Complex gripper, flexible assembly

CRG

End-Of-Arm-Tooling

机器人末端工装夹具 -EOAT

5.1

# ROBOTICS PARTS CATALOG


บริษัท นานดีอินเตอร์เทรด จำกัด

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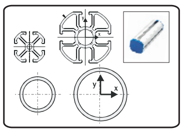
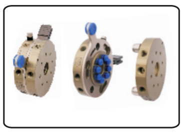


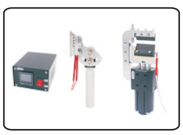
















# 索引 General Index

# 索引 General index

型材、钢管 Profile、SUS Tube
支架模组 Stents Module
快换 Quick Changer
夹具组件 Grip Module
气动剪刀 Air Nipper
真空组件 Vacuum Module
附件 Accessory Components

### 亮点Highlights

- 尺寸和材质多种规格可选
- 密封唇柔软且有锥度
- 吸盘顶部有加强筋结构
- 最优结构设计
- 底部支撑结构

- Various sizes and materials are available
- Soft and tapered sealing lip
- Rib structure on the top of the suction cup
- Optimum structural design
- Bottom support structure

### 优势Advantage

- 适合不同尺寸和形状的工件
- 对曲面和不平整的工件有很强的适应性
- 高速运动时，具有极强的的水平和横向抓取力
- 尺寸小、吸力大
- 搬运薄壁工件不会产生永久变形

- Suitable for workpieces of different sizes and shapes
- Strong adaptability to curved surfaces and uneven workpieces
- Strong horizontal and lateral grabbing force when moving at high speed
- Small size and high suction
- Handling thin-walled workpieces without permanent deformation

## 型号表示方法
## Model representation methods

PFG - 43 - SI-55

系列
Series

吸盘直径
Suction cup diameter

橡胶件代码
NBR-55 丁腈橡胶
SI-55 硅橡胶
HT1-60 无痕橡胶
NBR-55 nitrile rubber
SI-55 silicone rubber
HT1-60 traceless rubber

## 运用案例
## Application example

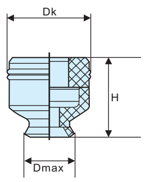
包装行业
packaging industry

电子行业
Electronics industry

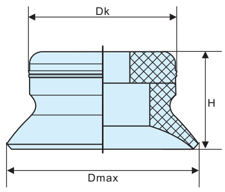
注塑行业
Injection molding industry

# 吸盘PFG系列（扁平式）Vacuum Cups PFG Series

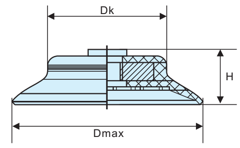
**PFG-2...PFG-10**



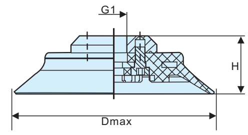

**PFG-15...PFG-50**




**PFG-60...PFG-95**




**PFYN-120...PFYN-200**




PFYN-120 自带吸盘座
PFYN-150 自带吸盘座
PFYN-200 自带吸盘座

| 型号 (Model) | 吸力 (N)(1) | 推荐真空管内径(mm) | G1 (mm) | Dk (mm) | Dmax (mm) | H (mm) | NBR-55 (黑色) | SI-55 (透明) | HT1-60 (蓝色) | 重量 (Weight) |
|---|---|---|---|---|---|---|---|---|---|---|
| PFG-2-... | 0.12 | 2 | - | 4.2 | 3.0 | 4.0 | 1.Y12953 | 1.Y12972 | 1.Y12991 | 0.02g |
| PFG-3.5-... | 0.42 | 2 | - | 4.2 | 4.0 | 4.0 | 1.Y12954 | 1.Y12973 | 1.Y12992 | 0.03g |
| PFG-5-... | 0.75 | 2 | - | 7.7 | 5.5 | 6.5 | 1.Y12955 | 1.Y12974 | 1.Y12993 | 0.15g |
| PFG-6-... | 1.2 | 2 | - | 7.7 | 6.5 | 6.5 | 1.Y12956 | 1.Y12975 | 1.Y12994 | 0.17g |
| PFG-8-... | 2.3 | 2 | - | 8.2 | 9.0 | 7.0 | 1.Y12957 | 1.Y12976 | 1.Y12995 | 0.23g |
| PFG-10-... | 4.0 | 2 | - | 8.7 | 11.5 | 7.5 | 1.Y12958 | 1.Y12977 | 1.Y12996 | 0.30g |
| PFG-15-... | 9.0 | 4 | - | 12.2 | 17.5 | 8.0 | 1.Y12959 | 1.Y12978 | 1.Y12997 | 1g |
| PFG-20-... | 15.5 | 4 | - | 15.2 | 23.0 | 10.0 | 1.Y12960 | 1.Y12979 | 1.Y12998 | 1g |
| PFG-25-... | 26.5 | 4 | - | 16.2 | 27.5 | 14.0 | 1.Y12961 | 1.Y12980 | 1.Y12999 | 3g |
| PFG-30-... | 34.0 | 4 | - | 15.1 | 31.5 | 12.0 | 1.Y12962 | 1.Y12981 | 1.Y13000 | 3g |
| PFG-35-... | 44.0 | 4 | - | 20.5 | 38.0 | 14.0 | 1.Y12963 | 1.Y12982 | 1.Y13001 | 6g |
| PFG-40-... | 57.7 | 4 | - | 24.3 | 43.0 | 14.0 | 1.Y12964 | 1.Y12983 | 1.Y13002 | 7g |
| PFG-50-... | 91.0 | 4 | - | 29.1 | 53.5 | 15.0 | 1.Y12965 | 1.Y12984 | 1.Y13003 | 11g |
| PFG-60-... | 125 | 6 | - | 38.7 | 64.0 | 18.0 | 1.Y12966 | 1.Y12985 | 1.Y13004 | 25g |
| PFG-80-... | 260 | 6 | - | 52.3 | 86.0 | 20.5 | 1.Y12967 | 1.Y12986 | 1.Y13005 | 52g |
| PFG-95-... | 350 | 6 | - | 68.2 | 102.0 | 19.0 | 1.Y12968 | 1.Y12987 | 1.Y13006 | 93g |
| PFYN-120-... | 540 | 9 | G1/2-F | 89.5 | 124 | 36.5 | 1.Y12969 | 1.Y12988 | - | 223g |
| PFYN-150-... | 842 | 9 | G1/2-F | 104.5 | 158 | 45.5 | 1.Y12970 | 1.Y12989 | 1.Y13008 | 391g |
| PFYN-200-... | 1498 | 9 | G1/2-F | 142.5 | 222 | 50.5 | 1.Y12971 | 1.Y12990 | - | 555g |

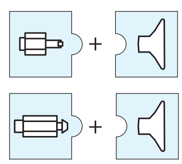
(1)上述规定吸力为在真空度为-0.6bar时的理论值，对于表面光滑、干燥的工件而言，未包括安全系数。

(1) The suction specified above is the theoretical value when the vacuum degree is -0.6bar. For smooth and dry workpieces, the safety factor is not included.

安装方式
Types of assembly

直插式
Factory-crimped fitting:

直插式
Hollow shaft fitting:

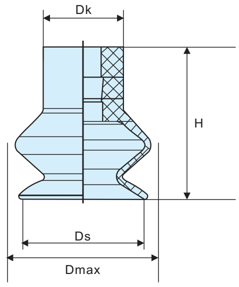



| 吸盘座 Vacuum Cup Fitting | 吸盘 Vacuum Cups |
|---|---|
| VM14-M5 | PFG-2~PFG-3.5 |
| VM29-M5、VM30-G18 | PFG-5~PFG-10 |
| VM31-M5、VM32-G18 | PFG-15 |
| VM33-M5、VM34-G18 | PFG-20 |
| VM35-M5、VM36-G18 | PFG-25~PFG-40 |
| VM37-M5、VM38-G18 | PFG-50 |
| VM-G14M-M10M | PFG-60~PFG-95 |

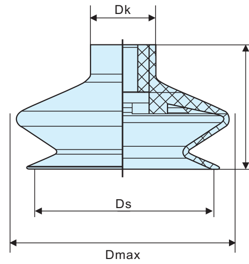
| Materials 材质 | Shore Hardness 硬度 | A Flexibility 柔韧性 | Abrasion resistance 耐磨性 | UV & weather resistance 抗紫外线 | Oil resistance 抗油污性 | Heat resistance (in °C) 耐高温 | |
|---|---|---|---|---|---|---|---|
| **SI-55**: Translucent Silicone 半透明硅胶 | 50 | +++ | - | - | - | -40 to 220 | Translucent 半透明 |
| **HT1-60**: Siton® 特制复合材料(无痕) | 60 | + | ++ | - | ++ | -25 to 170 | Blue 蓝色 |
| **NBR-55**: Nitrile 丁腈橡胶 | 60 | + | + | - | ++ | -30 to 120 | Black 黑色 |

# 吸盘FGA系列（波纹管式/2层）Vacuum Cups FGA Series

### FGA-6...FGA-25




### FGA-33...FGA-78




| 型号 (Model) | 吸力 (N)[1] | 拉脱力 (N)[1][2] | 推荐真空管内径(mm) | Dk (mm) | Dmax(S) (mm) | Ds (mm) | H (mm) | NBR-55 (黑色) | SI-55 (透明) | HT1-60 (蓝色) | 重量 (Weight) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FGA-6-... | 0.4 | 1.4 | 4 | 7 | 8.0 | 5.7 | 9 | 1.Y12937 | 1.Y12949 | 1.Y12951 | 1g |
| FGA-11-... | 0.95 | 3.8 | 4 | 10 | 13.0 | 10.4 | 16.0 | 1.Y12938 | 1.Y12288 | 1.Y12298 | 1g |
| FGA-14-... | 1.2 | 5.0 | 4 | 10 | 14.5 | 12.5 | 15.5 | 1.Y12939 | 1.Y12289 | 1.Y12299 | 1g |
| FGA-16-... | 2.3 | 6.7 | 4 | 10 | 18.5 | 15.6 | 19.2 | 1.Y12940 | 1.Y12290 | 1.Y12300 | 1g |
| FGA-20-... | 4.7 | 10.7 | 4 | 10 | 21.0 | 18.1 | 15.2 | 1.Y12941 | 1.Y12291 | 1.Y12301 | 2g |
| FGA-22-... | 5.7 | 15.2 | 4 | 10 | 25.0 | 21.5 | 19.0 | 1.Y12942 | 1.Y12292 | 1.Y12302 | 2g |
| FGA-25-... | 5.3 | 17.3 | 4 | 10 | 26.5 | 22.5 | 23.0 | 1.Y12943 | 1.Y12293 | 1.Y12303 | 3g |
| FGA-33-... | 13.6 | 39.6 | 6 | 18 | 38.0 | 30.0 | 27.0 | 1.Y12944 | 1.Y12294 | 1.Y12304 | 7g |
| FGA-43-... | 22.8 | 64.5 | 6 | 18 | 47.5 | 38.0 | 27.6 | 1.Y12945 | 1.Y12295 | 1.Y12305 | 11g |
| FGA-53-... | 51.3 | 95 | 6 | 18 | 60.0 | 50.0 | 34.0 | 1.Y12946 | 1.Y12296 | 1.Y12306 | 19g |
| FGA-63-... | 85.0 | 135 | 6 | 18 | 68.0 | 60.0 | 34.0 | 1.Y12947 | 1.Y12297 | 1.Y12307 | 24g |
| FGA-78-... | 137.4 | 218 | 6 | 25 | 84.5 | 74.0 | 47.0 | 1.Y12948 | 1.Y12950 | 1.Y12952 | 56g |

(1)上述规定吸力为在真空度为-0.6bar时的理论值，对于表面光滑、干燥的工件而言，未包括安全系数

(1) The suction specified above is the theoretical value when the vacuum degree is -0.6bar. For smooth and dry workpieces, the safety factor is not included.

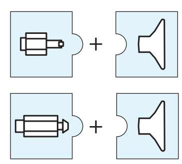
(2)天然橡胶材质的吸盘，其拉脱力约降低40%。

(2) The pull-off force of the vacuum cup made of natural rubber is reduced by about 40%.

