | 0.26 | 0.32 | 0.42 | 0.62 | 1.30 | - |
| MC10AX-N2B40X | 48 | 1.1 | 0.16 | 0.23 | 0.32 | 0.45 | 0.60 | - | - | - | - |
| | 83 | 1.8 | 0.13 | 0.17 | 0.25 | 0.33 | 0.41 | 0.53 | 0.80 | 1.55 | - |
| | 81 | 2.2 | 0.11 | 0.16 | 0.22 | 0.32 | 0.40 | 0.54 | 0.85 | 1.70 | - |
| MC20AX-N1B40X | 63 | 2.2 | 0.07 | 0.09 | 0.11 | 0.13 | 0.15 | 0.20 | - | - | - |
| | 92 | 3.3 | 0.07 | 0.09 | 0.10 | 0.12 | 0.14 | 0.16 | 0.20 | 0.26 | - |
| | 91 | 4.0 | 0.07 | 0.08 | 0.10 | 0.11 | 0.13 | 0.15 | 0.19 | 0.25 | - |
| MC20AX-N2B40X | 63 | 2.2 | 0.08 | 0.10 | 0.13 | 0.15 | 0.18 | 0.23 | - | - | - |
| | 92 | 3.3 | 0.07 | 0.09 | 0.12 | 0.13 | 0.15 | 0.18 | 0.24 | 0.33 | - |
| | 91 | 4.0 | 0.07 | 0.09 | 0.11 | 0.12 | 0.15 | 0.18 | 0.22 | 0.29 | - |
| MC20AX-N1B60X | 63 | 2.2 | 0.10 | 0.16 | 0.18 | 0.20 | 0.23 | 0.28 | - | - | - |
| | 92 | 3.3 | 0.09 | 0.12 | 0.15 | 0.17 | 0.20 | 0.24 | 0.29 | 0.42 | - |
| | 91 | 4.0 | 0.09 | 0.12 | 0.14 | 0.16 | 0.19 | 0.22 | 0.28 | 0.38 | - |
| MC20AX-N2B60X | 63 | 2.2 | 0.12 | 0.17 | 0.20 | 0.23 | 0.27 | 0.36 | - | - | - |
| | 92 | 3.3 | 0.11 | 0.15 | 0.17 | 0.19 | 0.23 | 0.27 | 0.33 | 0.46 | - |
| | 91 | 4.0 | 0.10 | 0.13 | 0.16 | 0.18 | 0.22 | 0.26 | 0.31 | 0.43 | - |
| MC23AX-N1B40X | 63 | 2.2 | 0.08 | 0.09 | 0.11 | 0.12 | 0.15 | 0.20 | - | - | - |
| | 91 | 3.3 | 0.07 | 0.08 | 0.10 | 0.11 | 0.13 | 0.14 | 0.17 | 0.22 | - |
| | 90 | 4.0 | 0.08 | 0.08 | 0.10 | 0.11 | 0.13 | 0.15 | 0.17 | 0.22 | - |
| MC23AX-N2B40X | 63 | 2.2 | 0.08 | 0.10 | 0.12 | 0.14 | 0.17 | 0.25 | - | - | - |
| | 91 | 3.3 | 0.07 | 0.09 | 0.11 | 0.12 | 0.14 | 0.17 | 0.20 | 0.24 | - |
| | 90 | 4.0 | 0.07 | 0.08 | 0.10 | 0.11 | 0.13 | 0.17 | 0.19 | 0.24 | - |
| MC23AX-N1B60X | 63 | 2.2 | 0.08 | 0.12 | 0.14 | 0.16 | 0.18 | 0.22 | - | - | - |
| | 91 | 3.3 | 0.08 | 0.09 | 0.11 | 0.12 | 0.15 | 0.17 | 0.20 | 0.26 | - |
| | 90 | 4.0 | 0.08 | 0.10 | 0.11 | 0.13 | 0.15 | 0.17 | 0.21 | 0.26 | - |
| MC23AX-N2B60X | 63 | 2.2 | 0.10 | 0.14 | 0.17 | 0.20 | 0.23 | 0.28 | - | - | - |
| | 91 | 3.3 | 0.09 | 0.11 | 0.15 | 0.16 | 0.19 | 0.22 | 0.26 | 0.32 | - |
| | 90 | 4.0 | 0.09 | 0.11 | 0.13 | 0.15 | 0.17 | 0.21 | 0.25 | 0.32 | - |
| MC25AX-N1B40X | 87.5 | 4.5 | 0.06 | 0.08 | 0.08 | 0.09 | 0.10 | 0.12 | 0.12 | 0.15 | - |
| | 94.5 | 5.5 | 0.06 | 0.08 | 0.08 | 0.09 | 0.10 | 0.11 | 0.12 | 0.14 | 0.18 |
| | 94 | 6.0 | 0.06 | 0.08 | 0.08 | 0.09 | 0.10 | 0.11 | 0.12 | 0.14 | 0.19 |
| MC25AX-N2B40X | 87.5 | 4.5 | 0.06 | 0.08 | 0.09 | 0.10 | 0.11 | 0.12 | 0.13 | 0.16 | - |
| | 94.5 | 5.5 | 0.06 | 0.07 | 0.09 | 0.09 | 0.10 | 0.11 | 0.13 | 0.15 | 0.19 |
| | 94 | 6.0 | 0.06 | 0.08 | 0.09 | 0.09 | 0.10 | 0.11 | 0.13 | 0.15 | 0.20 |
| MC25AX-N1B60X | 87.5 | 4.5 | 0.07 | 0.09 | 0.10 | 0.11 | 0.12 | 0.13 | 0.14 | 0.18 | - |
| | 94.5 | 5.5 | 0.07 | 0.08 | 0.09 | 0.10 | 0.11 | 0.12 | 0.14 | 0.16 | 0.22 |
| | 94 | 6.0 | 0.07 | 0.08 | 0.09 | 0.10 | 0.11 | 0.12 | 0.14 | 0.16 | 0.23 |
| MC25AX-N2B60X | 87.5 | 4.5 | 0.08 | 0.10 | 0.11 | 0.12 | 0.14 | 0.15 | 0.17 | 0.20 | - |
| | 94.5 | 5.5 | 0.08 | 0.09 | 0.10 | 0.11 | 0.13 | 0.14 | 0.15 | 0.19 | 0.27 |
| | 94 | 6.0 | 0.08 | 0.09 | 0.11 | 0.11 | 0.13 | 0.14 | 0.16 | 0.19 | 0.28 |

Dimensional Data

MC10A / MC20A / MC23A / MC25A (Without mounting option)



[Unit : mm]

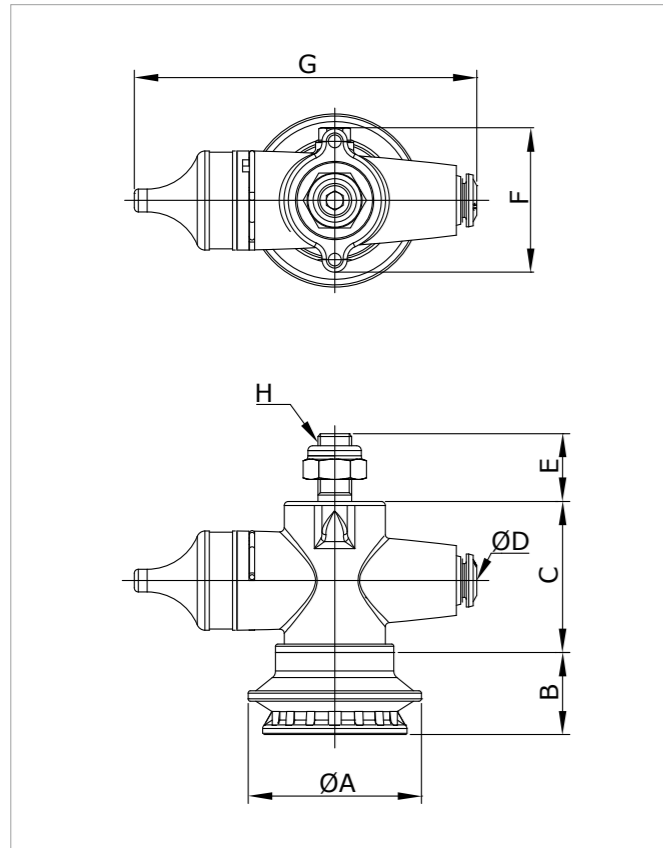
※ Male thread on section "G" not available longer than 7mm

| Model | ØA | B | C | ØD | E | F | G |
|---------------|----|------|------|----|------|-------|-----------------|
| MC10AX-N1B20F | 23 | 11.5 | 25.7 | 4 | 23.5 | 53.3 | M10xP1.0 / DP 8 |
| MC10AX-N1B40F | 41 | 21.4 | 25.7 | 4 | 23.5 | 53.3 | M10xP1.0 / DP 8 |
| MC10AX-N2B20F | 23 | 19.5 | 25.7 | 4 | 23.5 | 53.3 | M10xP1.0 / DP 8 |
| MC10AX-N2B40F | 41 | 31.4 | 25.7 | 4 | 23.5 | 53.3 | M10xP1.0 / DP 8 |
| MC20AX-N1B40F | 41 | 21.4 | 35.8 | 6 | 34.3 | 81.2 | M16xP1.0 / DP 8 |
| MC20AX-N1B60F | 56 | 30.4 | 35.8 | 6 | 34.3 | 81.2 | M16xP1.0 / DP 8 |
| MC20AX-N2B40F | 41 | 31.4 | 35.8 | 6 | 34.3 | 81.2 | M16xP1.0 / DP 8 |
| MC20AX-N2B60F | 56 | 44.8 | 35.8 | 6 | 34.3 | 81.2 | M16xP1.0 / DP 8 |
| MC23AX-N1B40F | 41 | 21.4 | 35.8 | 6 | 34.3 | 105.5 | M16xP1.0 / DP 8 |
| MC23AX-N1B60F | 56 | 30.4 | 35.8 | 6 | 34.3 | 105.5 | M16xP1.0 / DP 8 |
| MC23AX-N2B40F | 41 | 31.4 | 35.8 | 6 | 34.3 | 105.5 | M16xP1.0 / DP 8 |
| MC23AX-N2B60F | 56 | 44.8 | 35.8 | 6 | 34.3 | 105.5 | M16xP1.0 / DP 8 |
| MC25AX-N1B40F | 41 | 21.4 | 35.8 | 6 | 34.3 | 118.4 | M16xP1.0 / DP 8 |
| MC25AX-N1B60F | 56 | 30.4 | 35.8 | 6 | 34.3 | 118.4 | M16xP1.0 / DP 8 |
| MC25AX-N2B40F | 41 | 31.4 | 35.8 | 6 | 34.3 | 118.4 | M16xP1.0 / DP 8 |
| MC25AX-N2B60F | 56 | 44.8 | 35.8 | 6 | 34.3 | 118.4 | M16xP1.0 / DP 8 |



Dimensional Data

MC10A / MC20A / MC23A / MC25A (For Direct mounting option)

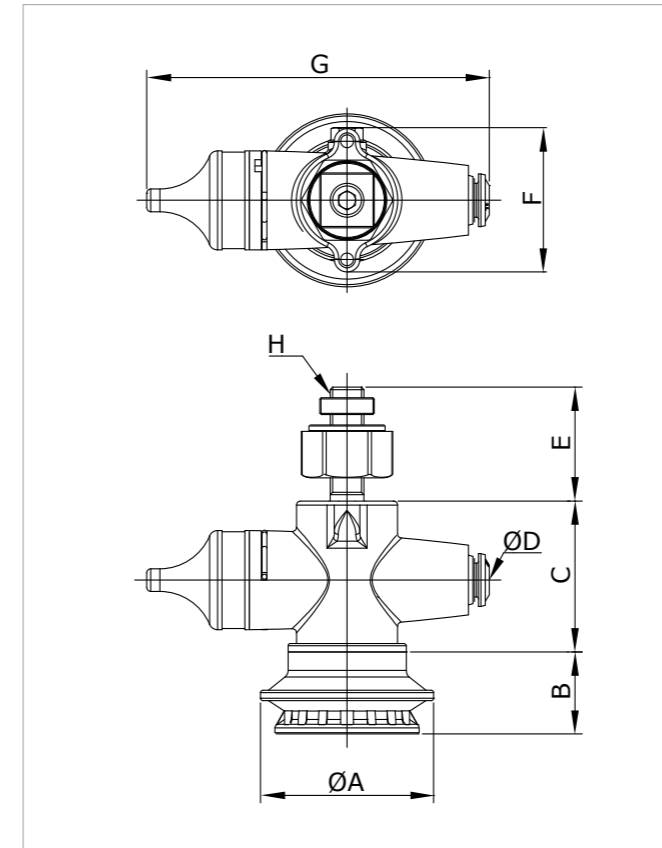


[Unit : mm]

| Model | ØA | B | C | ØD | E | F | G | H |
|---------------|----|------|------|----|----|------|-------|----------|
| MC10AM-N1B20F | 23 | 11.5 | 25.7 | 4 | 14 | 23.5 | 53.3 | M6xP1.0 |
| MC10AM-N1B40F | 42 | 21.4 | 25.7 | 4 | 14 | 23.5 | 53.3 | M6xP1.0 |
| MC10AM-N2B20F | 23 | 19.5 | 25.7 | 4 | 14 | 23.5 | 53.3 | M6xP1.0 |
| MC10AM-N2B40F | 41 | 31.4 | 25.7 | 4 | 14 | 23.5 | 53.3 | M6xP1.0 |
| MC20AM-N1B40F | 41 | 21.4 | 35.8 | 6 | 16 | 34.3 | 81.2 | M8xP1.25 |
| MC20AM-N1B60F | 56 | 30.4 | 35.8 | 6 | 16 | 34.3 | 81.2 | M8xP1.25 |
| MC20AM-N2B40F | 41 | 31.4 | 35.8 | 6 | 16 | 34.3 | 81.2 | M8xP1.25 |
| MC20AM-N2B60F | 56 | 44.8 | 35.8 | 6 | 16 | 34.3 | 81.2 | M8xP1.25 |
| MC23AM-N1B40F | 41 | 21.4 | 35.8 | 6 | 16 | 34.3 | 105.5 | M8xP1.25 |
| MC23AM-N1B60F | 56 | 30.4 | 35.8 | 6 | 16 | 34.3 | 105.5 | M8xP1.25 |
| MC23AM-N2B40F | 41 | 31.4 | 35.8 | 6 | 16 | 34.3 | 105.5 | M8xP1.25 |
| MC23AM-N2B60F | 56 | 44.8 | 35.8 | 6 | 16 | 34.3 | 105.5 | M8xP1.25 |
| MC25AM-N1B40F | 41 | 21.4 | 35.8 | 6 | 16 | 34.3 | 118.4 | M8xP1.25 |
| MC25AM-N1B60F | 56 | 30.4 | 35.8 | 6 | 16 | 34.3 | 118.4 | M8xP1.25 |
| MC25AM-N2B40F | 41 | 31.4 | 35.8 | 6 | 16 | 34.3 | 118.4 | M8xP1.25 |
| MC25AM-N2B60F | 56 | 44.8 | 35.8 | 6 | 16 | 34.3 | 118.4 | M8xP1.25 |

Dimensional Data

MC10A / MC20A / MC23A / MC25A (For Aluminum profile mounting option)



[Unit : mm]

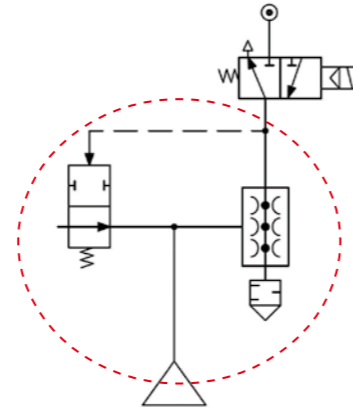
| Model | ØA | B | C | ØD | E | F | G | H |
|---------------|----|------|------|----|----|------|-------|----------|
| MC10AP-N1B20F | 23 | 11.5 | 25.7 | 4 | 22 | 23.5 | 53.3 | M6xP1.0 |
| MC10AP-N1B40F | 42 | 21.4 | 25.7 | 4 | 22 | 23.5 | 53.3 | M6xP1.0 |
| MC10AP-N2B20F | 23 | 19.5 | 25.7 | 4 | 22 | 23.5 | 53.3 | M6xP1.0 |
| MC10AP-N2B40F | 41 | 31.4 | 25.7 | 4 | 22 | 23.5 | 53.3 | M6xP1.0 |
| MC20AP-N1B40F | 41 | 21.4 | 35.8 | 6 | 27 | 34.3 | 81.2 | M8xP1.25 |
| MC20AP-N1B60F | 56 | 30.4 | 35.8 | 6 | 27 | 34.3 | 81.2 | M8xP1.25 |
| MC20AP-N2B40F | 41 | 31.4 | 35.8 | 6 | 27 | 34.3 | 81.2 | M8xP1.25 |
| MC20AP-N2B60F | 56 | 44.8 | 35.8 | 6 | 27 | 34.3 | 81.2 | M8xP1.25 |
| MC23AP-N1B40F | 41 | 21.4 | 35.8 | 6 | 27 | 34.3 | 105.5 | M8xP1.25 |
| MC23AP-N1B60F | 56 | 30.4 | 35.8 | 6 | 27 | 34.3 | 105.5 | M8xP1.25 |
| MC23AP-N2B40F | 41 | 31.4 | 35.8 | 6 | 27 | 34.3 | 105.5 | M8xP1.25 |
| MC23AP-N2B60F | 56 | 44.8 | 35.8 | 6 | 27 | 34.3 | 105.5 | M8xP1.25 |
| MC25AP-N1B40F | 41 | 21.4 | 35.8 | 6 | 27 | 34.3 | 118.4 | M8xP1.25 |
| MC25AP-N1B60F | 56 | 30.4 | 35.8 | 6 | 27 | 34.3 | 118.4 | M8xP1.25 |
| MC25AP-N2B40F | 41 | 31.4 | 35.8 | 6 | 27 | 34.3 | 118.4 | M8xP1.25 |
| MC25AP-N2B60F | 56 | 44.8 | 35.8 | 6 | 27 | 34.3 | 118.4 | M8xP1.25 |



B-type

Features

- ✓ VMECA cartridge integrated
 - Reliable performance despite inconsistent compressed air pressure
- ✓ Quick release without release control valve
- ✓ Compact & Light weight
- ✓ Low air consumption
- ✓ Various mounting options
- ✓ Excellent gripping power
- ✓ Various suction lips for different applications



Specifications

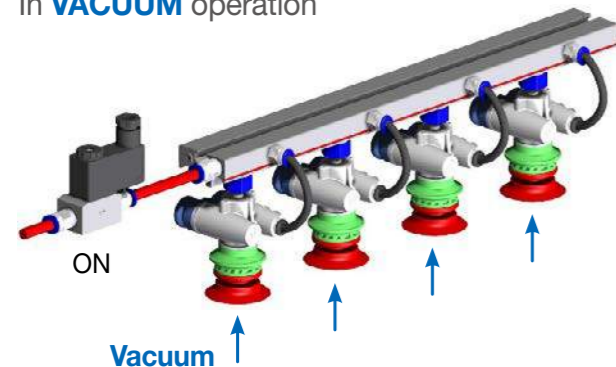
| Description | MC10B | MC20B | MC23B | MC25B |
|--------------------|-------------|-------------|-------------|-------------|
| Max. Vacuum level | -83 kPa | -92 kPa | -91 kPa | -94.5 kPa |
| Open Vacuum flow | 14.0 NI/min | 42.2 NI/min | 85.0 NI/min | 146 NI/min |
| Max. Feed pressure | 4 Bar | 7 Bar | 7 Bar | 7 Bar |
| Temperature | -20 ~ 80 °C | -20 ~ 80 °C | -20 ~ 80 °C | -20 ~ 80 °C |
| Noise level | 44 ~ 53 dBA | 51 ~ 60 dBA | 58 ~ 68 dBA | 67 ~ 71 dBA |
| Weight | 25.5 g | 96.3 g | 124 g | 124.2 g |

* Weight is calculated without top bellows and suction lip.

Quick release function without a release control valve

(Required a single 3/2way valve for air control valve only)

In **VACUUM** operation



In **RELEASE** operation



Vacuum Flow

| Model | Max. vacuum (-kPa) | Feed Pressure (bar) | Air Consumption (N/min) | Vacuum flow (NI/min) at different vacuum levels (-kPa) | | | | | | | | | | |
|-------|--------------------|---------------------|-------------------------|--|------|------|------|------|------|------|------|------|-----|--|
| | | | | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | |
| MC10B | 48 | 1.1 | 5.9 | 9.2 | 5.7 | 2.1 | 1.4 | 0.6 | - | - | - | - | - | |
| | 83 | 1.8 | 8.7 | 12.3 | 7.5 | 3.2 | 2.5 | 2.0 | 1.5 | 0.8 | 0.3 | - | - | |
| | 81 | 2.2 | 9.9 | 14 | 9.4 | 5.0 | 2.5 | 2.0 | 1.3 | 0.6 | 0.2 | - | - | |
| MC20B | 63 | 2.2 | 21 | 36.8 | 27 | 17.8 | 16.8 | 12.7 | 7.6 | 2.0 | - | - | - | |
| | 92 | 3.3 | 27 | 40.5 | 33.6 | 23.7 | 16.5 | 13.8 | 11.9 | 7.8 | 3.8 | 2.3 | - | |
| | 91 | 4.0 | 32 | 42.2 | 40.2 | 26.5 | 19.3 | 14.3 | 11.6 | 8.8 | 5.8 | 2.6 | - | |
| MC23B | 63 | 2.2 | 21 | 62.4 | 32.7 | 18.5 | 16.7 | 12.4 | 6.4 | 0.7 | - | - | - | |
| | 91 | 3.3 | 27 | 80 | 40 | 26.6 | 17 | 14.8 | 13 | 10.5 | 7.3 | 4.0 | - | |
| | 90 | 4.0 | 32 | 85 | 49.5 | 34.4 | 22 | 16.5 | 13 | 10.5 | 7.5 | 3.0 | - | |
| MC25B | 87.5 | 4.5 | 65 | 134 | 106 | 58 | 42 | 36 | 28 | 22 | 17 | 12.6 | - | |
| | 94.5 | 5.5 | 77 | 141 | 109 | 71 | 51 | 32 | 26 | 22 | 17.5 | 11 | 2.8 | |
| | 94 | 6.0 | 83.5 | 146 | 108 | 75 | 60 | 42 | 25 | 21 | 16 | 9.6 | 2.3 | |

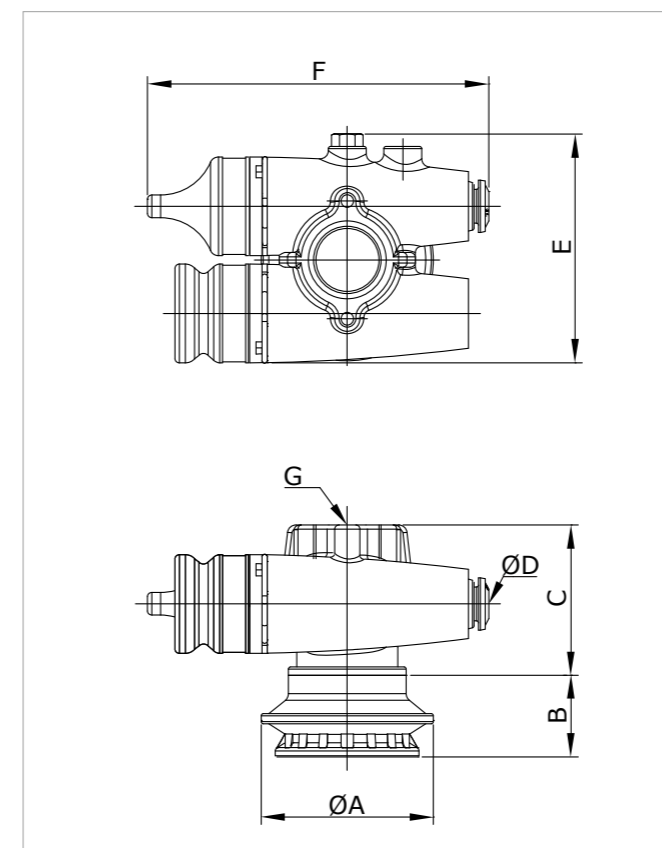


Evacuation time

| Model | Max. vacuum (-kPa) | Feed Pressure (bar) | Evacuation time (sec) at different vacuum levels (-kPa) | | | | | | | | |
|---------------|--------------------|---------------------|---|------|------|------|------|------|------|------|------|
| | | | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 |
| MC10BX-N1B20X | 48 | 1.1 | 0.12 | 0.15 | 0.18 | 0.22 | 0.31 | - | - | - | - |
| | 83 | 1.8 | 0.09 | 0.11 | 0.13 | 0.16 | 0.20 | 0.27 | 0.42 | 0.86 | - |
| | 81 | 2.2 | 0.08 | 0.10 | 0.13 | 0.16 | 0.20 | 0.28 | 0.45 | 1.04 | - |
| MC10BX-N2B20X | 48 | 1.1 | 0.13 | 0.16 | 0.20 | 0.26 | 0.33 | - | - | - | - |
| | 83 | 1.8 | 0.10 | 0.12 | 0.15 | 0.18 | 0.23 | 0.29 | 0.44 | 0.89 | - |
| | 81 | 2.2 | 0.09 | 0.11 | 0.14 | 0.17 | 0.22 | 0.30 | 0.47 | 1.10 | - |
| MC10BX-N1B40X | 48 | 1.1 | 0.15 | 0.22 | 0.28 | 0.37 | 0.47 | - | - | - | - |
| | 83 | 1.8 | 0.12 | 0.16 | 0.21 | 0.28 | 0.33 | 0.41 | 0.59 | 1.13 | - |
| | 81 | 2.2 | 0.10 | 0.14 | 0.19 | 0.26 | 0.32 | 0.42 | 0.62 | 1.30 | - |
| MC10BX-N2B40X | 48 | 1.1 | 0.16 | 0.23 | 0.32 | 0.45 | 0.60 | - | - | - | - |
| | 83 | 1.8 | 0.13 | 0.17 | 0.25 | 0.33 | 0.41 | 0.53 | 0.80 | 1.55 | - |
| | 81 | 2.2 | 0.11 | 0.16 | 0.22 | 0.32 | 0.40 | 0.54 | 0.85 | 1.70 | - |
| MC20BX-N1B40X | 63 | 2.2 | 0.07 | 0.09 | 0.11 | 0.13 | 0.15 | 0.20 | - | - | - |
| | 92 | 3.3 | 0.07 | 0.09 | 0.10 | 0.12 | 0.14 | 0.16 | 0.20 | 0.26 | - |
| | 91 | 4.0 | 0.07 | 0.08 | 0.10 | 0.11 | 0.13 | 0.15 | 0.19 | 0.25 | - |
| MC20BX-N2B40X | 63 | 2.2 | 0.08 | 0.10 | 0.13 | 0.15 | 0.18 | 0.23 | - | - | - |
| | 92 | 3.3 | 0.07 | 0.09 | 0.12 | 0.13 | 0.15 | 0.18 | 0.24 | 0.33 | - |
| | 91 | 4.0 | 0.07 | 0.09 | 0.11 | 0.12 | 0.15 | 0.18 | 0.22 | 0.29 | - |
| MC20BX-N1B60X | 63 | 2.2 | 0.10 | 0.16 | 0.18 | 0.20 | 0.23 | 0.28 | - | - | - |
| | 92 | 3.3 | 0.09 | 0.12 | 0.15 | 0.17 | 0.20 | 0.24 | 0.29 | 0.42 | - |
| | 91 | 4.0 | 0.09 | 0.12 | 0.14 | 0.16 | 0.19 | 0.22 | 0.28 | 0.38 | - |
| MC20BX-N2B60X | 63 | 2.2 | 0.12 | 0.17 | 0.20 | 0.23 | 0.27 | 0.36 | - | - | - |
| | 92 | 3.3 | 0.11 | 0.15 | 0.17 | 0.19 | 0.23 | 0.27 | 0.33 | 0.46 | - |
| | 91 | 4.0 | 0.10 | 0.13 | 0.16 | 0.18 | 0.22 | 0.26 | 0.31 | 0.43 | - |
| MC23BX-N1B40X | 63 | 2.2 | 0.08 | 0.09 | 0.11 | 0.13 | 0.15 | 0.18 | - | - | - |
| | 91 | 3.3 | 0.07 | 0.08 | 0.09 | 0.11 | 0.13 | 0.15 | 0.18 | 0.23 | - |
| | 90 | 4.0 | 0.07 | 0.08 | 0.09 | 0.11 | 0.12 | 0.15 | 0.17 | 0.23 | - |
| MC23BX-N2B40X | 63 | 2.2 | 0.08 | 0.10 | 0.12 | 0.14 | 0.18 | 0.23 | - | - | - |
| | 91 | 3.3 | 0.07 | 0.08 | 0.10 | 0.23 | 0.15 | 0.17 | 0.21 | 0.27 | - |
| | 90 | 4.0 | 0.07 | 0.08 | 0.10 | 0.11 | 0.13 | 0.16 | 0.20 | 0.28 | - |
| MC23BX-N1B60X | 63 | 2.2 | 0.08 | 0.12 | 0.15 | 0.17 | 0.21 | 0.27 | - | - | - |
| | 91 | 3.3 | 0.08 | 0.10 | 0.12 | 0.14 | 0.17 | 0.19 | 0.24 | 0.30 | - |
| | 90 | 4.0 | 0.08 | 0.10 | 0.11 | 0.13 | 0.16 | 0.19 | 0.23 | 0.29 | - |
| MC23BX-N2B60X | 63 | 2.2 | 0.10 | 0.15 | 0.19 | 0.22 | 0.26 | 0.36 | - | - | - |
| | 91 | 3.3 | 0.08 | 0.11 | 0.14 | 0.16 | 0.19 | 0.23 | 0.28 | 0.35 | - |
| | 90 | 4.0 | 0.09 | 0.11 | 0.13 | 0.16 | 0.18 | 0.22 | 0.27 | 0.35 | - |
| MC25BX-N1B40X | 87.5 | 4.5 | 0.07 | 0.08 | 0.09 | 0.10 | 0.11 | 0.12 | 0.13 | 0.16 | - |
| | 94.5 | 5.5 | 0.07 | 0.08 | 0.08 | 0.09 | 0.10 | 0.11 | 0.13 | 0.15 | 0.22 |
| | 94 | 6.0 | 0.07 | 0.08 | 0.09 | 0.10 | 0.10 | 0.11 | 0.13 | 0.15 | 0.24 |
| MC25BX-N2B40X | 87.5 | 4.5 | 0.07 | 0.08 | 0.09 | 0.10 | 0.11 | 0.13 | 0.14 | 0.17 | - |
| | 94.5 | 5.5 | 0.07 | 0.08 | 0.09 | 0.10 | 0.11 | 0.12 | 0.14 | 0.16 | 0.23 |
| | 94 | 6.0 | 0.07 | 0.08 | 0.09 | 0.10 | 0.11 | 0.12 | 0.14 | 0.16 | 0.26 |
| MC25BX-N1B60X | 87.5 | 4.5 | 0.08 | 0.09 | 0.10 | 0.11 | 0.12 | 0.14 | 0.15 | 0.18 | - |
| | 94.5 | 5.5 | 0.07 | 0.08 | 0.10 | 0.10 | 0.11 | 0.13 | 0.14 | 0.17 | 0.24 |
| | 94 | 6.0 | 0.07 | 0.09 | 0.10 | 0.11 | 0.12 | 0.13 | 0.14 | 0.17 | 0.25 |
| MC25BX-N2B60X | 87.5 | 4.5 | 0.09 | 0.10 | 0.11 | 0.12 | 0.14 | 0.15 | 0.17 | 0.21 | - |
| | 94.5 | 5.5 | 0.08 | 0.09 | 0.10 | 0.12 | 0.13 | 0.14 | 0.16 | 0.19 | 0.28 |
| | 94 | 6.0 | 0.08 | 0.09 | 0.11 | 0.12 | 0.13 | 0.14 | 0.16 | 0.19 | 0.29 |

