

SPF Series

Flat Suction Cup

AIRBEST



UNIVERSAL



Features

- ◇ With support structure at the bottom
- ◇ Optimal design
- ◇ Small inner volume
- ◇ Available in various sizes

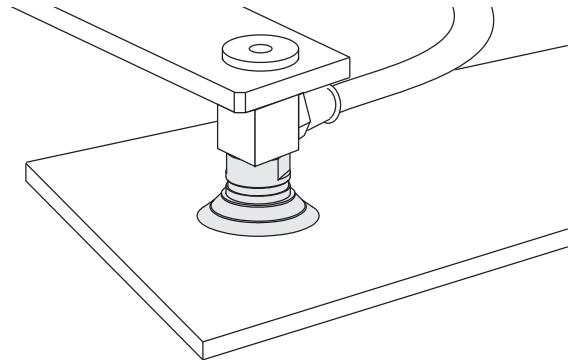
Advantages

- ◇ Be able to prevent permanent deformation of workpieces
- ◇ Small size, large suction force
- ◇ Short working cycle
- ◇ Suitable for workpieces of various sizes and shapes



Applications

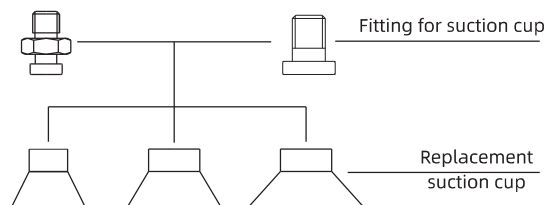
- ◇ Handling of flat workpieces with smooth or slightly rough surface such as wood, metal plate, plywood and plastic plate
- ◇ Suitable for handling electronic components, conductive material can effectively prevent electrostatic damage to electronic components



Structure

- ◇ Suction cups with diameter less than 50mm adopt split structure for easy replacement of wearing parts
- ◇ One-piece structure for suction cup with diameter 60mm-200mm

In the same series, replacement suction cup and fitting can be combined as required



SPF Series

Flat Suction Cup

How to order

SPF 15 N - M5M

① ② ③ ④

| ① Series | ② Diameter | ③ Material & Hardness | ④ Connection thread |
|----------|--------------------|-----------------------|-------------------------------------------------------------------------------------------------------|
| SPF | 2 - ϕ 2mm | 35 - ϕ 35mm | N - NBR 55 |
| | 3.5 - ϕ 3.5mm | 40 - ϕ 40mm | WS - White silicone 50 |
| | 5 - ϕ 5mm | 50 - ϕ 50mm | CN - Conductive NBR 55 |
| | 6 - ϕ 6mm | 60 - ϕ 60mm | CS - Conductive silicone 55 |
| | 8 - ϕ 8mm | 80 - ϕ 80mm | |
| | 10 - ϕ 10mm | 95 - ϕ 95mm | |
| | 15 - ϕ 15mm | 120 - ϕ 120mm | |
| | 20 - ϕ 20mm | 150 - ϕ 150mm | |
| | 25 - ϕ 25mm | 200 - ϕ 200mm | |
| | 30 - ϕ 30mm | | |
| | | | Nil - Suction cup only |
| | | | M3M - M3x0.5 male thread |
| | | | M5M - M5x0.8 male thread |
| | | | M8M - M8x1.25 male thread |
| | | | M10F - M10x1.25 female thread |

Selection

| Model | Connection thread M - Male thread |
|---------|--------------------------------------|
| SPF2□ | SPF2□-M3M |
| SPF3.5□ | SPF3.5□-M3M |
| SPF5□ | SPF5□-M5M |
| SPF6□ | SPF6□-M5M |
| SPF8□ | SPF8□-M5M |
| SPF10□ | SPF10□-M5M |
| SPF15□ | SPF15□-M5M |
| SPF20□ | SPF20□-M5M |

| Model | Connection thread M - Male thread |
|-------------|--------------------------------------|
| SPF25□ | SPF25□-M5M |
| SPF30□ | SPF30□-M5M |
| SPF35□ | SPF35□-M5M |
| SPF40□ | SPF40□-M5M |
| SPF50□ | SPF50□-M8M |
| SPF60□-M10F | - |
| SPF80□-M10F | - |
| SPF95□-M10F | - |

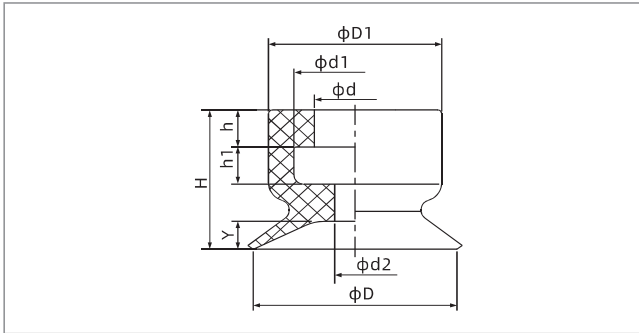
Technical parameters

| Model | Pull-out force N | Inner volume cm ³ | Weight g | Recommended hose dia. mm | MPQ pcs |
|--------|---------------------|---------------------------------|-------------|-----------------------------|------------|
| SPF2 | 0.15 | <0.1 | 0.1 | 4 | 10 |
| SPF3.5 | 0.4 | <0.1 | 0.1 | 4 | 10 |
| SPF5 | 0.9 | <0.1 | 0.2 | 4 | 10 |
| SPF6 | 1.2 | <0.1 | 0.2 | 4 | 10 |
| SPF8 | 2.2 | <0.1 | 0.2 | 4 | 10 |
| SPF10 | 3.5 | <0.1 | 0.3 | 4 | 10 |
| SPF15 | 8 | 0.2 | 0.4 | 6 | 10 |
| SPF20 | 15 | 0.5 | 1.6 | 6 | 5 |
| SPF25 | 24 | 1.1 | 2.5 | 6 | 5 |
| SPF30 | 32 | 1 | 3.3 | 6 | 5 |

