

Holders for Mini Suction Cups / Mini Suction Cups

Note that, for some of the types shown here, order might be unable to be received by the MISUMI Indonesia offices.

Vacuum Pens / Vacuum Attachments

Holders for Mini Suction Cup

MHLD (Press Fit)

MHLDM (Threaded)

MHLDK (Threaded)

Material: Body: SUS303
O-Ring NBR (JIS B2401 Class 1 A)

RoHS 10

| Part Number | L Selection | a Tolerance | M Coarse | Dk6 | P | d | d1 | L1 | D1 | D2 | W | MHLD Unit Price | MHLD Volume Discount Rate | MHLDM Unit Price | MHLDM Volume Discount Rate | MHLDK Unit Price | MHLDK Volume Discount Rate |
|-------------|-------------|-------------|----------|-----|---|-----|----|----|----|----|---|-----------------|---------------------------|------------------|----------------------------|------------------|----------------------------|
| MHLD | 1.7 | 1.7 0 | M5 | 5 | 5 | 1.2 | 2 | 6 | 9 | 7 | 8 | 1~9 pc(s) | 10~20 | 1~9 pc(s) | 10~20 | 1~9 pc(s) | 10~20 |
| MHLDM | 2.7 | 2.7 -0.03 | M6 | 6 | 6 | 2.3 | 3 | 8 | 10 | 8 | 9 | - | - | - | - | - | - |
| MHLDK | 5 | - | M5 | - | 5 | - | 2 | 6 | 9 | 7 | 8 | - | - | - | - | - | - |
| | 15 | - | M6 | - | 6 | - | 2 | 8 | 10 | 8 | 9 | - | - | - | - | - | - |

Ordering Example: Part Number - L
MHLD1.7 - 10

Mini Suction Cups

| Type | Material | Hardness | Heat Resistance Temp. | Volume Specific Resistance |
|-------------|------------------------|-----------|-----------------------|----------------------------|
| Round Type | Nitrile Rubber (Black) | Shore A80 | -20~150°C | 1.0x10 ¹⁰ · cm |
| Square Type | Silicon Rubber (Black) | Shore A60 | -70~200°C | 1.0x10 ¹⁰ · cm |

Round Type

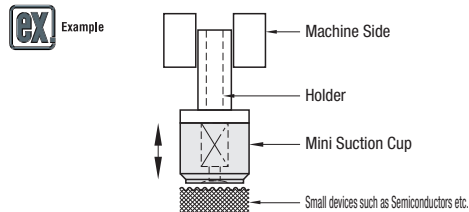
Square Type

The photo is enlarged.

Ordering Example: Part Number - B
RBTR2 RBTS2.5 - 5

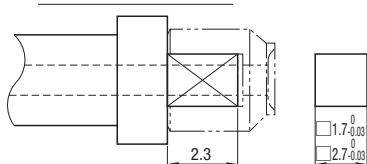
| Part Number | D | C | A | d | H | Applicable Holder | Unit Price |
|--------------|------|-----|---|-----|-----|-------------------|------------|
| <Round Type> | 1 | - | - | 0.5 | 1.7 | MHLDM | RBTR SCTR |
| | 1.25 | - | - | 0.5 | 1.7 | MHLDM | RBTR SCTR |
| | 1.5 | 0.9 | 4 | 1 | 1.7 | MHLDM | RBTR SCTR |
| | 1.75 | 1.2 | 4 | 1 | 1.7 | MHLDM | RBTR SCTR |
| | 2 | 1.4 | 4 | 1 | 1.7 | MHLDM | RBTR SCTR |
| | 2.5 | 1.9 | 5 | 1 | 2.7 | MHLDM | RBTR SCTR |
| | 3 | 2.3 | 5 | 1 | 2.7 | MHLDM | RBTR SCTR |
| | 4 | 3.2 | 5 | 1 | 2.7 | MHLDM | RBTR SCTR |
| | 5 | 4.2 | 7 | 1 | 2.7 | MHLDM | RBTR SCTR |
| | 6 | 4.9 | 7 | 1 | 2.7 | MHLDM | RBTR SCTR |
| | 7 | 5.9 | 7 | 1 | 2.7 | MHLDM | RBTR SCTR |

| Part Number | A | B | X | Y | T | d | H | Applicable Holder | Unit Price |
|---------------|-----|----|-----|------|-----|---|-----|-------------------|------------|
| <Square Type> | 2 | 4 | 4 | 6 | 0.4 | 1 | 1.7 | MHLDM | RBTS SCTS |
| | 2.5 | 5 | 4 | 7 | 0.4 | 1 | 1.7 | MHLDM | RBTS SCTS |
| | 3 | 6 | 4 | 7 | 0.5 | 1 | 2.7 | MHLDM | RBTS SCTS |
| | 4 | 8 | 5 | 9 | 0.5 | 1 | 2.7 | MHLDM | RBTS SCTS |
| | 5 | 10 | 6 | 10.5 | 0.5 | 1 | 2.7 | MHLDM | RBTS SCTS |
| | 6 | 12 | 6.5 | 12.5 | 0.5 | 1 | 2.7 | MHLDM | RBTS SCTS |
| | 7 | 14 | 7.5 | 14.5 | 0.5 | 1 | 2.7 | MHLDM | RBTS SCTS |