Dimensional Data

MC10B / MC20B / MC23B / MC25B (Without mounting option)



[Unit : mm]

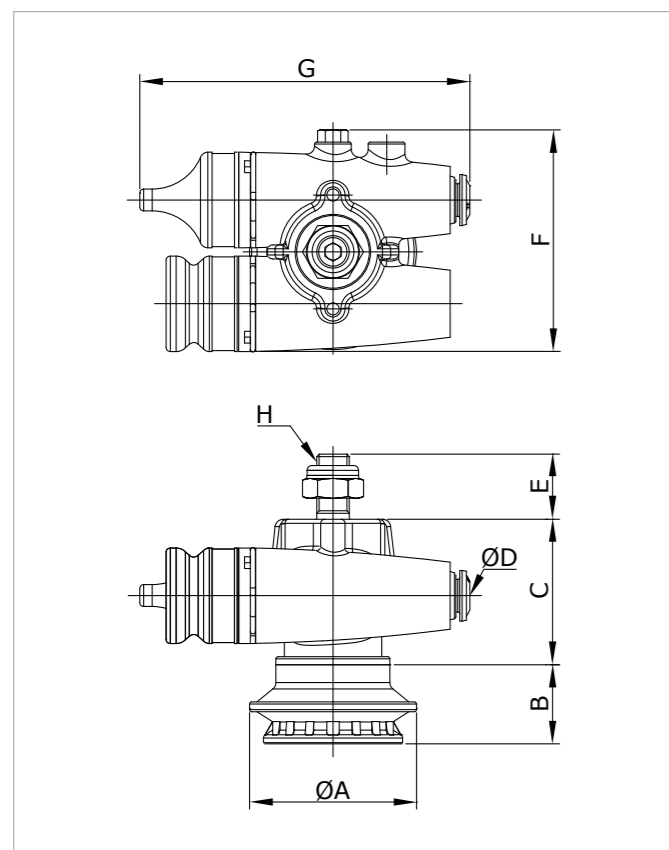
※ Male thread on section "G" not available longer than 7mm

| Model | ØA | B | C | ØD | E | F | G |
|---------------|----|------|------|----|------|-------|-----------------|
| MC10BX-N1B20F | 23 | 11.5 | 25.7 | 4 | 35.2 | 53.3 | M10xP1.0 / DP 8 |
| MC10BX-N1B40F | 41 | 21.4 | 25.7 | 4 | 35.2 | 53.3 | M10xP1.0 / DP 8 |
| MC10BX-N2B20F | 23 | 19.5 | 25.7 | 4 | 35.2 | 53.3 | M10xP1.0 / DP 8 |
| MC10BX-N2B40F | 41 | 31.4 | 25.7 | 4 | 35.2 | 53.3 | M10xP1.0 / DP 8 |
| MC20BX-N1B40F | 41 | 21.4 | 35.8 | 6 | 54.4 | 81.2 | M16xP1.0 / DP 8 |
| MC20BX-N1B60F | 56 | 30.4 | 35.8 | 6 | 54.4 | 81.2 | M16xP1.0 / DP 8 |
| MC20BX-N2B40F | 41 | 31.4 | 35.8 | 6 | 54.4 | 81.2 | M16xP1.0 / DP 8 |
| MC20BX-N2B60F | 56 | 44.8 | 35.8 | 6 | 54.4 | 81.2 | M16xP1.0 / DP 8 |
| MC23BX-N1B40F | 41 | 21.4 | 35.8 | 6 | 54.4 | 105.5 | M16xP1.0 / DP 8 |
| MC23BX-N1B60F | 56 | 30.4 | 35.8 | 6 | 54.4 | 105.5 | M16xP1.0 / DP 8 |
| MC23BX-N2B40F | 41 | 31.4 | 35.8 | 6 | 54.4 | 105.5 | M16xP1.0 / DP 8 |
| MC23BX-N2B60F | 56 | 44.8 | 35.8 | 6 | 54.4 | 105.5 | M16xP1.0 / DP 8 |
| MC25BX-N1B40F | 41 | 21.4 | 35.8 | 6 | 54.4 | 118.4 | M16xP1.0 / DP 8 |
| MC25BX-N1B60F | 56 | 30.4 | 35.8 | 6 | 54.4 | 118.4 | M16xP1.0 / DP 8 |
| MC25BX-N2B40F | 41 | 31.4 | 35.8 | 6 | 54.4 | 118.4 | M16xP1.0 / DP 8 |
| MC25BX-N2B60F | 56 | 44.8 | 35.8 | 6 | 54.4 | 118.4 | M16xP1.0 / DP 8 |



Dimensional Data

MC10B / MC20B / MC23B / MC25B (For Direct mounting option)

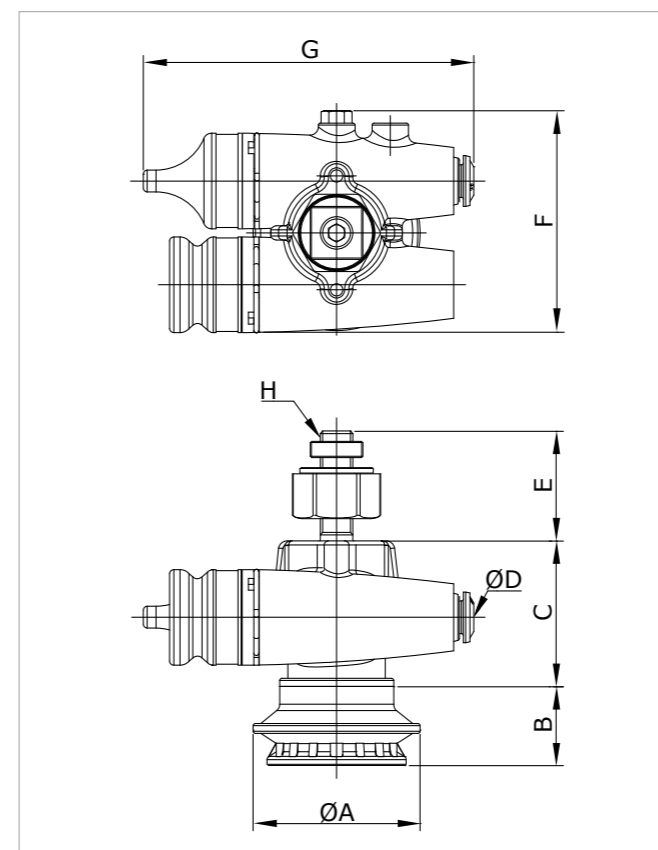


[Unit : mm]

| Model | ØA | B | C | ØD | E | F | G | H |
|---------------|----|------|------|----|----|------|-------|----------|
| MC10BM-N1B20F | 23 | 11.5 | 25.7 | 4 | 14 | 35.2 | 53.9 | M6XP1.0 |
| MC10BM-N1B40F | 41 | 21.4 | 25.7 | 4 | 14 | 35.2 | 53.9 | M6XP1.0 |
| MC10BM-N2B20F | 23 | 19.5 | 25.7 | 4 | 14 | 35.2 | 53.9 | M6XP1.0 |
| MC10BM-N2B40F | 41 | 31.4 | 25.7 | 4 | 14 | 35.2 | 53.9 | M6XP1.0 |
| MC20BM-N1B40F | 41 | 21.4 | 35.8 | 6 | 16 | 54.4 | 81.2 | M8XP1.25 |
| MC20BM-N1B60F | 56 | 30.4 | 35.8 | 6 | 16 | 54.4 | 81.2 | M8XP1.25 |
| MC20BM-N2B40F | 41 | 31.4 | 35.8 | 6 | 16 | 54.4 | 81.2 | M8XP1.25 |
| MC20BM-N2B60F | 56 | 44.8 | 35.8 | 6 | 16 | 54.4 | 81.2 | M8XP1.25 |
| MC23BM-N1B40F | 41 | 21.4 | 35.8 | 6 | 16 | 54.4 | 105.5 | M8xP1.25 |
| MC23BM-N1B60F | 56 | 30.4 | 35.8 | 6 | 16 | 54.4 | 105.5 | M8xP1.25 |
| MC23BM-N2B40F | 41 | 31.4 | 35.8 | 6 | 16 | 54.4 | 105.5 | M8xP1.25 |
| MC23BM-N2B60F | 56 | 44.8 | 35.8 | 6 | 16 | 54.4 | 105.5 | M8xP1.25 |
| MC25BM-N1B40F | 41 | 21.4 | 35.8 | 6 | 16 | 54.4 | 118.4 | M8XP1.25 |
| MC25BM-N1B60F | 56 | 30.4 | 35.8 | 6 | 16 | 54.4 | 118.4 | M8XP1.25 |
| MC25BM-N2B40F | 41 | 31.4 | 35.8 | 6 | 16 | 54.4 | 118.4 | M8XP1.25 |
| MC25BM-N2B60F | 56 | 44.8 | 35.8 | 6 | 16 | 54.4 | 118.4 | M8XP1.25 |

Dimensional Data

MC10B / MC20B / MC23B / MC25B (For Aluminum profile mounting option)



[Unit : mm]

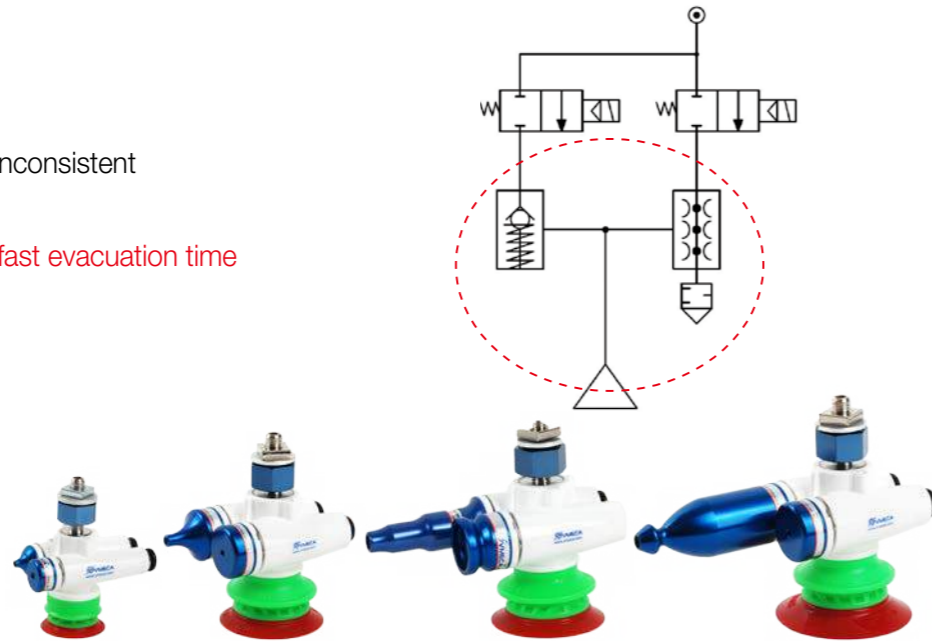
| Model | ØA | B | C | ØD | E | F | G | H |
|---------------|----|------|------|----|----|------|-------|----------|
| MC10BP-N1B20F | 23 | 11.5 | 25.7 | 4 | 22 | 35.2 | 53.9 | M6XP1.0 |
| MC10BP-N1B40F | 41 | 21.4 | 25.7 | 4 | 22 | 35.2 | 53.9 | M6XP1.0 |
| MC10BP-N2B20F | 23 | 19.5 | 25.7 | 4 | 22 | 35.2 | 53.9 | M6XP1.0 |
| MC10BP-N2B40F | 41 | 31.4 | 25.7 | 4 | 22 | 35.2 | 53.9 | M6XP1.0 |
| MC20BP-N1B40F | 41 | 21.4 | 35.8 | 6 | 27 | 54.4 | 81.2 | M8XP1.25 |
| MC20BP-N1B60F | 56 | 30.4 | 35.8 | 6 | 27 | 54.4 | 81.2 | M8XP1.25 |
| MC20BP-N2B40F | 41 | 21.4 | 35.8 | 6 | 27 | 54.4 | 81.2 | M8XP1.25 |
| MC20BP-N2B60F | 56 | 30.4 | 35.8 | 6 | 27 | 54.4 | 81.2 | M8XP1.25 |
| MC23BP-N1B40F | 41 | 21.4 | 35.8 | 6 | 27 | 54.4 | 105.5 | M8xP1.25 |
| MC23BP-N1B60F | 56 | 30.4 | 35.8 | 6 | 27 | 54.4 | 105.5 | M8xP1.25 |
| MC23BP-N2B40F | 41 | 31.4 | 35.8 | 6 | 27 | 54.4 | 105.5 | M8xP1.25 |
| MC23BP-N2B60F | 56 | 44.8 | 35.8 | 6 | 27 | 54.4 | 105.5 | M8xP1.25 |
| MC25BP-N1B40F | 41 | 21.4 | 35.8 | 6 | 27 | 54.4 | 118.4 | M8XP1.25 |
| MC25BP-N1B60F | 56 | 30.4 | 35.8 | 6 | 27 | 54.4 | 118.4 | M8XP1.25 |
| MC25BP-N2B40F | 41 | 21.4 | 35.8 | 6 | 27 | 54.4 | 118.4 | M8XP1.25 |
| MC25BP-N2B60F | 56 | 30.4 | 35.8 | 6 | 27 | 54.4 | 118.4 | M8XP1.25 |



C-type

Features

- ✓ VMECA cartridge integrated
 - Reliable performance despite inconsistent compressed air pressure
- ✓ Check valve on release port for fast evacuation time
- ✓ Compact & Light weight
- ✓ Low air consumption
- ✓ Various mounting options
- ✓ Excellent gripping power
- ✓ Various suction lips for different applications



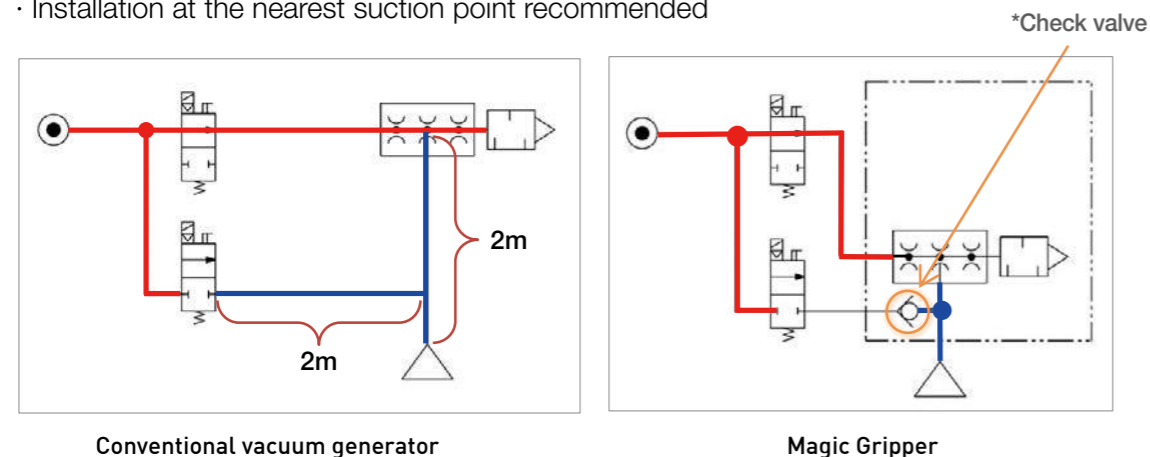
Specifications

| Description | MC10C | MC20C | MC23C | MC25C |
|--------------------|-------------|-------------|-------------|-------------|
| Max. Vacuum level | -83 kPa | -92 kPa | -91 kPa | -94.5 kPa |
| Open Vacuum flow | 14.0 NI/min | 42.2 NI/min | 85.0 NI/min | 146 NI/min |
| Max. Feed pressure | 4 Bar | 7 Bar | 7 Bar | 7 Bar |
| Temperature | -20 ~ 80 °C | -20 ~ 80 °C | -20 ~ 80 °C | -20 ~ 80 °C |
| Noise level | 44 ~ 53 dBA | 51 ~ 60 dBA | 58 ~ 68 dBA | 67 ~ 71 dBA |
| Weight | 25.5 g | 88.8 g | 118 g | 117.8 g |

* Weight is calculated without top bellows and suction lip.

Check valve "2 times Faster" evacuation time!!

- Quicker evacuation due to lack of vacuum release line
- Installation at the nearest suction point recommended



Vacuum Flow

| Model | Max. vacuum (-kPa) | Feed Pressure (bar) | Air Consumption (N/min) | Vacuum flow (NI/min) at different vacuum levels (-kPa) | | | | | | | | | |
|-------|--------------------|---------------------|-------------------------|--|------|------|------|------|------|------|------|------|-----|
| | | | | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 |
| MC10C | 48 | 1.1 | 5.9 | 9.2 | 5.7 | 2.1 | 1.4 | 0.6 | - | - | - | - | - |
| | 83 | 1.8 | 8.7 | 12.3 | 7.5 | 3.2 | 2.5 | 2.0 | 1.5 | 0.8 | 0.3 | - | - |
| | 81 | 2.2 | 9.9 | 14 | 9.4 | 5.0 | 2.5 | 2.0 | 1.3 | 0.6 | 0.2 | - | - |
| MC20C | 63 | 2.2 | 21 | 36.8 | 27 | 17.8 | 16.8 | 12.7 | 7.6 | 2.0 | - | - | - |
| | 92 | 3.3 | 27 | 40.5 | 33.6 | 23.7 | 16.5 | 13.8 | 11.9 | 7.8 | 3.8 | 2.3 | - |
| MC23C | 63 | 2.2 | 21 | 62.4 | 32.7 | 18.5 | 16.7 | 12.4 | 6.4 | 0.7 | - | - | - |
| | 91 | 3.3 | 27 | 80 | 40 | 26.6 | 17 | 14.8 | 13 | 10.5 | 7.3 | 4.0 | - |
| | 90 | 4.0 | 32 | 85 | 49.5 | 34.4 | 22 | 16.5 | 13 | 10.5 | 7.5 | 3.0 | - |
| MC25C | 87.5 | 4.5 | 65 | 134 | 106 | 58 | 42 | 36 | 28 | 22 | 17 | 12.6 | - |
| | 94.5 | 5.5 | 77 | 141 | 109 | 71 | 51 | 32 | 26 | 22 | 17.5 | 11 | 2.8 |
| | 94 | 6.0 | 83.5 | 146 | 108 | 75 | 60 | 42 | 25 | 21 | 16 | 9.6 | 2.3 |

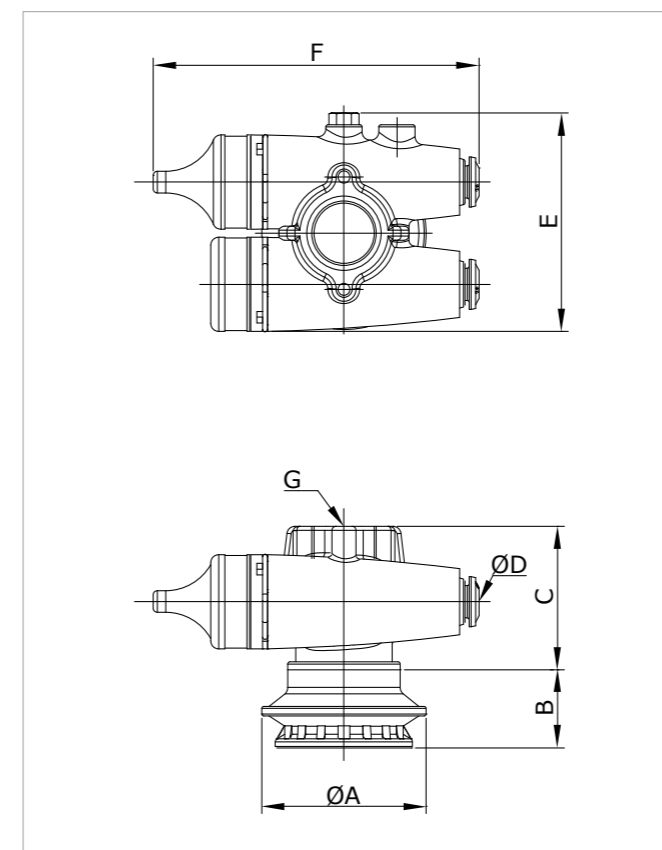


Evacuation time

| Model | Max. vacuum (-kPa) | Feed Pressure (bar) | Evacuation time (sec) at different vacuum levels (-kPa) | | | | | | | | |
|---------------|--------------------|---------------------|---|------|------|------|------|------|------|------|------|
| | | | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 |
| MC10CX-N1B20X | 48 | 1.1 | 0.12 | 0.15 | 0.18 | 0.22 | 0.31 | - | - | - | - |
| | 83 | 1.8 | 0.09 | 0.11 | 0.13 | 0.16 | 0.20 | 0.27 | 0.42 | 0.86 | - |
| | 81 | 2.2 | 0.08 | 0.10 | 0.13 | 0.16 | 0.20 | 0.28 | 0.45 | 1.04 | - |
| MC10CX-N2B20X | 48 | 1.1 | 0.13 | 0.16 | 0.20 | 0.26 | 0.33 | - | - | - | - |
| | 83 | 1.8 | 0.10 | 0.12 | 0.15 | 0.18 | 0.23 | 0.29 | 0.44 | 0.89 | - |
| | 81 | 2.2 | 0.09 | 0.11 | 0.14 | 0.17 | 0.22 | 0.30 | 0.47 | 1.10 | - |
| MC10CX-N1B40X | 48 | 1.1 | 0.15 | 0.22 | 0.28 | 0.37 | 0.47 | - | - | - | - |
| | 83 | 1.8 | 0.12 | 0.16 | 0.21 | 0.28 | 0.33 | 0.41 | 0.59 | 1.13 | - |
| | 81 | 2.2 | 0.10 | 0.14 | 0.19 | 0.26 | 0.32 | 0.42 | 0.62 | 1.30 | - |
| MC10CX-N2B40X | 48 | 1.1 | 0.16 | 0.23 | 0.32 | 0.45 | 0.60 | - | - | - | - |
| | 83 | 1.8 | 0.13 | 0.17 | 0.25 | 0.33 | 0.41 | 0.53 | 0.80 | 1.55 | - |
| | 81 | 2.2 | 0.11 | 0.16 | 0.22 | 0.32 | 0.40 | 0.54 | 0.85 | 1.70 | - |
| MC20CX-N1B40X | 63 | 2.2 | 0.07 | 0.09 | 0.11 | 0.13 | 0.15 | 0.20 | - | - | - |
| | 92 | 3.3 | 0.07 | 0.09 | 0.10 | 0.12 | 0.14 | 0.16 | 0.20 | 0.26 | - |
| | 91 | 4.0 | 0.07 | 0.08 | 0.10 | 0.11 | 0.13 | 0.15 | 0.19 | 0.25 | - |
| MC20CX-N2B40X | 63 | 2.2 | 0.08 | 0.10 | 0.13 | 0.15 | 0.18 | 0.23 | - | - | - |
| | 92 | 3.3 | 0.07 | 0.09 | 0.12 | 0.13 | 0.15 | 0.18 | 0.24 | 0.33 | - |
| | 91 | 4.0 | 0.07 | 0.09 | 0.11 | 0.12 | 0.15 | 0.18 | 0.22 | 0.29 | - |
| MC20CX-N1B60X | 63 | 2.2 | 0.10 | 0.16 | 0.18 | 0.20 | 0.23 | 0.28 | - | - | - |
| | 92 | 3.3 | 0.09 | 0.12 | 0.15 | 0.17 | 0.20 | 0.24 | 0.29 | 0.42 | - |
| | 91 | 4.0 | 0.09 | 0.12 | 0.14 | 0.16 | 0.19 | 0.22 | 0.28 | 0.38 | - |
| MC20CX-N2B60X | 63 | 2.2 | 0.12 | 0.17 | 0.20 | 0.23 | 0.27 | 0.36 | - | - | - |
| | 92 | 3.3 | 0.11 | 0.15 | 0.17 | 0.19 | 0.23 | 0.27 | 0.33 | 0.46 | - |
| | 91 | 4.0 | 0.10 | 0.13 | 0.16 | 0.18 | 0.22 | 0.26 | 0.31 | 0.43 | - |
| MC23CX-N1B40X | 63 | 2.2 | 0.08 | 0.09 | 0.11 | 0.13 | 0.15 | 0.18 | - | - | - |
| | 91 | 3.3 | 0.07 | 0.08 | 0.09 | 0.11 | 0.13 | 0.15 | 0.18 | 0.23 | - |
| | 90 | 4.0 | 0.07 | 0.08 | 0.09 | 0.11 | 0.12 | 0.15 | 0.17 | 0.23 | - |
| MC23CX-N2B40X | 63 | 2.2 | 0.08 | 0.10 | 0.12 | 0.14 | 0.18 | 0.23 | - | - | - |
| | 91 | 3.3 | 0.07 | 0.08 | 0.10 | 0.23 | 0.15 | 0.17 | 0.21 | 0.27 | - |
| | 90 | 4.0 | 0.07 | 0.08 | 0.10 | 0.11 | 0.13 | 0.16 | 0.20 | 0.28 | - |
| MC23CX-N1B60X | 63 | 2.2 | 0.08 | 0.12 | 0.15 | 0.17 | 0.21 | 0.27 | - | - | - |
| | 91 | 3.3 | 0.08 | 0.10 | 0.12 | 0.14 | 0.17 | 0.19 | 0.24 | 0.30 | - |
| | 90 | 4.0 | 0.08 | 0.10 | 0.11 | 0.13 | 0.16 | 0.19 | 0.23 | 0.29 | - |
| MC23CX-N2B60X | 63 | 2.2 | 0.10 | 0.15 | 0.19 | 0.22 | 0.26 | 0.36 | - | - | - |
| | 91 | 3.3 | 0.08 | 0.11 | 0.14 | 0.16 | 0.19 | 0.23 | 0.28 | 0.35 | - |
| | 90 | 4.0 | 0.09 | 0.11 | 0.13 | 0.16 | 0.18 | 0.22 | 0.27 | 0.35 | - |
| MC25CX-N1B40X | 87.5 | 4.5 | 0.07 | 0.08 | 0.09 | 0.10 | 0.11 | 0.12 | 0.13 | 0.16 | - |
| | 94.5 | 5.5 | 0.07 | 0.08 | 0.08 | 0.09 | 0.10 | 0.11 | 0.13 | 0.15 | 0.22 |
| | 94 | 6.0 | 0.07 | 0.08 | 0.09 | 0.10 | 0.10 | 0.11 | 0.13 | 0.15 | 0.24 |
| MC25CX-N2B40X | 87.5 | 4.5 | 0.07 | 0.08 | 0.09 | 0.10 | 0.11 | 0.13 | 0.14 | 0.17 | - |
| | 94.5 | 5.5 | 0.07 | 0.08 | 0.09 | 0.10 | 0.11 | 0.12 | 0.14 | 0.16 | 0.23 |
| | 94 | 6.0 | 0.07 | 0.08 | 0.09 | 0.10 | 0.11 | 0.12 | 0.14 | 0.16 | 0.26 |
| MC25CX-N1B60X | 87.5 | 4.5 | 0.08 | 0.09 | 0.10 | 0.11 | 0.12 | 0.14 | 0.15 | 0.18 | - |
| | 94.5 | 5.5 | 0.07 | 0.08 | 0.10 | 0.10 | 0.11 | 0.13 | 0.14 | 0.17 | 0.24 |
| | 94 | 6.0 | 0.07 | 0.09 | 0.10 | 0.11 | 0.12 | 0.13 | 0.14 | 0.17 | 0.25 |
| MC25CX-N2B60X | 87.5 | 4.5 | 0.09 | 0.10 | 0.11 | 0.12 | 0.14 | 0.15 | 0.17 | 0.21 | - |
| | 94.5 | 5.5 | 0.08 | 0.09 | 0.10 | 0.12 | 0.13 | 0.14 | 0.16 | 0.19 | 0.28 |
| | 94 | 6.0 | 0.08 | 0.09 | 0.11 | 0.12 | 0.13 | 0.14 | 0.16 | 0.19 | 0.29 |

Dimensional Data

MC10C / MC20C / MC23C / MC25C (Without mounting option)



[Unit : mm]

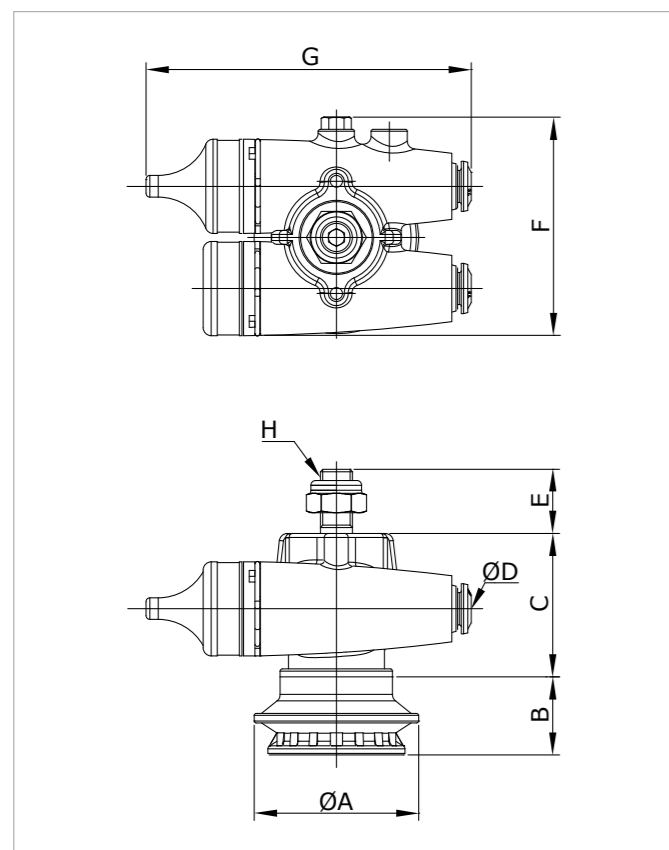
※ Male thread on section "G" not available longer than 7mm

| Model | ØA | B | C | ØD | E | F | G |
|---------------|----|------|------|----|------|-------|-----------------|
| MC10CX-N1B20F | 23 | 11.5 | 25.7 | 4 | 35.2 | 53.9 | M10xP1.0 / DP 8 |
| MC10CX-N1B40F | 41 | 21.4 | 25.7 | 4 | 35.2 | 53.9 | M10xP1.0 / DP 8 |
| MC10CX-N2B20F | 23 | 19.5 | 25.7 | 4 | 35.2 | 53.9 | M10xP1.0 / DP 8 |
| MC10CX-N2B40F | 41 | 31.4 | 25.7 | 4 | 35.2 | 53.9 | M10xP1.0 / DP 8 |
| MC20CX-N1B40F | 41 | 21.4 | 35.8 | 6 | 54.4 | 81.2 | M16xP1.0 / DP 8 |
| MC20CX-N1B60F | 56 | 30.4 | 35.8 | 6 | 54.4 | 81.2 | M16xP1.0 / DP 8 |
| MC20CX-N2B40F | 41 | 31.4 | 35.8 | 6 | 54.4 | 81.2 | M16xP1.0 / DP 8 |
| MC20CX-N2B60F | 56 | 44.8 | 35.8 | 6 | 54.4 | 81.2 | M16xP1.0 / DP 8 |
| MC23CX-N1B40F | 41 | 21.4 | 35.8 | 6 | 54.4 | 105.5 | M16xP1.0 / DP 8 |
| MC23CX-N1B60F | 56 | 30.4 | 35.8 | 6 | 54.4 | 105.5 | M16xP1.0 / DP 8 |
| MC23CX-N2B40F | 41 | 31.4 | 35.8 | 6 | 54.4 | 105.5 | M16xP1.0 / DP 8 |
| MC23CX-N2B60F | 56 | 44.8 | 35.8 | 6 | 54.4 | 105.5 | M16xP1.0 / DP 8 |
| MC25CX-N1B40F | 41 | 21.4 | 35.8 | 6 | 54.4 | 118.4 | M16xP1.0 / DP 8 |
| MC25CX-N1B60F | 56 | 30.4 | 35.8 | 6 | 54.4 | 118.4 | M16xP1.0 / DP 8 |
| MC25CX-N2B40F | 41 | 31.4 | 35.8 | 6 | 54.4 | 118.4 | M16xP1.0 / DP 8 |
| MC25CX-N2B60F | 56 | 44.8 | 35.8 | 6 | 54.4 | 118.4 | M16xP1.0 / DP 8 |