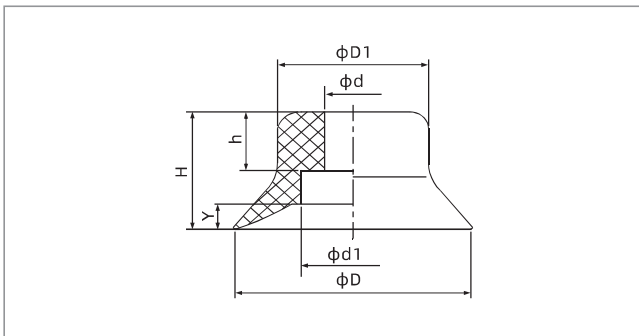
| Model | Pull-out force N | Inner volume cm ³ | Weight g | Recommended hose dia. mm | MPQ pcs |
|--------|---------------------|---------------------------------|-------------|-----------------------------|------------|
| SPF35 | 43 | 2.4 | 6.6 | 6 | 5 |
| SPF40 | 60 | 3.4 | 8.4 | 6 | 5 |
| SPF50 | 92 | 5.7 | 10.4 | 8 | 1 |
| SPF60 | 127 | 11 | 23.2 | 8 | 1 |
| SPF80 | 226 | 25.3 | 48.2 | 8 | 1 |
| SPF95 | 319 | 38 | 70.3 | 10 | 1 |
| SPF120 | 510 | 81 | 159.5 | 10 | 1 |
| SPF150 | 800 | 171 | 322.4 | 12 | 1 |
| SPF200 | 1,410 | 364 | 521.5 | 12 | 1 |

SZ
SP3
SUF
SAN
SAO
SOFA
STP
SFT
SFA
SBT
SBL
SBLP
SBS
SFP
SBP
SXP
SGP
SBOF
STC
SFF
SOB
SOF
SOG
SFM
SOM
SBF
SDM
SFU
SFK
SHT
SDL
SFG
SFGT
SFD
SB
SBA
SF
SU
SPA
SPD
SPF
SPC
SPJ
SPU
SH
SHB
SBB
SOP
SNP

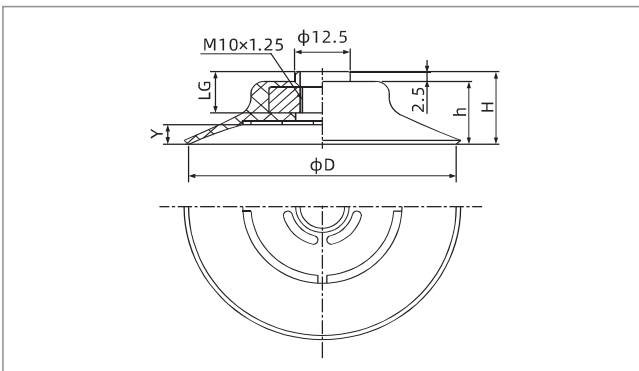
Dimensions(mm) - Suction cup only



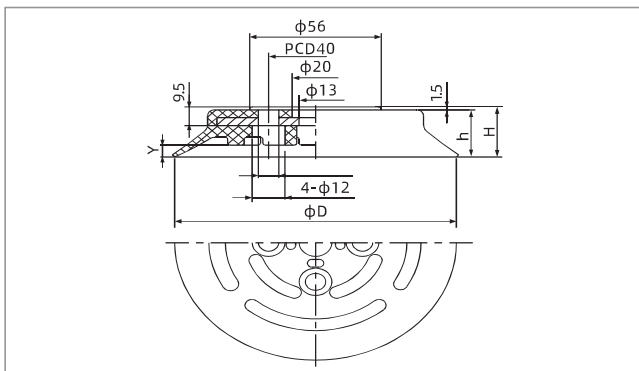
SPF2-15



SPF20-50



SPF60-95



SPF120-200

| Model/Size | D | H | D1 | d | h | d1 | h1 | d2 | Y |
|------------|-----|-----|-----|---|-----|----|----|-----|-----|
| SPF2□ | 2 | 4 | 4 | 2 | 1.5 | 3 | 1 | 1.2 | 0.5 |
| SPF3.5□ | 3.5 | 4 | 4 | 2 | 1.5 | 3 | 1 | 1.2 | 0.5 |
| SPF5□ | 5 | 6.5 | 7.5 | 4 | 2 | 6 | 2 | 1.4 | 0.8 |
| SPF6□ | 6 | 6.5 | 7.5 | 4 | 2 | 6 | 2 | 2 | 0.8 |
| SPF8□ | 8 | 7 | 8 | 4 | 2 | 6 | 2 | 2 | 1.2 |
| SPF10□ | 10 | 7.5 | 8.5 | 4 | 2 | 6 | 2 | 2 | 1.5 |
| SPF15□ | 15 | 8 | 9 | 4 | 2 | 6 | 2 | 2 | 1.9 |