安装方式
Types of assembly

直插式
Factory-crimped fitting:

直插式
Hollow shaft fitting:

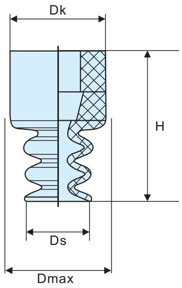



| 吸盘座 Vacuum Cup Fitting | 吸盘 Vacuum Cups |
|---|---|
| VM21-M5 | FGA-6 |
| VM18-M5、VM02-G18 | FGA-11~FGA-25 |
| VM24-G18 | FGA-33~FGA-63 |
| VM41-G14 | FGA-78 |

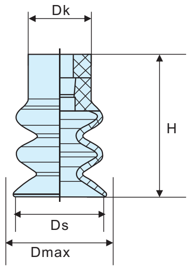
| Materials 材质 | Shore Hardness 硬度 | A Flexibility 柔韧性 | Abrasion resistance 耐磨性 | UV & weather resistance 抗紫外线 | Oil resistance 抗油污性 | Heat resistance (in °C) 耐高温 | |
|---|---|---|---|---|---|---|---|
| **HT1-60**: Siton® 特制复合材料(无痕) | 60 | + | ++ | - | ++ | -25 to 170 | Blue 蓝色 |
| **SI-55**: Translucent Silicone 半透明硅胶 | 50 | +++ | - | +++ | - | -40 to 220 | Translucent 半透明 |
| **NBR-55**: Nitrile 丁腈橡胶 | 60 | + | + | - | ++ | -30 to 120 | Black 黑色 |

# 吸盘FG系列（波纹管式/3层）Vacuum Cups FG Series

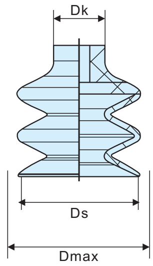
**FG-3...FG-9**




**FG-12...FG-25**




**FG-32...FG-88**



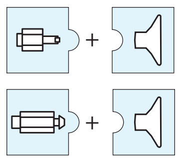

| 型号 (Model) | 吸力 (N)(1) | 拉脱力 (N)(1)(2) | 推荐真空管内径(mm) | Dk (mm) | Dmax(S) (mm) | Ds (mm) | H (mm) | NBR-55 (黑色) | SI-55 (透明) | HT1-60 (蓝色) | 重量 (Weight) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FG-3-... | 0.2 | 0.4 | 2 | 4 | 4.0 | 3.0 | 6.7 | 1.Y12929 | 1.Y12931 | 1.Y12934 | 1g |
| FG-4-... | 0.3 | 0.6 | 2 | 7 | 7.0 | 3.8 | 14 | 1.Y12930 | 1.Y12932 | 1.Y12935 | 1g |
| FG-5-... | 0.2 | 0.8 | 2 | 7 | 7.0 | 5.0 | 14 | 1.Y12308 | 1.Y12319 | 1.Y12331 | 1g |
| FG-7-... | 0.1 | 0.9 | 4 | 9 | 9.0 | 5.9 | 14 | 1.Y12309 | 1.Y12320 | 1.Y12332 | 1g |
| FG-9-... | 0.7 | 2.3 | 4 | 9 | 9.5 | 9.0 | 15 | 1.Y12310 | 1.Y12321 | 1.Y12333 | 1g |
| FG-12-... | 0.9 | 3.5 | 4 | 10 | 13.0 | 12.0 | 21.0 | 1.Y12311 | 1.Y12322 | 1.Y12334 | 1g |
| FG-14-... | 1.2 | 5.7 | 4 | 10 | 15.5 | 14.5 | 22.8 | 1.Y12312 | 1.Y12323 | 1.Y12335 | 2g |
| FG-18-... | 2.3 | 8.5 | 4 | 10 | 19.0 | 17.2 | 22.6 | 1.Y12313 | 1.Y12324 | 1.Y12336 | 2g |
| FG-20-... | 3.8 | 12.1 | 4 | 10 | 21.0 | 20.0 | 22.1 | 1.Y12314 | 1.Y12325 | 1.Y12337 | 2g |
| FG-25-... | 4.5 | 19.0 | 4 | 10 | 26.0 | 23.0 | 34.0 | 1.Y12315 | 1.Y12326 | 1.Y12338 | 4g |
| FG-32-... | 12.0 | 36.9 | 6 | 18 | 33.5 | 32 | 37.5 | 1.Y12284 | 1.Y12327 | 1.Y11797 | 10g |
| FG-42-... | 13.6 | 44 | 6 | 18 | 45 | 42.6 | 46 | 1.Y12316 | 1.Y12328 | 1.Y12340 | 18g |
| FG-52-... | 27.0 | 96 | 6 | 18 | 55 | 52.5 | 48.7 | 1.Y12317 | 1.Y12329 | 1.Y12341 | 24g |
| FG-62-... | 39.6 | 137 | 6 | 18 | 65 | 62.2 | 54 | 1.Y12318 | 1.Y12330 | 1.Y12342 | 39g |
| FG-88-... | 45.2 | 286 | 9 | 25 | 95.5 | 89 | 86.5 | 1.Y12928 | 1.Y12933 | - | 166g |

(1)上述规定吸力为在真空度为-0.6bar时的理论值，对于表面光滑、干燥的工件而言，未包括安全系数
(1) The suction specified above is the theoretical value when the vacuum degree is -0.6bar. For smooth and dry workpieces, the safety factor is not included.
(2)天然橡胶材质的吸盘，其拉脱力约降低40%。
(2) The pull-off force of the vacuum cup made of natural rubber is reduced by about 40%.

安装方式
Types of assembly

直插式
Factory-crimped fitting:

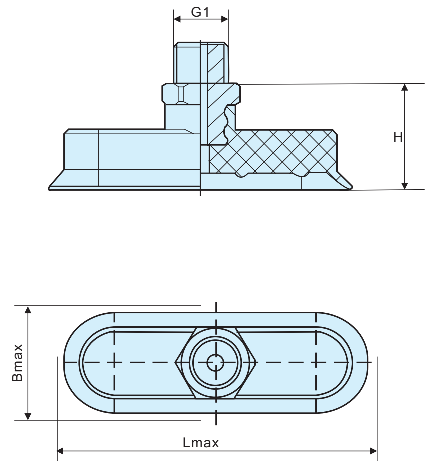
直插式
Hollow shaft fitting:



| 吸盘座 Vacuum Cup Fitting | 吸盘 Vacuum Cups |
|---|---|
| VM14-M5 | FG-3 |
| VM21-M5 | FG-4~FG-5 |
| VM39-M5、VM40-G18 | FG-7~FG-25 |
| VM24-G18 | FG-32~FG-62 |
| VM41-G14 | FG-88 |

| Materials 材质 | Shore Hardness 硬度 | A Flexibility 柔韧性 | Abrasion resistance 耐磨性 | UV & weather resistance 抗紫外线 | Oil resistance 抗油污性 | Heat resistance (in °C) 耐高温 | |
|---|---|---|---|---|---|---|---|
| **HT1-60**: Siton® 特制复合材料(无痕) | 60 | + | ++ | - | ++ | -25 to 170 | Blue 蓝色 |
| **SI-55**: Translucent Silicone 半透明硅胶 | 50 | +++ | - | +++ | - | -40 to 220 | Translucent 半透明 |
| **NBR-55**: Nitrile 丁腈橡胶 | 60 | + | + | - | ++ | -30 to 120 | Black 黑色 |

# 吸盘SGON系列（扁平长方型）Vacuum Cups SGON Series




| 型号 (Model) | 吸力 (N)[1] | 推荐真空管内径 (mm) | G1 (mm) | Bmax (mm) | Lmax (mm) | H (mm) | NBR-60 (黑色) | SI-60 (透明) | HT1-60 (蓝色) | 重量 (Weight) |
|---|---|---|---|---|---|---|---|---|---|---|
| SGON-4x2-... | 0.42 | 2 | M3-M | 2.5 | 4.5 | 8 | 1.Y13068 | 1.Y13079 | 1.Y13090 | 2g |
| SGON-7x3.5-... | 1.0 | 2 | M3-M | 4.5 | 7.5 | 8 | 1.Y13069 | 1.Y13080 | 1.Y13091 | 2g |
| SGON-12x4-... | 1.8 | 2 | M5-M | 5.0 | 13.0 | 18 | 1.Y13070 | 1.Y13081 | 1.Y13092 | 3g |
| SGON-15x5-... | 3.1 | 2 | M5-M | 5.5 | 15.5 | 17 | 1.Y13071 | 1.Y13082 | 1.Y13093 | 3g |
| SGON-18x6-... | 4.5 | 2 | M5-M | 7.0 | 18.5 | 17 | 1.Y13072 | 1.Y13083 | 1.Y13094 | 3g |
| SGON-24x8-... | 8.0 | 4 | G1/8-M | 9.0 | 24.5 | 17 | 1.Y13073 | 1.Y13084 | 1.Y13095 | 7g |
| SGON-30x10-... | 12.2 | 4 | G1/8-M | 11.5 | 30.5 | 17 | 1.Y13074 | 1.Y13085 | 1.Y13096 | 7g |
| SGON-45x15-... | 28.2 | 6 | G1/4-M | 16.5 | 46.0 | 26 | 1.Y13075 | 1.Y13086 | 1.Y13097 | 15g |
| SGON-60x20-... | 50.1 | 6 | G1/4-M | 22.0 | 61.0 | 26 | 1.Y13076 | 1.Y13087 | 1.Y13098 | 19g |
| SGON-75x25-... | 78.3 | 6 | G1/4-M | 27.5 | 77.0 | 26 | 1.Y13077 | 1.Y13088 | 1.Y13099 | 27g |
| SGON-90x30-... | 112.6 | 6 | G1/4-M | 33.0 | 92.5 | 26 | 1.Y13078 | 1.Y13089 | - | 35g |

(1)上述规定吸力为在真空度为-0.6bar时的理论值，对于表面光滑、干燥的工件而言，未包括安全系数

(1) The suction specified above is the theoretical value when the vacuum degree is -0.6bar. For smooth and dry workpieces, the safety factor is not included.

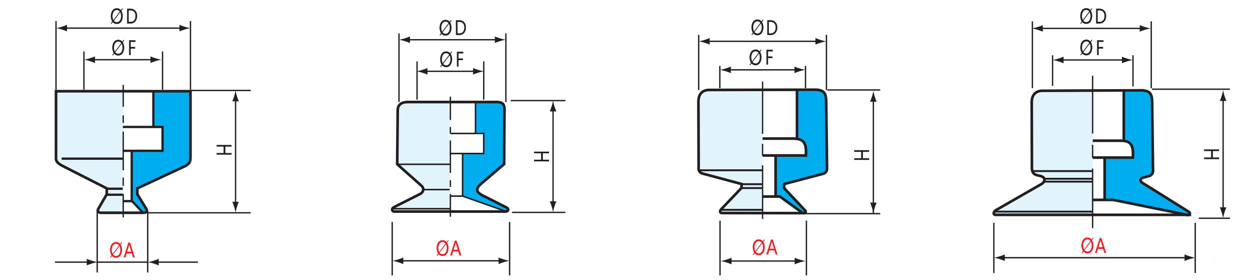
* SGON-24x8 及更大的替换吸盘垫配有专用固定夹。

* SGON-24x8 and larger replacement vacuum cup pads are equipped with special fixing clips.

| Materials 材质 | Shore Hardness 硬度 | A Flexibility 柔韧性 | Abrasion resistance 耐磨性 | UV & weather resistance 抗紫外线 | Oil resistance 抗油污性 | Heat resistance (in °C) 耐高温 | |
|---|---|---|---|---|---|---|---|
| **HT1-60**: Siton® 特制复合材料(无痕) | 60 | + | ++ | - | ++ | -25 to 170 | Blue 蓝色 |
| **SI-60**: Translucent Silicone 半透明硅胶 | 50 | +++ | - | +++ | - | -40 to 220 | Translucent 半透明 |
| **NBR-60**: Nitrile 丁腈橡胶 | 60 | + | + | - | ++ | -30 to 120 | Black 黑色 |