- Features**
- Makes no scratch on devices.
 - Easy replacement by commonizing the holder insert part.
 - Devices can surely be sucked and detached.
- The applicable tip type of Mini Suction Cup must be selected in accordance with the size and shape of the current object device. For the mating holder insertion part, however, only 2 types are offered and are commonized to enable easy insertion and replacement of Mini Suction Cup tips.
- To suck, apply air pressure.
To remove, stop the air pressure.
The surface of the suction portion of the mini suction cups is treated with satin finish, providing easy device removal. The material of RBTR and RBTS is NBR (Nitrile Rubber) and can suck (convey) devices without making scratch on them. The material of SCTR and SCTS is silicon rubber and excels in chemical, heat, low temperature and weather resistance.

Holder End Machining Guide



Vacuum Pens

MKPEN (0 ~ 40° Bent)

MKPEL (40 ~ 90° Bent)

Material: Aluminum, Low Cadmium Brass

| Part Number | Applicable Tube I.D. | Accessory | MKPEN Unit Price | MKPEN Volume Discount Rate | MKPEL Unit Price | MKPEL Volume Discount Rate |
|-------------|----------------------|----------------------|------------------|----------------------------|------------------|----------------------------|
| MKPEN MKPEL | 3 | Ø3 Silicon Tube L=1m | 1~2 pc(s) | 3~10 | 1~2 pc(s) | 3~10 |

- Features**
- Press the button lightly to suck and release it to detach.
 - Suction/Attachment can be controlled smoothly by using the air volume control function.
 - The air flow rate can be changed by adjusting the thread according to weight and size of sucking objects.

Vacuum Attachments - Chip Type

| Type | Material | Surface Treatment | Heat Resistance Temp. | Electrical Resistance |
|------|-------------------|-------------------------|-----------------------|-----------------------|
| NICR | Low Cadmium Brass | Nickel / Chrome Plating | 200°C | - |
| NIFE | PTFE (Teflon) | - | 260°C | 10 ¹⁰ Ω |
| NIKE | Conductive PEEK | - | 250°C | 10 ⁹ Ω |

Tip Shape: d 0.3~3.5, d 4.0

Material: End Part: SUS304 Resin Part: Polypropylene

Features

- Brass: Low cost and heat resistant.
- Teflon: Since the material is soft, the product is very little likely to damage the sucking workpiece and is excellent in chemical resistance.
- Conductive PEEK: Convenient in handling small electronic parts that require static protection.

Please use in combination with Holder for Mini Suction Cup Tip Male Thread (MHLDK P1443) and Vacuum Pen (MKPEN, MKPEL).

Vacuum Attachments - Fine Type

NSUSA

Material: End Part: SUS304 Resin Part: Polypropylene

| Part Number | d | D | L1 | L2 | Unit Price | Volume Discount Rate |
|-------------|------|------|-------|------|------------|----------------------|
| NSUSA | 0.10 | 0.23 | 29.35 | 6.35 | 1~9 pc(s) | 10~20 |
| | 0.15 | 0.3 | | | | |
| | 0.20 | 0.41 | | | | |
| | 0.33 | 0.64 | | | | |
| | 0.51 | 0.81 | 35.7 | 12.7 | | |
| | 0.84 | 1.27 | | | | |
| | 1.37 | 1.65 | | | | |
| | 1.52 | 1.83 | | | | |

| Part Number | d | NICR Unit Price | NICR Volume Discount Rate | NIFE Unit Price | NIFE Volume Discount Rate | NIKE Unit Price | NIKE Volume Discount Rate |
|----------------|-----|-----------------|---------------------------|-----------------|---------------------------|-----------------|---------------------------|
| NICR NIFE NIKE | 0.3 | 1~9 pc(s) | 10~20 | 1~9 pc(s) | 10~20 | 1~9 pc(s) | 10~20 |
| | 0.4 | | | | | | |
| | 0.5 | | | | | | |
| | 0.6 | | | | | | |
| | 0.7 | | | | | | |
| | 0.8 | | | | | | |
| | 1.0 | | | | | | |
| | 1.2 | | | | | | |
| | 1.5 | | | | | | |
| | 2.0 | | | | | | |
| | 2.5 | | | | | | |
| | 3.0 | | | | | | |
| | 3.5 | | | | | | |
| | 4.0 | | | | | | |

d3.5 is not available for NIKE.

Vacuum Attachments - Conductive Rubber Suction Type

NPUN

Material: Conductive Silicon Rubber

Ordering Example: Part Number
MKPEN NICR0.3

| Part Number | d | Unit Price | Volume Discount Rate |
|-------------|----|------------|----------------------|
| NPUN | 6 | 1~9 pc(s) | 10~20 |
| | 10 | | |
| | 15 | | |
| | 20 | | |