Dimensional Data

MC10C / MC20C / MC23C / MC25C (For Direct mounting option)

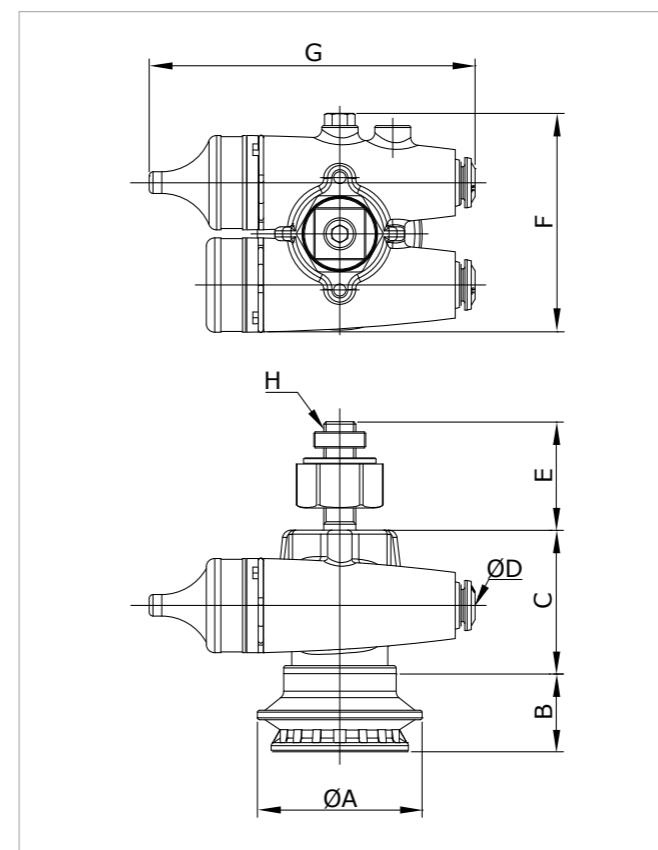


[Unit : mm]

| Model | ØA | B | C | ØD | E | F | G | H |
|---------------|----|------|------|----|----|------|-------|----------|
| MC10CM-N1B20F | 23 | 11.5 | 25.7 | 4 | 14 | 35.2 | 53.9 | M6XP1.0 |
| MC10CM-N1B40F | 41 | 21.4 | 25.7 | 4 | 14 | 35.2 | 53.9 | M6XP1.0 |
| MC10CM-N2B20F | 23 | 19.5 | 25.7 | 4 | 14 | 35.2 | 53.9 | M6XP1.0 |
| MC10CM-N2B40F | 41 | 31.4 | 25.7 | 4 | 14 | 35.2 | 53.9 | M6XP1.0 |
| MC20CM-N1B40F | 41 | 21.4 | 35.8 | 6 | 16 | 54.4 | 81.2 | M8XP1.25 |
| MC20CM-N1B60F | 56 | 30.4 | 35.8 | 6 | 16 | 54.4 | 81.2 | M8XP1.25 |
| MC20CM-N2B40F | 41 | 31.4 | 35.8 | 6 | 16 | 54.4 | 81.2 | M8XP1.25 |
| MC20CM-N2B60F | 56 | 44.8 | 35.8 | 6 | 16 | 54.4 | 81.2 | M8XP1.25 |
| MC23CM-N1B40F | 41 | 21.4 | 35.8 | 6 | 16 | 54.4 | 105.5 | M8xP1.25 |
| MC23CM-N1B60F | 56 | 30.4 | 35.8 | 6 | 16 | 54.4 | 105.5 | M8xP1.25 |
| MC23CM-N2B40F | 41 | 31.4 | 35.8 | 6 | 16 | 54.4 | 105.5 | M8xP1.25 |
| MC23CM-N2B60F | 56 | 44.8 | 35.8 | 6 | 16 | 54.4 | 105.5 | M8xP1.25 |
| MC25CM-N1B40F | 41 | 21.4 | 35.8 | 6 | 16 | 54.4 | 118.4 | M8XP1.25 |
| MC25CM-N1B60F | 56 | 30.4 | 35.8 | 6 | 16 | 54.4 | 118.4 | M8XP1.25 |
| MC25CM-N2B40F | 41 | 31.4 | 35.8 | 6 | 16 | 54.4 | 118.4 | M8XP1.25 |
| MC25CM-N2B60F | 56 | 44.8 | 35.8 | 6 | 16 | 54.4 | 118.4 | M8XP1.25 |

Dimensional Data

MC10C / MC20C / MC23C / MC25C (For Aluminum profile mounting option)



[Unit : mm]

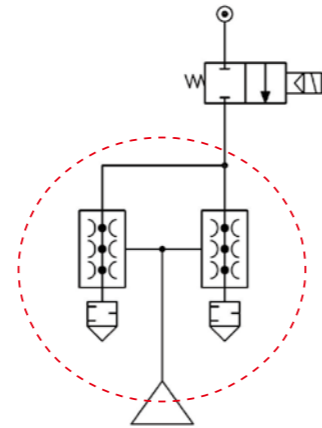
| Model | ØA | B | C | ØD | E | F | G | H |
|---------------|----|------|------|----|----|------|-------|----------|
| MC10CP-N1B20F | 23 | 11.5 | 25.7 | 4 | 22 | 35.2 | 53.9 | M6XP1.0 |
| MC10CP-N1B40F | 41 | 21.4 | 25.7 | 4 | 22 | 35.2 | 53.9 | M6XP1.0 |
| MC10CP-N2B20F | 23 | 19.5 | 25.7 | 4 | 22 | 35.2 | 53.9 | M6XP1.0 |
| MC10CP-N2B40F | 41 | 31.4 | 25.7 | 4 | 22 | 35.2 | 53.9 | M6XP1.0 |
| MC20CP-N1B40F | 41 | 21.4 | 35.8 | 6 | 27 | 54.4 | 81.2 | M8XP1.25 |
| MC20CP-N1B60F | 56 | 30.4 | 35.8 | 6 | 27 | 54.4 | 81.2 | M8XP1.25 |
| MC20CP-N2B40F | 41 | 31.4 | 35.8 | 6 | 27 | 54.4 | 81.2 | M8XP1.25 |
| MC20CP-N2B60F | 56 | 44.8 | 35.8 | 6 | 27 | 54.4 | 81.2 | M8XP1.25 |
| MC23CP-N1B40F | 41 | 21.4 | 35.8 | 6 | 27 | 54.4 | 105.5 | M8xP1.25 |
| MC23CP-N1B60F | 56 | 30.4 | 35.8 | 6 | 27 | 54.4 | 105.5 | M8xP1.25 |
| MC23CP-N2B40F | 41 | 31.4 | 35.8 | 6 | 27 | 54.4 | 105.5 | M8xP1.25 |
| MC23CP-N2B60F | 56 | 44.8 | 35.8 | 6 | 27 | 54.4 | 105.5 | M8xP1.25 |
| MC25CP-N1B40F | 41 | 21.4 | 35.8 | 6 | 27 | 54.4 | 118.4 | M8XP1.25 |
| MC25CP-N1B60F | 56 | 30.4 | 35.8 | 6 | 27 | 54.4 | 118.4 | M8XP1.25 |
| MC25CP-N2B40F | 41 | 31.4 | 35.8 | 6 | 27 | 54.4 | 118.4 | M8XP1.25 |
| MC25CP-N2B60F | 56 | 44.8 | 35.8 | 6 | 27 | 54.4 | 118.4 | M8XP1.25 |



D-type

Features

- ✓ VMECA cartridge integrated
 - Reliable performance despite inconsistent compressed air pressure
- ✓ **Dual cartridge - Double capacity (High flow)**
- ✓ Compact & Light weight
- ✓ Low air consumption
- ✓ Various mounting options
- ✓ Excellent gripping power
- ✓ Various suction lips for different applications



Vacuum Flow

| Model | Max. vacuum (-kPa) | Feed Pressure (bar) | Air Consumption (N/min) | Vacuum flow (NI/min) at different vacuum levels (-kPa) | | | | | | | | | | |
|-------|--------------------|---------------------|-------------------------|--|------|------|------|------|------|------|------|-----|----|--|
| | | | | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | |
| MC10D | 48 | 1.1 | 11.3 | 16.4 | 8.3 | 3.8 | 2.2 | 1.0 | - | - | - | - | - | |
| | 83 | 1.8 | 16.4 | 20.2 | 12.6 | 5.2 | 4.7 | 3.9 | 2.9 | 1.6 | 0.5 | - | - | |
| | 81 | 2.2 | 20.3 | 23 | 16.6 | 6.87 | 5.1 | 4.3 | 3.2 | 1.8 | 0.8 | - | - | |
| MC20D | 63 | 2.2 | 40 | 66.2 | 49.2 | 32.2 | 28 | 18 | 13 | 3.1 | - | - | - | |
| | 92 | 3.3 | 55 | 74 | 57.5 | 41.5 | 28 | 22.5 | 18.5 | 16.4 | 10.3 | 5.8 | - | |
| | 91 | 4.0 | 56 | 75.7 | 73.6 | 44.5 | 34 | 22 | 18.2 | 17.2 | 11.7 | 5.2 | - | |
| MC23D | 63 | 2.2 | 40.1 | 90.5 | 57.8 | 36.4 | 26.8 | 20.8 | 14.8 | 1.4 | - | - | - | |
| | 91 | 3.3 | 53.3 | 111.9 | 77.9 | 58.6 | 42.4 | 24.8 | 23.2 | 18.0 | 12.5 | 7.0 | - | |
| | 90 | 4.0 | 56.2 | 139.0 | 92.0 | 65.1 | 49.2 | 35.4 | 21.7 | 18.8 | 13.8 | 6.1 | - | |

Specifications

| Description | MC10D | MC20D | MC23D |
|--------------------|-------------|-------------|-------------|
| Max. Vacuum level | -83 kPa | -92 kPa | -91 kPa |
| Open Vacuum flow | 23.0 NI/min | 75.7 NI/min | 139 NI/min |
| Max. Feed pressure | 4 Bar | 7 Bar | 7 Bar |
| Temperature | -20 ~ 80 °C | -20 ~ 80 °C | -20 ~ 80 °C |
| Noise level | 51 ~ 53 dBA | 55 ~ 65 dBA | 59 ~ 70 dBA |
| Weight | 24.6 g | 87.5 g | 100 g |

* Weight is calculated without top bellows and suction lip.

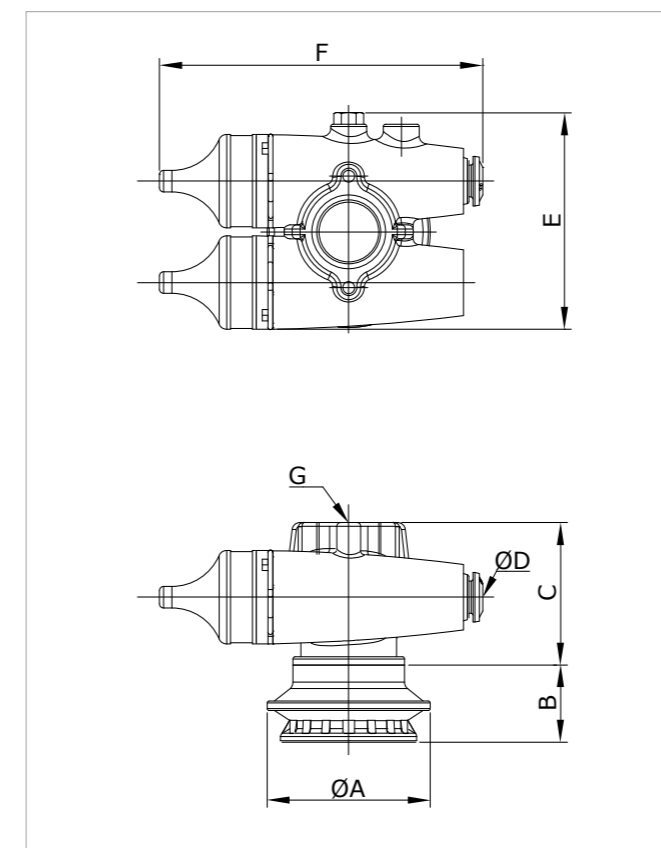


Evacuation time

| Model | Max. vacuum (-kPa) | Feed Pressure (bar) | Evacuation time (sec) at different vacuum levels (-kPa) | | | | | | | | |
|---------------|--------------------|---------------------|---|------|-------|------|------|------|------|------|----|
| | | | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 |
| MC10DX-N1B20X | 48 | 1.1 | 0.09 | 0.11 | 0.13 | 0.18 | 0.27 | - | - | - | - |
| | 83 | 1.8 | 0.07 | 0.09 | 0.10 | 0.12 | 0.15 | 0.19 | 0.29 | 0.40 | - |
| | 81 | 2.2 | 0.07 | 0.08 | 0.10 | 0.12 | 0.14 | 0.18 | 0.30 | 0.56 | - |
| MC10DX-N2B20X | 48 | 1.1 | 0.09 | 0.12 | 0.14 | 0.21 | 0.30 | - | - | - | - |
| | 83 | 1.8 | 0.07 | 0.09 | 0.11 | 0.13 | 0.16 | 0.20 | 0.30 | 0.44 | - |
| | 81 | 2.2 | 0.07 | 0.09 | 0.11 | 0.13 | 0.15 | 0.20 | 0.31 | 0.57 | - |
| MC10DX-N1B40X | 48 | 1.1 | 0.12 | 0.17 | 0.23 | 0.30 | 0.41 | - | - | - | - |
| | 83 | 1.8 | 0.10 | 0.14 | 0.18 | 0.23 | 0.26 | 0.31 | 0.40 | 0.66 | - |
| | 81 | 2.2 | 0.09 | 0.13 | 0.17 | 0.22 | 0.25 | 0.30 | 0.41 | 0.72 | - |
| MC10DX-N2B40X | 48 | 1.1 | 0.14 | 0.20 | 0.28 | 0.36 | 0.48 | - | - | - | - |
| | 83 | 1.8 | 0.11 | 0.16 | 0.21 | 0.26 | 0.31 | 0.37 | 0.50 | 0.80 | - |
| | 81 | 2.2 | 0.10 | 0.15 | 0.20 | 0.24 | 0.28 | 0.35 | 0.52 | 0.86 | - |
| MC20DX-N1B40X | 63 | 2.2 | 0.07 | 0.09 | 0.10 | 0.11 | 0.13 | 0.19 | - | - | - |
| | 92 | 3.3 | 0.07 | 0.08 | 0.09 | 0.10 | 0.12 | 0.13 | 0.15 | 0.19 | - |
| MC20DX-N2B40X | 63 | 2.2 | 0.08 | 0.09 | 0.11 | 0.12 | 0.14 | 0.20 | - | - | - |
| | 92 | 3.3 | 0.07 | 0.09 | 0.10 | 0.11 | 0.13 | 0.15 | 0.17 | 0.21 | - |
| MC20DX-N1B60X | 63 | 2.2 | 0.08 | 0.11 | 0.13 | 0.15 | 0.17 | 0.24 | - | - | - |
| | 92 | 3.3 | 0.08 | 0.10 | 0.12 | 0.13 | 0.15 | 0.18 | 0.19 | 0.26 | - |
| | 91 | 4.0 | 0.08 | 0.10 | 11.00 | 0.12 | 0.14 | 0.16 | 0.19 | 0.26 | - |
| MC20DX-N2B60X | 63 | 2.2 | 0.09 | 0.13 | 0.15 | 0.17 | 0.20 | 0.28 | - | - | - |
| | 92 | 3.3 | 0.09 | 0.11 | 0.13 | 0.15 | 0.18 | 0.19 | 0.23 | 0.28 | - |
| | 91 | 4.0 | 0.09 | 0.11 | 0.12 | 0.14 | 0.16 | 0.18 | 0.23 | 0.29 | - |
| MC23DX-N1B40X | 63 | 2.2 | 0.07 | 0.09 | 0.09 | 0.11 | 0.13 | 0.17 | - | - | - |
| | 91 | 3.3 | 0.06 | 0.07 | 0.08 | 0.10 | 0.11 | 0.12 | 0.14 | 0.17 | - |
| MC23DX-N2B40X | 63 | 2.2 | 0.08 | 0.09 | 0.10 | 0.12 | 0.17 | 0.18 | - | - | - |
| | 91 | 3.3 | 0.07 | 0.08 | 0.09 | 0.10 | 0.12 | 0.13 | 0.15 | 0.18 | - |
| | 90 | 4.0 | 0.07 | 0.08 | 0.09 | 0.10 | 0.12 | 0.13 | 0.15 | 0.19 | - |
| MC23DX-N1B60X | 63 | 2.2 | 0.08 | 0.09 | 0.11 | 0.13 | 0.15 | 0.20 | - | - | - |
| | 91 | 3.3 | 0.07 | 0.09 | 0.10 | 0.11 | 0.13 | 0.14 | 0.17 | 0.22 | - |
| | 90 | 4.0 | 0.08 | 0.08 | 0.10 | 0.11 | 0.13 | 0.14 | 0.17 | 0.22 | - |
| MC23DX-N2B60X | 63 | 2.2 | 0.09 | 0.11 | 0.13 | 0.15 | 0.17 | 0.24 | - | - | - |
| | 91 | 3.3 | 0.07 | 0.09 | 0.11 | 0.13 | 0.14 | 0.17 | 0.19 | 0.24 | - |
| | 90 | 4.0 | 0.08 | 0.10 | 0.11 | 0.12 | 0.14 | 0.16 | 0.17 | 0.24 | - |

Dimensional Data

MC10D / MC20D / MC23D (Without mounting option)



[Unit : mm]

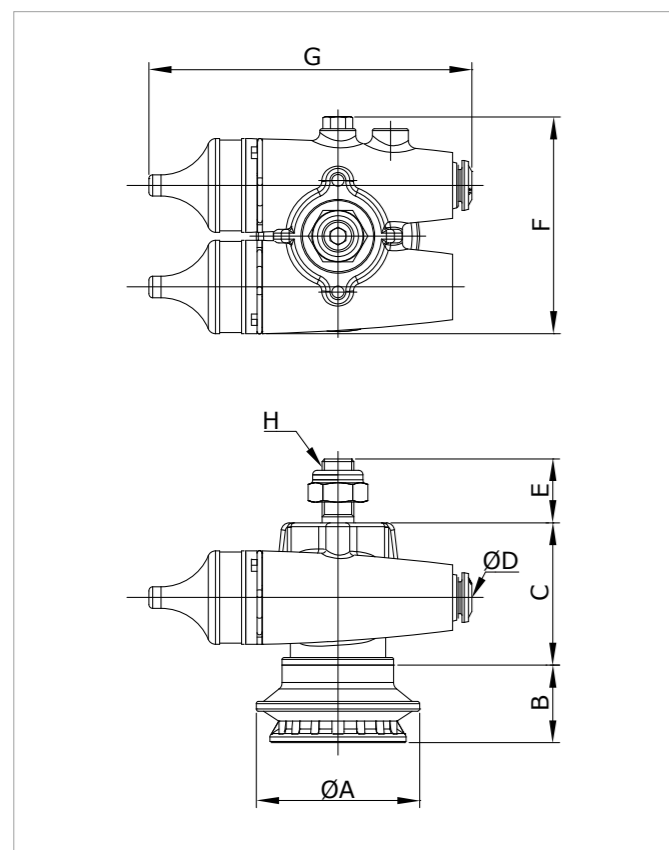
※ Male thread on section "G" not available longer than 7mm

| Model | ØA | B | C | ØD | E | F | G |
|---------------|----|------|------|----|------|-------|-----------------|
| MC10DX-N1B20F | 23 | 11.5 | 25.7 | 4 | 35.2 | 53.9 | M10xP1.0 / DP 8 |
| MC10DX-N1B40F | 41 | 21.4 | 25.7 | 4 | 35.2 | 53.9 | M10xP1.0 / DP 8 |
| MC10DX-N2B20F | 23 | 19.5 | 25.7 | 4 | 35.2 | 53.9 | M10xP1.0 / DP 8 |
| MC10DX-N2B40F | 41 | 31.4 | 25.7 | 4 | 35.2 | 53.9 | M10xP1.0 / DP 8 |
| MC20DX-N1B40F | 41 | 21.4 | 35.8 | 6 | 54.4 | 81.2 | M16xP1.0 / DP 8 |
| MC20DX-N1B60F | 56 | 30.4 | 35.8 | 6 | 54.4 | 81.2 | M16xP1.0 / DP 8 |
| MC20DX-N2B40F | 41 | 31.4 | 35.8 | 6 | 54.4 | 81.2 | M16xP1.0 / DP 8 |
| MC20DX-N2B60F | 56 | 44.8 | 35.8 | 6 | 54.4 | 81.2 | M16xP1.0 / DP 8 |
| MC23DX-N1B40F | 41 | 21.4 | 35.8 | 6 | 54.4 | 105.5 | M16xP1.0 / DP 8 |
| MC23DX-N1B60F | 56 | 30.4 | 35.8 | 6 | 54.4 | 105.5 | M16xP1.0 / DP 8 |
| MC23DX-N2B40F | 41 | 31.4 | 35.8 | 6 | 54.4 | 105.5 | M16xP1.0 / DP 8 |
| MC23DX-N2B60F | 56 | 44.8 | 35.8 | 6 | 54.4 | 105.5 | M16xP1.0 / DP 8 |



Dimensional Data

MC10D / MC20D / MC23D (For Direct mounting option)

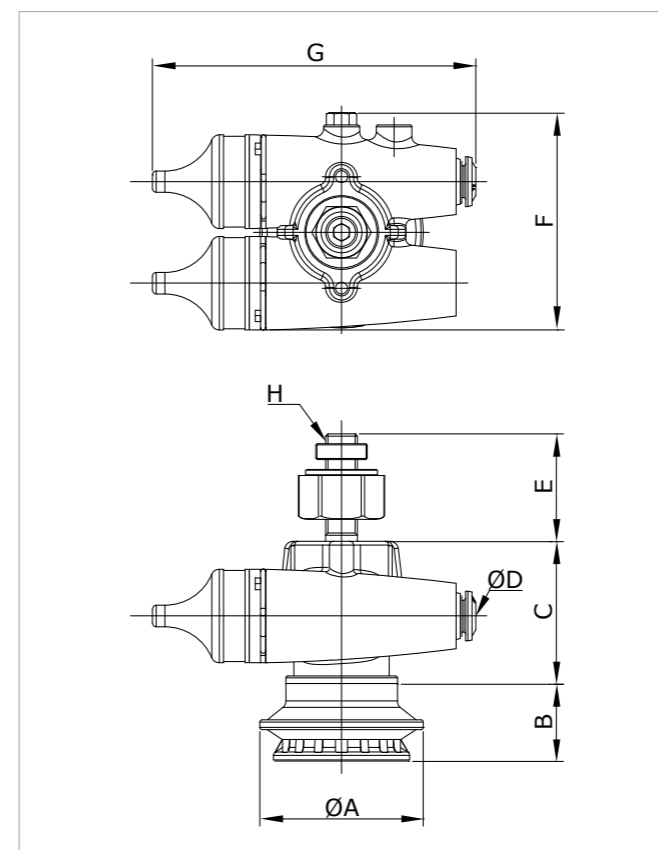


[Unit : mm]

| Model | ØA | B | C | ØD | E | F | G | H |
|---------------|----|------|------|----|----|------|-------|----------|
| MC10DM-N1B20F | 23 | 11.5 | 25.7 | 4 | 14 | 35.2 | 53.9 | M6XP1.0 |
| MC10DM-N1B40F | 41 | 21.4 | 25.7 | 4 | 14 | 35.2 | 53.9 | M6XP1.0 |
| MC10DM-N2B20F | 23 | 19.5 | 25.7 | 4 | 14 | 35.2 | 53.9 | M6XP1.0 |
| MC10DM-N2B40F | 41 | 31.4 | 25.7 | 4 | 14 | 35.2 | 53.9 | M6XP1.0 |
| MC20DM-N1B40F | 41 | 21.4 | 35.8 | 6 | 16 | 54.4 | 81.2 | M8XP1.25 |
| MC20DM-N1B60F | 56 | 30.4 | 35.8 | 6 | 16 | 54.4 | 81.2 | M8XP1.25 |
| MC20DM-N2B40F | 41 | 31.4 | 35.8 | 6 | 16 | 54.4 | 81.2 | M8XP1.25 |
| MC20DM-N2B60F | 56 | 44.8 | 35.8 | 6 | 16 | 54.4 | 81.2 | M8XP1.25 |
| MC23DM-N1B40F | 41 | 21.4 | 35.8 | 6 | 16 | 54.4 | 105.5 | M8xP1.25 |
| MC23DM-N1B60F | 56 | 30.4 | 35.8 | 6 | 16 | 54.4 | 105.5 | M8xP1.25 |
| MC23DM-N2B40F | 41 | 31.4 | 35.8 | 6 | 16 | 54.4 | 105.5 | M8xP1.25 |
| MC23DM-N2B60F | 56 | 44.8 | 35.8 | 6 | 16 | 54.4 | 105.5 | M8xP1.25 |

Dimensional Data

MC10D / MC20D / MC23D (For Aluminum profile mounting option)



[Unit : mm]

| Model | ØA | B | C | ØD | E | F | G | H |
|---------------|----|------|------|----|----|------|-------|----------|
| MC10DP-N1B20F | 23 | 11.5 | 25.7 | 4 | 22 | 35.2 | 53.9 | M6XP1.0 |
| MC10DP-N1B40F | 41 | 21.4 | 25.7 | 4 | 22 | 35.2 | 53.9 | M6XP1.0 |
| MC10DP-N2B20F | 23 | 19.5 | 25.7 | 4 | 22 | 35.2 | 53.9 | M6XP1.0 |
| MC10DP-N2B40F | 41 | 31.4 | 25.7 | 4 | 22 | 35.2 | 53.9 | M6XP1.0 |
| MC20DP-N1B40F | 41 | 21.4 | 35.8 | 6 | 27 | 54.4 | 81.2 | M8XP1.25 |
| MC20DP-N1B60F | 56 | 30.4 | 35.8 | 6 | 27 | 54.4 | 81.2 | M8XP1.25 |
| MC20DP-N2B40F | 41 | 31.4 | 35.8 | 6 | 27 | 54.4 | 81.2 | M8XP1.25 |
| MC20DP-N2B60F | 56 | 44.8 | 35.8 | 6 | 27 | 54.4 | 81.2 | M8XP1.25 |
| MC23DP-N1B40F | 41 | 21.4 | 35.8 | 6 | 27 | 54.4 | 105.5 | M8xP1.25 |
| MC23DP-N1B60F | 56 | 30.4 | 35.8 | 6 | 27 | 54.4 | 105.5 | M8xP1.25 |
| MC23DP-N2B40F | 41 | 31.4 | 35.8 | 6 | 27 | 54.4 | 105.5 | M8xP1.25 |
| MC23DP-N2B60F | 56 | 44.8 | 35.8 | 6 | 27 | 54.4 | 105.5 | M8xP1.25 |



X suction lip



X - Suction lip

Features

- ✓ Excellent in handling very thin and flexible plastic bags
- ✓ Various stopper & lip material options to cover a wide range of vacuum applications



Structure of X-Suction lip

Structure

- ✓ Stopper
- ✓ X - Suction lip

Applications

- ✓ Thin & flexible plastic bags
- ✓ Pouch bags
- ✓ Frozen food package
- ✓ Aluminum foil



X - Suction lip being used in thin plastic bag application – Ice cream

Recommended Lifting Force (Max.)

| Model | Volume (cm ³) | Lifting Force (Kg) - Perpendicular | | |
|----------|---------------------------|------------------------------------|----------|----------|
| | | - 20 kPa | - 60 kPa | - 90 kPa |
| 1B20-X25 | 2.93 | 0.8 | 1.79 | 2.44 |
| 1B20-X30 | 4.53 | 1.08 | 2.13 | 2.62 |
| 1B40-X45 | 17.8 | 2.14 | 3.57 | 5.0 |
| 1B40-X55 | 23.05 | 2.6 | 5.27 | 5.92 |
| 1B60-X65 | 43 | 4.8 | 11.5 | 15.9 |
| 1B60-X75 | 62.5 | 5.6 | 12.3 | 17.9 |
| 2B20-X25 | 5.04 | 0.8 | 1.79 | 2.44 |
| 2B20-X30 | 6.64 | 1.08 | 2.13 | 2.62 |
| 2B40-X45 | 25.2 | 2.14 | 3.57 | 5.0 |
| 2B40-X55 | 32.4 | 2.6 | 5.27 | 5.92 |
| 2B60-X65 | 63.8 | 4.8 | 11.5 | 15.9 |
| 2B60-X75 | 83.3 | 5.6 | 12.3 | 17.9 |

* The lifting force does not include safety factor

Material Specifications

| Material | Hardness Shore (°) | Color | Temperature (°C) |
|--------------------------------|--------------------|--------------------|--------------------|
| N6- NBR (Nitrile) | 60 | Blue | -20~110 |
| S3 - Silicone | 30 | Translucent White | -70~200 |
| S5 - Silicone | 50 | Red | -70~200 |
| W3 - White Silicone | 30 | Translucent White | -70~200 |
| W5 - White Silicone | 50 | Translucent White | -70~200 |
| W3(FDA) - White Silicone (FDA) | 30 | Translucent White | -70~200 |
| W5(FDA) - White Silicone (FDA) | 50 | Translucent White | -70~200 |
| U6 – Urethane | 60 | Dark Grey | 0~100 |
| PU - Polyurethane | 60 | Translucent Orange | 0~60 |

* The temperature data is only for suction lip. Please contact us if it is used in over 60°C

** For additional materials, please contact us

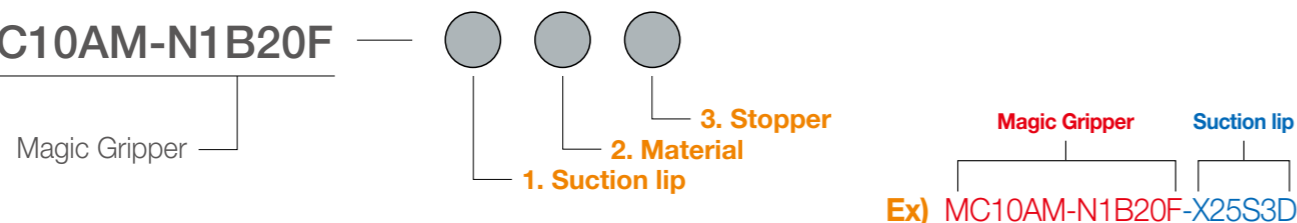
Material Resistance

| Description | NBR (Nitrile) | Silicone | White Silicone | Urethane | Polyurethane |
|-----------------|---------------|-----------|----------------|-----------|--------------|
| Wear Resistance | Excellent | Good | Good | Excellent | Excellent |
| Oil | Excellent | Poor | Poor | Excellent | Excellent |
| Weather / Ozone | Fair | Excellent | Excellent | Excellent | Excellent |
| Alcohol | Good | Good | Good | Fair | Fair |
| Acid | Fair | Poor | Poor | Poor | Fair |



Build an Ordering No.