# 吸盘VSH系列（扁平式）Vacuum Cups VSH Series

VSH-S2...VSH-S10　VSH-S12...VSH-S30　VSH-M4...VSH-M10　VSH-M12...VSH-M50




| | (N)(1) | (N)(1) | ØA(mm) | H(mm) | ØD(mm) | ØF(mm) | SI(半透明) | SP(海绵) |
|---|---|---|---|---|---|---|---|---|
| VSH-S2 | 0.5 | 0.1 | 2 | 13 | 11 | 7 | 1.Y07282 | - |
| VSH-S4 | 0.7 | 0.2 | 4 | 15 | 11 | 7 | 1.Y07283 | - |
| VSH-S6 | 0.9 | 0.3 | 6 | 11 | 11 | 7 | 1.Y07284 | - |
| VSH-S8 | 1.1 | 0.5 | 8 | 11 | 11 | 7 | 1.Y07285 | - |
| VSH-S10 | 1.6 | 0.8 | 10 | 11 | 11 | 7 | 1.Y07286 | - |
| VSH-S12 | 2.0 | 1.5 | 12 | 11 | 11 | 7 | 1.Y07287 | - |
| VSH-S15 | 3.7 | 1.8 | 15 | 13 | 11 | 7 | 1.Y07288 | - |
| VSH-S20 | 6.1 | 3.0 | 20 | 13 | 12 | 7 | 1.Y07289 | - |
| VSH-S25 | 9.4 | 4.7 | 25 | 13 | 11 | 7 | 1.Y07290 | - |
| VSH-S30 | 15.9 | 7.9 | 30 | 12 | 13 | 7 | 1.Y07291 | - |
| VSH-M4 | 0.7 | 0.2 | 4 | 14 | 15 | 11 | 1.Y07292 | - |
| VSH-M6 | 0.9 | 0.3 | 6 | 15 | 15 | 11 | 1.Y07293 | - |
| VSH-M8 | 1.1 | 0.5 | 8 | 15 | 15 | 11 | 1.Y07294 | - |
| VSH-M10 | 1.6 | 0.8 | 10 | 15 | 15 | 11 | 1.Y07295 | 1.Y12885 |
| VSH-M12 | 2.0 | 1.5 | 12 | 15 | 15 | 11 | 1.Y07296 | 1.Y12886 |
| VSH-M15 | 3.7 | 1.8 | 15 | 15.5 | 16 | 11 | 1.Y07297 | 1.Y12887 |
| VSH-M20 | 6.1 | 3.0 | 20 | 15.5 | 16 | 11 | 1.Y07298 | 1.Y07530 |
| VSH-M25 | 9.4 | 4.7 | 25 | 15 | 15 | 11 | 1.Y07299 | 1.Y12888 |
| VSH-M30 | 15.9 | 7.9 | 30 | 15 | 16 | 11 | 1.Y07300 | 1.Y07758 |
| VSH-M40 | 26.7 | 13.4 | 40 | 16 | 17 | 11 | 1.Y07301 | 1.Y07894 |
| VSH-M50 | 38.3 | 19.1 | 50 | 15 | 20 | 11 | 1.Y07302 | 1.Y07895 |

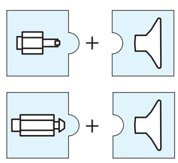
(1)真空度为65%时吸盘的实际吸附力，建议水平工作时安全系数为2，垂直工作时安全系数为4。

(1) Actual force of the suction cup in use with 65% vacuum and including a safety factor of 2 for horizontal handling and a factor of 4 for vertical handling.

安装方式
Types of assembly

直插式
Factory-crimped fitting:

直插式
Hollow shaft fitting:

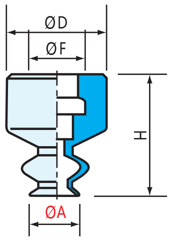


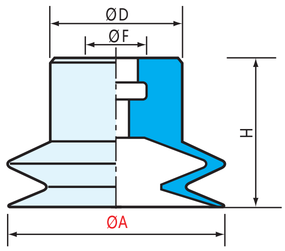
| 吸盘座 Vacuum Cup Fitting | 吸盘 Vacuum Cups |
|---|---|
| VM11-M5、VM11-G18<br>VFS 系列金具 (VFS Series Stem)<br>VFST 系列金具 (VFST Series Stem) | VSH-S2~VSH-S30 |
| VM10-G 1/8、VM27-M5<br>VFM 系列金具 (VFM Series Stem)<br>VFMT 系列金具 (VFMT Series Stem) | VSH-M4~VSH-M50 |

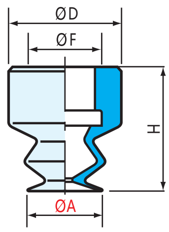
| Materials 材质 | Shore Hardness 硬度 | A Flexibility 柔韧性 | Abrasion resistance 耐磨性 | UV & weather resistance 抗紫外线 | Oil resistance 抗油污性 | Heat resistance (in °C) 耐高温 | |
|---|---|---|---|---|---|---|---|
| **SI**: Translucent Silicone 半透明硅胶 | 50 | +++ | - | - | - | -40 to 220 | Translucent 半透明 |

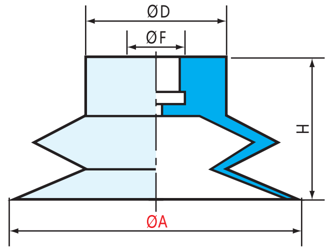
# 吸盘VSH2系列（波纹管式/2层）Vacuum Cups VSH2 Series

| VSH2-S4...VSH2-S20 | VSH2-S25...VSH2-S30 | VSH2-M6...VSH2-M25 | VSH2-M30...VSH2-M50 |
|---|---|---|---|



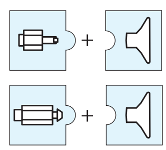

| | (N)[1] | (N)[1] | ØA(mm) | H(mm) | ØD(mm) | ØF(mm) | SI(半透明) | SP(海绵) |
|---|---|---|---|---|---|---|---|---|
| VSH2-S4 | 0.3 | 0.1 | 4 | 15 | 12 | 7 | 1.Y07303 | - |
| VSH2-S6 | 0.5 | 0.2 | 6 | 15 | 12 | 7 | 1.Y07304 | - |
| VSH2-S8 | 1.2 | 0.7 | 8 | 15 | 12 | 7 | 1.Y07305 | - |
| VSH2-S10 | 1.7 | 0.9 | 10 | 15 | 12 | 7 | 1.Y07306 | - |
| VSH2-S12 | 2.5 | 1.3 | 12 | 15 | 12 | 7 | 1.Y07307 | - |
| VSH2-S15 | 2.7 | 1.3 | 15 | 18 | 15 | 7 | 1.Y07308 | - |
| VSH2-S20 | 5.6 | 2.8 | 20 | 18 | 15 | 7 | 1.Y07309 | - |
| VSH2-S25 | 7.9 | 4.0 | 25 | 17.5 | 15 | 7 | 1.Y07310 | - |
| VSH2-S30 | 12 | 6 | 30 | 17.5 | 15 | 7 | 1.Y07311 | - |
| VSH2-M6 | 0.5 | 0.2 | 6 | 18 | 15 | 11 | 1.Y07312 | - |
| VSH2-M8 | 1.2 | 0.7 | 8 | 17 | 15 | 11 | 1.Y07313 | - |
| VSH2-M10 | 1.7 | 0.9 | 10 | 17 | 15 | 11 | 1.Y07314 | 1.Y08294 |
| VSH2-M12 | 2.5 | 1.3 | 12 | 17 | 15 | 11 | 1.Y07315 | 1.Y08295 |
| VSH2-M15 | 2.7 | 1.3 | 15 | 18 | 15 | 11 | 1.Y07316 | 1.Y08296 |
| VSH2-M20 | 5.6 | 2.8 | 20 | 18 | 15 | 11 | 1.Y07317 | 1.Y07929 |
| VSH2-M25 | 7.9 | 4.0 | 25 | 18 | 15 | 11 | 1.Y07318 | 1.Y08349 |
| VSH2-M30 | 12 | 6 | 30 | 19 | 18 | 11 | 1.Y07319 | 1.Y08056 |
| VSH2-M35 | 13.9 | 6.9 | 35 | 19 | 18 | 11 | 1.Y07320 | - |
| VSH2-M40 | 20.2 | 10.1 | 40 | 22 | 23 | 11 | 1.Y07321 | 1.Y08104 |
| VSH2-M50 | 40 | 20 | 50 | 24 | 24 | 11 | 1.Y07322 | 1.Y08105 |

(1)真空度为65%时吸盘的实际吸附力，建议水平工作时安全系数为2，垂直工作时安全系数为4。
(1) Actual force of the suction cup in use with 65% vacuum and including a safety factor of 2 for horizontal handling and a factor of 4 for vertical handling.

安装方式
Types of assembly

直插式
Factory-crimped fitting:

直插式
Hollow shaft fitting:

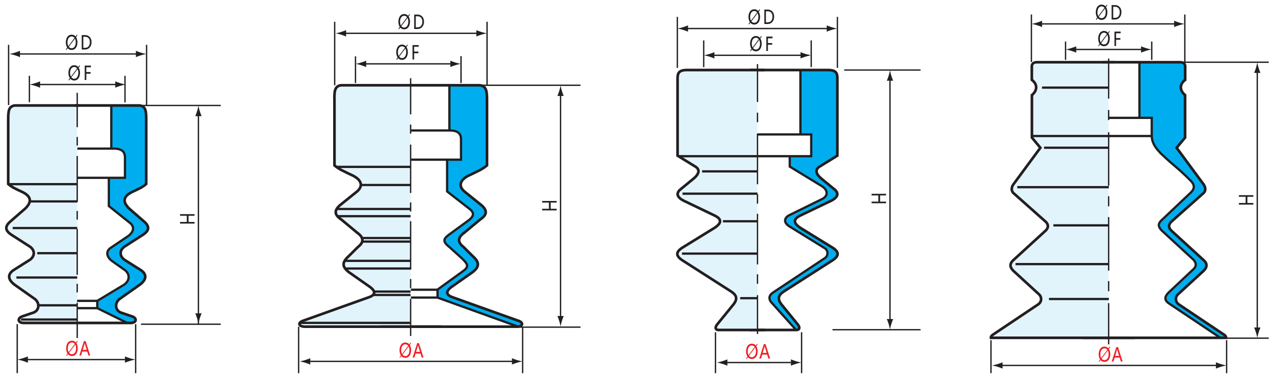


| 吸盘座 Vacuum Cup Fitting | 吸盘 Vacuum Cups |
|---|---|
| VM11-M5、VM11-G18<br>VFS 系列金具 (VFS Series Stem)<br>VFST 系列金具 (VFST Series Stem) | VSH2-S4~VSH2-S30 |
| VM10-G 1/8、VM27-M5<br>VFM 系列金具 (VFM Series Stem)<br>VFMT 系列金具 (VFMT Series Stem) | VSH2-M6~VSH2-M50 |

| Materials 材质 | Shore Hardness 硬度 | A Flexibility 柔韧性 | Abrasion resistance 耐磨性 | UV & weather resistance 抗紫外线 | Oil resistance 抗油污性 | Heat resistance (in °C) 耐高温 | |
|---|---|---|---|---|---|---|---|
| **SI**: Translucent Silicone 半透明硅胶 | 50 | +++ | - | - | - | -40 to 220 | Translucent 半透明 |

# 吸盘VSH3系列（波纹管式/3层）Vacuum Cups VSH3 Series

**VSH3-S6...VSH3-S8** **VSH3-S10...VSH3-S15** **VSH3-M8...VSH3-M30** **VSH3-M40...VSH3-M50**




| | (N)(1) | ØA(mm) | H(mm) | ØD(mm) | ØF(mm) | SI(半透明) | SP(海绵) |
|---|---|---|---|---|---|---|---|
| VSH3-S6 | 0.5 | 6 | 15 | 10 | 7 | 1.Y07323 | - |
| VSH3-S8 | 1.0 | 8 | 15 | 10 | 7 | 1.Y07324 | - |
| VSH3-S10 | 1.5 | 10 | 15 | 10 | 7 | 1.Y07325 | - |
| VSH3-S12 | 2.8 | 12 | 15 | 10 | 7 | 1.Y07326 | - |
| VSH3-S15 | 3.0 | 15 | 16 | 10 | 7 | 1.Y07327 | - |
| VSH3-M8 | 1.0 | 8 | 20 | 15 | 11 | 1.Y07328 | - |
| VSH3-M10 | 1.5 | 10 | 24 | 15 | 11 | 1.Y07329 | 1.Y09163 |
| VSH3-M12 | 2.8 | 12 | 24 | 15 | 11 | 1.Y07330 | 1.Y09162 |
| VSH3-M15 | 3.0 | 15 | 24 | 15 | 11 | 1.Y07331 | 1.Y09161 |
| VSH3-M20 | 4.6 | 20 | 25 | 15 | 11 | 1.Y07332 | 1.Y08134 |
| VSH3-M25 | 6.5 | 25 | 29 | 17 | 11 | 1.Y07333 | 1.Y09065 |
| VSH3-M30 | 12.1 | 30 | 35 | 17 | 11 | 1.Y07334 | 1.Y08167 |
| VSH3-M40 | 20.5 | 40 | 45 | 20 | 11 | 1.Y07335 | 1.Y08168 |
| VSH3-M50 | 25 | 50 | 43 | 20 | 11 | 1.Y07336 | 1.Y08234 |

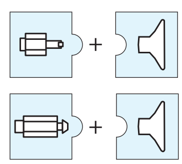
(1)真空度为65%时吸盘的实际吸附力，建议水平工作时安全系数为2，垂直工作时安全系数为4。

(1) Actual force of the suction cup in use with 65% vacuum and including a safety factor of 2 for horizontal handling and a factor of 4 for vertical handling.