| Model/Size | D | H | D1 | d | h | d1 | Y |
|------------|----|----|----|---|-----|------|-----|
| SPF20□ | 20 | 10 | 15 | 6 | 4.5 | 10.8 | 2.3 |
| SPF25□ | 25 | 14 | 16 | 6 | 7 | 11 | 3 |
| SPF30□ | 29 | 12 | 14 | 6 | 7 | 11 | 2 |
| SPF35□ | 35 | 14 | 21 | 6 | 7 | 11 | 3 |
| SPF40□ | 40 | 14 | 24 | 6 | 7 | 11 | 3.5 |
| SPF50□ | 50 | 15 | 27 | 8 | 7 | 20 | 4 |

| Model/Size | D | H | h | LG | Y |
|-------------|----|------|------|------|---|
| SPF60□-M10F | 60 | 18.5 | 16 | 10.5 | 5 |
| SPF80□-M10F | 80 | 20.5 | 18 | 11.5 | 6 |
| SPF95□-M10F | 95 | 21 | 18.5 | 11 | 6 |

| Model/size | D | H | h | Y |
|------------|-----|------|----|----|
| SPF120□ | 120 | 25.5 | 24 | 6 |
| SPF150□ | 150 | 32.5 | 31 | 9 |
| SPF200□ | 200 | 37.5 | 36 | 13 |

SPF Series

Flat Suction Cup

Mounting parts

| Item | Model M - Male thread | Applicable suction cup |
|-------------------------|--------------------------|------------------------|
| Fitting for suction cup | PJS-M3M-ST1 | SPF2, 3.5 |
| | PJS-M5M-ST2 | SPF5, 6, 8, 10, 15 |
| | PJS-M5M-ST3 | SPF20 |
| | PJS-M5M-ST4 | SPF25, 30, 35, 40 |
| | PJS-M8M-ST6 | SPF50 |

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBT
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFGT
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPD
- SPF**
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SPF Series

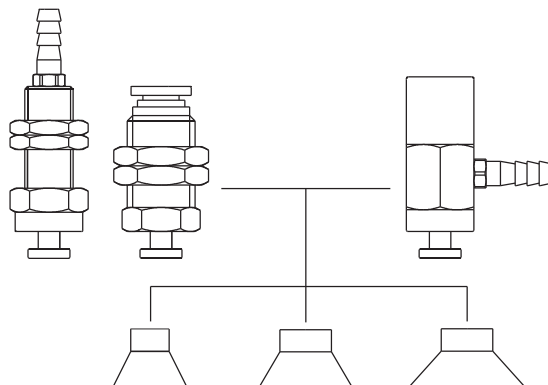
Suction Cup with Locking Fitting



Structure

- ◇ Consisting of replacement suction cup and locking fitting
- ◇ Plug-in fitting for suction cup
- ◇ Vertical vacuum port, Pagoda fitting or one-touch fitting for connection, male thread for mounting
- ◇ Lateral vacuum port, Pagoda fitting for connection, female thread for mounting

In the same series, replacement suction cup and locking fitting can be combined as required



How to order

SPF10N - L B6 - M4F

① ② ③ ④

| ① Model | ② Vacuum port direction | ③ Vacuum port connection | ④ Mounting thread |
|---------|--------------------------|--------------------------------------|--------------------------------------|
| SPF10N | Nil - Vertical direction | A4 - One-touch fitting $\phi 4$ hose | M3F - M3 \times 0.5 female thread |
| | L - Lateral direction | A6 - One-touch fitting $\phi 6$ hose | M4F - M4 \times 0.7 female thread |
| | | B4 - Pagoda fitting $\phi 4$ hose | M6F - M6 \times 1 female thread |
| | | B6 - Pagoda fitting $\phi 6$ hose | M8F - M8 \times 1.25 female thread |
| | | R1 - Rc1/8 female thread | M16F - M16 \times 2 female thread |
| | | | |
| | | | M5M - M5 \times 0.5 male thread |
| | | | M8M - M8 \times 1 male thread |
| | | | M10M - M10 \times 1 male thread |
| | | | M12M - M12 \times 1 male thread |
| | | | M14M - M14 \times 1 male thread |
| | | | M16M - M16 \times 1.5 male thread |

◇ Please refer to page 290 for suction cup selection

Selection

| Model | Vacuum port direction Vertical-Pagoda fitting | Vertical-One-touch fitting | Lateral-Pagoda fitting |
|---------|--------------------------------------------------|----------------------------|------------------------|
| SPF2□ | SPF2□-B4-M5M | - | SPF2□-LB4-M3F |
| SPF3.5□ | SPF3.5□-B4-M5M | - | SPF3.5□-LB4-M3F |
| SPF5□ | SPF5□-B6-M8M | SPF5□-A4-M12M | SPF5□-LB6-M4F |
| SPF6□ | SPF6□-B6-M8M | SPF6□-A4-M12M | SPF6□-LB6-M4F |
| SPF8□ | SPF8□-B6-M8M | SPF8□-A4-M12M | SPF8□-LB6-M4F |
| SPF10□ | SPF10□-B6-M8M | SPF10□-A4-M12M | SPF10□-LB6-M4F |
| SPF15□ | SPF15□-B6-M8M | SPF15□-A4-M12M | SPF15□-LB6-M4F |
| SPF20□ | SPF20□-B6-M10M | SPF20□-A6-M14M | SPF20□-LB6-M4F |
| SPF25□ | SPF25□-B6-M10M | SPF25□-A6-M14M | SPF25□-LB6-M6F |
| SPF30□ | SPF30□-B6-M10M | SPF30□-A6-M14M | SPF30□-LB6-M6F |
| SPF35□ | SPF35□-B6-M10M | SPF35□-A6-M14M | SPF35□-LB6-M6F |
| SPF40□ | SPF40□-B6-M10M | SPF40□-A6-M14M | SPF40□-LB6-M6F |
| SPF50□ | SPF50□-B6-M10M | SPF50□-A6-M14M | SPF50□-LB6-M6F |