MC10AM-N1B20F



1. Suction lip

| Description | Top Bellow 20 | Top Bellow 40 | Top Bellow 60 | Symbol |
|---------------------------|---------------|---------------|---------------|--------|
| X type lip, 25mm diameter | ○ | | | X25 |
| X type lip, 30mm diameter | ○ | | | X30 |
| X type lip, 45mm diameter | | ○ | | X45 |
| X type lip, 55mm diameter | | ○ | | X55 |
| X type lip, 65mm diameter | | | ○ | X65 |
| X type lip, 75mm diameter | | | ○ | X75 |

2. Material

| Description | Symbol |
|------------------------------------|---------|
| NBR (Nitrile) | N6 |
| Silicone, 30° hardness | S3 |
| Silicone, 50° hardness | S5 |
| White Silicone, 30° hardness | W3 |
| White Silicone, 50° hardness | W5 |
| White Silicone, 30° hardness (FDA) | W3(FDA) |
| White Silicone, 50° hardness (FDA) | W5(FDA) |
| Urethane | U6 |
| Polyurethane | PU |

3. Stopper

| Description | Symbol |
|-------------|--------|
| A type | A |
| B type | B |
| C type | C |
| D type | D |

Spare Parts

1. Stopper

| Part No. | Description | Part No. | Description |
|----------|------------------------------|----------|------------------------------|
| MS20-A | Stopper A type for X25 & X30 | MS40-C | Stopper C type for X45 & X55 |
| MS20-B | Stopper B type for X25 & X30 | MS40-D | Stopper D type for X45 & X55 |
| MS20-C | Stopper C type for X25 & X30 | MS60-A | Stopper A type for X65 & X75 |
| MS20-D | Stopper D type for X25 & X30 | MS60-B | Stopper B type for X65 & X75 |
| MS40-A | Stopper A type for X45 & X55 | MS60-C | Stopper C type for X65 & X75 |
| MS40-B | Stopper B type for X45 & X55 | MS60-D | Stopper D type for X65 & X75 |

2. Middle bellows

| Part No. | Description | Part No. | Description |
|----------|--------------------------------------|----------|--------------------------------------|
| 2MB/20 | Middle bellows 2 folds for X25 & X30 | 3MB/20 | Middle bellows 3 folds for X25 & X30 |
| 2MB/40 | Middle bellows 2 folds for X45 & X55 | 3MB/40 | Middle bellows 3 folds for X45 & X55 |
| | | 3MB/60 | Middle bellows 3 folds for X65 & X75 |

3. Filter

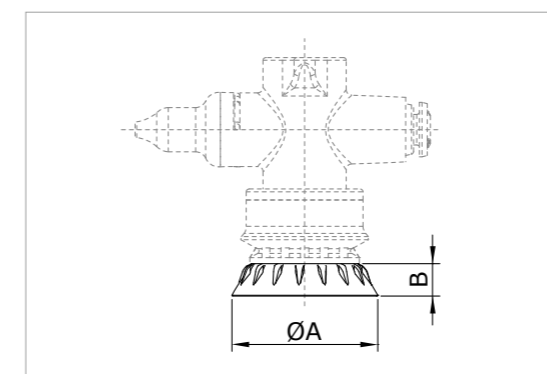
| Part No. | Description | Part No. | Description |
|----------|---|----------|---|
| VTFE20 | Filter (200mesh) for 20mm bellow diameter | VTFE60 | Filter (200mesh) for 60mm bellow diameter |
| VTFE40 | Filter (200mesh) for 40mm bellow diameter | | |

4. Suction lip

| Part No. | Description | Part No. | Description |
|----------|---|-------------|---|
| X25-N6 | X suction lip - 25mm diameter, NBR | X25-W3(FDA) | X suction lip - 25mm diameter, White Silicone, 30° hardness (FDA) |
| X30-N6 | X suction lip - 30mm diameter, NBR | X30-W3(FDA) | X suction lip - 30mm diameter, White Silicone, 30° hardness (FDA) |
| X45-N6 | X suction lip - 45mm diameter, NBR | X45-W3(FDA) | X suction lip - 45mm diameter, White Silicone, 30° hardness (FDA) |
| X55-N6 | X suction lip - 55mm diameter, NBR | X55-W3(FDA) | X suction lip - 55mm diameter, White Silicone, 30° hardness (FDA) |
| X65-N6 | X suction lip - 65mm diameter, NBR | X65-W3(FDA) | X suction lip - 65mm diameter, White Silicone, 30° hardness (FDA) |
| X75-N6 | X suction lip - 75mm diameter, NBR | X75-W3(FDA) | X suction lip - 75mm diameter, White Silicone, 30° hardness (FDA) |
| X25-S3 | X suction lip - 25mm diameter, Silicone, 30° hardness | X25-W5(FDA) | X suction lip - 25mm diameter, White Silicone, 50° hardness (FDA) |
| X30-S3 | X suction lip - 30mm diameter, Silicone, 30° hardness | X30-W5(FDA) | X suction lip - 30mm diameter, White Silicone, 50° hardness (FDA) |
| X45-S3 | X suction lip - 45mm diameter, Silicone, 30° hardness | X45-W5(FDA) | X suction lip - 45mm diameter, White Silicone, 50° hardness (FDA) |
| X55-S3 | X suction lip - 55mm diameter, Silicone, 30° hardness | X55-W5(FDA) | X suction lip - 55mm diameter, White Silicone, 50° hardness (FDA) |
| X65-S3 | X suction lip - 65mm diameter, Silicone, 30° hardness | X65-W5(FDA) | X suction lip - 65mm diameter, White Silicone, 50° hardness (FDA) |
| X75-S3 | X suction lip - 75mm diameter, Silicone, 30° hardness | X75-W5(FDA) | X suction lip - 75mm diameter, White Silicone, 50° hardness (FDA) |
| X25-S5 | X suction lip - 25mm diameter, Silicone, 50° hardness | X25-U6 | X suction lip - 25mm diameter, Urethane |
| X30-S5 | X suction lip - 30mm diameter, Silicone, 50° hardness | X30-U6 | X suction lip - 30mm diameter, Urethane |
| X45-S5 | X suction lip - 45mm diameter, Silicone, 50° hardness | X45-U6 | X suction lip - 45mm diameter, Urethane |
| X55-S5 | X suction lip - 55mm diameter, Silicone, 50° hardness | X55-U6 | X suction lip - 55mm diameter, Urethane |
| X65-S5 | X suction lip - 65mm diameter, Silicone, 50° hardness | X65-U6 | X suction lip - 65mm diameter, Urethane |
| X75-S5 | X suction lip - 75mm diameter, Silicone, 50° hardness | X75-U6 | X suction lip - 75mm diameter, Urethane |
| X25-W3 | X suction lip - 25mm diameter, White Silicone, 30° hardness | X25-PU | X suction lip - 25mm diameter, Polyurethane |
| X30-W3 | X suction lip - 30mm diameter, White Silicone, 30° hardness | X30-PU | X suction lip - 30mm diameter, Polyurethane |
| X45-W3 | X suction lip - 45mm diameter, White Silicone, 30° hardness | X45-PU | X suction lip - 45mm diameter, Polyurethane |
| X55-W3 | X suction lip - 55mm diameter, White Silicone, 30° hardness | X55-PU | X suction lip - 55mm diameter, Polyurethane |
| X65-W3 | X suction lip - 65mm diameter, White Silicone, 30° hardness | X65-PU | X suction lip - 65mm diameter, Polyurethane |
| X75-W3 | X suction lip - 75mm diameter, White Silicone, 30° hardness | X75-PU | X suction lip - 75mm diameter, Polyurethane |
| X25-W5 | X suction lip - 25mm diameter, White Silicone, 50° hardness | | |
| X30-W5 | X suction lip - 30mm diameter, White Silicone, 50° hardness | | |
| X45-W5 | X suction lip - 45mm diameter, White Silicone, 50° hardness | | |
| X55-W5 | X suction lip - 55mm diameter, White Silicone, 50° hardness | | |
| X65-W5 | X suction lip - 65mm diameter, White Silicone, 50° hardness | | |
| X75-W5 | X suction lip - 75mm diameter, White Silicone, 50° hardness | | |

Dimensional Data

[Unit : mm]



※ Dimensions are measured with the suction lip assembled

| Model | ØA | B |
|-------|------|------|
| X25 | 26 | 5.8 |
| X30 | 32 | 7.3 |
| X45 | 46 | 11.1 |
| X55 | 54.5 | 14.2 |
| X65 | 65 | 14.3 |
| X75 | 75 | 19.3 |



U suction lip



U - Suction lip

Features

- ✓ Excellent in handling flat and slightly curved objects
- ✓ Various stopper & lip material options to cover a wide range of vacuum applications



Structure of U-Suction lip

Structure

- ✓ Stopper
- ✓ U - Suction lip

Applications

- ✓ Carton boxes
- ✓ Metal sheets
- ✓ Glass



U-Suction lip being used in flat object application - Carton box

Recommended Lifting Force (Max.)

| Model | Volume (cm ³) | Lifting Force (Kg) - Perpendicular | | |
|----------|---------------------------|------------------------------------|----------|----------|
| | | - 20 kPa | - 60 kPa | - 90 kPa |
| 1B20-U25 | 1.83 | 0.83 | 2.2 | 3.06 |
| 1B20-U30 | 2.63 | 1.22 | 2.45 | 3.06 |
| 1B40-U45 | 12.1 | 2.55 | 5.66 | 9.18 |
| 1B40-U55 | 17 | 3.78 | 7.09 | 9.56 |
| 1B60-U65 | 28.8 | 5.3 | 13.3 | 19.4 |
| 1B60-U75 | 40.4 | 6.6 | 15 | 20.5 |
| 2B20-U25 | 3.94 | 0.83 | 2.2 | 3.06 |
| 2B20-U30 | 4.74 | 1.22 | 2.45 | 3.06 |
| 2B40-U45 | 19.5 | 2.55 | 5.66 | 9.18 |
| 2B40-U55 | 24.4 | 3.78 | 7.09 | 9.56 |
| 2B60-U65 | 49.6 | 5.3 | 13.3 | 19.4 |
| 2B60-U75 | 61.2 | 6.6 | 15 | 20.5 |

* The lifting force does not include safety factor

Material Specifications

| Material | Hardness Shore (°) | Color | Temperature (°C) |
|--------------------------------|--------------------|--------------------|--------------------|
| N6- NBR (Nitrile) | 60 | Blue | -20~110 |
| S3 - Silicone | 30 | Translucent White | -70~200 |
| S5 - Silicone | 50 | Red | -70~200 |
| W3 - White Silicone | 30 | Translucent White | -70~200 |
| W5 - White Silicone | 50 | Translucent White | -70~200 |
| W3(FDA) - White Silicone (FDA) | 30 | Translucent White | -70~200 |
| W5(FDA) - White Silicone (FDA) | 50 | Translucent White | -70~200 |
| U6 - Urethane | 60 | Dark Grey | 0~100 |
| PU - Polyurethane | 60 | Translucent Orange | 0~60 |

* The temperature data is only for suction lip. Please contact us if it is used in over 60°C

** For additional materials, please contact us

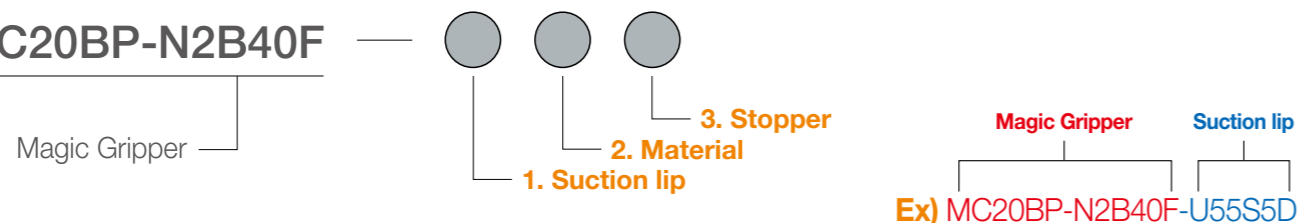
Material Resistance

| Description | NBR (Nitrile) | Silicone | White Silicone | Urethane | Polyurethane |
|-----------------|---------------|-----------|----------------|-----------|--------------|
| Wear Resistance | Excellent | Good | Good | Excellent | Excellent |
| Oil | Excellent | Poor | Poor | Excellent | Excellent |
| Weather / Ozone | Fair | Excellent | Excellent | Excellent | Excellent |
| Alcohol | Good | Good | Good | Fair | Fair |
| Acid | Fair | Poor | Poor | Poor | Fair |



Build an Ordering No.

MC20BP-N2B40F



1. Suction lip

| Description | Top Bellow 20 | Top Bellow 40 | Top Bellow 60 | Symbol |
|---------------------------|---------------|---------------|---------------|--------|
| U type lip, 25mm diameter | ○ | | | U25 |
| U type lip, 30mm diameter | ○ | | | U30 |
| U type lip, 45mm diameter | | ○ | | U45 |
| U type lip, 55mm diameter | | ○ | | U55 |
| U type lip, 65mm diameter | | | ○ | U65 |
| U type lip, 75mm diameter | | | ○ | U75 |

2. Material

| Description | Symbol |
|------------------------------------|---------|
| NBR (Nitrile) | N6 |
| Silicone, 30° hardness | S3 |
| Silicone, 50° hardness | S5 |
| White Silicone, 30° hardness | W3 |
| White Silicone, 50° hardness | W5 |
| White Silicone, 30° hardness (FDA) | W3(FDA) |
| White Silicone, 50° hardness (FDA) | W5(FDA) |
| Urethane | U6 |
| Polyurethane | PU |

3. Stopper

| Description | Symbol |
|-------------|--------|
| B type | B |
| C type | C |
| D type | D |

Spare Parts

1. Stopper

| Part No. | Description | Part No. | Description |
|----------|------------------------------|----------|------------------------------|
| MS20-B | Stopper B type for U25 & U30 | MS60-B | Stopper B type for U65 & U75 |
| MS20-C | Stopper C type for U25 & U30 | MS60-C | Stopper C type for U65 & U75 |
| MS20-D | Stopper D type for U25 & U30 | MS60-D | Stopper D type for U65 & U75 |
| MS40-B | Stopper B type for U45 & U55 | | |
| MS40-C | Stopper C type for U45 & U55 | | |
| MS40-D | Stopper D type for U45 & U55 | | |

2. Middle bellows

| Part No. | Description | Part No. | Description |
|----------|--------------------------------------|----------|--------------------------------------|
| 2MB/20 | Middle bellows 2 folds for U25 & U30 | 3MB/20 | Middle bellows 3 folds for U25 & U30 |
| 2MB/40 | Middle bellows 2 folds for U45 & U55 | 3MB/40 | Middle bellows 3 folds for U45 & U55 |
| | | 3MB/60 | Middle bellows 3 folds for U65 & U75 |

3. Filter

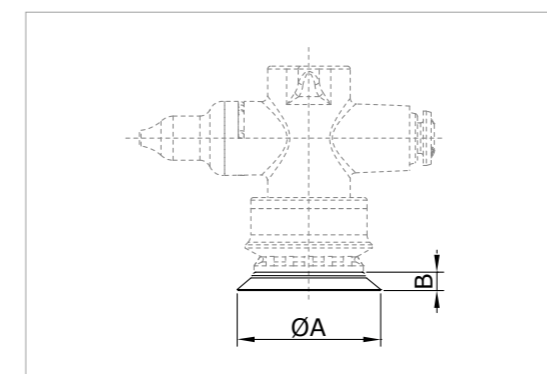
| Part No. | Description | Part No. | Description |
|----------|---|----------|---|
| VTFE20 | Filter (200mesh) for 20mm bellow diameter | VTFE60 | Filter (200mesh) for 60mm bellow diameter |
| VTFE40 | Filter (200mesh) for 40mm bellow diameter | | |

4. Suction lip

| Part No. | Description | Part No. | Description |
|----------|---|-------------|---|
| U25-N6 | U suction lip - 25mm diameter, NBR | U25-W3(FDA) | U suction lip - 25mm diameter, White Silicone, 30° hardness (FDA) |
| U30-N6 | U suction lip - 30mm diameter, NBR | U30-W3(FDA) | U suction lip - 30mm diameter, White Silicone, 30° hardness (FDA) |
| U45-N6 | U suction lip - 45mm diameter, NBR | U45-W3(FDA) | U suction lip - 45mm diameter, White Silicone, 30° hardness (FDA) |
| U55-N6 | U suction lip - 55mm diameter, NBR | U55-W3(FDA) | U suction lip - 55mm diameter, White Silicone, 30° hardness (FDA) |
| U65-N6 | U suction lip - 65mm diameter, NBR | U65-W3(FDA) | U suction lip - 65mm diameter, White Silicone, 30° hardness (FDA) |
| U75-N6 | U suction lip - 75mm diameter, NBR | U75-W3(FDA) | U suction lip - 75mm diameter, White Silicone, 30° hardness (FDA) |
| U25-S3 | U suction lip - 25mm diameter, Silicone, 30° hardness | U25-W5(FDA) | U suction lip - 25mm diameter, White Silicone, 50° hardness (FDA) |
| U30-S3 | U suction lip - 30mm diameter, Silicone, 30° hardness | U30-W5(FDA) | U suction lip - 30mm diameter, White Silicone, 50° hardness (FDA) |
| U45-S3 | U suction lip - 45mm diameter, Silicone, 30° hardness | U45-W5(FDA) | U suction lip - 45mm diameter, White Silicone, 50° hardness (FDA) |
| U55-S3 | U suction lip - 55mm diameter, Silicone, 30° hardness | U55-W5(FDA) | U suction lip - 55mm diameter, White Silicone, 50° hardness (FDA) |
| U65-S3 | U suction lip - 65mm diameter, Silicone, 30° hardness | U65-W5(FDA) | U suction lip - 65mm diameter, White Silicone, 50° hardness (FDA) |
| U75-S3 | U suction lip - 75mm diameter, Silicone, 30° hardness | U75-W5(FDA) | U suction lip - 75mm diameter, White Silicone, 50° hardness (FDA) |
| U25-S5 | U suction lip - 25mm diameter, Silicone, 50° hardness | U25-U6 | U suction lip - 25mm diameter, Urethane |
| U30-S5 | U suction lip - 30mm diameter, Silicone, 50° hardness | U30-U6 | U suction lip - 30mm diameter, Urethane |
| U45-S5 | U suction lip - 45mm diameter, Silicone, 50° hardness | U45-U6 | U suction lip - 45mm diameter, Urethane |
| U55-S5 | U suction lip - 55mm diameter, Silicone, 50° hardness | U55-U6 | U suction lip - 55mm diameter, Urethane |
| U65-S5 | U suction lip - 65mm diameter, Silicone, 50° hardness | U65-U6 | U suction lip - 65mm diameter, Urethane |
| U75-S5 | U suction lip - 75mm diameter, Silicone, 50° hardness | U75-U6 | U suction lip - 75mm diameter, Urethane |
| U25-W3 | U suction lip - 25mm diameter, White Silicone, 30° hardness | U25-PU | U suction lip - 25mm diameter, Polyurethane |
| U30-W3 | U suction lip - 30mm diameter, White Silicone, 30° hardness | U30-PU | U suction lip - 30mm diameter, Polyurethane |
| U45-W3 | U suction lip - 45mm diameter, White Silicone, 30° hardness | U45-PU | U suction lip - 45mm diameter, Polyurethane |
| U55-W3 | U suction lip - 55mm diameter, White Silicone, 30° hardness | U55-PU | U suction lip - 55mm diameter, Polyurethane |
| U65-W3 | U suction lip - 65mm diameter, White Silicone, 30° hardness | U65-PU | U suction lip - 65mm diameter, Polyurethane |
| U75-W3 | U suction lip - 75mm diameter, White Silicone, 30° hardness | U75-PU | U suction lip - 75mm diameter, Polyurethane |
| U25-W5 | U suction lip - 25mm diameter, White Silicone, 50° hardness | | |
| U30-W5 | U suction lip - 30mm diameter, White Silicone, 50° hardness | | |
| U45-W5 | U suction lip - 45mm diameter, White Silicone, 50° hardness | | |
| U55-W5 | U suction lip - 55mm diameter, White Silicone, 50° hardness | | |
| U65-W5 | U suction lip - 65mm diameter, White Silicone, 50° hardness | | |
| U75-W5 | U suction lip - 75mm diameter, White Silicone, 50° hardness | | |

Dimensional Data

[Unit : mm]



* Dimensions are measured with the suction lip assembled

| Model | ØA | B |
|-------|----|------|
| U25 | 26 | 9.5 |
| U30 | 33 | 6.7 |
| U45 | 47 | 4.3 |
| U55 | 55 | 3.3 |
| U65 | 65 | 9 |
| U75 | 75 | 12.7 |



P suction lip



Features

- ✓ Excellent in handling heavy or thick plastic bags, liquid filled plastic bags and powder filled plastic bags.
- ✓ Various stopper & lip material options to cover a wide range of vacuum applications

P - Suction lip



Structure

- ✓ Stopper
- ✓ P - Suction lip

Structure of P-Suction lip



Applications

- ✓ Plastic bags
- ✓ Pouch bags

P-Suction lip being used in heavy plastic bag application - Chocolate bag

Recommended Lifting Force (Max.)

| Model | Volume (cm ³) | Lifting Force (Kg) - Perpendicular | | |
|----------|---|------------------------------------|----------|----------|
| | | - 20 kPa | - 60 kPa | - 90 kPa |
| 1B20-P15 | 1.43 | 0.30 | 0.50 | 0.60 |
| 1B20-P17 | 1.53 | 0.35 | 0.60 | 0.74 |
| 1B20-P20 | 1.83 | 0.40 | 0.80 | 0.90 |
| 1B20-P27 | 2.73 | 0.80 | 1.79 | 2.44 |
| 1B20-P32 | 4.13 | 1.08 | 2.13 | 2.62 |
| 1B40-P48 | 14.4 | 2.14 | 3.57 | 5.00 |
| 1B40-P60 | 21.5 | 2.60 | 5.27 | 5.92 |
| 1B60-P72 | Please contact VMECA for lifting force. | | | |
| 1B60-P85 | Please contact VMECA for lifting force. | | | |
| 2B20-P15 | 3.54 | 0.30 | 0.50 | 0.60 |
| 2B20-P17 | 3.64 | 0.35 | 0.60 | 0.74 |
| 2B20-P20 | 3.94 | 0.40 | 0.80 | 0.90 |
| 2B20-P27 | 4.84 | 0.80 | 1.79 | 2.44 |
| 2B20-P32 | 6.24 | 1.08 | 2.13 | 2.62 |
| 2B40-P48 | 21.8 | 2.14 | 3.57 | 5.00 |
| 2B40-P60 | 28.9 | 2.60 | 5.27 | 5.92 |
| 2B60-P72 | Please contact VMECA for lifting force. | | | |
| 2B60-P85 | Please contact VMECA for lifting force. | | | |

* The lifting force does not include safety factor

Material Specifications

| Material | Hardness Shore (°) | Color | Temperature (°C) |
|--------------------------------|--------------------|-------------------|------------------|
| N6 - NBR (Nitrile) | 60 | Blue | -20~110 |
| S3 - Silicone | 30 | Translucent White | -70~200 |
| S5 - Silicone | 50 | Red | -70~200 |
| W3 - White Silicone | 30 | Translucent White | -70~200 |
| W5 - White Silicone | 50 | Translucent White | -70~200 |
| W3(FDA) - White Silicone (FDA) | 30 | Translucent White | -70~200 |
| W5(FDA) - White Silicone (FDA) | 50 | Translucent White | -70~200 |
| U6 - Urethane | 60 | Dark Grey | 0~100 |

* The temperature data is only for suction lip. Please contact us if it is used in over 60°C

** For additional materials, please contact us

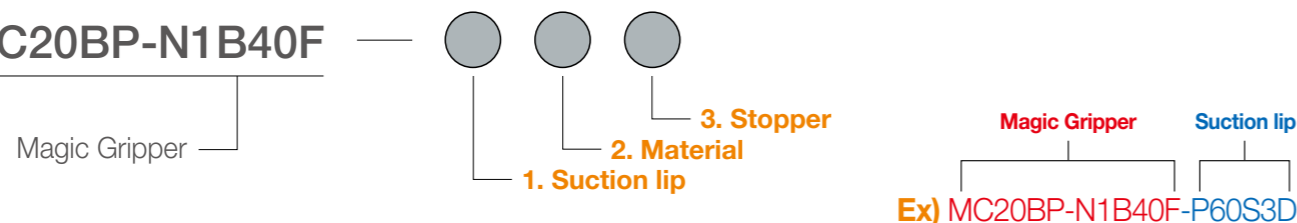
Material Resistance

| Description | NBR (Nitrile) | Silicone | White Silicone | Urethane |
|-----------------|---------------|-----------|----------------|-----------|
| Wear Resistance | Excellent | Good | Good | Excellent |
| Oil | Excellent | Poor | Poor | Excellent |
| Weather / Ozone | Fair | Excellent | Excellent | Excellent |
| Alcohol | Good | Good | Good | Fair |
| Acid | Fair | Poor | Poor | Poor |



Build an Ordering No.

MC20BP-N1B40F



1. Suction lip

| Description | Top Bellow 20 | Top Bellow 40 | Top Bellow 60 | Symbol |
|---------------------------|---------------|---------------|---------------|--------|
| P type lip, 15mm diameter | ○ | | | P15 |
| P type lip, 17mm diameter | ○ | | | P17 |
| P type lip, 20mm diameter | ○ | | | P20 |
| P type lip, 27mm diameter | ○ | | | P27 |
| P type lip, 32mm diameter | ○ | | | P32 |
| P type lip, 48mm diameter | | ○ | | P48 |
| P type lip, 60mm diameter | | ○ | | P60 |
| P type lip, 72mm diameter | | | ○ | P72 |
| P type lip, 85mm diameter | | | ○ | P85 |

2. Material

| Description | Symbol |
|------------------------------------|---------|
| NBR (Nitrile) | N6 |
| Silicone, 30° hardness | S3 |
| Silicone, 50° hardness | S5 |
| White Silicone, 30° hardness | W3 |
| White Silicone, 50° hardness | W5 |
| White Silicone, 30° hardness (FDA) | W3(FDA) |
| White Silicone, 50° hardness (FDA) | W5(FDA) |
| Urethane | U6 |

3. Stopper

| Description | Symbol |
|-------------|--------|
| D type | D |

Spare Parts

1. Stopper

| Part No. | Description | Part No. | Description |
|----------|---|----------|------------------------------|
| MS20-D | Stopper D type for P15, P17, P20, P27 & P32 | MS60-D | Stopper D type for P72 & P85 |
| MS40-D | Stopper D type for P48 & P60 | | |

2. Middle bellows

| Part No. | Description | Part No. | Description |
|----------|---|----------|---|
| 2MB/20 | Middle bellows 2 folds for P15, P17, P20, P27 & P32 | 3MB/20 | Middle bellows 3 folds for P15, P17, P20, P27 & P32 |
| 2MB/40 | Middle bellows 2 folds for P48 & P60 | 3MB/40 | Middle bellows 3 folds for P48 & P60 |
| | | 3MB/60 | Middle bellows 3 folds for P72 & P85 |

3. Filter

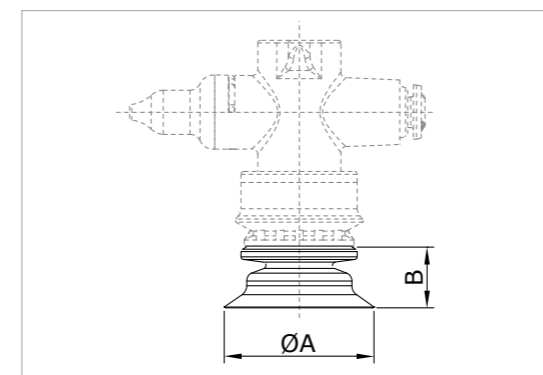
| Part No. | Description | Part No. | Description |
|----------|---|----------|---|
| VTFE20 | Filter (200mesh) for 20mm bellow diameter | VTFE60 | Filter (200mesh) for 60mm bellow diameter |
| VTFE40 | Filter (200mesh) for 40mm bellow diameter | | |