安装方式
Types of assembly

直插式
Factory-crimped fitting:

直插式
Hollow shaft fitting:



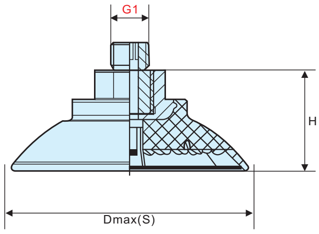
| 吸盘座 Vacuum Cup Fitting | 吸盘 Vacuum Cups |
|---|---|
| VM11-M5、VM11-G18<br>VFS 系列金具 (VFS Series Stem)<br>VFST 系列金具 (VFST Series Stem) | VSH3-S6~VSH3-S15 |
| VM10-G 1/8、VM27-M5<br>VFM 系列金具 (VFM Series Stem)<br>VFMT 系列金具 (VFMT Series Stem) | VSH3-M8~VSH3-M50 |

| Materials 材质 | Shore Hardness 硬度 | A Flexibility 柔韧性 | Abrasion resistance 耐磨性 | UV & weather resistance 抗紫外线 | Oil resistance 抗油污性 | Heat resistance (in °C) 耐高温 | |
|---|---|---|---|---|---|---|---|
| **SI**: Translucent Silicone 半透明硅胶 | 50 | +++ | - | - | - | -40 to 220 | Translucent 半透明 |

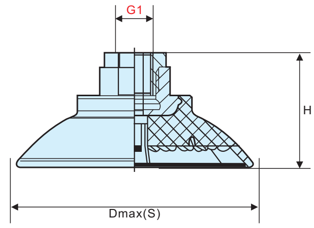
## 吸盘SAF系列 (扁平式) Vacuum Cups SAF Series

功能：防滑、防油、防水（多用于汽车钣金，玻璃等吸附）

Functions: anti-skid, oil-proof and water-proof (mostly used for adsorption of automobile sheet metal, glass, etc.)



SAF...-AG(外牙安装)



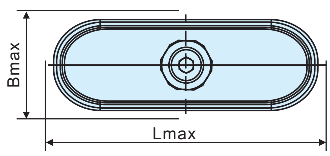
SAF...-IG(内牙安装)

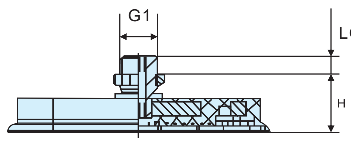
| 货号 (PN) | 型号 (Model) | 吸力 (N)[1] | 侧向力 (N)[2] | 推荐真空管内径(mm) | Dmax(S) (mm) | G1 (mm) | H (mm) | LG1 (mm) | 重量 (Weight) |
|---|---|---|---|---|---|---|---|---|---|
| 1.Y13010 | SAF-30-G3/8AG | 38 | 30 | 4 | 34 | G3/8-M | 20 | 10 | 17g |
| 1.Y13011 | SAF-30-G3/8IG | 38 | 30 | 4 | 34 | G3/8-F | 36 | 9 | 43g |
| 1.Y13012 | SAF-40-G3/8AG | 69 | 52 | 4 | 46 | G3/8-M | 22 | 10 | 19g |
| 1.Y13013 | SAF-40-G3/8IG | 69 | 52 | 4 | 46 | G3/8-F | 38 | 9 | 45g |
| 1.Y13014 | SAF-50-G3/8AG | 100 | 80 | 4 | 56 | G3/8-M | 28 | 10 | 40g |
| 1.Y13015 | SAF-50-G3/8IG | 100 | 80 | 4 | 56 | G3/8-F | 28 | 15 | 31g |
| 1.Y13016 | SAF-60-G3/8AG | 150 | 105 | 6 | 67 | G3/8-M | 31 | 10 | 46g |
| 1.Y13017 | SAF-60-G3/8IG | 150 | 105 | 6 | 67 | G3/8-F | 31 | 15 | 37g |
| 1.Y13018 | SAF-80-G3/8AG | 272 | 205 | 6 | 89 | G3/8-M | 35 | 10 | 65g |
| 1.Y13019 | SAF-80-G3/8IG | 272 | 205 | 6 | 89 | G3/8-F | 35 | 15 | 56g |
| 1.Y13020 | SAF-100-G3/8AG | 430 | 310 | 6 | 110 | G3/8-M | 36 | 10 | 76g |
| 1.Y13021 | SAF-100-G3/8IG | 430 | 310 | 6 | 110 | G3/8-F | 36 | 15 | 67g |
| 1.Y13023 | SAF-125-G3/8IG | 660 | 475 | 9 | 135 | G3/8-F | 43 | 15 | 146g |

## 吸盘SAOF系列 (扁平式) Vacuum Cups SAOF Series

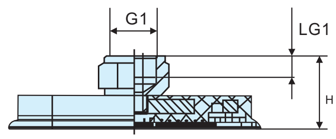
功能：防滑、防油、防水（多用于汽车钣金，玻璃等吸附）

Functions: anti-skid, oil-proof and water-proof (mostly used for adsorption of automobile sheet metal, glass, etc.)



SAOF...-AG(外牙安装)



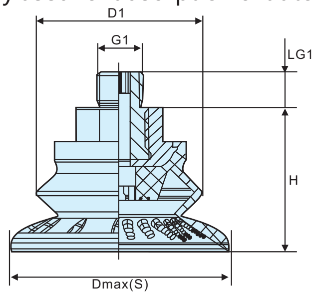
SAOF...-IG(内牙安装)

| 货号 (PN) | 型号 (Model) | 吸力 (N)[1] | 侧向力 (N)[2] | 推荐真空管内径(mm) | Dmax(S) (mm) | G1 (mm) | H (mm) | LG1 (mm) | Lmax(S) (mm) | 重量 (Weight) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.Y13024 | SAOF-50x16-G3/8AG | 31 | 24 | 4 | 18 | G3/8-M | 26 | 8 | 52 | 24g |
| 1.Y13025 | SAOF-50x16-G3/8IG | 31 | 24 | 4 | 18 | G3/8-F | 34 | 9 | 52 | 45g |
| 1.Y13026 | SAOF-60x23-G3/8AG | 57 | 37 | 4 | 25 | G3/8-M | 18 | 8 | 64 | 21g |
| 1.Y13027 | SAOF-60x23-G3/8IG | 57 | 37 | 4 | 25 | G3/8-F | 26 | 9 | 64 | 42g |
| 1.Y13028 | SAOF-90x30-G3/8AG | 122 | 96 | 4 | 34 | G3/8-M | 19 | 8 | 94 | 39g |
| 1.Y13029 | SAOF-90x30-G3/8IG | 122 | 96 | 4 | 34 | G3/8-F | 27 | 9 | 94 | 60g |
| 1.Y13030 | SAOF-80x40-G3/8AG | 140 | 110 | 4 | 43 | G3/8-M | 20 | 8 | 85 | 34g |
| 1.Y13031 | SAOF-80x40-G3/8IG | 140 | 110 | 4 | 43 | G3/8-F | 28 | 9 | 85 | 55g |
| 1.Y13032 | SAOF-100x50-G3/8AG | 217 | 181 | 6 | 54 | G3/8-M | 22 | 8 | 106 | 63g |
| 1.Y13033 | SAOF-100x50-G3/8IG | 217 | 181 | 6 | 54 | G3/8-F | 31 | 9 | 106 | 85g |
| 1.Y13034 | SAOF-120x60-G3/8AG | 312 | 254 | 6 | 65 | G3/8-M | 24 | 8 | 128 | 77g |
| 1.Y13035 | SAOF-120x60-G3/8IG | 312 | 254 | 6 | 65 | G3/8-F | 33 | 9 | 128 | 99g |
| 1.Y13037 | SAOF-140x70-G3/8IG | 425 | 344 | 6 | 76 | G3/8-F | 34 | 9 | 149 | 107g |

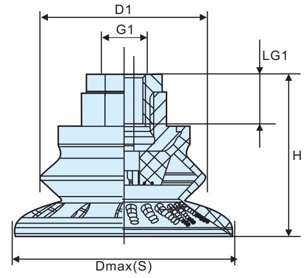
## 吸盘SAB系列 (波纹管式/2层) Vacuum Cups SAB Series

功能：防滑、防油、防水（多用于汽车钣金，玻璃等吸附）

Functions: anti-skid, oil-proof and water-proof (mostly used for adsorption of automobile sheet metal, glass, etc.)




SAB...-AG(外牙安装)



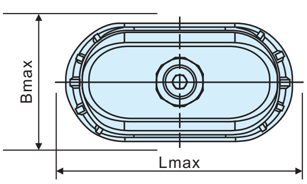

SAB...-IG(内牙安装)

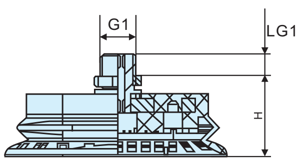
| 货号 (PN) | 型号 (Model) | 吸力 (N)[1] | 拉脱力 (N)[1] | 侧向力 (N)[2] | 推荐真空管内径(mm) | Dmax(S) (mm) | G1 (mm) | D1 (mm) | H (mm) | LG1 (mm) | 重量 (Weight) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.Y13038 | SAB-22-G3/8AG | 16 | 24 | 18 | 4 | 24 | G3/8-M | 22 | 25 | 10 | 15g |
| 1.Y13039 | SAB-22-G3/8IG | 16 | 24 | 18 | 4 | 24 | G3/8-F | 22 | 41 | 9.5 | 41g |
| 1.Y13040 | SAB-30-G3/8AG | 22 | 33 | 30 | 4 | 34 | G3/8-M | 32 | 28 | 10 | 19g |
| 1.Y13041 | SAB-30-G3/8IG | 22 | 33 | 30 | 4 | 34 | G3/8-F | 32 | 44 | 9.5 | 45g |
| 1.Y13042 | SAB-40-G3/8AG | 38 | 59 | 36 | 4 | 45 | G3/8-M | 32 | 28.8 | 10 | 20g |
| 1.Y13043 | SAB-40-G3/8IG | 38 | 59 | 36 | 4 | 45 | G3/8-F | 32 | 44.8 | 9.5 | 45g |
| 1.Y13044 | SAB-50-G3/8AG | 53 | 87 | 55 | 4 | 56 | G3/8-M | 40 | 36.9 | 10 | 41g |
| 1.Y13045 | SAB-50-G3/8IG | 53 | 87 | 55 | 4 | 56 | G3/8-F | 40 | 36.9 | 15 | 32g |
| 1.Y13046 | SAB-60-G3/8AG | 82 | 130 | 82 | 6 | 67 | G3/8-M | 48 | 41.3 | 10 | 49g |
| 1.Y13047 | SAB-60-G3/8IG | 82 | 130 | 82 | 6 | 67 | G3/8-F | 48 | 41.3 | 15 | 40g |
| 1.Y13048 | SAB-80-G3/8AG | 135 | 221 | 145 | 6 | 89 | G3/8-M | 64 | 49.9 | 10 | 72g |
| 1.Y13049 | SAB-80-G3/8IG | 135 | 221 | 145 | 6 | 89 | G3/8-F | 64 | 49.9 | 15 | 63g |
| 1.Y13050 | SAB-100-G3/8AG | 190 | 357 | 220 | 6 | 110 | G3/8-M | 77 | 56.6 | 10 | 97g |
| 1.Y13051 | SAB-100-G3/8IG | 190 | 357 | 220 | 6 | 110 | G3/8-F | 77 | 56.6 | 15 | 88g |
| 1.Y13052 | SAB-125-G3/8AG | 250 | 558 | 352 | 9 | 135 | G3/8-M | 94 | 67.8 | 10 | 179g |
| 1.Y13053 | SAB-125-G3/8IG | 250 | 558 | 352 | 9 | 135 | G3/8-F | 94 | 67.8 | 15 | 170g |

## 吸盘SAOB系列 (波纹管式长方型/2层) Vacuum Cups SAOB Series

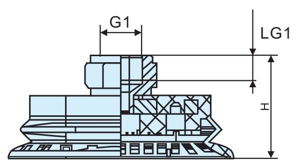
功能：防滑、防油、防水（多用于汽车钣金，玻璃等吸附）

Functions: anti-skid, oil-proof and water-proof (mostly used for adsorption of automobile sheet metal, glass, etc.)