SPF Series

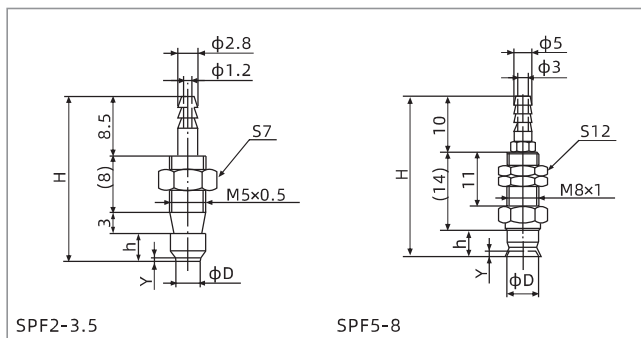
Suction Cup with Locking Fitting



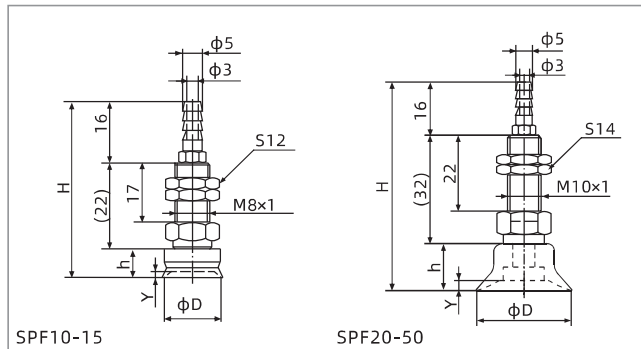
Selection

| Model | Vacuum port direction Vertical-Pagoda fitting | Lateral-Pagoda fitting |
|---------|--------------------------------------------------|------------------------|
| SPF60□ | SPF60□-R1-M16M | SPF60□-LR1-M8F |
| SPF80□ | SPF80□-R1-M16M | SPF80□-LR1-M8F |
| SPF95□ | SPF95□-R1-M16M | SPF95□-LR1-M8F |
| SPF120□ | - | SPF120□-LR1-M16F |
| SPF150□ | - | SPF150□-LR1-M16F |
| SPF200□ | - | SPF200□-LR1-M16F |

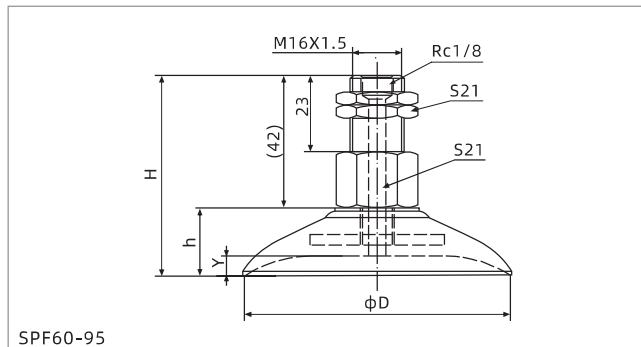
Dimensions(mm)



Vertical-Pagoda fitting



Vertical-Pagoda fitting



Vertical-Female thread connection

| Model/Size | D | H | h | Y |
|----------------|-----|------|-----|-----|
| SPF2□-B4-M5M | 2 | 23.5 | 4 | 0.5 |
| SPF3.5□-B4-M5M | 3.5 | 23.5 | 4 | 0.5 |
| SPF5□-B6-M8M | 5 | 30.5 | 6.5 | 0.8 |
| SPF6□-B6-M8M | 6 | 30.5 | 6.5 | 0.8 |
| SPF8□-B6-M8M | 8 | 31 | 7 | 1.2 |

| Model/Size | D | H | h | Y |
|----------------|----|------|-----|-----|
| SPF10□-B6-M8M | 10 | 45.5 | 7.5 | 1.5 |
| SPF15□-B6-M8M | 15 | 46 | 8 | 1.9 |
| SPF20□-B6-M10M | 20 | 58 | 10 | 2.3 |
| SPF25□-B6-M10M | 25 | 62 | 14 | 3 |
| SPF30□-B6-M10M | 30 | 60 | 12 | 2 |
| SPF35□-B6-M10M | 35 | 62 | 14 | 3 |
| SPF40□-B6-M10M | 40 | 62 | 14 | 3.5 |
| SPF50□-B6-M10M | 50 | 63 | 15 | 4 |

| Model/Size | D | H | h | Y |
|----------------|----|------|------|---|
| SPF60□-R1-M16M | 60 | 58 | 16 | 5 |
| SPF80□-R1-M16M | 80 | 60 | 18 | 6 |
| SPF95□-R1-M16M | 95 | 60.5 | 18.5 | 6 |

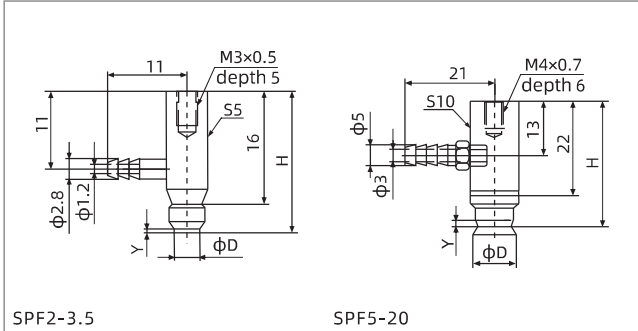
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBT
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOE
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFGT
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPD
- SPF**
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SPF Series