4. Suction lip

| Part No. | Description | Part No. | Description |
|----------|---|--------------|---|
| P15-N6 | P suction lip - 15mm diameter, NBR | P15-W5 | P suction lip - 15mm diameter, White Silicone, 50° hardness |
| P17-N6 | P suction lip - 17mm diameter, NBR | P17-W5 | P suction lip - 17mm diameter, White Silicone, 50° hardness |
| P20-N6 | P suction lip - 20mm diameter, NBR | P20-W5 | P suction lip - 20mm diameter, White Silicone, 50° hardness |
| P27-N6 | P suction lip - 27mm diameter, NBR | P27-W5 | P suction lip - 27mm diameter, White Silicone, 50° hardness |
| P32-N6 | P suction lip - 32mm diameter, NBR | P32-W5 | P suction lip - 32mm diameter, White Silicone, 50° hardness |
| P48-N6 | P suction lip - 48mm diameter, NBR | P48-W5 | P suction lip - 48mm diameter, White Silicone, 50° hardness |
| P60-N6 | P suction lip - 60mm diameter, NBR | P60-W5 | P suction lip - 60mm diameter, White Silicone, 50° hardness |
| P72-N6 | P suction lip - 72mm diameter, NBR | P72-W5 | P suction lip - 72mm diameter, White Silicone, 50° hardness |
| P85-N6 | P suction lip - 85mm diameter, NBR | P85-W5 | P suction lip - 85mm diameter, White Silicone, 50° hardness |
| P15-S3 | P suction lip - 15mm diameter, Silicone, 30° hardness | P15-W3 (FDA) | P suction lip - 15mm diameter, White Silicone, 30° hardness (FDA) |
| P17-S3 | P suction lip - 17mm diameter, Silicone, 30° hardness | P17-W3 (FDA) | P suction lip - 17mm diameter, White Silicone, 30° hardness (FDA) |
| P20-S3 | P suction lip - 20mm diameter, Silicone, 30° hardness | P20-W3 (FDA) | P suction lip - 20mm diameter, White Silicone, 30° hardness (FDA) |
| P27-S3 | P suction lip - 27mm diameter, Silicone, 30° hardness | P27-W3 (FDA) | P suction lip - 27mm diameter, White Silicone, 30° hardness (FDA) |
| P32-S3 | P suction lip - 32mm diameter, Silicone, 30° hardness | P32-W3 (FDA) | P suction lip - 32mm diameter, White Silicone, 30° hardness (FDA) |
| P48-S3 | P suction lip - 48mm diameter, Silicone, 30° hardness | P48-W3 (FDA) | P suction lip - 48mm diameter, White Silicone, 30° hardness (FDA) |
| P60-S3 | P suction lip - 60mm diameter, Silicone, 30° hardness | P60-W3 (FDA) | P suction lip - 60mm diameter, White Silicone, 30° hardness (FDA) |
| P72-S3 | P suction lip - 72mm diameter, Silicone, 30° hardness | P72-W3 (FDA) | P suction lip - 72mm diameter, White Silicone, 30° hardness (FDA) |
| P85-S3 | P suction lip - 85mm diameter, Silicone, 30° hardness | P85-W3 (FDA) | P suction lip - 85mm diameter, White Silicone, 30° hardness (FDA) |
| P15-S5 | P suction lip - 15mm diameter, Silicone, 50° hardness | P15-W5 (FDA) | P suction lip - 15mm diameter, White Silicone, 50° hardness (FDA) |
| P17-S5 | P suction lip - 17mm diameter, Silicone, 50° hardness | P17-W5 (FDA) | P suction lip - 17mm diameter, White Silicone, 50° hardness (FDA) |
| P20-S5 | P suction lip - 20mm diameter, Silicone, 50° hardness | P20-W5 (FDA) | P suction lip - 20mm diameter, White Silicone, 50° hardness (FDA) |
| P27-S5 | P suction lip - 27mm diameter, Silicone, 50° hardness | P27-W5 (FDA) | P suction lip - 27mm diameter, White Silicone, 50° hardness (FDA) |
| P32-S5 | P suction lip - 32mm diameter, Silicone, 50° hardness | P32-W5 (FDA) | P suction lip - 32mm diameter, White Silicone, 50° hardness (FDA) |
| P48-S5 | P suction lip - 48mm diameter, Silicone, 50° hardness | P48-W5 (FDA) | P suction lip - 48mm diameter, White Silicone, 50° hardness (FDA) |
| P60-S5 | P suction lip - 60mm diameter, Silicone, 50° hardness | P60-W5 (FDA) | P suction lip - 60mm diameter, White Silicone, 50° hardness (FDA) |
| P72-S5 | P suction lip - 72mm diameter, Silicone, 50° hardness | P72-W5 (FDA) | P suction lip - 72mm diameter, White Silicone, 50° hardness (FDA) |
| P85-S5 | P suction lip - 85mm diameter, Silicone, 50° hardness | P85-W5 (FDA) | P suction lip - 85mm diameter, White Silicone, 50° hardness (FDA) |
| P15-U6 | P suction lip - 15mm diameter, Urethane | P15-U6 | P suction lip - 15mm diameter, Urethane |
| P17-U6 | P suction lip - 17mm diameter, Urethane | P17-U6 | P suction lip - 17mm diameter, Urethane |
| P20-U6 | P suction lip - 20mm diameter, Urethane | P20-U6 | P suction lip - 20mm diameter, Urethane |
| P27-U6 | P suction lip - 27mm diameter, Urethane | P27-U6 | P suction lip - 27mm diameter, Urethane |
| P32-U6 | P suction lip - 32mm diameter, Urethane | P32-U6 | P suction lip - 32mm diameter, Urethane |
| P48-U6 | P suction lip - 48mm diameter, Urethane | P48-U6 | P suction lip - 48mm diameter, Urethane |
| P60-U6 | P suction lip - 60mm diameter, Urethane | P60-U6 | P suction lip - 60mm diameter, Urethane |
| P72-U6 | P suction lip - 72mm diameter, Urethane | P72-U6 | P suction lip - 72mm diameter, Urethane |
| P85-U6 | P suction lip - 85mm diameter, Urethane | P85-U6 | P suction lip - 85mm diameter, Urethane |

Dimensional Data

[Unit : mm]



* The dimension is measured when the lip is assembled

| Model | ØA | B |
|-------|--------------------------------------|------|
| P15 | 15.5 | 8.6 |
| P17 | 17 | 9 |
| P20 | 20 | 9.9 |
| P27 | 27 | 11 |
| P32 | 34 | 13.2 |
| P48 | 48 | 18.7 |
| P60 | 60 | 21.7 |
| P72 | Please contact VMECA for dimensions. | |
| P85 | Please contact VMECA for dimensions. | |



F suction lip



Features

- ✓ F-type lip is excellent in handling flat and heavy objects
- ✓ Various stopper options to cover a wide range of vacuum applications

F - Suction lip



Structure

- ✓ Stopper
- ✓ F - Suction lip

Structure of F-Suction lip



Applications

- ✓ Thin boxes
- ✓ Wooden panel
- ✓ Metal sheets
- ✓ Thin film

F-Suction lip being used in flat object application - Flat box

Recommended Lifting Force (Max.)

| Model | Volume (cm ³) | Lifting Force (Kg) - Perpendicular | | |
|----------|---------------------------|------------------------------------|----------|----------|
| | | - 20 kPa | - 60 kPa | - 90 kPa |
| 1B20-F25 | 1.53 | 1.4 | 2.9 | 3.7 |
| 1B20-F30 | 2.03 | 1.9 | 3.8 | 4.3 |
| 1B40-F45 | 10.9 | 3.4 | 8.0 | 9.3 |
| 1B40-F55 | 11.7 | 4.4 | 9.9 | 11.9 |
| 2B20-F25 | 3.64 | 1.4 | 2.9 | 3.7 |
| 2B20-F30 | 4.14 | 1.9 | 3.8 | 4.3 |
| 2B40-F45 | 18.3 | 3.4 | 8.0 | 9.3 |
| 2B40-F55 | 19.1 | 4.4 | 9.9 | 11.9 |

* The lifting force does not include safety factor

Material Specifications

| Material | Hardness Shore (°) | Color | Temperature (°C) |
|--------------|--------------------|--------------------|------------------|
| Polyurethane | 60 | Translucent Orange | 0-60 |

* The temperature data is only for suction lip. Please contact us if it is used in over 60°C

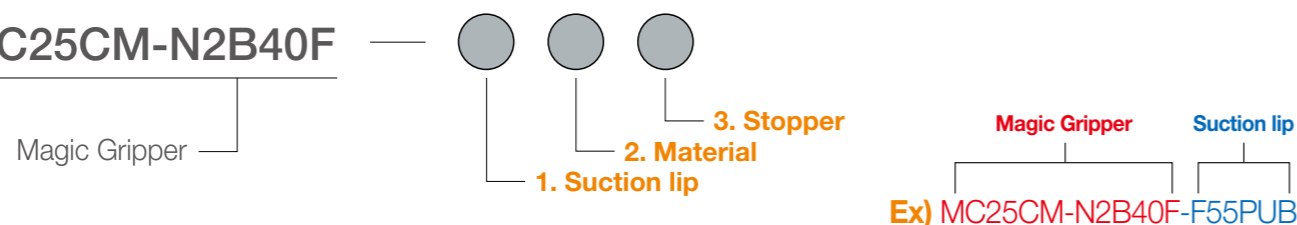
Material Resistance

| Description | Polyurethane |
|-----------------|--------------|
| Wear Resistance | Excellent |
| Oil | Excellent |
| Weather / Ozone | Excellent |
| Alcohol | Fair |
| Acid | Fair |



Build an Ordering No.

MC25CM-N2B40F



1. Suction lip

| Description | Top Bellow 20 | Top Bellow 40 | Top Bellow 60 | Symbol |
|---------------------------|---------------|---------------|---------------|--------|
| F type lip, 25mm diameter | ○ | | | F25 |
| F type lip, 30mm diameter | ○ | | | F30 |
| F type lip, 45mm diameter | | ○ | | F45 |
| F type lip, 55mm diameter | | ○ | | F55 |

2. Material

| Description | Symbol |
|--------------|--------|
| Polyurethane | PU |

3. Stopper

| Description | Symbol |
|-------------|--------|
| B type | B |
| C type | C |
| D type | D |

3. Filter

| Part No. | Description | Part No. | Description |
|----------|---|----------|---|
| VTFE20 | Filter (200mesh) for 20mm bellow diameter | VTFE40 | Filter (200mesh) for 40mm bellow diameter |

4. Suction lip

| Part No. | Description | Part No. | Description |
|----------|---|----------|---|
| F25-PU | F suction lip - 25mm diameter, Polyurethane | F45-PU | F suction lip - 45mm diameter, Polyurethane |
| F30-PU | F suction lip - 30mm diameter, Polyurethane | F55-PU | F suction lip - 55mm diameter, Polyurethane |

Spare Parts

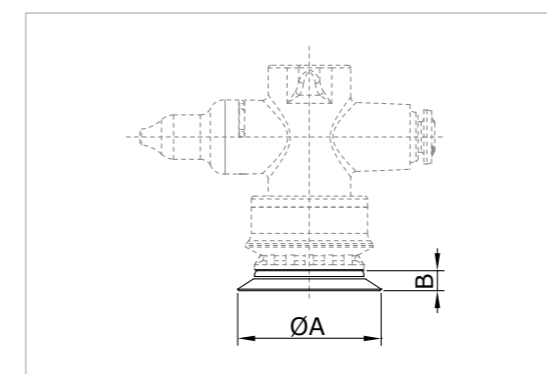
1. Stopper

| Part No. | Description | Part No. | Description |
|----------|------------------------------|----------|------------------------------|
| MS20-B | Stopper B type for F25 & F30 | MS40-B | Stopper B type for F45 & F55 |
| MS20-C | Stopper C type for F25 & F30 | MS40-C | Stopper C type for F45 & F55 |
| MS20-D | Stopper D type for F25 & F30 | MS40-D | Stopper D type for F45 & F55 |

2. Middle bellows

| Part No. | Description | Part No. | Description |
|----------|--------------------------------------|----------|--------------------------------------|
| 2MB/20 | Middle bellows 2 folds for F25 & F30 | 3MB/20 | Middle bellows 3 folds for F25 & F30 |
| 2MB/40 | Middle bellows 2 folds for F45 & F55 | 3MB/40 | Middle bellows 3 folds for F45 & F55 |

Dimensional Data



※ Dimensions are measured with the suction lip assembled

[Unit : mm]

| Model | ØA | B |
|-------|----|-----|
| F25 | 26 | 3.5 |
| F30 | 33 | 3.5 |
| F45 | 47 | 6 |
| F55 | 55 | 6 |



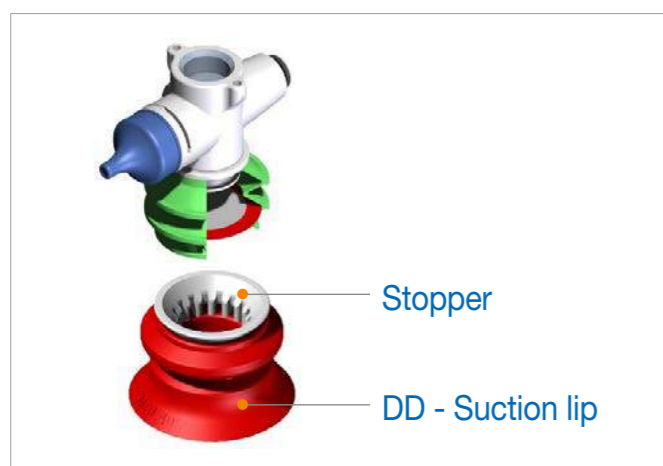
DD-type



DD - Suction lip

Features

- ✓ Excellent for irregular curved and rough surface products
- ✓ Dual lip design offers a safety factor against suction lip wear and tear
- ✓ Various lip material options to cover a wide range of vacuum applications



Structure of DD-Suction lip

Structure

- ✓ Stopper
- ✓ DD - Suction lip

Applications

- ✓ Food packages
- ✓ Eggs
- ✓ Plastic bags
- ✓ Pouch bags



DD-Suction lip being used in various applications - Apple

Recommended Lifting Force (Max.)

| Model | Volume (cm ³) | Lifting Force (Kg) - Perpendicular | | |
|-------------|---------------------------|------------------------------------|-----------|-------------|
| | | - 20 kPa | - 60 kPa | - 90 kPa |
| 1B40-DD4030 | 17.36 | 1.07 / 1.84 | 2.1 / 3.8 | 2.76 / 4.79 |
| 2B40-DD4030 | 24.76 | 1.07 / 1.84 | 2.1 / 3.8 | 2.76 / 4.79 |

Material Specifications

| Material | Hardness Shore (°) | Color | Temperature (°C) |
|--------------------------------|--------------------|-------------------|--------------------|
| N6- NBR (Nitrile) | 60 | Blue | -20~110 |
| S3 - Silicone | 30 | Translucent White | -70~200 |
| S5 - Silicone | 50 | Red | -70~200 |
| W3 - White Silicone | 30 | Translucent White | -70~200 |
| W5 - White Silicone | 50 | Translucent White | -70~200 |
| W3(FDA) - White Silicone (FDA) | 30 | Translucent White | -70~200 |
| W5(FDA) - White Silicone (FDA) | 50 | Translucent White | -70~200 |
| U6 - Urethane | 60 | Dark Grey | 0~100 |

* The temperature data is only for suction lip. Please contact us if it is used in over 60°C

** For additional materials, please contact us

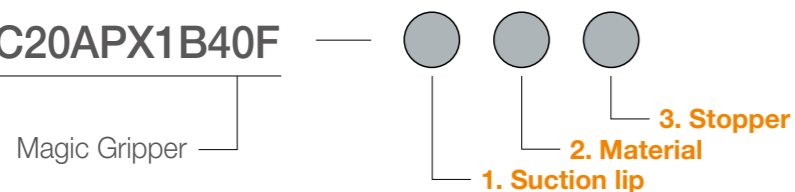
Material Resistance

| Description | NBR (Nitrile) | Silicone | White Silicone | Urethane |
|-----------------|---------------|-----------|----------------|-----------|
| Wear Resistance | Excellent | Good | Good | Excellent |
| Oil | Excellent | Poor | Poor | Excellent |
| Weather / Ozone | Fair | Excellent | Excellent | Excellent |
| Alcohol | Good | Good | Good | Fair |
| Acid | Fair | Poor | Poor | Poor |



Build an Ordering No.

MC20APX1B40F



1. Suction lip

| Description | Top Bellow 20 | Top Bellow 40 | Top Bellow 60 | Symbol |
|---|---------------|---------------|---------------|--------|
| DD type lip, inner lip 30mm diameter, outer lip 41mm diameter | | O | | DD4030 |

2. Material

| Description | Symbol |
|------------------------------------|---------|
| NBR (Nitrile) | N6 |
| Silicone, 30° hardness | S3 |
| Silicone, 50° hardness | S5 |
| White Silicone, 30° hardness | W3 |
| White Silicone, 50° hardness | W5 |
| White Silicone, 30° hardness (FDA) | W3(FDA) |
| White Silicone, 50° hardness (FDA) | W5(FDA) |
| Urethane | U6 |

3. Stopper

| Description | Symbol |
|-------------|--------|
| D type | D |

3. Filter

| Part No. | Description |
|----------|---|
| VTFE40 | Filter (200mesh) for 40mm bellow diameter |

4. Suction lip

| Part No. | Description |
|----------------|--|
| DD4030-N6 | DD type - inner lip 30mm diameter, outer lip 41mm diameter, NBR |
| DD4030-S3 | DD type - inner lip 30mm diameter, outer lip 41mm diameter, Silicone, 30° hardness |
| DD4030-S5 | DD type - inner lip 30mm diameter, outer lip 41mm diameter, Silicone, 50° hardness |
| DD4030-W3 | DD type - inner lip 30mm diameter, outer lip 41mm diameter, White Silicone, 30° hardness |
| DD4030-W5 | DD type - inner lip 30mm diameter, outer lip 41mm diameter, White Silicone, 50° hardness |
| DD4030-W3(FDA) | DD type - inner lip 30mm diameter, outer lip 41mm diameter, White Silicone, 30° hardness (FDA) |
| DD4030-W5(FDA) | DD type - inner lip 30mm diameter, outer lip 41mm diameter, White Silicone, 50° hardness (FDA) |
| DD4030-U6 | DD type - inner lip 30mm diameter, outer lip 41mm diameter, Urethane |

Spare Parts

1. Stopper

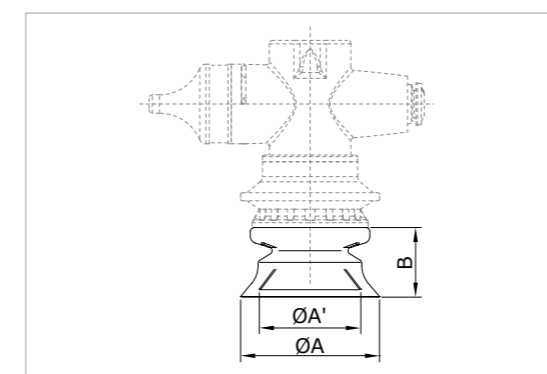
| Part No. | Description |
|----------|----------------|
| MS40-D | Stopper D type |

2. Middle bellows

| Part No. | Description | Part No. | Description |
|----------|-----------------------------------|----------|-----------------------------------|
| 2MB/40 | Middle bellows 2 folds for DD4030 | 3MB/40 | Middle bellows 3 folds for DD4030 |

Dimensional Data

[Unit : mm]



| Model | ØA | ØA' | B |
|--------|----|-----|------|
| DD4030 | 41 | 30 | 20.5 |

※ Dimensions are measured with the suction lip assembled



MBU suction lip



Features

- ✓ Wide cover for increased degree of height compensation
- ✓ Excellent for curved products
- ✓ Various lip material options to cover a wide range of vacuum applications

MBU - Suction lip



Structure

- ✓ Stopper
- ✓ MBU - Suction lip

Structure of MBU-Suction lip



Applications

- ✓ Plastic bags
- ✓ Metal sheets
- ✓ Plywood
- ✓ Light Carton boxes

MBU-Suction lip being used in uneven object application - Cone package

Recommended Lifting Force (Max.)

| Model | Volume (cm ³) | Lifting Force (Kg) - Perpendicular | | |
|------------|---------------------------|------------------------------------|----------|----------|
| | | - 20 kPa | - 60 kPa | - 90 kPa |
| 1B20-MBU17 | 1.92 | 0.39 | 0.57 | 0.67 |
| 1B20-MBU23 | 2.49 | 0.52 | 0.79 | 0.91 |
| 1B20-MBU27 | 3.1 | 0.55 | 0.94 | 1.05 |
| 2B20-MBU17 | 4.03 | 0.39 | 0.57 | 0.67 |
| 2B20-MBU23 | 4.6 | 0.52 | 0.79 | 0.91 |
| 2B20-MBU27 | 5.21 | 0.55 | 0.94 | 1.05 |

* The lifting force does not include safety factor

Material Specifications

| Material | Hardness Shore (°) | Color | Temperature (°C) |
|--------------------------------|--------------------|-------------------|--------------------|
| N6- NBR (Nitrile) | 60 | Blue | -20~110 |
| S3 - Silicone | 30 | Translucent White | -70~200 |
| S5 - Silicone | 50 | Red | -70~200 |
| W3 - White Silicone | 30 | Translucent White | -70~200 |
| W5 - White Silicone | 50 | Translucent White | -70~200 |
| W3(FDA) - White Silicone (FDA) | 30 | Translucent White | -70~200 |
| W5(FDA) - White Silicone (FDA) | 50 | Translucent White | -70~200 |
| U6 - Urethane | 60 | Dark Grey | 0~100 |

* The temperature data is only for suction lip. Please contact us if it is used in over 60°C

** For additional materials, please contact us

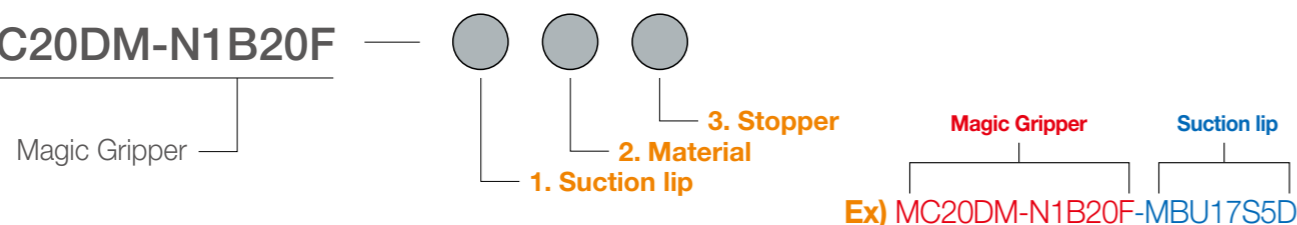
Material Resistance

| Description | NBR (Nitrile) | Silicone | White Silicone | Urethane |
|-----------------|---------------|-----------|----------------|-----------|
| Wear Resistance | Excellent | Good | Good | Excellent |
| Oil | Excellent | Poor | Poor | Excellent |
| Weather / Ozone | Fair | Excellent | Excellent | Excellent |
| Alcohol | Good | Good | Good | Fair |
| Acid | Fair | Poor | Poor | Poor |



Build an Ordering No.

MC20DM-N1B20F



1. Suction lip

| Description | Top Bellow 20 | Top Bellow 40 | Top Bellow 60 | Symbol |
|-----------------------------|---------------|---------------|---------------|--------|
| MBU type lip, 17mm diameter | ○ | | | MBU17 |
| MBU type lip, 23mm diameter | ○ | | | MBU23 |
| MBU type lip, 27mm diameter | ○ | | | MBU27 |

2. Material

| Description | Symbol |
|------------------------------------|---------|
| NBR (Nitrile) | N6 |
| Silicone, 30° hardness | S3 |
| Silicone, 50° hardness | S5 |
| White Silicone, 30° hardness | W3 |
| White Silicone, 50° hardness | W5 |
| White Silicone, 30° hardness (FDA) | W3(FDA) |
| White Silicone, 50° hardness (FDA) | W5(FDA) |
| Urethane | U6 |

3. Stopper

| Description | Symbol |
|-------------|--------|
| D type | D |

3. Filter

| Part No. | Description |
|----------|---|
| VTFE20 | Filter (200mesh) for 20mm bellow diameter |

4. Suction lip

| Part No. | Description | Part No. | Description |
|----------|---|----------------|---|
| MBU17-N6 | MBU suction lip - 17mm diameter, NBR | MBU17-W5 | MBU suction lip - 17mm diameter, White Silicone, 50° hardness |
| MBU23-N6 | MBU suction lip - 23mm diameter, NBR | MBU23-W5 | MBU suction lip - 23mm diameter, White Silicone, 50° hardness |
| MBU27-N6 | MBU suction lip - 27mm diameter, NBR | MBU27-W5 | MBU suction lip - 27mm diameter, White Silicone, 50° hardness |
| MBU17-S3 | MBU suction lip - 17mm diameter, Silicone, 30° hardness | MBU17-W3 (FDA) | MBU suction lip - 17mm diameter, White Silicone, 30° hardness (FDA) |
| MBU23-S3 | MBU suction lip - 23mm diameter, Silicone, 30° hardness | MBU23-W3 (FDA) | MBU suction lip - 23mm diameter, White Silicone, 30° hardness (FDA) |
| MBU27-S3 | MBU suction lip - 27mm diameter, Silicone, 30° hardness | MBU27-W3 (FDA) | MBU suction lip - 27mm diameter, White Silicone, 30° hardness (FDA) |
| MBU17-S5 | MBU suction lip - 17mm diameter, Silicone, 50° hardness | MBU17-W5 (FDA) | MBU suction lip - 17mm diameter, White Silicone, 50° hardness (FDA) |
| MBU23-S5 | MBU suction lip - 23mm diameter, Silicone, 50° hardness | MBU23-W5 (FDA) | MBU suction lip - 23mm diameter, White Silicone, 50° hardness (FDA) |
| MBU27-S5 | MBU suction lip - 27mm diameter, Silicone, 50° hardness | MBU27-W5 (FDA) | MBU suction lip - 27mm diameter, White Silicone, 50° hardness (FDA) |
| MBU17-U6 | MBU suction lip - 17mm diameter, Urethane | MBU17-U6 | MBU suction lip - 17mm diameter, Urethane |
| MBU23-U6 | MBU suction lip - 23mm diameter, Urethane | MBU23-U6 | MBU suction lip - 23mm diameter, Urethane |
| MBU27-U6 | MBU suction lip - 27mm diameter, Urethane | MBU27-U6 | MBU suction lip - 27mm diameter, Urethane |

Spare Parts

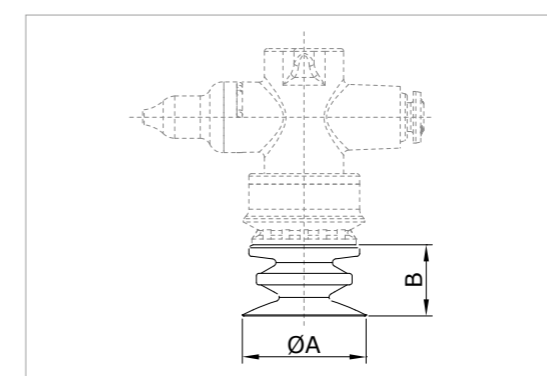
1. Stopper

| Part No. | Description |
|----------|----------------|
| MS20-D | Stopper D type |

2. Middle bellows

| Part No. | Description | Part No. | Description |
|----------|---|----------|---|
| 2MB/20 | Middle bellows 2 folds for MBU17, MBU23 & MBU27 | 3MB/20 | Middle bellows 3 folds for MBU17, MBU23 & MBU27 |

Dimensional Data



※ Dimensions are measured with the suction lip assembled

[Unit : mm]

| Model | ØA | B |
|-------|----|------|
| MBU17 | 17 | 13.5 |
| MBU23 | 23 | 13.5 |
| MBU27 | 27 | 13.5 |



MD suction lip



MD - Suction lip

Features

- ✓ Excellent in handling curved or rounded objects
- ✓ Various stopper & lip material options to cover a wide range of vacuum applications



Structure of MD-Suction lip

Structure

- ✓ Stopper
- ✓ MD - Suction lip



MD-Suction lip being used in rounded object application - Plastic bottle

Applications

- ✓ Automobile roof & doors
- ✓ Metal sheets
- ✓ Veneer sheets

Recommended Lifting Force (Max.)

| Model | Volume (cm ³) | Lifting Force (Kg) - Perpendicular | | |
|-----------|---------------------------|------------------------------------|----------|----------|
| | | - 20 kPa | - 60 kPa | - 90 kPa |
| 1B20-MD22 | 2.67 | 0.71 | 1.61 | 2.2 |
| 2B20-MD22 | 4.78 | 0.71 | 1.61 | 2.2 |

* The lifting force does not include safety factor

Material Specifications

| Material | Hardness Shore (°) | Color | Temperature (°C) |
|--------------------------------|--------------------|-------------------|--------------------|
| N6- NBR (Nitrile) | 60 | Blue | -20~110 |
| S3 - Silicone | 30 | Translucent White | -70~200 |
| S5 - Silicone | 50 | Red | -70~200 |
| W3 - White Silicone | 30 | Translucent White | -70~200 |
| W5 - White Silicone | 50 | Translucent White | -70~200 |
| W3(FDA) - White Silicone (FDA) | 30 | Translucent White | -70~200 |
| W5(FDA) - White Silicone (FDA) | 50 | Translucent White | -70~200 |
| U6 - Urethane | 60 | Dark Grey | 0~100 |

* The temperature data is only for suction lip. Please contact us if it is used in over 60°C

** For additional materials, please contact us

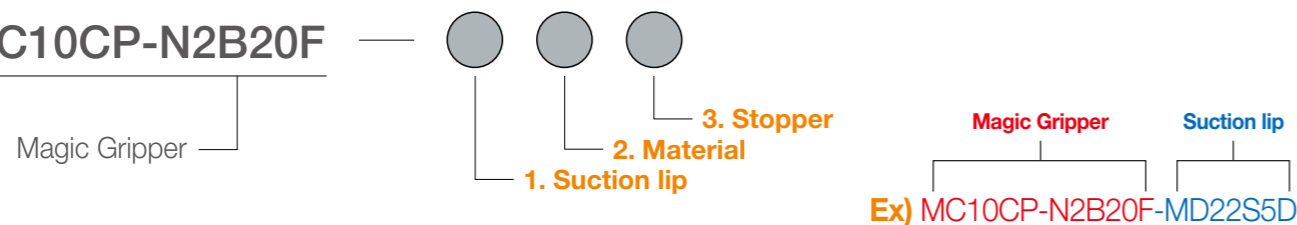
Material Resistance

| Description | NBR (Nitrile) | Silicone | White Silicone | Urethane |
|-----------------|---------------|-----------|----------------|-----------|
| Wear Resistance | Excellent | Good | Good | Excellent |
| Oil | Excellent | Poor | Poor | Excellent |
| Weather / Ozone | Fair | Excellent | Excellent | Excellent |
| Alcohol | Good | Good | Good | Fair |
| Acid | Fair | Poor | Poor | Poor |



Build an Ordering No.