SAOB...-AG(外牙安装)




SAOB...-IG(内牙安装)

| 货号 (PN) | 型号 (Model) | 吸力 (N)[1] | 拉脱力 (N)[1] | 侧向力 (N)[2] | 推荐真空管内径(mm) | Bmax(S) (mm) | Lmax(S) (mm) | G1 (mm) | H (mm) | LG1 (mm) | 重量 (Weight) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.Y13054 | SAOB-60x30-G3/8AG | 38 | 70 | 73 | 4 | 33 | 63 | G3/8-M | 27.0 | 8 | 49g |
| 1.Y13055 | SAOB-60x30-G3/8IG | 38 | 70 | 73 | 4 | 33 | 63 | G3/8-F | 35.0 | 9 | 70g |
| 1.Y13056 | SAOB-80x40-G3/8AG | 65 | 132 | 153 | 6 | 43 | 83 | G3/8-M | 29.7 | 8 | 67g |
| 1.Y13057 | SAOB-80x40-G3/8IG | 65 | 132 | 153 | 6 | 43 | 83 | G3/8-F | 37.7 | 9 | 88g |
| 1.Y13058 | SAOB-110x55-G3/8AG | 110 | 234 | 299 | 6 | 59 | 114 | G3/8-M | 35.5 | 8 | 87g |
| 1.Y13059 | SAOB-110x55-G3/8IG | 110 | 234 | 299 | 6 | 59 | 114 | G3/8-F | 43.5 | 9 | 109g |
| 1.Y13061 | SAOB-140x70-G3/8IG | 165 | 355 | 473 | 6 | 75 | 146 | G3/8-F | 47.5 | 9 | 142g |

型材、钢管 Profile、SUS Tube
支架模组 Stents Module
快换 Quick Changer
夹具组件 Grip Module
气动剪刀 Air Nipper
真空组件 Vacuum Module
附件 Accessory Components

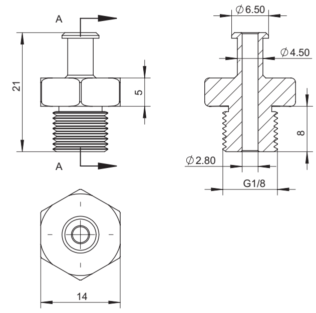
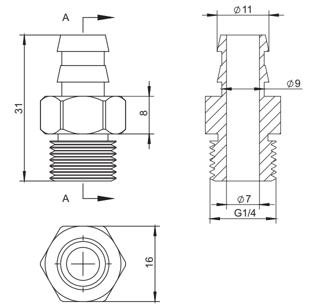
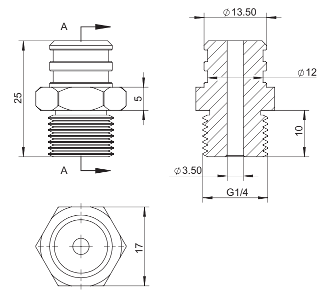
## 型号表示方法
## Model representation methods

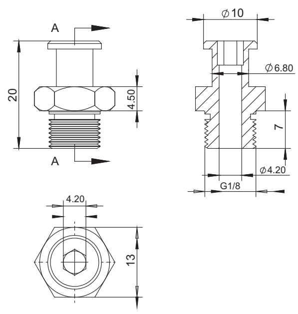
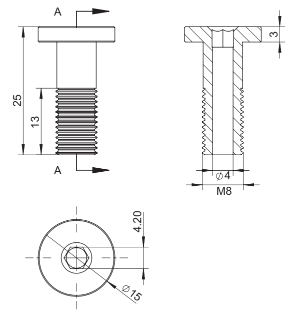
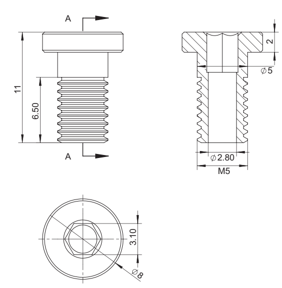
VM  01 - G14

系列 Series

编号 NO.

螺牙尺寸 Thread dimension
M5 M8 G1/8 G1/4

| | | | |
|---|---|---|---|
| 吸盘座 Vacuum Cup Fitting |  |  |  |
| 尺寸 Dimension |  |  |  |
| 货号(PN) | 7.Y00703 | 7.Y00709 | 7.Y00768 |
| 型号(Model) | VM02-G18 | VM04-G14 | VM06-G14 |
| 重量(Weight) | 3.5g | 7.0g | 9.7g |

| | | | |
|---|---|---|---|
| 吸盘座 Vacuum Cup Fitting |  |  |  |
| 尺寸 Dimension |  |  |  |
| 货号(PN) | 7.Y00767 | 1.Y05275 | 1.Y05274 |
| 型号(Model) | VM07-G18 | VM08-M8 | VM09-M5 |
| 重量(Weight) | 3.3g | 8.3g | 1.4g |

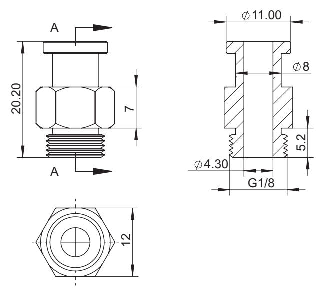
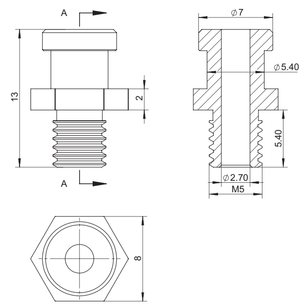
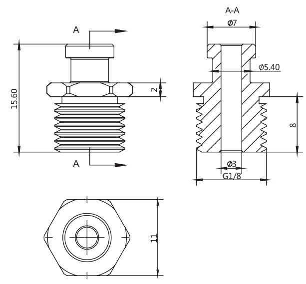
# 吸盘座 Vacuum Cup Fitting

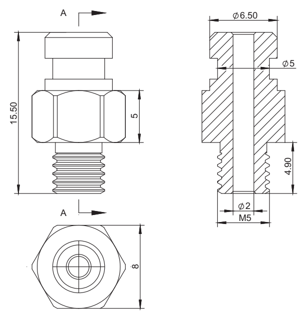
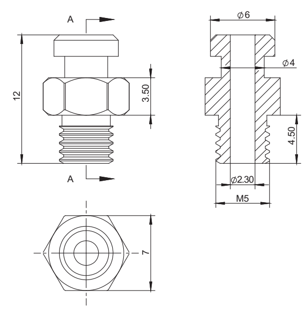
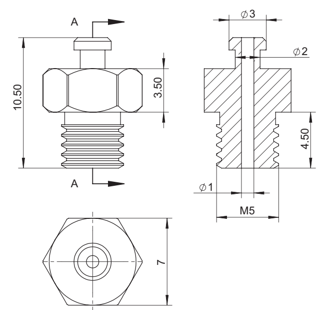
VM 01 - G14

系列 Series

编号 NO.

螺牙尺寸 Thread dimension
M5 M8 G1/8 G1/4

| 吸盘座<br>Vacuum Cup<br>Fitting |  |  |  |
|---|---|---|---|
| 尺寸<br>Dimension |  |  |  |
| 货号(PN) | 7.Y00902 | 1.Y05327 | 1.Y12762 |
| 型号(Model) | VM10-G18 | VM11-M5 | VM11-G18 |
| 重量(Weight) | 3.7g | 2.0g | 2.5g |

| 吸盘座<br>Vacuum Cup<br>Fitting |  |  |  |
|---|---|---|---|
| 尺寸<br>Dimension |  |  |  |
| 货号(PN) | 7.Y00762 | 7.Y00761 | 7.Y00760 |
| 型号(Model) | VM12-M5 | VM13-M5 | VM14-M5 |
| 重量(Weight) | 1.2g | 0.7g | 0.5g |

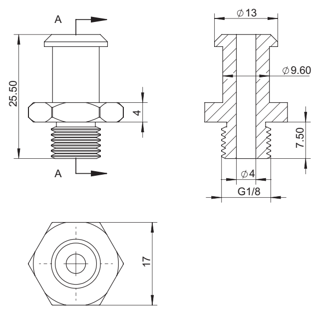
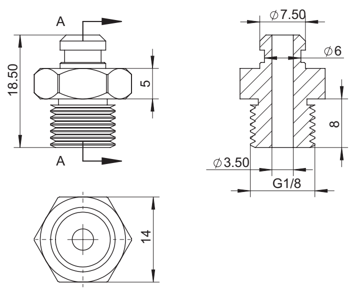
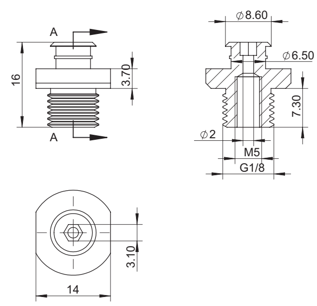
# 吸盘座 Vacuum Cup Fitting

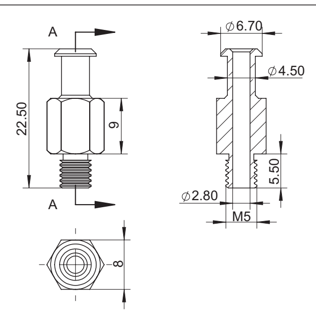
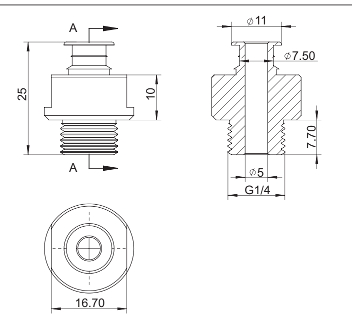
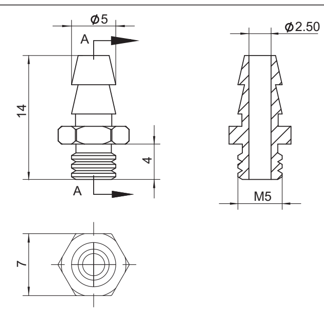
VM 01 - G14

系列 Series

编号 NO.