Suction Cup with Locking Fitting



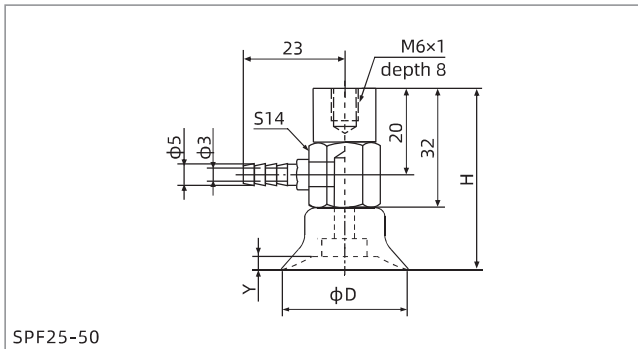
Dimensions(mm)



SPF2-3.5

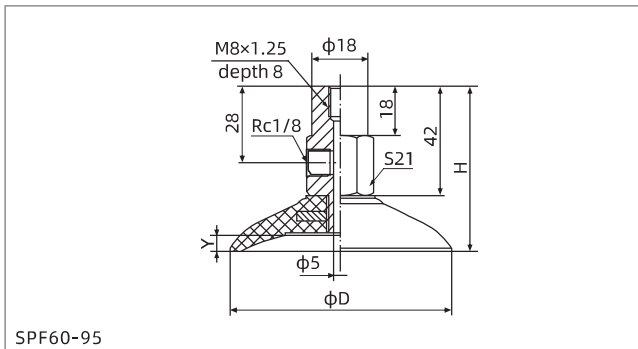
SPF5-20

Lateral-Pagoda fitting



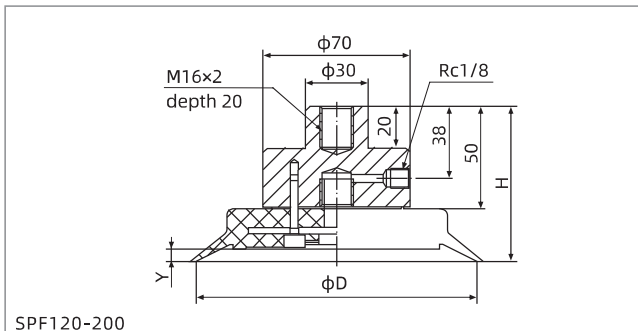
SPF25-50

Lateral-Pagoda fitting



SPF60-95

Lateral-Female thread connection



SPF120-200

Lateral-Female thread connection

| Model/Size | D | H | Y |
|-----------------|-----|------|-----|
| SPF2□-LB4-M3F | 2 | 20 | 0.5 |
| SPF3.5□-LB4-M3F | 3.5 | 20 | 0.5 |
| SPF5□-LB6-M4F | 5 | 28.5 | 0.8 |
| SPF6□-LB6-M4F | 6 | 28.5 | 0.8 |
| SPF8□-LB6-M4F | 8 | 29 | 1.2 |
| SPF10□-LB6-M4F | 10 | 29.5 | 1.5 |
| SPF15□-LB6-M4F | 15 | 30 | 1.9 |
| SPF20□-LB6-M4F | 20 | 32 | 2.3 |

| Model/Size | D | H | Y |
|----------------|----|----|-----|
| SPF25□-LB6-M6F | 25 | 46 | 3 |
| SPF30□-LB6-M6F | 30 | 44 | 2 |
| SPF35□-LB6-M6F | 35 | 46 | 3 |
| SPF40□-LB6-M6F | 40 | 46 | 3.5 |
| SPF50□-LB6-M6F | 50 | 47 | 4 |

| Model/Size | D | H | Y |
|----------------|----|------|---|
| SPF60□-LR1-M8F | 60 | 58 | 5 |
| SPF80□-LR1-M8F | 80 | 58.5 | 6 |
| SPF95□-LR1-M8F | 95 | 59 | 6 |

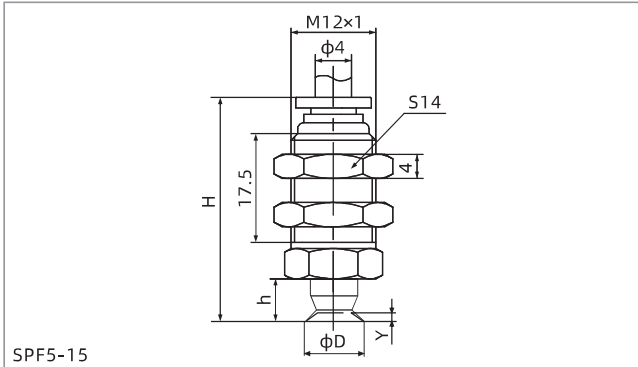
| Model/Size | D | H | Y |
|------------------|-----|------|----|
| SPF120□-LR1-M16F | 120 | 75.5 | 6 |
| SPF150□-LR1-M16F | 150 | 82.5 | 9 |
| SPF200□-LR1-M16F | 200 | 87.5 | 13 |