MC10CP-N2B20F



1. Suction lip

| Description | Top Bellow 20 | Top Bellow 40 | Top Bellow 60 | Symbol |
|----------------------------|---------------|---------------|---------------|--------|
| MD type lip, 22mm diameter | O | | | MD22 |

2. Material

| Description | Symbol |
|------------------------------------|---------|
| NBR (Nitrile) | N6 |
| Silicone, 30° hardness | S3 |
| Silicone, 50° hardness | S5 |
| White Silicone, 30° hardness | W3 |
| White Silicone, 50° hardness | W5 |
| White Silicone, 30° hardness (FDA) | W3(FDA) |
| White Silicone, 50° hardness (FDA) | W5(FDA) |
| Urethane | U6 |

3. Stopper

| Description | Symbol |
|-------------|--------|
| D type | D |

3. Filter

| Part No. | Description |
|----------|---|
| VTFE20 | Filter (200mesh) for 20mm bellow diameter |

4. Suction lip

| Part No. | Description |
|---------------|---|
| MD22-N6 | MD type - 22mm diameter, NBR |
| MD22-S3 | MD type - 22mm diameter, Silicone, 30° hardness |
| MD22-S5 | MD type - 22mm diameter, Silicone, 50° hardness |
| MD22-W3 | MD type - 22mm diameter, White Silicone, 30° hardness |
| MD22-W5 | MD type - 22mm diameter, White Silicone, 50° hardness |
| MD22-W3 (FDA) | MD type - 22mm diameter, White Silicone, 30° hardness (FDA) |
| MD22-W5 (FDA) | MD type - 22mm diameter, White Silicone, 50° hardness (FDA) |
| MD22-U6 | MD type - 22mm diameter, Urethane |

Spare Parts

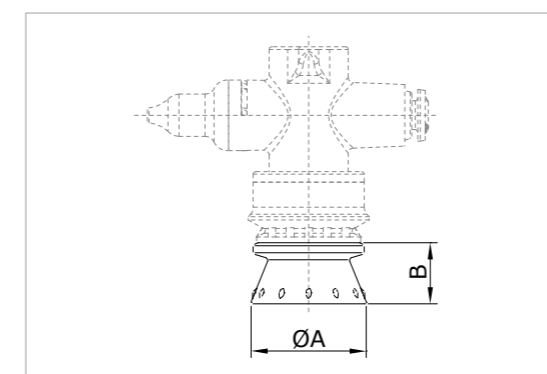
1. Stopper

| Part No. | Description |
|----------|----------------|
| MS20-D | Stopper D type |

2. Middle bellows

| Part No. | Description | Part No. | Description |
|----------|---------------------------------|----------|---------------------------------|
| 2MB/20 | Middle bellows 2 folds for MD22 | 3MB/20 | Middle bellows 3 folds for MD22 |

Dimensional Data



※ Dimensions are measured with the suction lip assembled

[Unit : mm]

| Model | ØA | B |
|-------|----|------|
| MD22 | 22 | 11.6 |



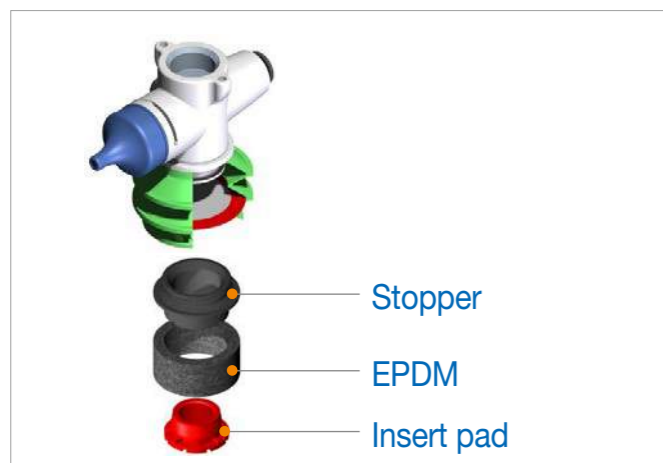
S suction lip



S - Suction lip

Features

- ✓ Excellent in handling uneven, rough surface products, and porous objects
- ✓ Various stopper & lip material options to cover a wide range of vacuum applications



Structure of S-Suction lip

Structure

- ✓ Stopper
- ✓ S - Suction lip
- ✓ Insert pad

Applications

- ✓ Uneven surface products
- ✓ Bricks
- ✓ Marble
- ✓ Metal sheets
- ✓ Rough lumber products



S-Suction lip being used in uneven & slightly curved object application - Coffee cup

Recommended Lifting Force (Max.)

| Model | Volume (cm ³) | Lifting Force (Kg) - Perpendicular | | |
|----------|---------------------------|------------------------------------|----------|----------|
| | | - 20 kPa | - 60 kPa | - 90 kPa |
| 1B20-S30 | 3.35 | 0.94 | 2.53 | 3.30 |
| 1B40-S50 | 13.75 | 1.74 | 4.36 | 6.12 |
| 1B60-S60 | 34.17 | 2.87 | 7.30 | 10.34 |
| 2B20-S30 | 5.48 | 0.94 | 2.53 | 3.30 |
| 2B40-S50 | 21.02 | 1.74 | 4.36 | 6.12 |
| 2B60-S60 | 54.93 | 2.87 | 7.30 | 10.34 |

* The lifting force does not include safety factor

Material Specifications

| Material | Hardness Shore (°) | Color | Temperature (°C) |
|----------|--------------------|-------|--------------------|
| EPDM | 15 | Black | -0~120 |

* The temperature data is only for suction lip. Please contact us if it is used in over 60°C

Insert Pad

| Material | Hardness Shore (°) | Color | Temperature (°C) |
|---------------------|--------------------|-------------------|--------------------|
| NBR (Nitrile) | 60 | Black | -20 ~ 110 |
| S5 - Silicone | 50 | Red | -70 ~ 200 |
| W5 - White Silicone | 50 | Translucent White | -70 ~ 200 |

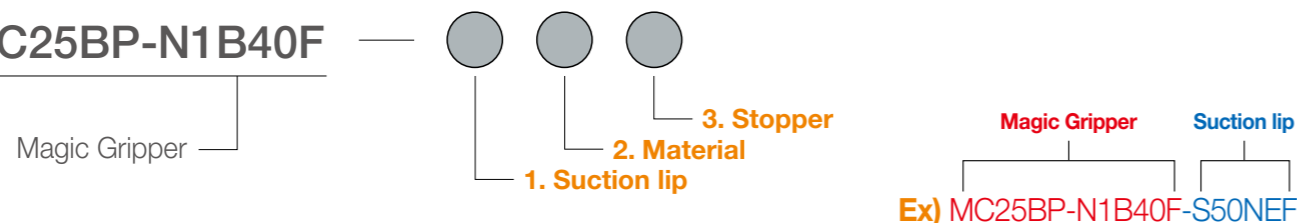
Material Resistance

| Description | NBR (Nitrile) | Silicone | White Silicone |
|-----------------|---------------|-----------|----------------|
| Wear Resistance | Excellent | Good | Good |
| Oil | Excellent | Poor | Poor |
| Weather / Ozone | Fair | Excellent | Excellent |
| Alcohol | Good | Good | Good |
| Acid | Fair | Poor | Poor |



Build an Ordering No.

MC25BP-N1B40F



1. Suction lip

| Description | Top Bellow 20 | Top Bellow 40 | Top Bellow 60 | Symbol |
|---------------------------|---------------|---------------|---------------|--------|
| S type lip, 30mm diameter | ○ | | | S30 |
| S type lip, 50mm diameter | | ○ | | S50 |
| S type lip, 61mm diameter | | | ○ | S60 |

2. Material

| Description | Symbol |
|---|--------|
| Insert pad NBR, sponge lip EPDM | NE |
| Insert pad Silicone 50° hardness, sponge lip EPDM | SE |
| Insert pad White Silicone 50° hardness, sponge lip EPDM | WSE |

3. Stopper

| Description | Symbol |
|---------------------------------|--------|
| F type : Only for S Suction lip | F |

3. Filter

| Part No. | Description | Part No. | Description |
|----------|---|----------|---|
| VTFE20 | Filter (200mesh) for 20mm bellow diameter | VTFE60 | Filter (200mesh) for 60mm bellow diameter |
| VTFE40 | Filter (200mesh) for 40mm bellow diameter | | |

4. Suction lip

| Part No. | Description | Part No. | Description |
|----------|------------------------------|----------|------------------------------|
| S3020-E | S type - 30mm diameter, EPDM | S5030-E | S type - 50mm diameter, EPDM |
| S6040-E | S type - 60mm diameter, EPDM | | |

5. Insert pad

| Part No. | Description | Part No. | Description |
|----------|--|----------|--|
| S30-IN | S suction lip – Insert pad, NBR for S30 | S30-IWS | S suction lip – Insert pad, White Silicone, 50° hardness for S30 |
| S50-IN | S suction lip – Insert pad, NBR for S50 | S50-IWS | S suction lip – Insert pad, White Silicone, 50° hardness for S50 |
| S60-IN | S suction lip – Insert pad, NBR for S60 | S60-IWS | S suction lip – Insert pad, White Silicone, 50° hardness for S60 |
| S30-IS | S suction lip – Insert pad, Silicone, 50° hardness for S30 | | |
| S50-IS | S suction lip – Insert pad, Silicone, 50° hardness for S50 | | |
| S60-IS | S suction lip – Insert pad, Silicone, 50° hardness for S60 | | |

Spare Parts

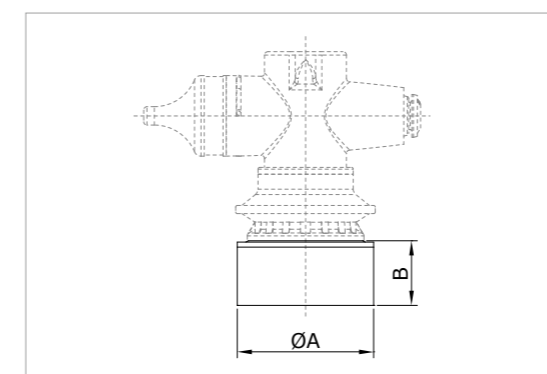
1. Stopper

| Part No. | Description | Part No. | Description |
|----------|------------------------|----------|------------------------|
| MS20-F | Stopper F type for S30 | MS60-F | Stopper F type for S60 |
| MS40-F | Stopper F type for S50 | | |

2. Middle bellows

| Part No. | Description | Part No. | Description |
|----------|--------------------------------|----------|--------------------------------|
| 2MB/20 | Middle bellows 2 folds for S30 | 3MB/20 | Middle bellows 3 folds for S30 |
| 2MB/40 | Middle bellows 2 folds for S50 | 3MB/40 | Middle bellows 3 folds for S50 |
| | | 3MB/60 | Middle bellows 3 folds for S60 |

Dimensional Data



※ Dimensions are measured with the suction lip assembled

[Unit : mm]

| Model | ØA | B |
|-------|----|------|
| S30 | 30 | 14.5 |
| S50 | 50 | 22.3 |
| S60 | 61 | 30.6 |



MU suction lip



MU - Suction lip

Features

- ✓ Offers great gripping force for flat and stable surfaces
- ✓ Various stopper & lip material options to cover a wide range of vacuum applications



Structure of MU-Suction lip

Structure

- ✓ Stopper
- ✓ MU - Suction lip



MU-Suction lip being used in flat object application - Cell phone

Applications

- ✓ Metal sheets
- ✓ Carton boxes
- ✓ Glass
- ✓ Veneer sheets
- ✓ Printing industry

Recommended Lifting Force (Max.)

| Model | Volume (cm ³) | Lifting Force (Kg) - Perpendicular | | |
|-----------|---|------------------------------------|----------|----------|
| | | - 20 kPa | - 60 kPa | - 90 kPa |
| 1B40-MU45 | 9.93 | 0.66 | 1.34 | 1.79 |
| 1B40-MU55 | 12.19 | 1.34 | 2.81 | 3.37 |
| 1B60-MU65 | 26.90 | 2.24 | 4.37 | 5.50 |
| 1B60-MU75 | 31.98 | 3.93 | 8.18 | 10.32 |
| 1B60-MU80 | Please contact VMECA for lifting force. | | | |
| 2B40-MU45 | 17.33 | 0.66 | 1.34 | 1.79 |
| 2B40-MU55 | 19.58 | 1.34 | 2.81 | 3.37 |
| 2B60-MU65 | 47.70 | 2.24 | 4.37 | 5.50 |
| 2B60-MU75 | 52.78 | 3.93 | 8.18 | 10.32 |
| 2B60-MU80 | Please contact VMECA for lifting force. | | | |

* The lifting force does not include safety factor

Material Specifications

| Material | Hardness Shore (°) | Color | Temperature (°C) |
|--------------------------------|--------------------|-------------------|------------------|
| N6- NBR (Nitrile) | 60 | Blue | -20~110 |
| S3 - Silicone | 30 | Translucent White | -70~200 |
| S5 - Silicone | 50 | Red | -70~200 |
| W3 - White Silicone | 30 | Translucent White | -70~200 |
| W5 - White Silicone | 50 | Translucent White | -70~200 |
| W3(FDA) - White Silicone (FDA) | 30 | Translucent White | -70~200 |
| W5(FDA) - White Silicone (FDA) | 50 | Translucent White | -70~200 |
| U6 - Urethane | 60 | Dark Grey | 0~100 |

* The temperature data is only for suction lip. Please contact us if it is used in over 60°C

** For additional materials, please contact us

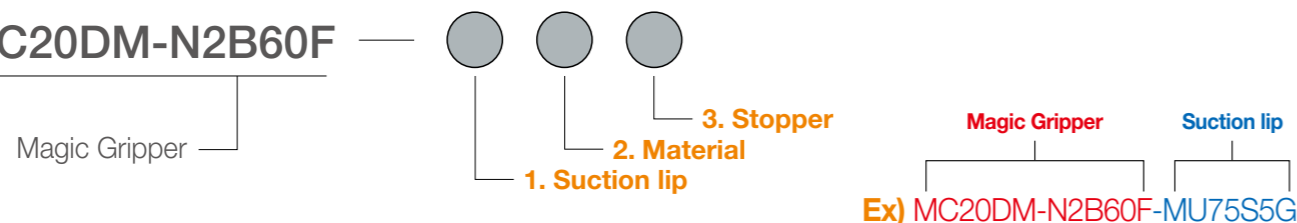
Material Resistance

| Description | NBR (Nitrile) | Silicone | White Silicone | Urethane |
|-----------------|---------------|-----------|----------------|-----------|
| Wear Resistance | Excellent | Good | Good | Excellent |
| Oil | Excellent | Poor | Poor | Excellent |
| Weather / Ozone | Fair | Excellent | Excellent | Excellent |
| Alcohol | Good | Good | Good | Fair |
| Acid | Fair | Poor | Poor | Poor |



Build an Ordering No.

MC20DM-N2B60F



1. Suction lip

| Description | Top Bellow 20 | Top Bellow 40 | Top Bellow 60 | Symbol |
|----------------------------|---------------|---------------|---------------|--------|
| MU type lip, 45mm diameter | | ○ | | MU45 |
| MU type lip, 55mm diameter | | ○ | | MU55 |
| MU type lip, 65mm diameter | | | ○ | MU65 |
| MU type lip, 75mm diameter | | | ○ | MU75 |
| MU type lip, 80mm diameter | | | ○ | MU80 |

2. Material

| Description | Symbol |
|------------------------------------|---------|
| NBR (Nitrile) | N6 |
| Silicone, 30° hardness | S3 |
| Silicone, 50° hardness | S5 |
| White Silicone, 30° hardness | W3 |
| White Silicone, 50° hardness | W5 |
| White Silicone, 30° hardness (FDA) | W3(FDA) |
| White Silicone, 50° hardness (FDA) | W5(FDA) |
| Urethane | U6 |

3. Stopper

| Description | Symbol |
|-------------------------------------|--------|
| G type : Only for MF&MU Suction lip | G |

Spare Parts

1. Stopper

| Part No. | Description | Part No. | Description |
|----------|--------------------------------|----------|---------------------------------------|
| MS40-G | Stopper G type for MU45 & MU55 | MS60-G | Stopper G type for MU65 & MU75 & MU80 |

2. Middle bellows

| Part No. | Description | Part No. | Description |
|----------|--|----------|---|
| 2MB/40 | Middle bellows 2 folds for MU45 & MU55 | 3MB/40 | Middle bellows 3 folds for MU45 & MU55 |
| | | 3MB/60 | Middle bellows 3 folds for MU65 & MU75 & MU80 |

3. Filter

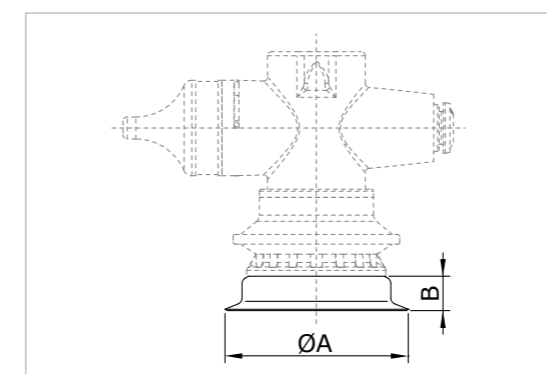
| Part No. | Description | Part No. | Description |
|----------|---|----------|---|
| VTFE40 | Filter (200mesh) for 40mm bellow diameter | VTFE60 | Filter (200mesh) for 60mm bellow diameter |

4. Suction lip

| Part No. | Description | Part No. | Description |
|----------|--|---------------|--|
| MU45-N6 | MU suction lip - 45mm diameter, NBR | MU45-W5 | MU suction lip - 45mm diameter, White Silicone, 50° hardness |
| MU55-N6 | MU suction lip - 55mm diameter, NBR | MU55-W5 | MU suction lip - 55mm diameter, White Silicone, 50° hardness |
| MU65-N6 | MU suction lip - 65mm diameter, NBR | MU65-W5 | MU suction lip - 65mm diameter, White Silicone, 50° hardness |
| MU75-N6 | MU suction lip - 75mm diameter, NBR | MU75-W5 | MU suction lip - 75mm diameter, White Silicone, 50° hardness |
| MU80-N6 | MU suction lip - 80mm diameter, NBR | MU80-W5 | MU suction lip - 80mm diameter, White Silicone, 50° hardness |
| MU45-S3 | MU suction lip - 45mm diameter, Silicone, 30° hardness | MU45-W3 (FDA) | MU suction lip - 45mm diameter, White Silicone, 30° hardness (FDA) |
| MU55-S3 | MU suction lip - 55mm diameter, Silicone, 30° hardness | MU55-W3 (FDA) | MU suction lip - 55mm diameter, White Silicone, 30° hardness (FDA) |
| MU65-S3 | MU suction lip - 65mm diameter, Silicone, 30° hardness | MU65-W3 (FDA) | MU suction lip - 65mm diameter, White Silicone, 30° hardness (FDA) |
| MU75-S3 | MU suction lip - 75mm diameter, Silicone, 30° hardness | MU75-W3 (FDA) | MU suction lip - 75mm diameter, White Silicone, 30° hardness (FDA) |
| MU80-S3 | MU suction lip - 80mm diameter, Silicone, 30° hardness | MU80-W3 (FDA) | MU suction lip - 80mm diameter, White Silicone, 30° hardness (FDA) |
| MU45-S5 | MU suction lip - 45mm diameter, Silicone, 50° hardness | MU45-W5 (FDA) | MU suction lip - 45mm diameter, White Silicone, 50° hardness (FDA) |
| MU55-S5 | MU suction lip - 55mm diameter, Silicone, 50° hardness | MU55-W5 (FDA) | MU suction lip - 55mm diameter, White Silicone, 50° hardness (FDA) |
| MU65-S5 | MU suction lip - 65mm diameter, Silicone, 50° hardness | MU65-W5 (FDA) | MU suction lip - 65mm diameter, White Silicone, 50° hardness (FDA) |
| MU75-S5 | MU suction lip - 75mm diameter, Silicone, 50° hardness | MU75-W5 (FDA) | MU suction lip - 75mm diameter, White Silicone, 50° hardness (FDA) |
| MU80-S5 | MU suction lip - 80mm diameter, Silicone, 50° hardness | MU80-W5 (FDA) | MU suction lip - 80mm diameter, White Silicone, 50° hardness (FDA) |
| MU45-U6 | MU suction lip - 45mm diameter, White Silicone, 30° hardness | MU45-U6 | MU suction lip - 45mm diameter, Urethane |
| MU55-U6 | MU suction lip - 55mm diameter, White Silicone, 30° hardness | MU55-U6 | MU suction lip - 55mm diameter, Urethane |
| MU65-U6 | MU suction lip - 65mm diameter, White Silicone, 30° hardness | MU65-U6 | MU suction lip - 65mm diameter, Urethane |
| MU75-U6 | MU suction lip - 75mm diameter, White Silicone, 30° hardness | MU75-U6 | MU suction lip - 75mm diameter, Urethane |
| MU80-U6 | MU suction lip - 80mm diameter, White Silicone, 30° hardness | MU80-U6 | MU suction lip - 80mm diameter, Urethane |

Dimensional Data

[Unit : mm]



※ Dimensions are measured with the suction lip assembled

| Model | ØA | B |
|-------|--------------------------------------|------|
| MU45 | 45 | 8.5 |
| MU55 | 55 | 8.9 |
| MU65 | 65 | 10.7 |
| MU75 | 75 | 11.7 |
| MU80 | Please contact VMECA for dimensions. | |



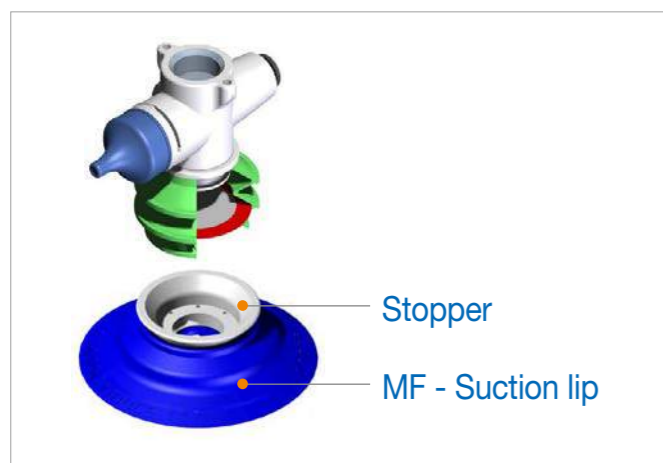
MF suction lip



MF - Suction lip

Features

- ✓ Excellent in handling flat heavy objects and offers great gripping force for both horizontal and vertical applications
- ✓ Various stopper & lip material options to cover a wide range of vacuum applications



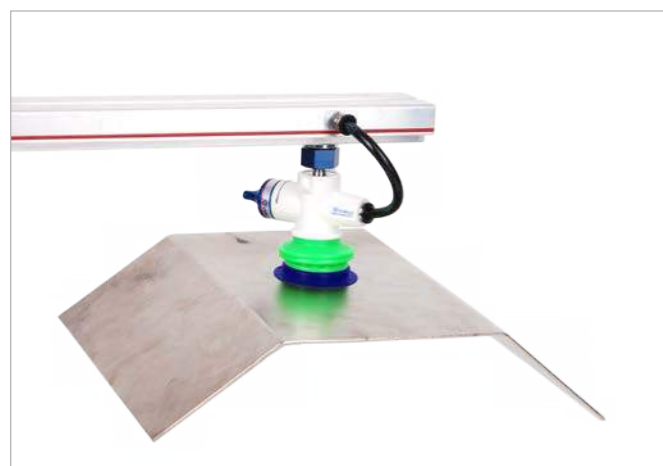
Structure of MF-Suction lip

Structure

- ✓ Stopper
- ✓ MF - Suction lip

Applications

- ✓ Metal sheets
- ✓ Veneer sheets
- ✓ Caron boxes



MF-Suction lip being used in flat object application - Steel plate

Recommended Lifting Force (Max.)

| Model | Volume (cm ³) | Lifting Force (Kg) - Perpendicular | | |
|-----------|---|------------------------------------|----------|----------|
| | | - 20 kPa | - 60 kPa | - 90 kPa |
| 1B40-MF45 | 9.63 | 0.67 | 1.62 | 2.12 |
| 1B40-MF55 | 12.19 | 1.34 | 2.81 | 3.48 |
| 1B60-MF65 | 26.40 | 2.24 | 4.49 | 5.61 |
| 1B60-MF75 | 31.58 | 4.04 | 8.31 | 10.70 |
| 1B60-MF80 | Please contact VMECA for lifting force. | | | |
| 2B40-MF45 | 17.03 | 0.67 | 1.62 | 2.12 |
| 2B40-MF55 | 19.59 | 1.34 | 2.81 | 3.48 |
| 2B60-MF65 | 47.20 | 2.24 | 4.49 | 5.61 |
| 2B60-MF75 | 52.38 | 4.04 | 8.31 | 10.70 |
| 2B60-MF80 | Please contact VMECA for lifting force. | | | |

* The lifting force does not include safety factor

Material Specifications

| Material | Hardness Shore (°) | Color | Temperature (°C) |
|--------------------------------|--------------------|-------------------|------------------|
| N6- NBR (Nitrile) | 60 | Blue | -20~110 |
| S3 - Silicone | 30 | Translucent White | -70~200 |
| S5 - Silicone | 50 | Red | -70~200 |
| W3 - White Silicone | 30 | Translucent White | -70~200 |
| W5 - White Silicone | 50 | Translucent White | -70~200 |
| W3(FDA) - White Silicone (FDA) | 30 | Translucent White | -70~200 |
| W5(FDA) - White Silicone (FDA) | 50 | Translucent White | -70~200 |
| U6 - Urethane | 60 | Dark Grey | 0~100 |

* The temperature data is only for suction lip. Please contact us if it is used in over 60°C

** For additional materials, please contact us

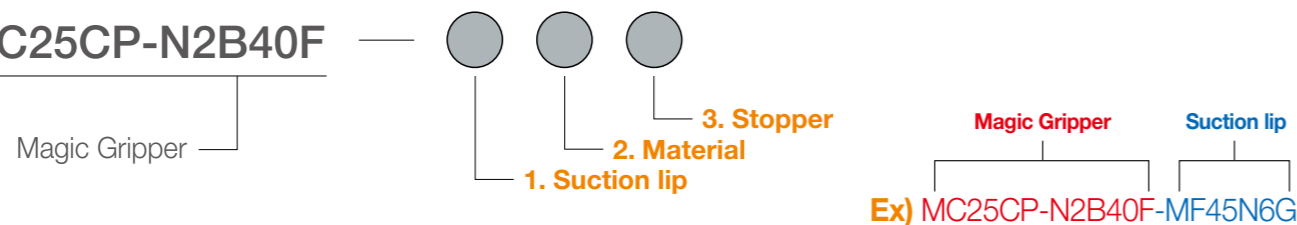
Material Resistance

| Description | NBR (Nitrile) | Silicone | White Silicone | Urethane |
|-----------------|---------------|-----------|----------------|-----------|
| Wear Resistance | Excellent | Good | Good | Excellent |
| Oil | Excellent | Poor | Poor | Excellent |
| Weather / Ozone | Fair | Excellent | Excellent | Excellent |
| Alcohol | Good | Good | Good | Fair |
| Acid | Fair | Poor | Poor | Poor |



Build an Ordering No.

MC25CP-N2B40F



1. Suction lip

| Description | Top Bellow 20 | Top Bellow 40 | Top Bellow 60 | Symbol |
|----------------------------|---------------|---------------|---------------|--------|
| MF type lip, 45mm diameter | | ○ | | MF45 |
| MF type lip, 55mm diameter | | ○ | | MF55 |
| MF type lip, 65mm diameter | | | ○ | MF65 |
| MF type lip, 75mm diameter | | | ○ | MF75 |
| MF type lip, 80mm diameter | | | ○ | MF80 |

2. Material

| Description | Symbol |
|------------------------------------|---------|
| NBR (Nitrile) | N6 |
| Silicone, 30° hardness | S3 |
| Silicone, 50° hardness | S5 |
| White Silicone, 30° hardness | W3 |
| White Silicone, 50° hardness | W5 |
| White Silicone, 30° hardness (FDA) | W3(FDA) |
| White Silicone, 50° hardness (FDA) | W5(FDA) |
| Urethane | U6 |

3. Stopper

| Description | Symbol |
|-------------------------------------|--------|
| G type : Only for MF&MU Suction lip | G |

3. Filter

| Part No. | Description | Part No. | Description |
|----------|---|----------|---|
| VTFE40 | Filter (200mesh) for 40mm bellow diameter | VTFE60 | Filter (200mesh) for 60mm bellow diameter |

4. Suction lip

| Part No. | Description | Part No. | Description |
|----------|--|---------------|--|
| MF45-N6 | MF suction lip - 45mm diameter, NBR | MF45-W5 | MF suction lip - 45mm diameter, White Silicone, 50° hardness |
| MF55-N6 | MF suction lip - 55mm diameter, NBR | MF55-W5 | MF suction lip - 55mm diameter, White Silicone, 50° hardness |
| MF65-N6 | MF suction lip - 65mm diameter, NBR | MF65-W5 | MF suction lip - 65mm diameter, White Silicone, 50° hardness |
| MF75-N6 | MF suction lip - 75mm diameter, NBR | MF75-W5 | MF suction lip - 75mm diameter, White Silicone, 50° hardness |
| MF80-N6 | MF suction lip - 80mm diameter, NBR | MF80-W5 | MF suction lip - 80mm diameter, White Silicone, 50° hardness |
| MF45-S3 | MF suction lip - 45mm diameter, Silicone, 30° hardness | MF45-W3 (FDA) | MF suction lip - 45mm diameter, White Silicone, 30° hardness (FDA) |
| MF55-S3 | MF suction lip - 55mm diameter, Silicone, 30° hardness | MF55-W3 (FDA) | MF suction lip - 55mm diameter, White Silicone, 30° hardness (FDA) |
| MF65-S3 | MF suction lip - 65mm diameter, Silicone, 30° hardness | MF65-W3 (FDA) | MF suction lip - 65mm diameter, White Silicone, 30° hardness (FDA) |
| MF75-S3 | MF suction lip - 75mm diameter, Silicone, 30° hardness | MF75-W3 (FDA) | MF suction lip - 75mm diameter, White Silicone, 30° hardness (FDA) |
| MF80-S3 | MF suction lip - 80mm diameter, Silicone, 30° hardness | MF80-W3 (FDA) | MF suction lip - 80mm diameter, White Silicone, 30° hardness (FDA) |
| MF45-S5 | MF suction lip - 45mm diameter, Silicone, 50° hardness | MF45-W5 (FDA) | MF suction lip - 45mm diameter, White Silicone, 50° hardness (FDA) |
| MF55-S5 | MF suction lip - 55mm diameter, Silicone, 50° hardness | MF55-W5 (FDA) | MF suction lip - 55mm diameter, White Silicone, 50° hardness (FDA) |
| MF65-S5 | MF suction lip - 65mm diameter, Silicone, 50° hardness | MF65-W5 (FDA) | MF suction lip - 65mm diameter, White Silicone, 50° hardness (FDA) |
| MF75-S5 | MF suction lip - 75mm diameter, Silicone, 50° hardness | MF75-W5 (FDA) | MF suction lip - 75mm diameter, White Silicone, 50° hardness (FDA) |
| MF80-S5 | MF suction lip - 80mm diameter, Silicone, 50° hardness | MF80-W5 (FDA) | MF suction lip - 80mm diameter, White Silicone, 50° hardness (FDA) |
| MF45-U6 | MF suction lip - 45mm diameter, White Silicone, 30° hardness | MF45-U6 | MF suction lip - 45mm diameter, Urethane |
| MF55-U6 | MF suction lip - 55mm diameter, White Silicone, 30° hardness | MF55-U6 | MF suction lip - 55mm diameter, Urethane |
| MF65-U6 | MF suction lip - 65mm diameter, White Silicone, 30° hardness | MF65-U6 | MF suction lip - 65mm diameter, Urethane |
| MF75-U6 | MF suction lip - 75mm diameter, White Silicone, 30° hardness | MF75-U6 | MF suction lip - 75mm diameter, Urethane |
| MF80-U6 | MF suction lip - 80mm diameter, White Silicone, 30° hardness | MF80-U6 | MF suction lip - 80mm diameter, Urethane |

Spare Parts

1. Stopper

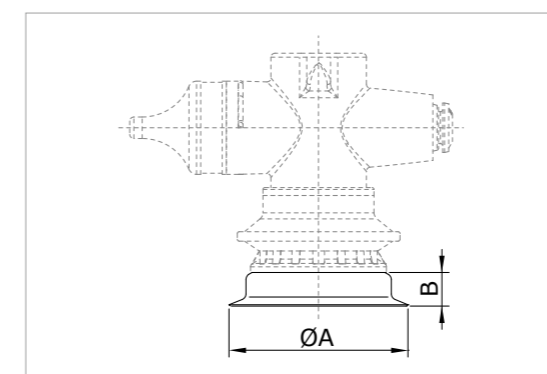
| Part No. | Description | Part No. | Description |
|----------|--------------------------------|----------|---------------------------------------|
| MS40-G | Stopper G type for MF45 & MF55 | MS60-G | Stopper G type for MF65 & MF75 & MF80 |