螺牙尺寸 Thread dimension
M5 M8 G1/8 G1/4

| 吸盘座 Vacuum Cup Fitting |  |  |  |
|---|---|---|---|
| 尺寸 Dimension |  |  |  |
| 货号(PN) | 7.Y00759 | 7.Y00758 | 7.Y00757 |
| 型号(Model) | VM15-G18 | VM16-G18 | VM17-G18 |
| 重量(Weight) | 17.8g | 3.8g | 2.9g |

| 吸盘座 Vacuum Cup Fitting |  |  |  |
|---|---|---|---|
| 尺寸 Dimension |  |  |  |
| 货号(PN) | 1.Y05314 | 4.Y00058 | 1.Y01986 |
| 型号(Model) | VM18-M5 | VM20-G14 | VM21-M5 |
| 重量(Weight) | 4.6g | 9.5g | 1.8g |

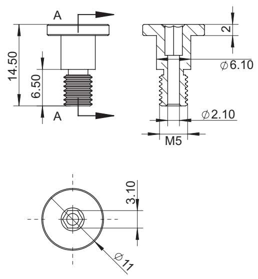
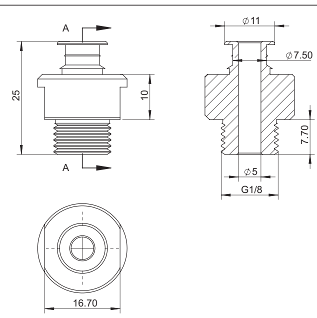
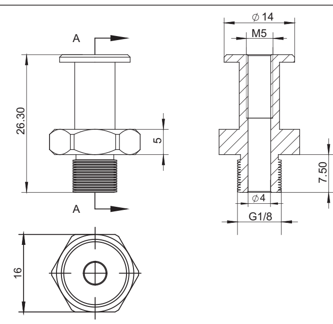
# 吸盘座 Vacuum Cup Fitting

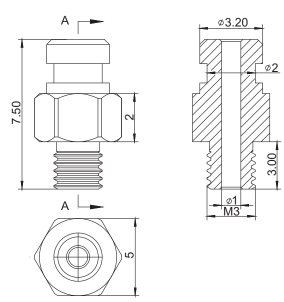
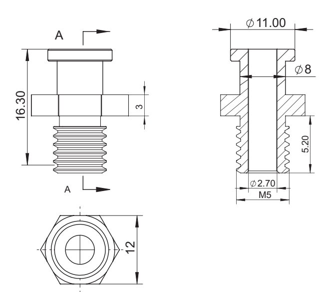
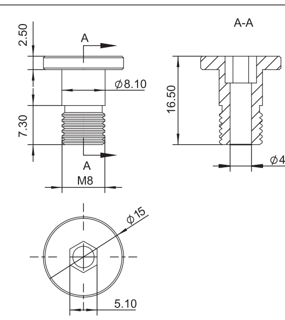
VM [01] - [G14]

系列 Series

编号 NO.

螺牙尺寸 Thread dimension
M5 M8 G1/8 G1/4

| 吸盘座<br>Vacuum Cup<br>Fitting |  |  |  |
|---|---|---|---|
| 尺寸<br>Dimension |  |  |  |
| 货号(PN) | 1.Y05790 | 7.Y00900 | 7.Y00898 |
| 型号(Model) | VM22-M5 | VM23-G18 | VM24-G18 |
| 重量(Weight) | 2.9g | 8.9g | 5.5g |

| 吸盘座<br>Vacuum Cup<br>Fitting |  |  |  |
|---|---|---|---|
| 尺寸<br>Dimension |  |  |  |
| 货号(PN) | 7.Y00928 | 1.Y01097 | 7.Y00475 |
| 型号(Model) | VM25-M3 | VM27-M5 | VM28-M8 |
| 重量(Weight) | 0.2g | 6.2g | 1.9g |

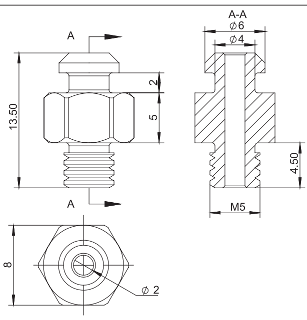
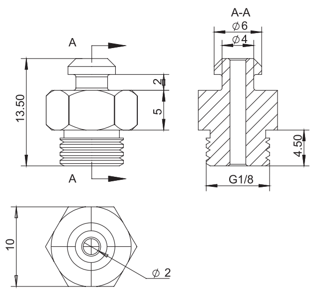
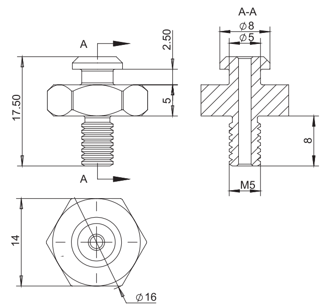
# 吸盘座 Vacuum Cup Fitting

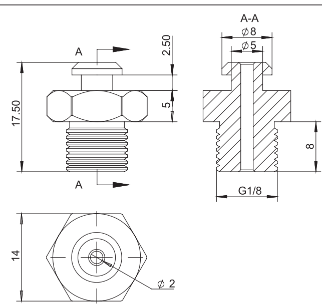
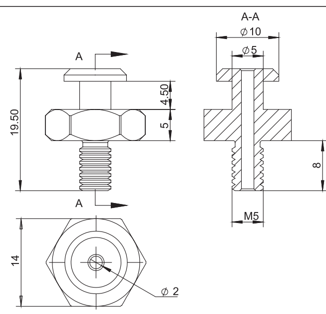
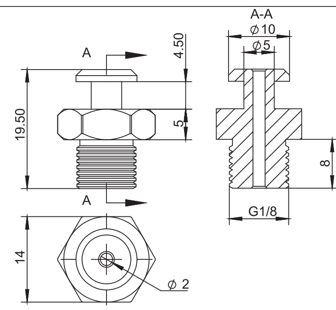
VM 01 - G14

系列 Series

编号 NO.

螺牙尺寸 Thread dimension
M5 M8 G1/8 G1/4

| 吸盘座 Vacuum Cup Fitting |  |  |  |
|---|---|---|---|
| 尺寸 Dimension |  |  |  |
| 货号(PN) | 7.Y01036 | 7.Y01037 | 7.Y01038 |
| 型号(Model) | VM29-M5 | VM30-G18 | VM31-M5 |
| 重量(Weight) | 1.1g | 1.3g | 3.8g |

| 吸盘座 Vacuum Cup Fitting |  |  |  |
|---|---|---|---|
| 尺寸 Dimension |  |  |  |
| 货号(PN) | 7.Y01039 | 7.Y01040 | 7.Y01041 |
| 型号(Model) | VM32-G18 | VM33-M5 | VM34-G18 |
| 重量(Weight) | 4.1g | 4.0g | 4.3g |

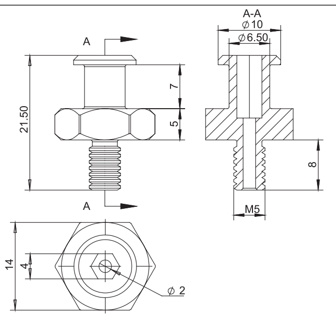
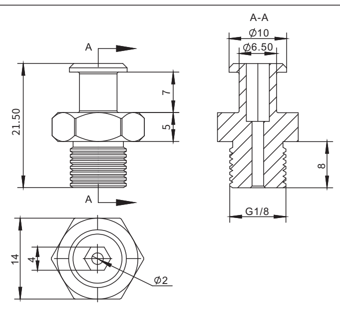
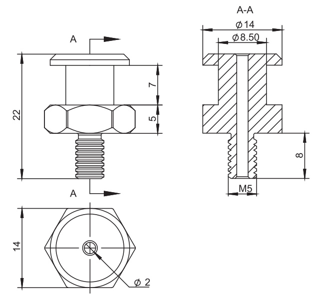
# 吸盘座 Vacuum Cup Fitting

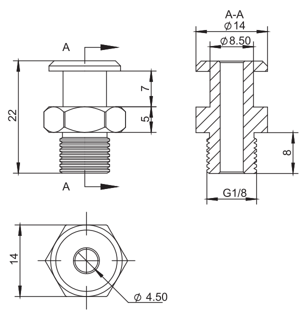
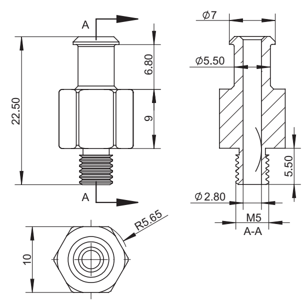
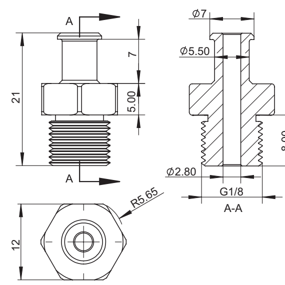
VM 01 - G14

系列 Series

编号 NO.

螺牙尺寸 Thread dimension
M5 M8 G1/8 G1/4

| | | | |
|---|---|---|---|
| 吸盘座 Vacuum Cup Fitting |  |  |  |
| 尺寸 Dimension |  |  |  |
| 货号(PN) | 7.Y01042 | 7.Y01043 | 7.Y01044 |
| 型号(Model) | VM35-M5 | VM36-G18 | VM37-M5 |
| 重量(Weight) | 3.4g | 3.7g | 4.3g |

| | | | |
|---|---|---|---|
| 吸盘座 Vacuum Cup Fitting |  |  |  |
| 尺寸 Dimension |  |  |  |
| 货号(PN) | 7.Y01045 | 7.Y01046 | 7.Y01047 |
| 型号(Model) | VM38-G18 | VM39-M5 | VM40-G18 |
| 重量(Weight) | 4.7g | 2.6g | 4.0g |

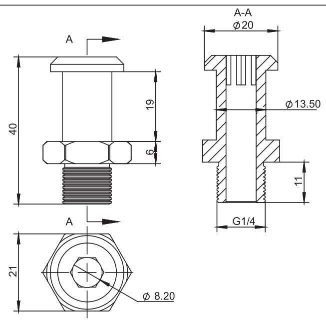
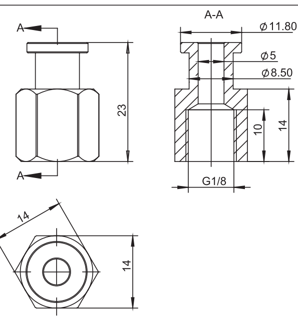
# 吸盘座 Vacuum Cup Fitting

VM 01 - G14

系列 Series

编号 NO.

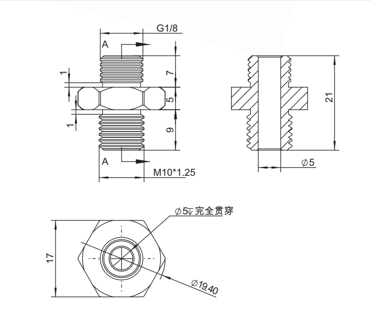
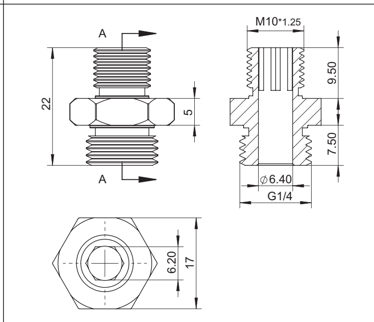
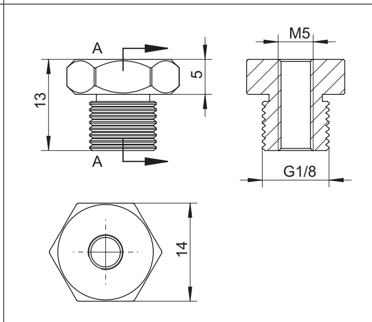
螺牙尺寸 Thread dimension
M5 M8 G1/8 G1/4

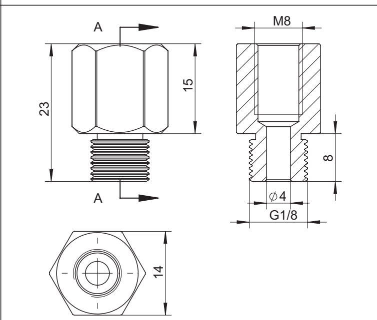
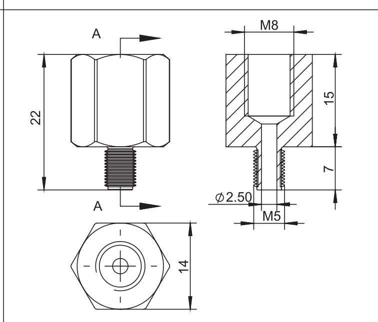
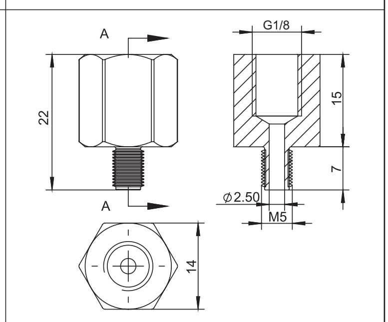
| | | | |
|---|---|---|---|
| 吸盘座 Vacuum Cup Fitting |  |   | |
| 尺寸 Dimension |   |   | |
| 货号(PN) | 7.Y01048 | 7.Y02013 | |
| 型号(Model) | VM41-G14 | VM10-G18-F | |
| 重量(Weight) | 14g | 5.7g | |