SPF Series

Suction Cup with Locking Fitting

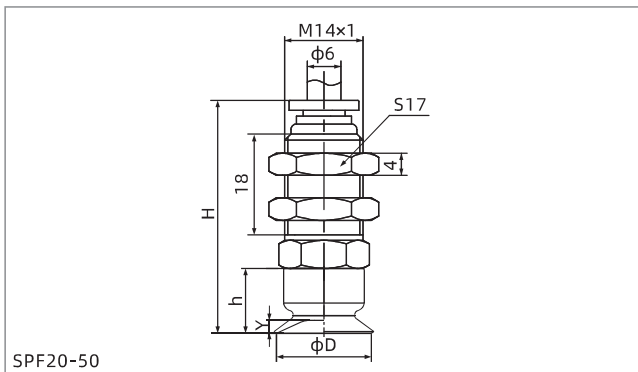


Dimensions(mm)



SPF5-15

Vertical-One-touch fitting



SPF20-50

Vertical-One-touch fitting

| Model/Size | D | H | Y |
|----------------|----|------|-----|
| SPF5□-A4-M12M | 5 | 34 | 0.8 |
| SPF6□-A4-M12M | 6 | 34 | 0.8 |
| SPF8□-A4-M12M | 8 | 34.5 | 1.2 |
| SPF10□-A4-M12M | 10 | 35 | 1.5 |
| SPF15□-A4-M12M | 15 | 35.5 | 1.9 |

| Model/Size | D | H | Y |
|----------------|----|----|-----|
| SPF20□-A6-M14M | 20 | 40 | 2.3 |
| SPF25□-A6-M14M | 25 | 44 | 3 |
| SPF30□-A6-M14M | 30 | 42 | 2 |
| SPF35□-A6-M14M | 35 | 44 | 3 |
| SPF40□-A6-M14M | 40 | 44 | 3.5 |
| SPF50□-A6-M14M | 50 | 45 | 4 |

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBT
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFGT
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPD
- SPF**
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SPF Series

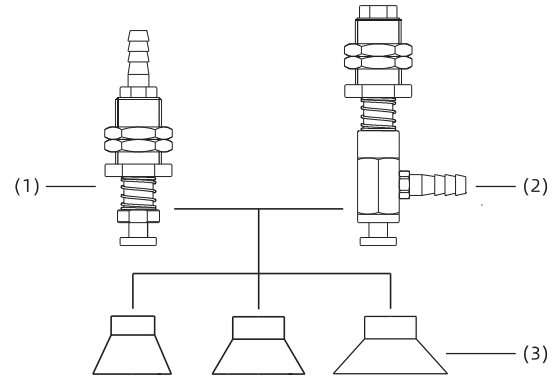


Suction Cup with Level Compensator

Structure

- ◇ Consisting of replacement suction cup(3) and level compensator
- ◇ Plug-in fitting for suction cup
- ◇ Vertical vacuum port(1), male thread for mounting
- ◇ Lateral vacuum port(2), male thread for mounting

In the same series, replacement suction cup and level compensator can be combined as required



How to order

SPF10N - F E 10 LB6 - M11

① ② ③ ④ ⑤ ⑥

| ① Model | ② Level compensator type | ③ Buffer type | ④ Buffer stroke | ⑤ Vacuum port connection | ⑥ Mounting thread |
|---------|--------------------------|---------------------|-----------------|---------------------------------------|-------------------|
| SPF10N | F - PSPF Series | E - External spring | 2 5 | B4 - Vertical, Pagoda fitting φ4 hose | M5 - M5×0.5 |
| | | | 3 10 | B6 - Vertical, Pagoda fitting φ6 hose | M9 - M9×1 |
| | | | 4 15 | LB4 - Lateral, Pagoda fitting φ4 hose | M11 - M11×1 |
| | | | 6 30 | LB6 - Lateral, Pagoda fitting φ6 hose | M14 - M14×1 |
| | | | | LR1 - Lateral, Rc1/8 female thread | M16 - M16×1.5 |
| | | | | | |

Selection

| Model | Vacuum port direction Vertical-Pagoda fitting | | Lateral-Pagoda fitting | |
|---------|--------------------------------------------------|-------------------|------------------------|--------------------|
| SPF2□ | SPF2□-FE2B4-M5 | SPF2□-FE5B4-M5 | SPF2□-FE2LB4-M5 | SPF2□-FE5B4-M5 |
| SPF3.5□ | SPF3.5□-FE2B4-M5 | SPF3.5□-FE5B4-M5 | SPF3.5□-FE2LB4-M5 | SPF3.5□-FE5LB4-M5 |
| SPF5□ | SPF5□-FE3B6-M9 | SPF5□-FE10B6-M9 | SPF5□-FE3LB6-M9 | SPF5□-FE10LB6-M9 |
| SPF6□ | SPF6□-FE3B6-M9 | SPF6□-FE10B6-M9 | SPF6□-FE3LB6-M9 | SPF6□-FE10LB6-M9 |
| SPF8□ | SPF8□-FE3B6-M9 | SPF8□-FE10B6-M9 | SPF8□-FE3LB6-M9 | SPF8□-FE10LB6-M9 |
| SPF10□ | SPF10□-FE4B6-M11 | SPF10□-FE10B6-M11 | SPF10□-FE4LB6-M11 | SPF10□-FE10LB6-M11 |
| SPF15□ | SPF15□-FE4B6-M11 | SPF15□-FE10B6-M11 | SPF15□-FE4LB6-M11 | SPF15□-FE10LB6-M11 |
| SPF20□ | SPF20□-FE4B6-M11 | SPF20□-FE10B6-M11 | SPF20□-FE4LB6-M11 | SPF20□-FE10LB6-M11 |
| SPF25□ | SPF25□-FE6B6-M14 | SPF25□-FE15B6-M14 | SPF25□-FE6LB6-M14 | SPF25□-FE15LB6-M14 |
| SPF30□ | SPF30□-FE6B6-M14 | SPF30□-FE15B6-M14 | SPF30□-FE6LB6-M14 | SPF30□-FE15LB6-M14 |
| SPF35□ | SPF35□-FE6B6-M14 | SPF35□-FE15B6-M14 | SPF35□-FE6LB6-M14 | SPF35□-FE15LB6-M14 |
| SPF40□ | SPF40□-FE6B6-M14 | SPF40□-FE15B6-M14 | SPF40□-FE6LB6-M14 | SPF40□-FE15LB6-M14 |
| SPF50□ | SPF50□-FE6B6-M14 | SPF50□-FE15B6-M14 | SPF50□-FE6LB6-M14 | SPF50□-FE15LB6-M14 |