2. Middle bellows

| Part No. | Description | Part No. | Description |
|----------|--|----------|---|
| 2MB/40 | Middle bellows 2 folds for MF45 & MF55 | 3MB/40 | Middle bellows 3 folds for MF45 & MF55 |
| | | 3MB/60 | Middle bellows 3 folds for MF65 & MF75 & MF80 |

Dimensional Data

[Unit : mm]

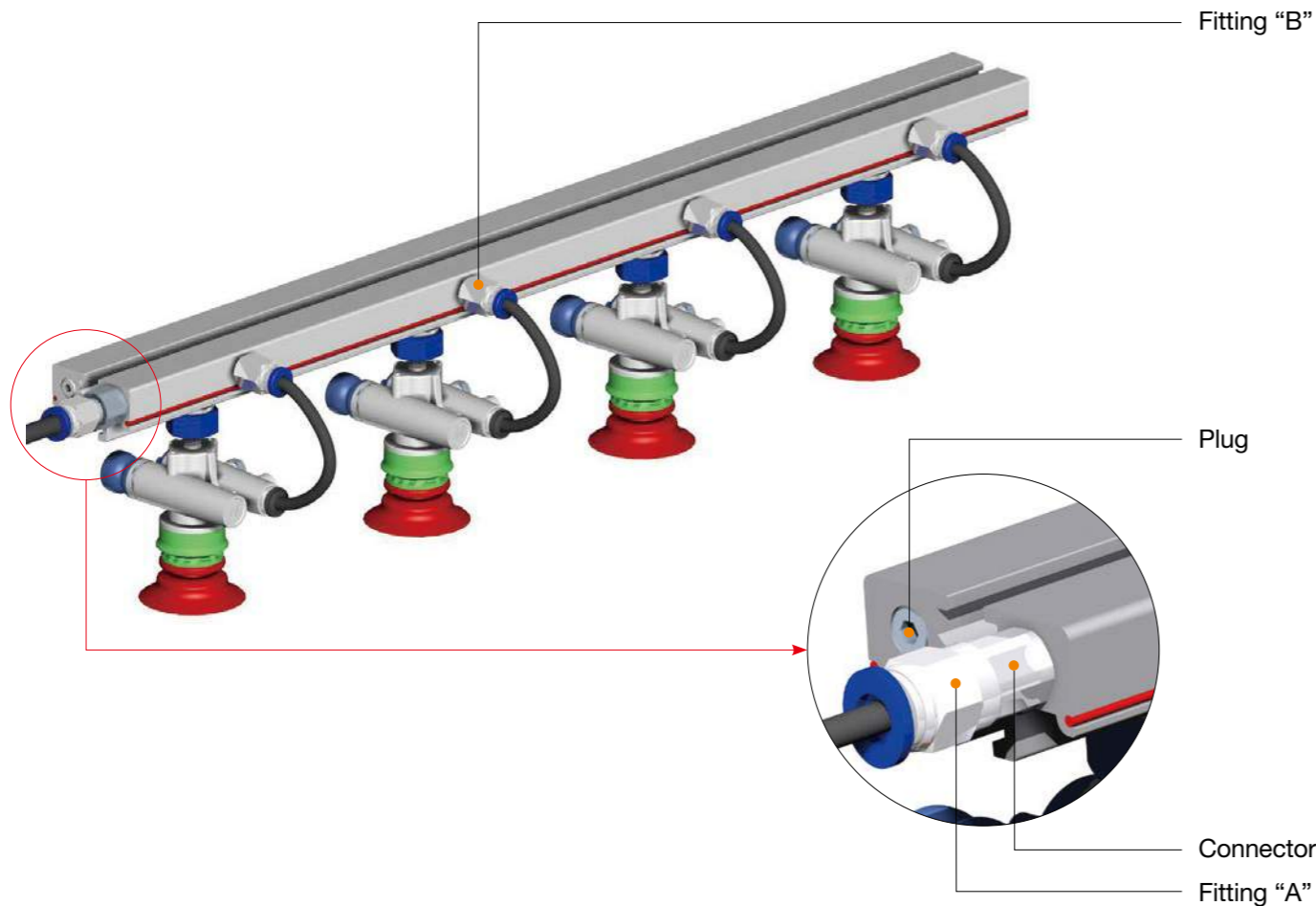


※ Dimensions are measured with the suction lip assembled

| Model | ØA | B |
|-------|--------------------------------------|------|
| MF45 | 45 | 8.5 |
| MF55 | 55 | 8.9 |
| MF65 | 65 | 10.7 |
| MF75 | 75 | 11.7 |
| MF80 | Please contact VMECA for dimensions. | |



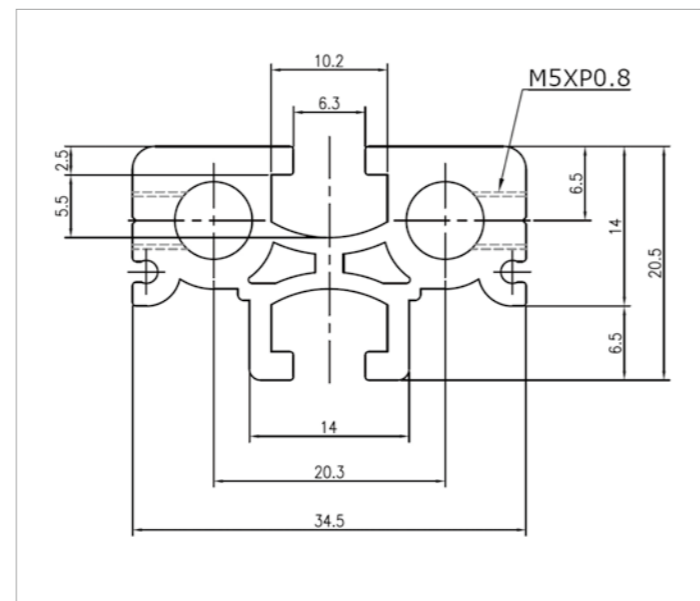
T-slotted aluminum profile – T06 series



Profile

| Model | Description |
|------------|---------------------|
| T06 – 500 | Profile length 0.5m |
| T06 – 1000 | Profile length 1m |
| T06 – 1500 | Profile length 1.5m |
| T06 – 2000 | Profile length 2m |

* For specific profile length contact VMECA



Dimensional Data

Connector

| Product view | Part No. | Description | |
|--------------|----------|---------------------------|--|
| | CF18 | Connector for T06 profile | |

Plug

| Product view | Part No. | Description |
|--------------|----------|------------------|
| | HL8 | Plug for profile |

Fitting "A"

| Product view | Part No. | Description | |
|--------------|----------|-----------------------------------|--|
| | FI1806 | G1/8 thread, 6Ø one touch fitting | |
| | FI1808 | G1/8 thread, 8Ø one touch fitting | |
| | FL1806 | G1/8 thread, 6Ø one touch fitting | |
| | FL1808 | G1/8 thread, 8Ø one touch fitting | |

[Unit : mm]

| Part No. | A | B | C |
|----------|---|------|---|
| FI1806 | 8 | 23.2 | 6 |
| FI1808 | 8 | 28.5 | 8 |
| FL1806 | 8 | 24 | 6 |
| FL1808 | 8 | 27 | 8 |

Fitting "B"

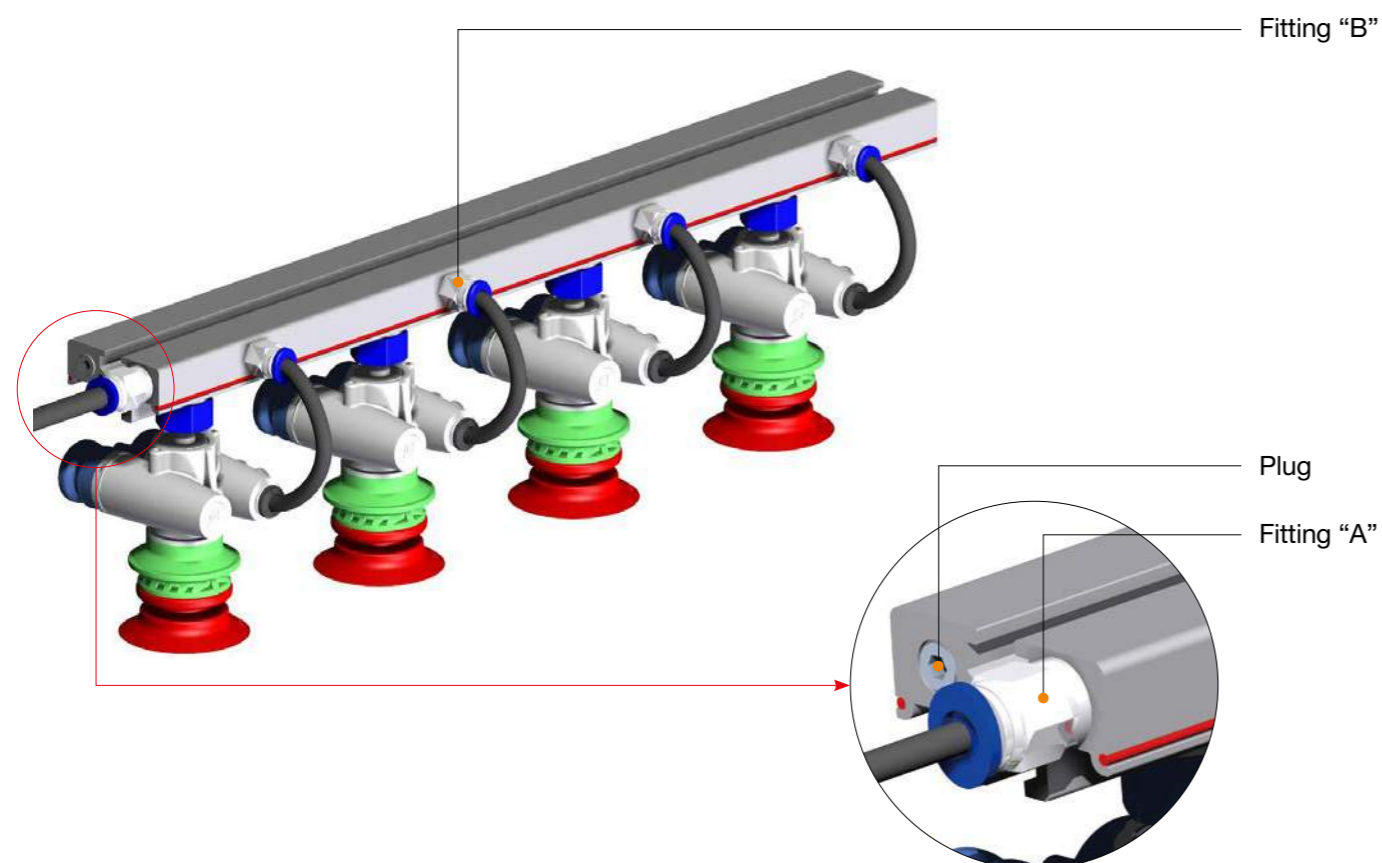
| Product view | Part No. | Description | |
|--------------|----------|---------------------------------|--|
| | FIM504 | M5 thread, 4Ø one touch fitting | |
| | FLM504 | M5 thread, 4Ø one touch fitting | |

[Unit : mm]

| Part No. | A | B |
|----------|---|------|
| FIM504 | 4 | 22 |
| FLM504 | 4 | 16.8 |



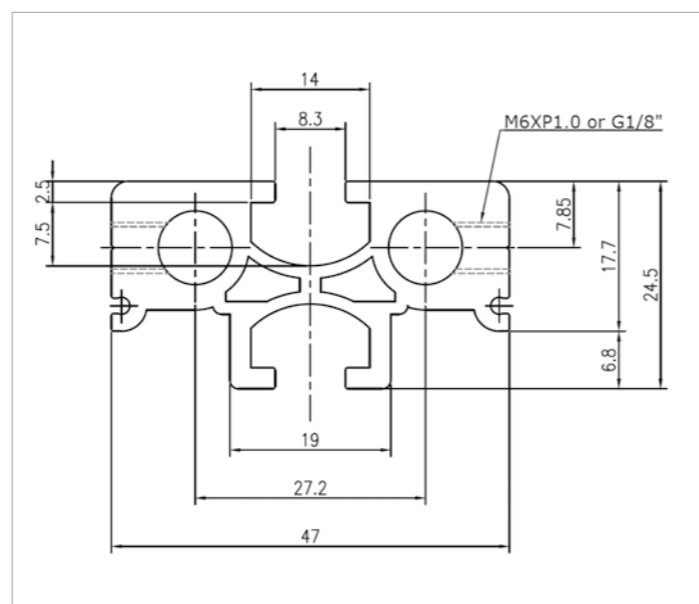
T-slotted aluminum profile – T08 series



Profile

| Model | Description |
|------------|---------------------|
| T08 – 500 | Profile length 0.5m |
| T08 – 1000 | Profile length 1m |
| T08 – 1500 | Profile length 1.5m |
| T08 – 2000 | Profile length 2m |

* For specific profile length contact VMECA



Dimensional Data

Plug

| Product view | Part No. | Description |
|--------------|----------|------------------|
| | HLG18 | Plug for profile |

Fitting "A"

| Product view | Part No. | Description | |
|--------------|----------|------------------------------------|--|
| | F11808 | G1/8 thread, 8Ø one touch fitting | |
| | F11810 | G1/8 thread, 10Ø one touch fitting | |
| | FL1808 | G1/8 thread, 8Ø one touch fitting | |
| | FL1810 | G1/8 thread, 10Ø one touch fitting | |

[Unit : mm]

| Part No. | A | B | C |
|----------|---|------|----|
| F11808 | 8 | 28.5 | 8 |
| F11810 | 8 | 31 | 10 |
| FL1808 | 8 | 27 | 8 |
| FL1810 | 8 | 32 | 10 |

Fitting "B"

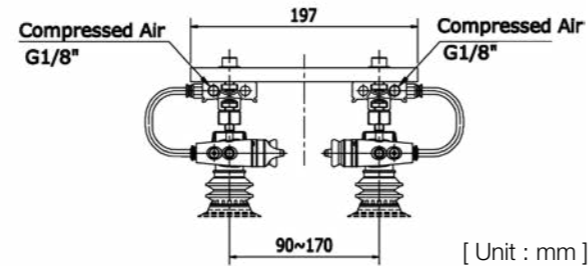
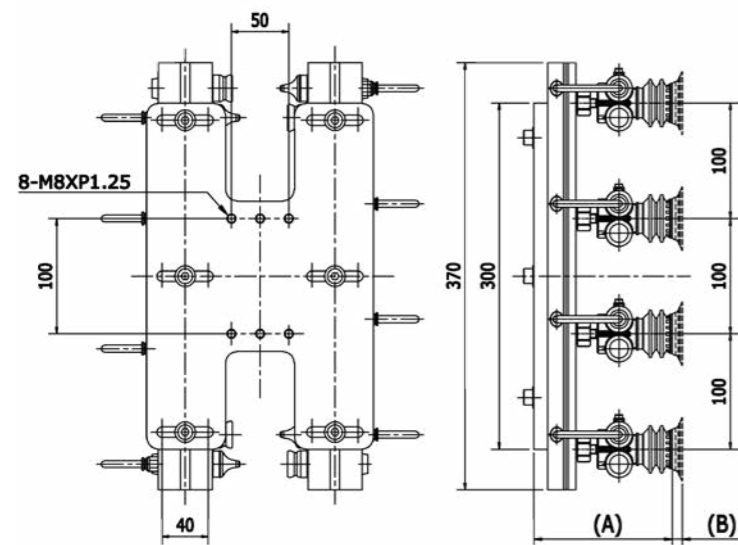
| Product view | Part No. | Description | |
|--------------|----------|-----------------------------------|--|
| | FIM606 | M6 thread, 6Ø one touch fitting | |
| | FI1806 | G1/8 thread, 6Ø one touch fitting | |
| | FLM606 | M6 thread, 6Ø one touch fitting | |
| | FL1806 | G1/8 thread, 6Ø one touch fitting | |

[Unit : mm]

| Part No. | A | B | C |
|----------|-----|------|---------|
| FIM606 | 6.5 | 25.7 | M6XP1.0 |
| FI1806 | 8 | 23.5 | G1/8" |
| FLM606 | 6.5 | 23.5 | M6XP1.0 |
| FL1806 | 8 | 24 | G1/8" |

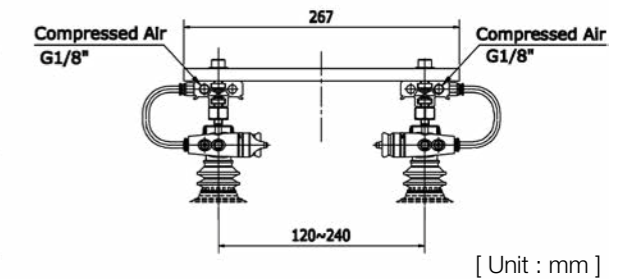
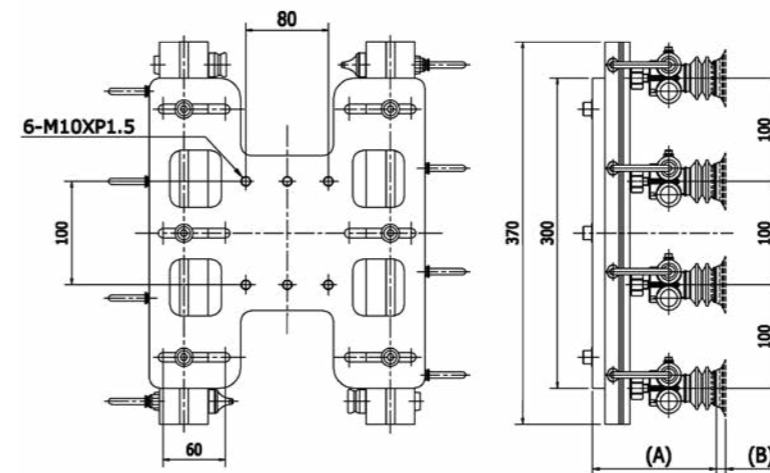


A130x300



| Part No. | A | B |
|----------|-------|---------------------------------------|
| 1B40 | 110.2 | See page 85 for suction lip dimension |
| 2B40 | 120.2 | |
| 1B60 | 121.0 | |
| 2B60 | 135.6 | |

A200x300



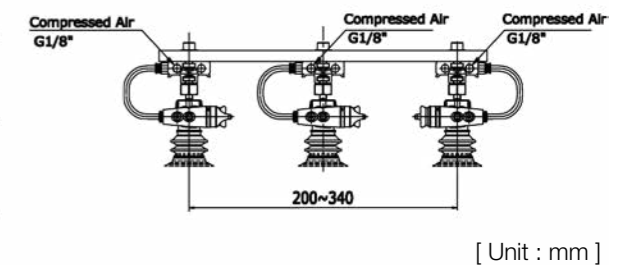
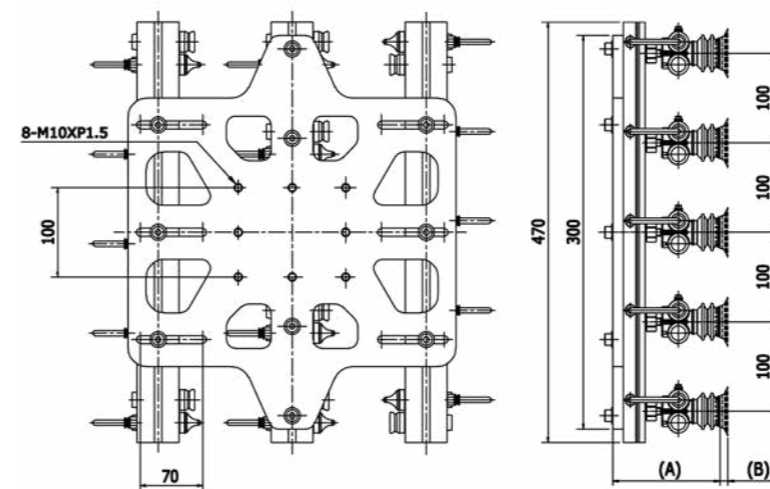
| Part No. | A | B |
|----------|-------|---------------------------------------|
| 1B40 | 110.2 | See page 85 for suction lip dimension |
| 2B40 | 120.2 | |
| 1B60 | 121.0 | |
| 2B60 | 135.6 | |

| 1. Size | 2. Magic Gripper | 3. Top bellows | 4. Suction lip | 5. Suction lip material |
|----------|------------------|----------------|----------------|-------------------------|
| Model | Model | Model | Model | Model |
| A130x300 | MC20A | 1B40 | MU45 | N6 |
| A200x300 | MC20B | 2B40 | MU55 | S3 |
| A300x400 | MC20C | 1B60 | MU65 | S5 |
| | MC20D | 2B60 | MU75 | W3 |
| | MC23A | | MU80 | W5 |
| | MC23B | | | W3(FDA) |
| | MC23C | | | W5(FDA) |
| | MC23D | | | U6 |

※ See page 82~85 for more detail information of Suction lip

※ See page 26~49 for more detail information of Magic grippers

A300x400



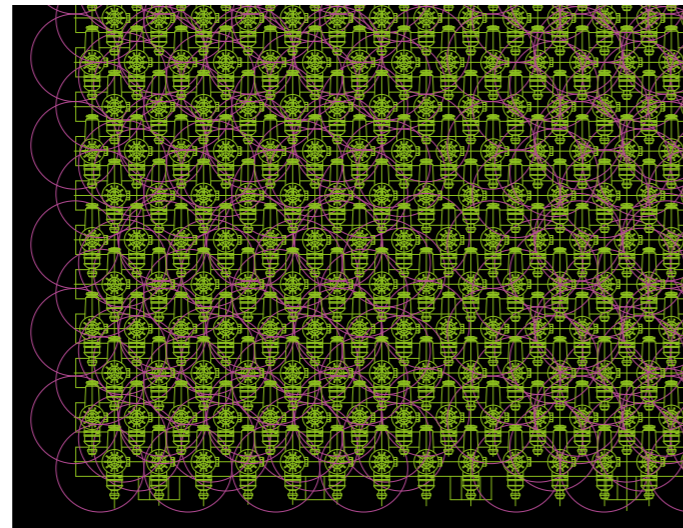
| Part No. | A | B |
|----------|-------|---------------------------------------|
| 1B40 | 110.2 | See page 85 for suction lip dimension |
| 2B40 | 120.2 | |
| 1B60 | 121.0 | |
| 2B60 | 135.6 | |



Application

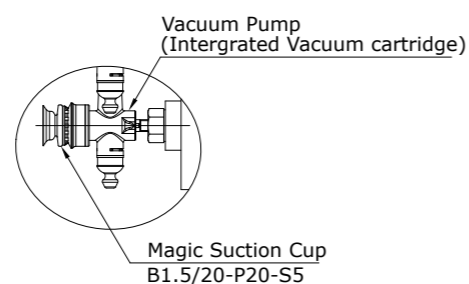
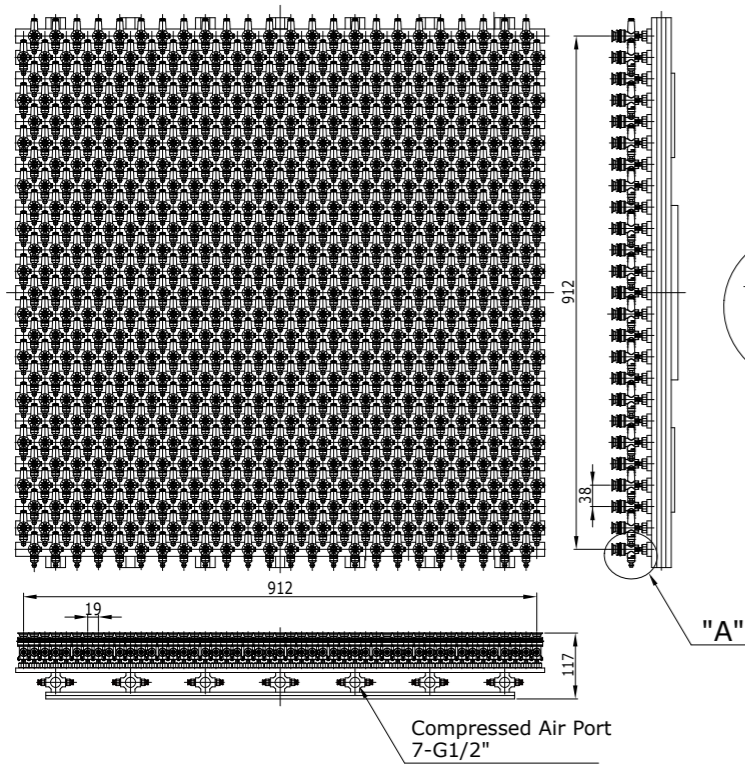


Palletizing
 – Cat food cans which are randomly located on conveyor



[VMECA R&D checked all possibility]

[VMECA Solution]



View "A"

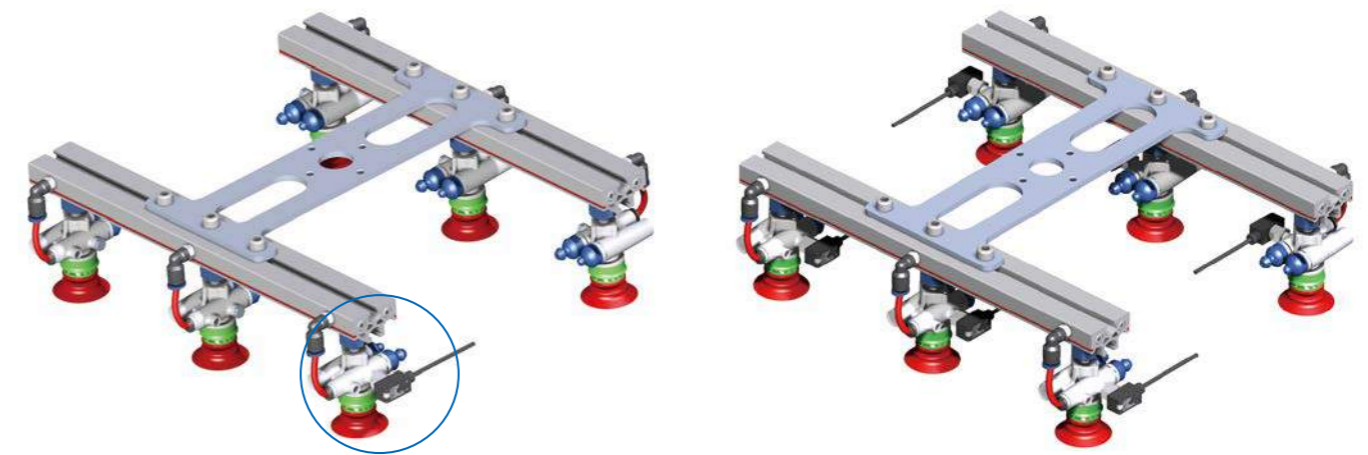
Model no: S1021-900-B1.5/20-P20-S5
 Max Vacuum Level : -83 kPa
 Air consumption (2bar) : 5,080 l/min
 Total quantity of pumps and suction cups : 612 EA
 Total weight : about 40 Kg

※ Air consumption is calculated when it is operated while picking the objects (It means there is no air consumption without the time to pick the objects)

Applications with Switch

(Recommended for application which is generally safely handled)

With V10 switch
 – Directly located on Magic Gripper

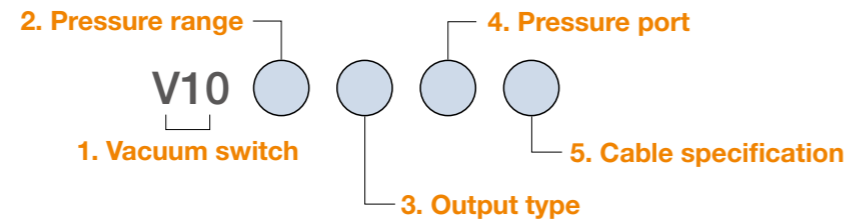


With VP20 / VP30 / VP32 switch
 – Located on top of mount plate





Vacuum Switch – V10



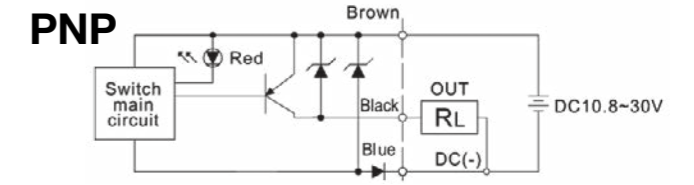
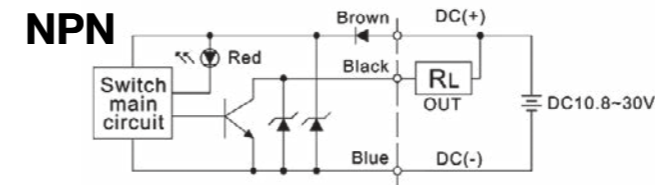
Build an Ordering No.

| 1. Vacuum switch | Description | Ordering No. |
|------------------------|------------------------------------|--------------|
| | Vacuum switch V10 | V10 |
| 2. Pressure range | Description | Ordering No. |
| | Negative pressure (0 ~ -101.3 kPa) | Blank |
| | Positive pressure (0 ~ 0.6 MPa) | P |
| 3. Output type | Description | Ordering No. |
| | NPN | 01 |
| | PNP | 02 |
| 4. Pressure port | Description | Ordering No. |
| | 1/8" PT, M5 | F1 |
| | 1/8" NPT, M5 | F2 |
| | M5 | F3 |
| | Ø4mm tube | F4 |
| | Ø6mm tube | F5 |
| 5. Cable specification | Description | Ordering No. |
| | Lead wire type (3m) | Blank |
| | M8-3pin male connector | C |

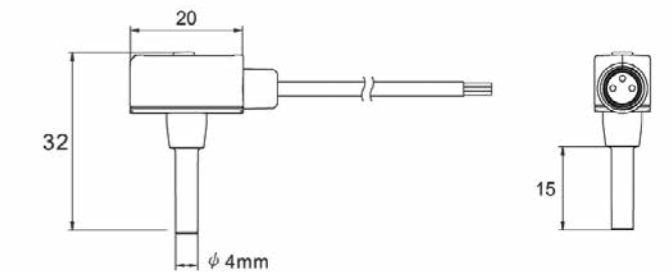
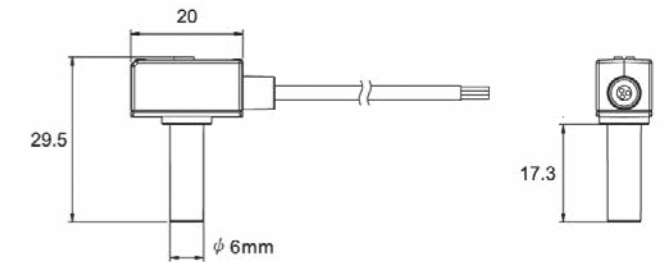
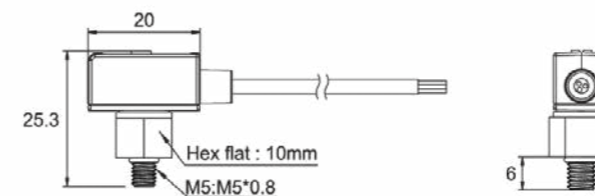
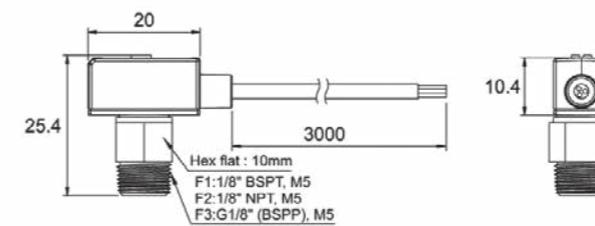
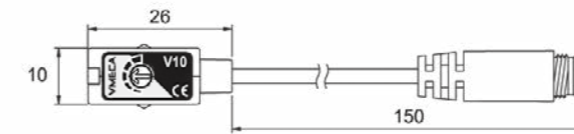
Build an Ordering No.

| Model | V10 | V10P |
|---------------------------------|--|-------------|
| Setting pressure range | 0.0 ~ -101.3 kPa | 0 ~ 0.6 MPa |
| Withstand pressure | 0.6 MPa | 1.5 MPa |
| Fluid | Air, Non-corrosive / Non-flammable gas | |
| Power supply voltage | 10.8 to 30V DC (include ripple voltage) | |
| Load current | 80 mA max. | |
| Internal voltage drop | NPN / 0.8V, PNP / 0.8V | |
| Current consumption | 10 mA max. | |
| Sensor type | NPN or PNP | |
| Output short circuit protection | Yes | |
| Setting method | Adjusting by VR | |
| Response time | Approx. 1 ms | |
| Repeatability | ±1% F.S. | |
| Hysteresis | 3% F.S. max. | |
| Indicator | Red LED turns ON | |
| Enclosure | IP 40 | |
| Temperature characteristic | ±3% F.S. of detected pressure (25°C) at temp. Range of 0 ~ 50°C (32 ~ 122°F) | |
| Ambient temp. range | Operation: 0 ~ 60°C (30 ~ 140°F), No condensation or freezing | |
| Ambient humidity. range | Operation / Storage: 35 ~ 85% RH (No condensation) | |
| Vibration | Total amplitude 1.5mm, 10Hz- 55Hz- 10Hz scan for 1minute, two hours each direction of X, Y and Z | |
| Piping method | Push-in tube or thread-in | |
| Lead wire | Oil-resistance cable, 3wires (0.18mm ²), 2.6mm, 3M | |
| Weight | Approx. *50g (with 3 meter lead wire) | |

Circuit diagram

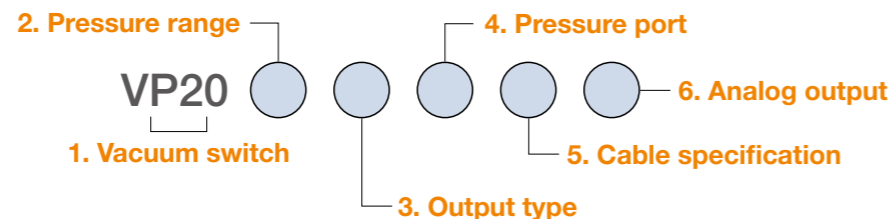


Dimensions





Vacuum Switch – VP20



Build an Ordering No.