## 型号表示方法
### Model representation methods

VM - G18 M - M8 F

- 系列 Series → VM
- 螺牙尺寸 Thread dimension G1/8 G1/4 M5 → G18
- 内牙 F-Female 外牙 M-Male → M
- 螺牙尺寸 Thread dimension M5 M8 M10 → M8
- 内牙 F-Female 外牙 M-Male → F

| 吸盘金具转接头 Vacuum Cup Connector |  |  |  |
|---|---|---|---|
| 尺寸 Dimension |  |  |  |
| 货号(PN) | 7.Y00808 | 7.Y00756 | 7.Y00755 |
| 型号(Model) | VM-G18M-M10M | VM-G14M-M10M | VM-G18M-M5F |
| 重量(Weight) | 4.5g | 4.7g | 2.9g |

| 吸盘金具转接头 Vacuum Cup Connector |  |  |  |
|---|---|---|---|
| 尺寸 Dimension |  |  |  |
| 货号(PN) | 7.Y00754 | 7.Y00473 | 7.Y00474 |
| 型号(Model) | VM-G18M-M8F | VM-M5M-M8F | VM-M5M-G18F |
| 重量(Weight) | 6.2g | 5.6g | 4.9g |

## 型号表示方法
## Model representation methods

VM - G18 M - M8 F

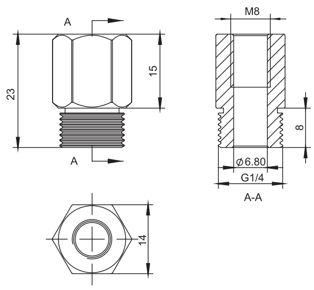
系列
Series

螺牙尺寸 Thread dimension
G1/8 G1/4 M5

内牙 F-Female
外牙 M-Male

螺牙尺寸 Thread dimension
M5 M8 M10

内牙 F-Female
外牙 M-Male

| | | | |
|---|---|---|---|
| 吸盘金具<br>转接头<br>Vacuum Cup<br>Connector |  | | |
| 尺寸<br>Dimension |   | | |
| 货号(PN) | 7.Y00476 | | |
| 型号(Model) | VM-G14M-M8F | | |
| 重量(Weight) | 6.7g | | |

# 真空吸盘悬件 Vacuum Cup Suspensions

## 型号表示方法
## Model representation methods

VFE [T] [1011] - [M5]

- VFE：系列 Series
- T：无 圆柱型 Non Cylindrical type；T 螺牙型 T Thread type
- 1011：安装方式+行程 Installation+stroke
- M5：吸盘座安装孔 Vacuum Cup Fitting hole for fastening M5 G1/8

VFE

VFR

VFN

VFET

VFRT

VFNT

当机械手移动时，这些悬件可用来保持吸盘的位置。
CRG 为塑料应用提供了广泛的独特设计。
它们一般通过固定支架安装在治具上。

The suspensions (or buffers, or level compensators) are used to keep the suction cups in position as the robot approaches.
CRG offers a range specifically designed for Plastics applications.
They are typically mounted on EAOTs (End Of Arm Toolings)with Mounting brackets.

带平滑主体的悬件
**Suspensions with smooth body**

VFR
VFN
VFE

带螺纹主体的悬件
**Suspensions with threaded body**

VFRT
VFNT
VFET

非可旋转悬件
**Non-rotative suspensions**

VFN
VFNT
VFE
VFET

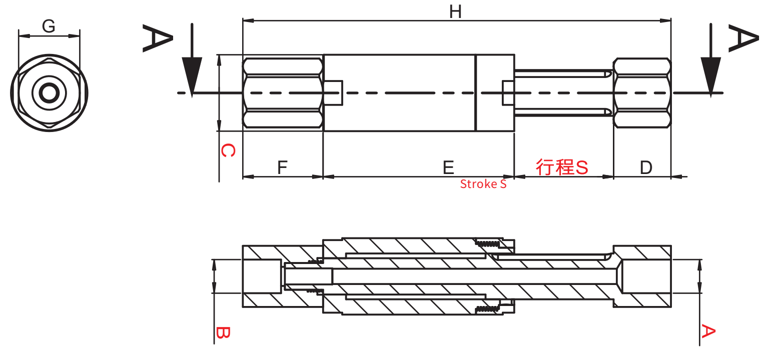
可旋转悬件
**Rotative suspensions**

VFR
VFRT

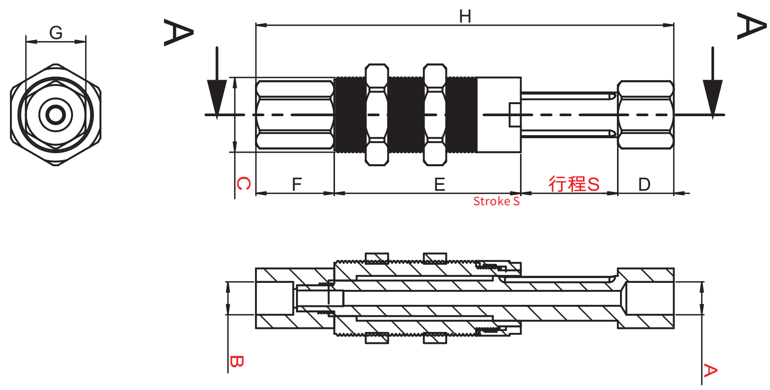
# 非可旋转悬件 Non-rotative Suspensions

主体和杆由阳极铝制成。
拥有高负载能力的非可旋转杆。
压力范围： -1 ~ 8 bar。.

Body and rod in anodized aluminum.
Non-rotative rod with high load capability.
Pressure range: -1 ~ 8 bar.




| 货号(PN) | 型号(Model) | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) | F(mm) | G(mm) | H(mm) | S(mm) | Weight(g) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.Y00064 | VFN1011-M5 | M5 | M5 | Ø10 | 10 | 22 | 17 | 8 | 60 | 11 | 7g |
| 8.Y00321 | VFN1021-M5 | M5 | M5 | Ø10 | 10 | 41 | 17 | 8 | 89 | 21 | 11g |
| 8.Y00065 | VFN1421-G18 | G1/8 | G1/8 | Ø14 | 12 | 40 | 20 | 12 | 93 | 21 | 24g |
| 8.Y00322 | VFN1436-G18 | G1/8 | G1/8 | Ø14 | 12 | 60 | 20 | 12 | 128 | 36 | 44g |
| 8.Y00066 | VFN2026-G18 | G1/8 | G1/8 | Ø20 | 15 | 50 | 21 | 16 | 112 | 26 | 54g |
| 8.Y00067 | VFN2051-G18 | G1/8 | G1/8 | Ø20 | 15 | 84 | 21 | 16 | 171 | 51 | 80g |




| 货号(PN) | 型号(Model) | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) | F(mm) | G(mm) | H(mm) | S(mm) | Weight(g) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.Y00068 | VFNT1011-M5 | M5 | M5 | M10*1 | 10 | 22 | 17 | 8 | 60 | 11 | 12g |
| 8.Y00323 | VFNT1021-M5 | M5 | M5 | M10*1 | 10 | 41 | 17 | 8 | 89 | 21 | 39g |
| 8.Y00204 | VFNT1421-G18 | G1/8 | G1/8 | M14*1 | 12 | 40 | 20 | 12 | 93 | 21 | 51g |
| 8.Y00383 | VFNT1621-G18 | G1/8 | G1/8 | M16*1 | 12 | 40 | 20 | 12 | 93 | 21 | 64g |
| 8.Y00324 | VFNT1436-G18 | G1/8 | G1/8 | M14*1 | 12 | 60 | 20 | 12 | 128 | 36 | 72g |
| 8.Y00384 | VFNT1636-G18 | G1/8 | G1/8 | M16*1 | 12 | 60 | 20 | 12 | 128 | 36 | 76g |
| 8.Y00205 | VFNT2026-G18 | G1/8 | G1/8 | M20*1 | 15 | 50 | 21 | 16 | 112 | 26 | 82g |
| 8.Y00206 | VFNT2051-G18 | G1/8 | G1/8 | M20*1 | 15 | 84 | 21 | 16 | 171 | 51 | 120g |

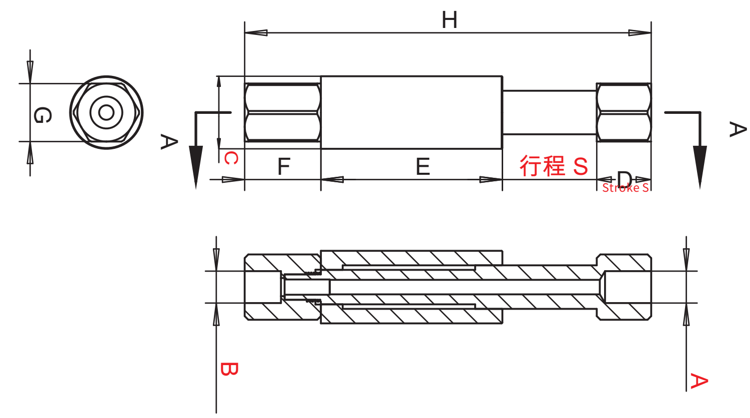
# 可旋转悬件 Rotative Suspensions

主体和杆由阳极铝制成。
可旋转杆。
压力范围： -1 ~ 8 bar。

Body and rod in anodized aluminum.
Rotative rod.
Pressure range: -1 ~8 bar.

M5为蓝色
M5 is blue

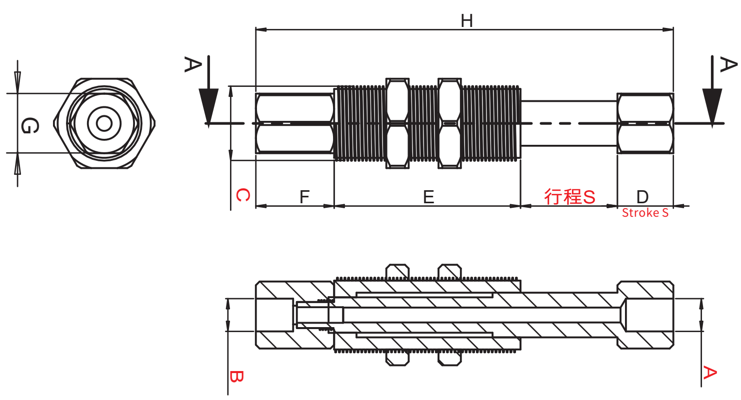
G1/8为黑色
G1/8 is black




| 货号(PN) | 型号(Model) | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) | F(mm) | G(mm) | H(mm) | S(mm) | Weight(g) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.Y00060 | VFR1011-M5 | M5 | M5 | Ø10 | 3 | 22 | 17 | 8 | 53 | 11 | 11g |
| 8.Y00325 | VFR1021-M5 | M5 | M5 | Ø10 | 3 | 41 | 17 | 8 | 82 | 21 | 17g |
| 8.Y00061 | VFR1421-G18 | G1/8 | G1/8 | Ø14 | 12 | 40 | 20 | 12 | 93 | 21 | 23g |
| 8.Y00326 | VFR1436-G18 | G1/8 | G1/8 | Ø14 | 12 | 60 | 20 | 12 | 128 | 36 | 40g |
| 8.Y00062 | VFR2026-G18 | G1/8 | G1/8 | Ø20 | 15 | 50 | 21 | 16 | 112 | 26 | 50g |
| 8.Y00063 | VFR2051-G18 | G1/8 | G1/8 | Ø20 | 15 | 84 | 21 | 16 | 171 | 51 | 77g |