SPF Series

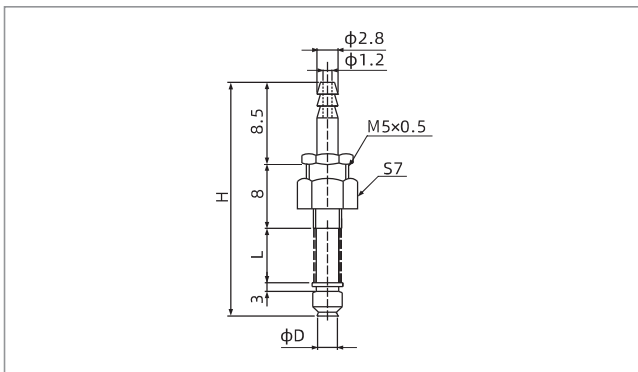
Suction Cup with Level Compensator



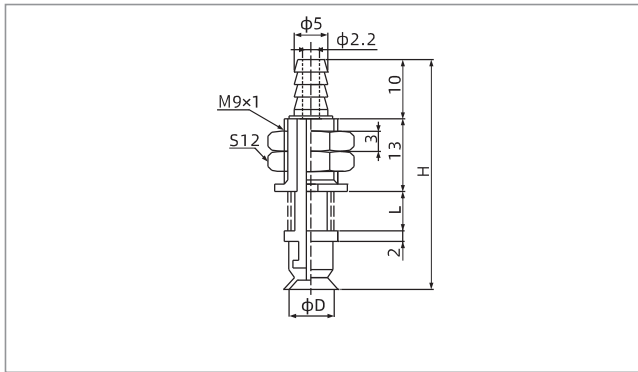
Selection

| Model | Vacuum port direction Vertical-Pagoda fitting | Lateral-Pagoda fitting | |
|--------|--------------------------------------------------|------------------------|--------------------|
| | | SPF60□-FE10LR1-M16 | SPF60□-FE30LR1-M16 |
| SPF60□ | - | SPF60□-FE10LR1-M16 | SPF60□-FE30LR1-M16 |
| SPF80□ | - | SPF80□-FE10LR1-M16 | SPF80□-FE30LR1-M16 |
| SPF95□ | - | SPF95□-FE10LR1-M16 | SPF95□-FE30LR1-M16 |

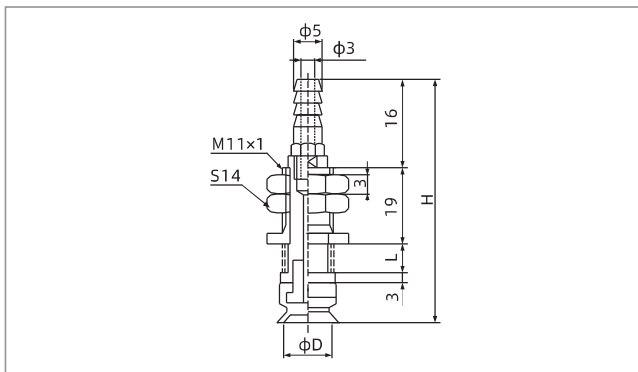
Dimensions(mm)



SPF2-3.5 Vertical-Pagoda fitting



SPF5-8 Vertical-Pagoda fitting



SPF10-20 Vertical-Pagoda fitting

| Model/Size | D | H | L | Buffer stroke |
|------------------|-----|------|----|---------------|
| SPF2□-FE2B4-M5 | 2 | 28.5 | 5 | 2.5 |
| SPF2□-FE5B4-M5 | 2 | 33.5 | 10 | 5 |
| SPF3.5□-FE2B4-M5 | 3.5 | 28.5 | 5 | 2.5 |
| SPF3.5□-FE5B4-M5 | 3.5 | 33.5 | 10 | 5 |

| Model/Size | D | H | L | Buffer stroke |
|-----------------|---|------|----|---------------|
| SPF5□-FE3B6-M9 | 5 | 37.5 | 6 | 3 |
| SPF5□-FE10B6-M9 | 5 | 51.5 | 20 | 10 |
| SPF6□-FE3B6-M9 | 6 | 37.5 | 6 | 3 |
| SPF6□-FE10B6-M9 | 6 | 51.5 | 20 | 10 |
| SPF8□-FE3B6-M9 | 8 | 38 | 6 | 3 |
| SPF8□-FE10B6-M9 | 8 | 52 | 20 | 10 |

| Model/Size | D | H | L | Buffer stroke |
|-------------------|----|------|----|---------------|
| SPF10□-FE4B6-M11 | 10 | 53.5 | 8 | 4 |
| SPF10□-FE10B6-M11 | 10 | 65.5 | 20 | 10 |
| SPF15□-FE4B6-M11 | 15 | 54 | 8 | 4 |
| SPF15□-FE10B6-M11 | 15 | 66 | 20 | 10 |
| SPF20□-FE4B6-M11 | 20 | 56 | 8 | 4 |
| SPF20□-FE10B6-M11 | 20 | 68 | 20 | 10 |