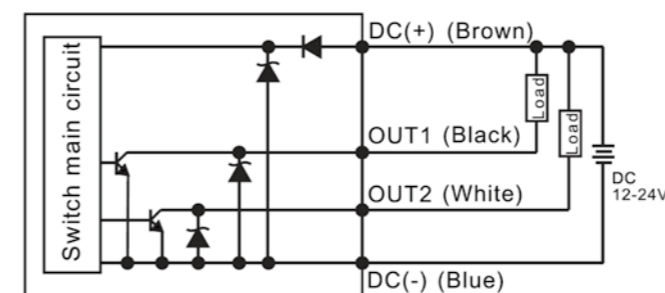
| 1. Vacuum switch | Description | Ordering No. |
|------------------------|--|--------------|
| | Vacuum Switch, LED-Display | VP20 |
| 2. Pressure range | Description | Ordering No. |
| | Compound pressure (-100.0 ~ 100.0 kPa) | C |
| | Negative pressure (-101.3 ~ 0 kPa) | V |
| | Positive pressure (0.00 ~ 1.00 MPa) | P |
| 3. Output type | Description | Ordering No. |
| | 2 NPN output | 01 |
| | 2 PNP output | 03 |
| 4. Pressure port | Description | Ordering No. |
| | 1/8 PT | G |
| 5. Cable specification | Description | Ordering No. |
| | 2m Lead wire type | Blank |
| | M8-4 pin male connector | C |
| 6. Analog output | Description | Ordering No. |
| | No analog output | Blank |
| | Analog output: <i>Only for wire type</i> | A |

Build an Ordering No.

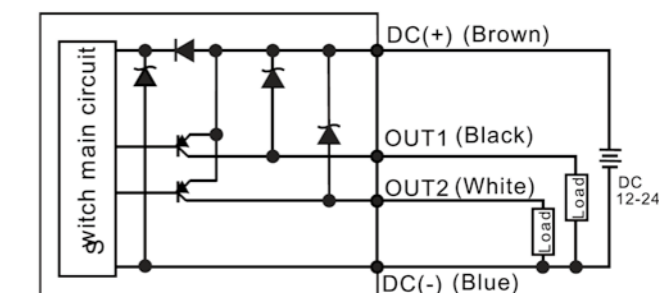
| Model | VP20C | VP20V | VP20P |
|--|---|---|-------------------|
| Applicable fluid | | Non corrosive gases | |
| Pressure range | -100.0 ~ 100.0 kPa | 0.0 ~ -101.3 kPa | 0.000 ~ 1.000 MPa |
| Pressure proof force | | 3 time of rate pressure range | |
| Indicator resolution | 0.1 kPa | 0.1 kPa | 0.01 MPa |
| Weight | | 135 g (with 2m lead wire) | |
| Material of pressure port | | Zn die casting | |
| Power supply voltage | | 12 ~ 24 VDC ±10%, Ripple (P-P) 10% or less | |
| Power consumption | | 55 mA or less | |
| Output | | NPN or PNP open collector 2 outputs, Max. 80 mA | |
| Analog output (*Only for analog type) | Output voltage: 1 ~ 5V ±5% (Within rated pressure range) Linearity: ≤±1% F.S | Output voltage: 1 ~ 5V ±2.5% (Within rated pressure range) Linearity: ≤±1% F.S | |
| Repeatability | | ≤±2% F.S ±1 digit | |
| Response time | ≤2.5ms (chattering-proof function: 25ms, 192ms and 768ms selections) | | |
| Protection structure | IP 65 | | |
| Operating ambient temperature (°C) | Operation: 0°C ~ 50°C, Storage: -20°C ~ 60°C (No condensation freezing) | | |
| Operating humidity | 35 ~ 85% RH | | |
| Temperature characteristic | ≤±2% F.S of detected pressure (25°C) at temp. Range of 0°C ~ 50°C | | |
| Vibration resistance | Total amplitude 1.5mm, 10Hz ~ 55Hz, -10Hz scan for 1 minute, two hours each direction of X, Y and Z | | |
| Shock resistance | 980m/s ² (100G), 3times each in direction of X, Y and Z | | |
| Hysteresis | Hysteresis mode | Adjustable | |
| | Window comparator | Fixed (3digits) | |
| Indicator accuracy | ≤±2% F.S ± 1digit (ambient temperature: 25±3°C) | | |
| Cable | Oil-resistance cable (0.15mm ²) | | |

Circuit diagram

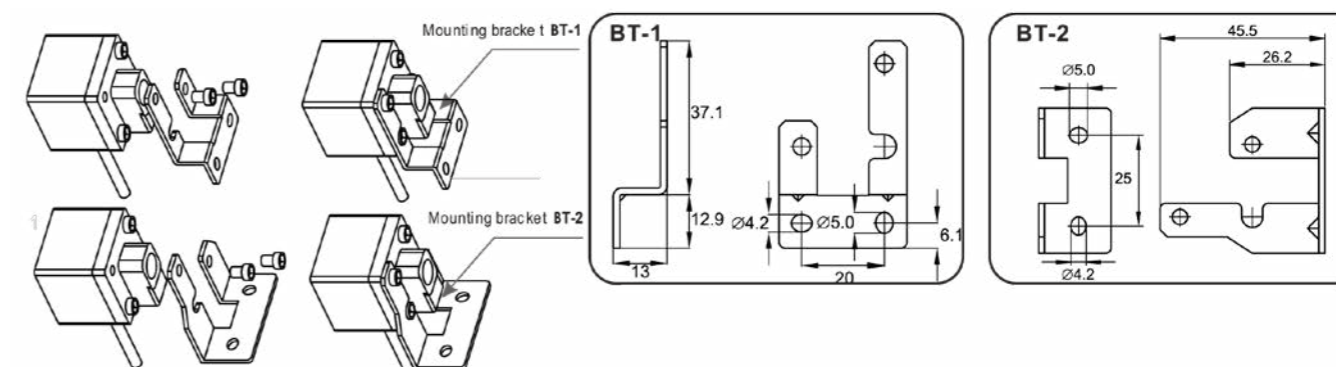
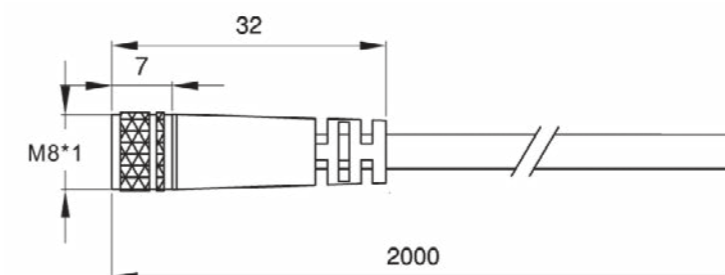
NPN



PNP

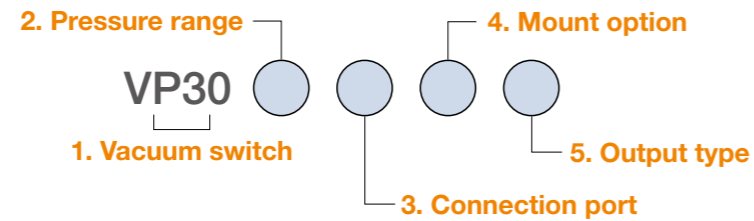


Dimensions





Vacuum Switch – VP30



Build an Ordering No.

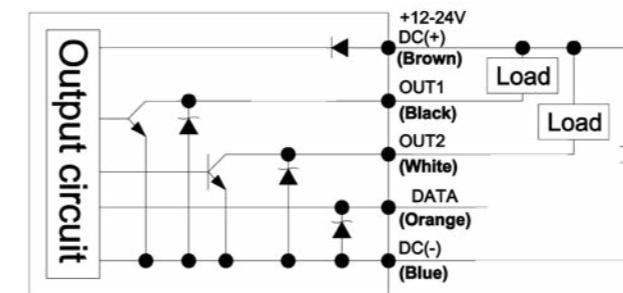
| 1. Vacuum switch | Description | Ordering No. |
|--------------------|----------------------------|--------------|
| | Vacuum Switch, LED-Display | VP30 |
| 2. Pressure range | Description | Ordering No. |
| | -100.0 ~ 1000.0 kPa | 10 |
| | -100.0 ~ 100.0 kPa | 01 |
| 3. Connection port | Description | Ordering No. |
| | R1/8 | R |
| | NPT1/8 | N |
| | G1/8 | G |
| 4. Mount option | Description | Ordering No. |
| | For panel installation | M |
| | For bracket installation | Z |
| 5. Output type | Description | Ordering No. |
| | NPN | N |
| | PNP | P |

Specification

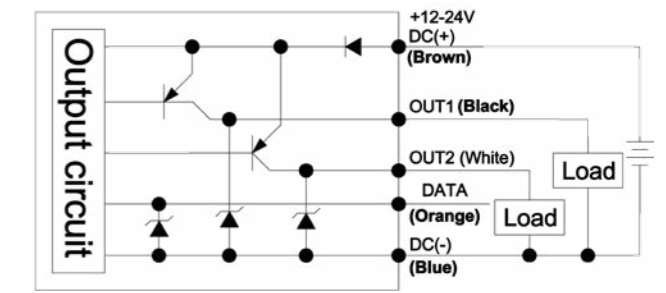
| Model | VP30 | | |
|-----------------------|--|---|--|
| Input power | Voltage range | 12 ~ 24V DC ±1% | |
| | Power consumption | 40mA Max | |
| Pressure Measurement | Pressure type | Noncorrosive gas, Gage pressure measure | |
| | Measuring mode | Hysteresis model | |
| | Measurement range | Upper and lower compare mode | |
| | | DPS-01: -100 kPa ~ 100 kPa (-0.1 ~ 0.1 MPa) | DPS-10: -100 kPa ~ 1000 kPa (-0.1 ~ 1 MPa) |
| | Max pressure | DPS-01: 200 kPa (0.2 MPa) | DPS-10: 1500 kPa (1.5 MPa) |
| | Measurement accuracy | ±2% full scale | |
| Temperature error | ±3% full scale | | |
| Display | Setup display | Double low LCD display 4words dalie | |
| | Status display | Output LCD display | |
| | Display mode | 4 display mode for choice, Backlight is available | |
| Output | Output path | Two group NPN / PNP output | |
| | Output | Two group NPN / PNP output | |
| | Response time | 2.5ms, 20ms, 100ms, 500ms, 1000ms, 2000ms | |
| | Output current | 100mA Max | |
| Connection port | R 1/8 male, NPT 1/8 male, M5 female | | |
| Insulation voltage | 100mA Max | | |
| Insulation resistance | 50MΩ (500V DC) | | |
| Impact resistance | Max 100m S2, 3 Axis – 6 direction 3times | | |
| Ambient temperature | Operating ambient temperature: 0 ~ 50°C, Stock ambient temperature: -20 ~ 65°C | | |
| Ambient humidity | 35 ~ 80% RH | | |

Circuit diagram

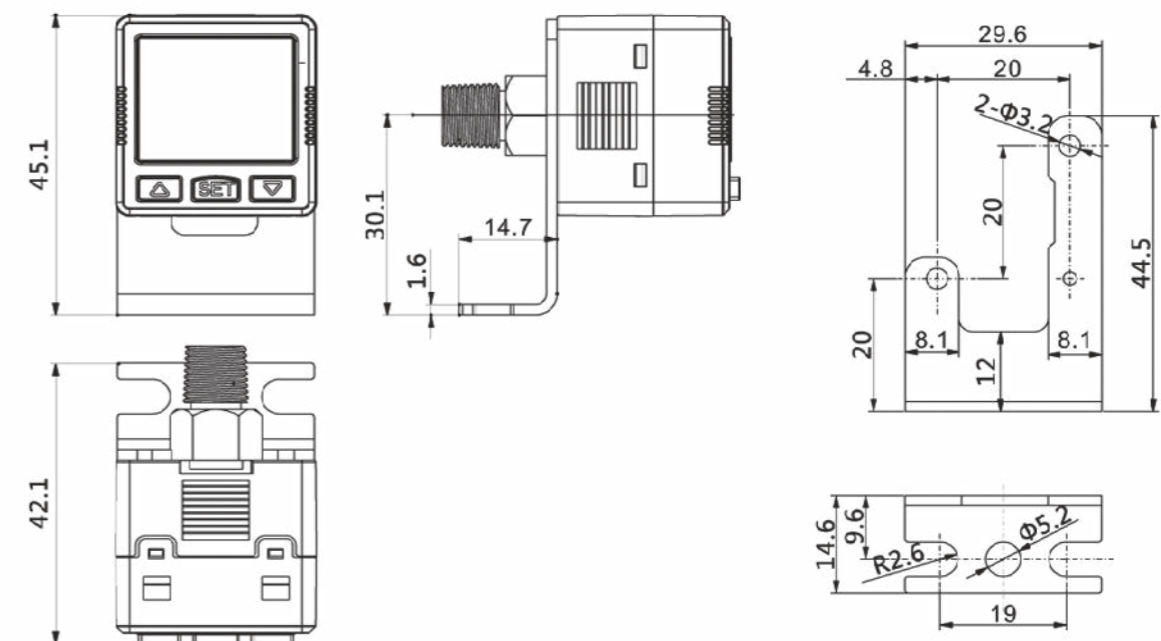
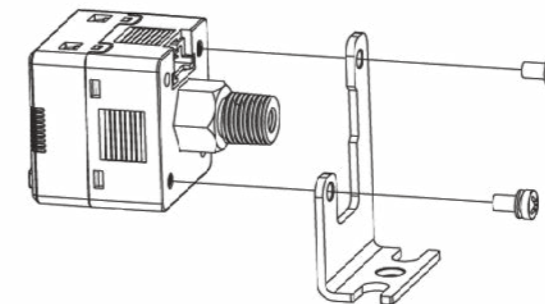
NPN



PNP

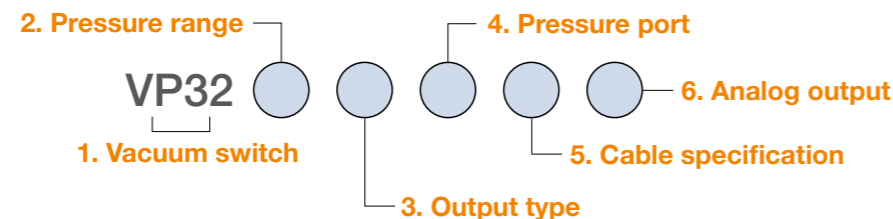


Dimensions





Vacuum Switch – VP32



Build an Ordering No.

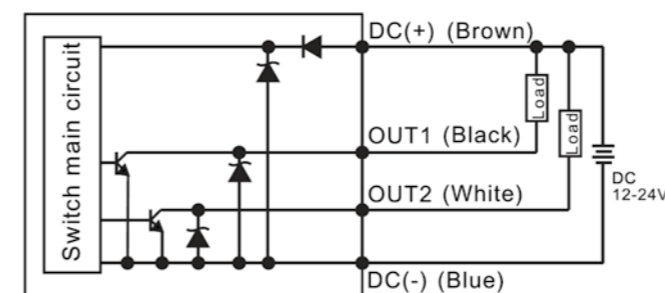
| 1. Vacuum switch | Description | Ordering No. |
|------------------------|--|--------------|
| | Vacuum Switch, LED-Display | VP32 |
| 2. Pressure range | Description | Ordering No. |
| | Compound pressure (-100.0 ~ 100.0 kPa) | C |
| | Negative pressure (-101.3 ~ 0 kPa) | V |
| | Positive pressure (0.00 ~ 1.00 MPa) | P |
| 3. Output type | Description | Ordering No. |
| | 2 NPN output | 01 |
| | 2 PNP output | 02 |
| 4. Pressure port | Description | Ordering No. |
| | PT1/8" male, M5 female | F1 |
| 5. Cable specification | Description | Ordering No. |
| | 2m Lead wire type | Blank |
| | M8-4 pin male connector | C |
| 6. Analog output | Description | Ordering No. |
| | No analog output | Blank |
| | 1 ~ 5V Analog output | A |

Specification

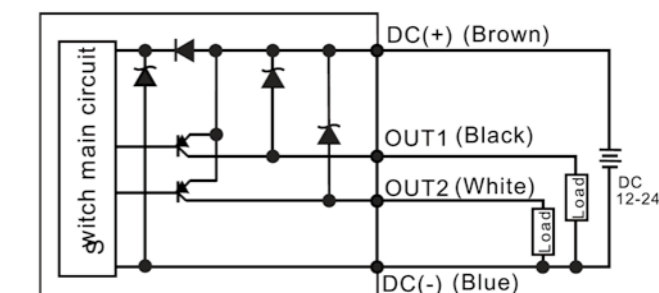
| Model | VP32C | VP32V | VP32P |
|---------------------------------|---|--|---|
| Applicable fluid | Air, Non corrosive gases, Incombustible gases | | |
| Pressure range | -100.0 ~ 100.0 kPa | 0.0 ~ -101.3 kPa | 0.000 ~ 1.000 MPa |
| Withstand pressure | 300 kPa | | |
| Indicator resolution | kPa | 0.1 | - |
| | MPa | - | 0.001 |
| | Kgf / cm2 | 0.001 | 0.01 |
| | bar | 0.001 | 0.01 |
| | Psi | 0.01 | 0.1 |
| | inHg | 0.1 | - |
| | mmHg | 1 | - |
| Power supply voltage | 12 ~ 24 VDC ±10%, Ripple (P-P) 10% or less | | |
| Current consumption | ≤ 40 mA (with no load) | | |
| Switch output | NPN open collector Max. load current : 125mA Max. supply voltage: 30VDC Residual voltage : ≤ 1.5V (load current 125mA) | | PNP open collector Max. load current : 125mA Max. supply voltage: 24VDC Residual voltage : ≤ 1.5V (load current 125mA) |
| Analog output | Output Voltage: 1~5V ≤ ±2.5%F.S.(within rated pressure range) Linearity : ≤±1% F.S. Output impedance : 1kΩ | | |
| Repeatability (Switch output) | ≤±0.2% F.S. ±1digit | | |
| Response time | ≤2.5ms (chattering-proof function : 25ms,100ms, 250ms, 500ms, 1000ms, 1500ms selections) | | |
| Output short circuit protection | Yes | | |
| Indicator accuracy | ≤±2% F.S ±1 digit (ambient temperature : 25±3°C) | | |
| Indicator resolution | One point set | Adjustable within 1~8 digits | |
| | Hysteresis mode | Adjustable within 1~8 digits | |
| | Window mode | Fixed (3 digits) | |
| Environment | Enclosure | IP40 | |
| | Ambient temp. range | Operation : 0 ~ 50°C, Storage : -10 ~ 60°C (No condensation or freezing) | |
| | Ambient humidity range | Operation/ Storage: 35~85% RH (No condensation) | |
| | Vibration | Total amplitude 1.5mm or 10G, 10Hz-150Hz-10Hz scan for 1 minute, hours each direction of X,Y and Z | |
| Shock | 1000 ½ (10G), 3 times each indirection of X,Y and Z | | |
| Temperature characteristic | ≤±2% F.S of detected pressure (25°C) at temp. range 0~50°C | | |
| Port size | PT 1/8" male, M5 | | |
| Lead wire | F1: 1/8" PT, M5 | | |
| Weight | Approx. 80g (with 2M lead wire), Approx. 45g (with male connector) | | |

Circuit diagram

NPN

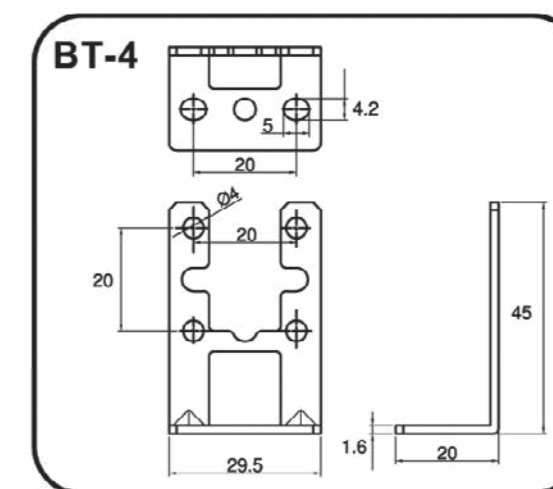
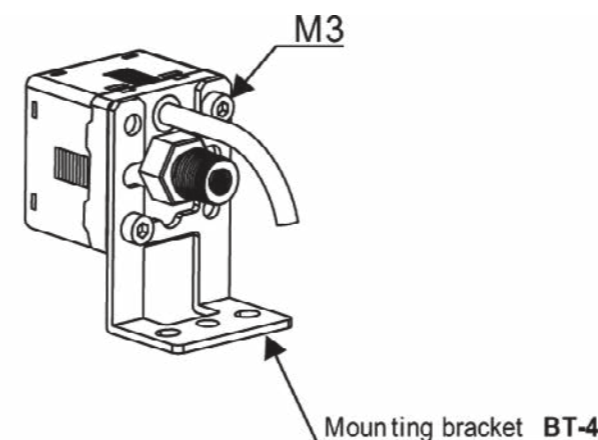
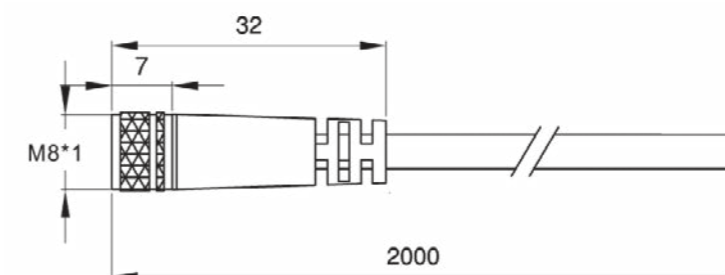


PNP



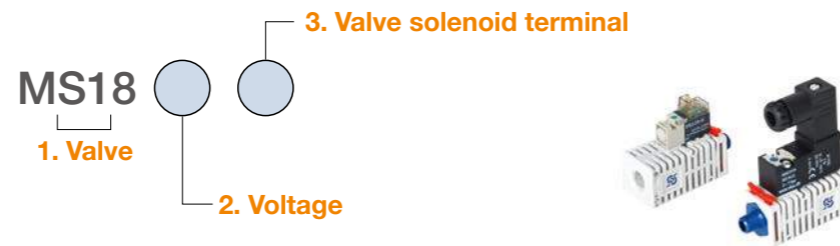
Dimensions

VCM842





Control valve – MS18



Build an Ordering No.

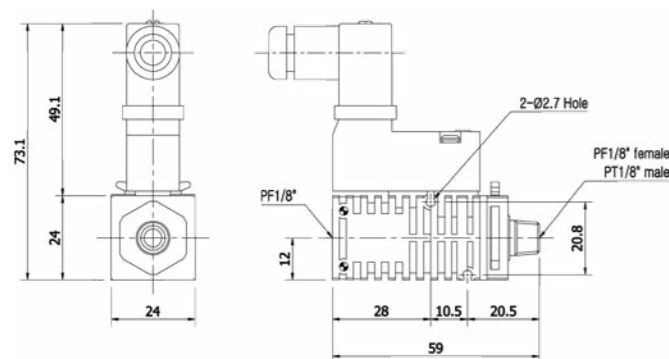
| 1. Valve | Description | Ordering No. |
|-------------------|---|--------------|
| | 2/2 way solenoid valve, PF1/8" female inlet | MS18 |
| | 2/2 way solenoid valve, PF1/8" male inlet | MS18M |
| 2. Voltage | Description | Ordering No. |
| | AC110V | 1 |
| | AC220V | 2 |
| | DC24V | 3 |
| 3. Valve terminal | Description | Ordering No. |
| | Solenoid Terminal, DIN, No LW | 1 |
| | Solenoid Terminal, DIN, Lamp, No LW | 2 |
| | Solenoid Terminal, Conn, Lamp & 0.3m LW: <i>Only available with DC24V</i> | 3 |

Specification

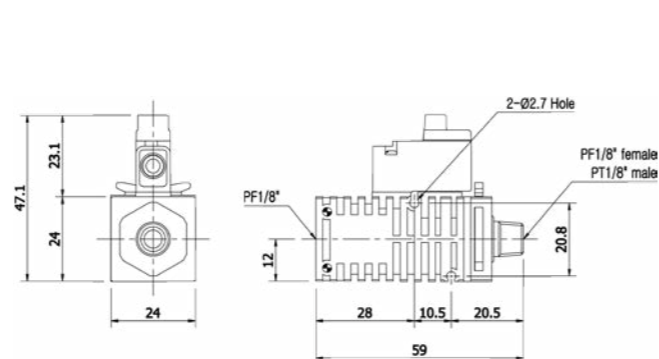
| Description | MS18 | Description | MS18 |
|-------------------|--|-------------------|---------------------------------------|
| Connection | G1/8" | Standard voltage | AC : 110V, 220V – 50/60Hz DC : 24V |
| Normal flow | 1,230 NI/m | Power consumption | 0.85 ~ 1.3W |
| Pressure range | 2.5 ~ 7 bar | Weight | 25g |
| Temperature range | -18 ~ 65 °C | | |
| Material | NYLON, AL, SUM, Ni, SS, CuZn, NBR, PPS | | |

Dimensions

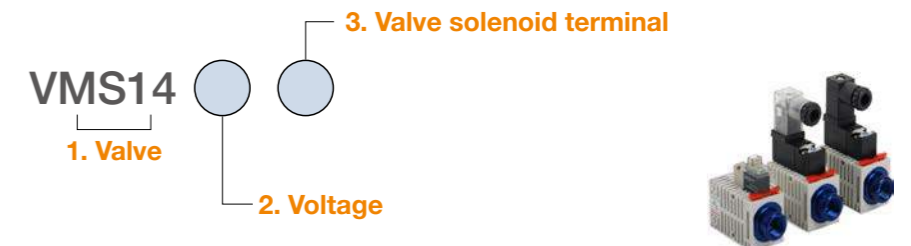
Din type



Connector type



Control valve – VMS14



Build an Ordering No.

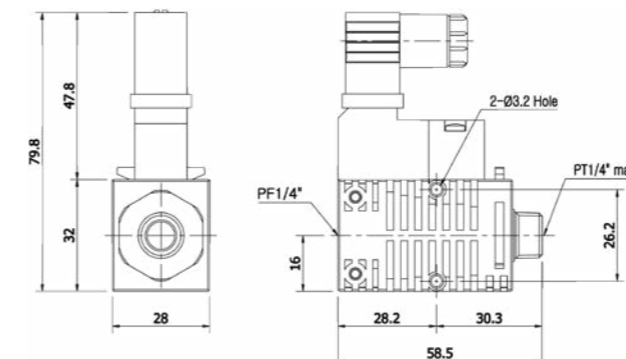
| 1. Valve | Description | Ordering No. |
|-------------------|---|--------------|
| | 2/2 way solenoid valve, G1/4" female inlet, Diaphragm | VMS14 |
| | 2/2 way solenoid valve, PT1/4" male inlet, Diaphragm | VMS14M |
| 2. Voltage | Description | Ordering No. |
| | AC110V | 1 |
| | AC220V | 2 |
| | DC24V | 3 |
| 3. Valve terminal | Description | Ordering No. |
| | Solenoid Terminal, DIN, No LW | 1 |
| | Solenoid Terminal, DIN, Lamp, No LW | 2 |
| | Solenoid Terminal, Conn, Lamp & 0.3m LW: <i>Only available with DC24V</i> | 3 |

Specification

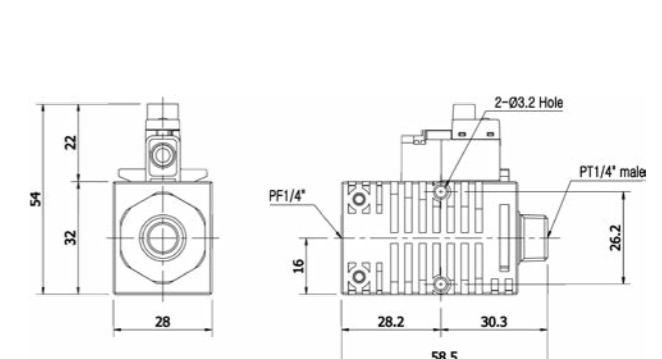
| Description | VMS14 | Description | VMS14 |
|-------------------|--|-------------------|---------------------------------------|
| Connection | G1/4" | Standard voltage | AC : 110V, 220V – 50/60Hz DC : 24V |
| Normal flow | 1410 NI/m | Power consumption | 0.85 ~ 1.3W |
| Pressure range | 2.5 ~ 7 bar | Weight | 80g |
| Temperature range | -18 ~ 65 °C | | |
| Material | Nylon, AL, SUM, Ni, SS, CuZn, NBR, PPS | | |

Dimensions

Din type



Connector type



Applications