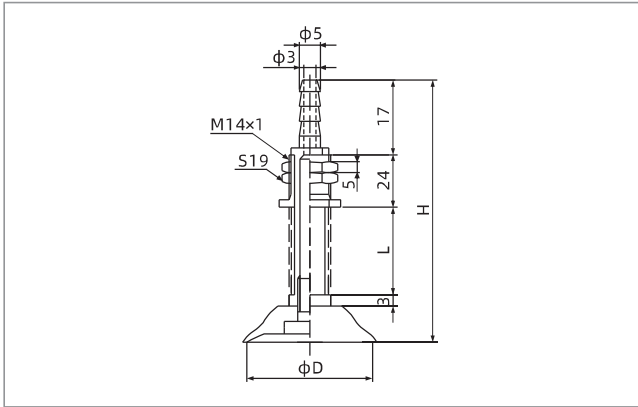
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBT
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOE
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFGT
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPD
- SPF**
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SPF Series

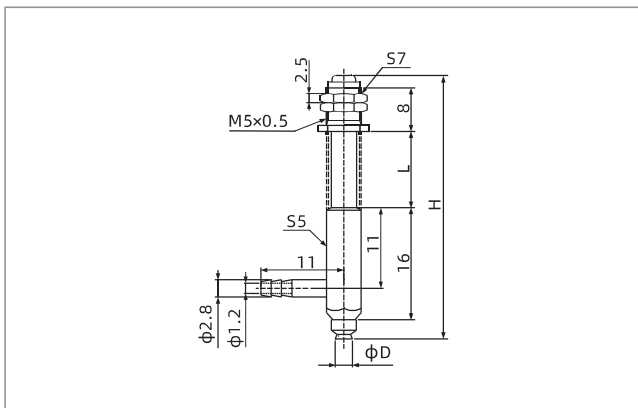
Suction Cup with Level Compensator



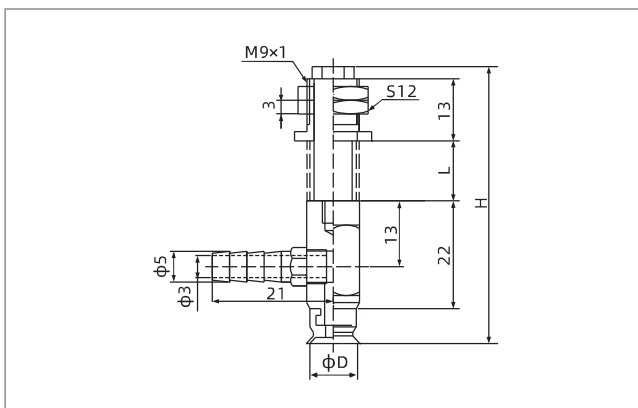
Dimensions(mm)



SPF25-50 Vertical-Pagoda fitting



SPF2-3.5 Lateral-Pagoda fitting



SPF5-8 Lateral-Pagoda fitting

| Model/Size | D | H | L | Buffer stroke |
|-------------------|----|----|----|---------------|
| SPF25□-FE6B6-M14 | 25 | 71 | 13 | 6 |
| SPF25□-FE15B6-M14 | 25 | 88 | 30 | 15 |
| SPF30□-FE6B6-M14 | 30 | 69 | 13 | 6 |
| SPF30□-FE15B6-M14 | 30 | 86 | 30 | 15 |
| SPF35□-FE6B6-M14 | 35 | 71 | 13 | 6 |
| SPF35□-FE15B6-M14 | 35 | 88 | 30 | 15 |
| SPF40□-FE6B6-M14 | 40 | 71 | 13 | 6 |
| SPF40□-FE15B6-M14 | 40 | 88 | 30 | 15 |
| SPF50□-FE6B6-M14 | 50 | 72 | 13 | 6 |
| SPF50□-FE15B6-M14 | 50 | 89 | 30 | 15 |

| Model/Size | D | H | L | Buffer stroke |
|-------------------|-----|------|----|---------------|
| SPF2□-FE2LB4-M5 | 2 | 35.5 | 5 | 2.5 |
| SPF2□-FE5LB4-M5 | 2 | 40.5 | 10 | 5 |
| SPF3.5□-FE2LB4-M5 | 3.5 | 35.5 | 5 | 2.5 |
| SPF3.5□-FE5LB4-M5 | 3.5 | 40.5 | 10 | 5 |

| Model/Size | D | H | L | Buffer stroke |
|------------------|---|------|----|---------------|
| SPF5□-FE3LB6-M9 | 5 | 50.5 | 6 | 3 |
| SPF5□-FE10LB6-M9 | 5 | 64.5 | 20 | 10 |
| SPF6□-FE3LB6-M9 | 6 | 50.5 | 6 | 3 |
| SPF6□-FE10LB6-M9 | 6 | 64.5 | 20 | 10 |
| SPF8□-FE3LB6-M9 | 8 | 51 | 6 | 3 |
| SPF8□-FE10LB6-M9 | 8 | 65 | 20 | 10 |