M5为蓝色
M5 is blue

G1/8为黑色
G1/8 is black

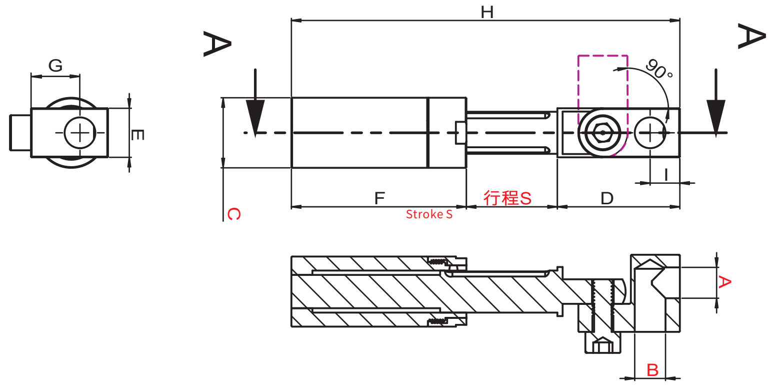



| 货号(PN) | 型号(Model) | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) | F(mm) | G(mm) | H(mm) | S(mm) | Weight(g) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.Y00074 | VFRT1011-M5 | M5 | M5 | M10*1 | 3 | 22 | 17 | 8 | 53 | 11 | 14g |
| 8.Y00327 | VFRT1021-M5 | M5 | M5 | M10*1 | 3 | 41 | 17 | 8 | 82 | 21 | 26g |
| 8.Y00075 | VFRT1421-G18 | G1/8 | G1/8 | M14*1 | 12 | 40 | 20 | 12 | 93 | 21 | 32g |
| 8.Y00381 | VFRT1621-G18 | G1/8 | G1/8 | M16*1 | 12 | 40 | 20 | 12 | 93 | 21 | 36g |
| 8.Y00328 | VFRT1436-G18 | G1/8 | G1/8 | M14*1 | 12 | 60 | 20 | 12 | 128 | 36 | 60g |
| 8.Y00382 | VFRT1636-G18 | G1/8 | G1/8 | M16*1 | 12 | 60 | 20 | 12 | 128 | 36 | 65g |
| 8.Y00076 | VFRT2026-G18 | G1/8 | G1/8 | M20*1 | 15 | 50 | 21 | 16 | 112 | 26 | 70g |
| 8.Y00077 | VFRT2051-G18 | G1/8 | G1/8 | M20*1 | 15 | 84 | 21 | 16 | 171 | 51 | 104g |

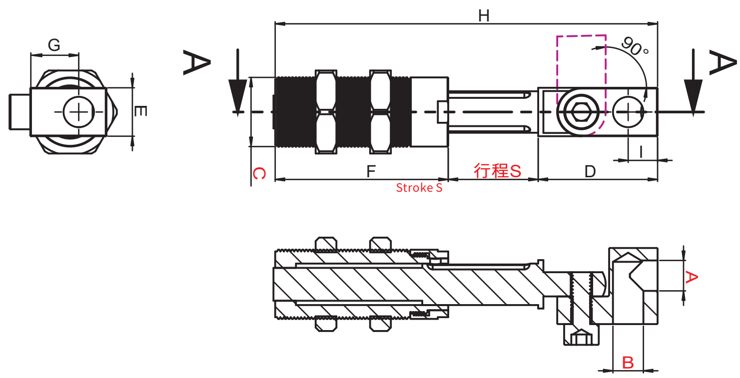
# 带集成弯臂的非可旋转悬件 Non-rotative Suspensions With Integral Elbow Arms

可在 0° 和 +/-90°之间不断设置角度。
外部供气。
主体和杆由阳极铝制成。
拥有高负载能力的非可旋转杆。
压力范围： -1 ~ 8 bar。

It is possible to set continuously the angle between 0° and +/-90°.
External air feeding.
Body and rod in anodized aluminum.
Non-rotative rod with high load capability.
Pressure range: -1 ~ 8 bar.




| 货号(PN) | 型号(Model) | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) | F(mm) | G(mm) | H(mm) | S(mm) | Weight(g) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.Y00070 | VFE1011-M5 | M5 | M5 | Ø10 | 20 | 8 | 22 | 8 | 53 | 11 | 12g |
| 8.Y00371 | VFE1021-M5 | M5 | M5 | Ø10 | 20 | 8 | 41 | 8 | 81 | 21 | 16g |
| 8.Y00071 | VFE1421-G18 | G1/8 | G1/8 | Ø14 | 32 | 14 | 40 | 14 | 93 | 21 | 45g |
| 8.Y00372 | VFE1436-G18 | G1/8 | G1/8 | Ø14 | 32 | 14 | 60 | 14 | 128 | 36 | 48g |
| 8.Y00072 | VFE2026-G18 | G1/8 | G1/8 | Ø20 | 35 | 14 | 50 | 14 | 111 | 26 | 70g |
| 8.Y00073 | VFE2051-G18 | G1/8 | G1/8 | Ø20 | 35 | 14 | 84 | 14 | 169.5 | 51 | 105g |

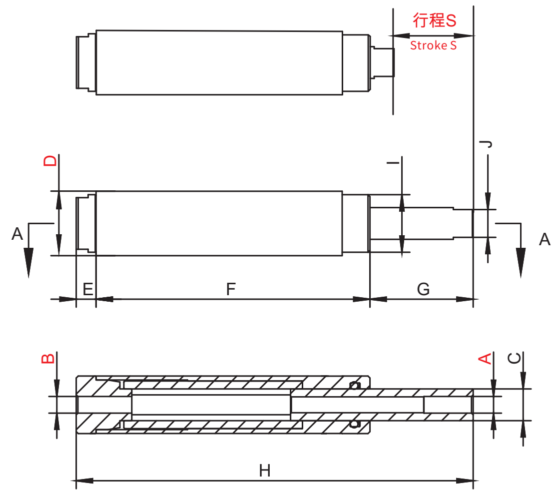



| 货号(PN) | 型号(Model) | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) | F(mm) | G(mm) | H(mm) | S(mm) | Weight(g) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.Y00069 | VFET1011-M5 | M5 | M5 | M10*1 | 20 | 8 | 22 | 8 | 53 | 11 | 15g |
| 8.Y00374 | VFET1021-M5 | M5 | M5 | M10*1 | 20 | 8 | 41 | 8 | 81 | 21 | 24g |
| 8.Y00228 | VFET1421-G18 | G1/8 | G1/8 | M14*1 | 32 | 14 | 40 | 14 | 93 | 21 | 57g |
| 8.Y00379 | VFET1621-G18 | G1/8 | G1/8 | M16*1 | 32 | 14 | 40 | 14 | 93 | 21 | 64g |
| 8.Y00375 | VFET1436-G18 | G1/8 | G1/8 | M14*1 | 32 | 14 | 60 | 14 | 128 | 36 | 80g |
| 8.Y00380 | VFET1636-G18 | G1/8 | G1/8 | M16*1 | 32 | 14 | 60 | 14 | 128 | 36 | 85g |
| 8.Y00229 | VFET2026-G18 | G1/8 | G1/8 | M20*1 | 35 | 14 | 50 | 14 | 111 | 26 | 88g |
| 8.Y00230 | VFET2051-G18 | G1/8 | G1/8 | M20*1 | 35 | 14 | 84 | 14 | 169.5 | 51 | 125g |

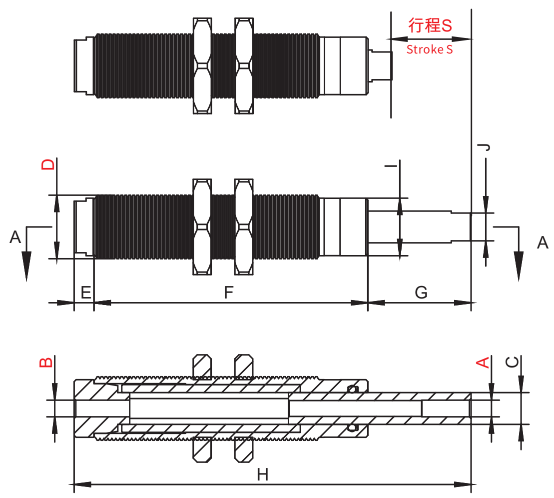
## 配管固定的非可旋转悬件 Non-rotating suspension for fixed piping

产品采用阳极铝制成。
内置防转塑料活塞。
内置伸缩功能弹簧复位，
尾部真空进气固定式设计。

The product is made of anodic aluminium.
Built-in anti-rotation plastic piston.
Built-in telescopic function of spring reset,
tail vacuum intake fixed design.

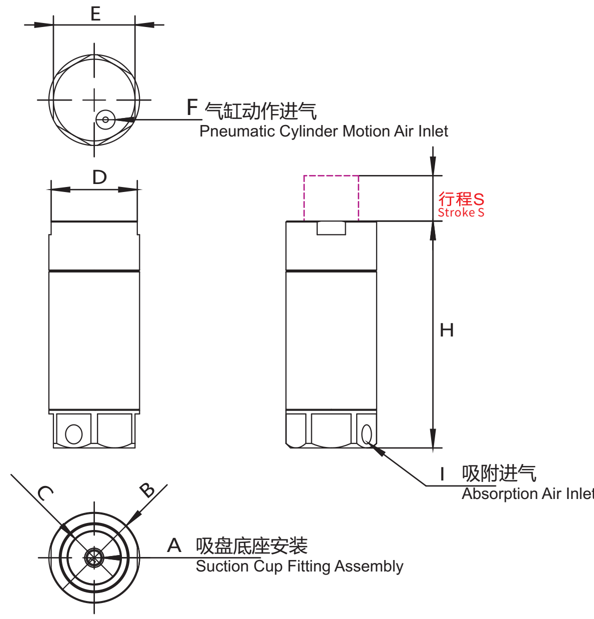



| 货号(PN) | 型号(Model) | A | B | C | D | E | F | G | H | I | J | S | Weight(g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.Y00313 | VFC2030-G18 | G1/8 | G1/8 | Φ13 | Φ20 | 8 | 85 | 40 | 133 | Φ18 | 12 | 30 | 60 |



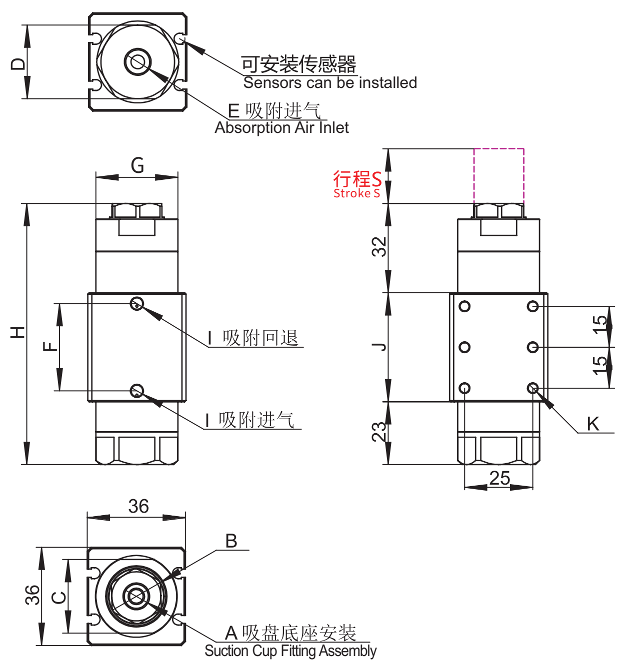

| 货号(PN) | 型号(Model) | A | B | C | D | E | F | G | H | I | J | S | Weight(g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.Y00277 | VFCT1620-M5 | M5 | M5 | Φ8 | M16X1.0 | 5 | 69 | 26 | 100 | Φ14.5 | 7 | 20 | 42.7 |
| 8.Y00314 | VFCT2030-G18 | G1/8 | G1/8 | Φ13 | M20X1.0 | 8 | 85 | 40 | 133 | Φ18 | 12 | 30 | 80 |

## 气动吸附金具 The Adsorption Of Pneumatic Fittings




| 货号(PN) | 型号(Model) | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) | F(mm) | H(mm) | I(mm) | S(mm) | Weight |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.Y00207 | VFG20-10 | M5 | Φ20 | Φ12 | 19 | 18 | M5 | 50 | M5 | 10 | 35g |
| 8.Y00337 | VFG20-20 | M5 | Φ20 | Φ12 | 19 | 18 | M5 | 65 | M5 | 20 | 45g |
| 8.Y00338 | VFG30-20 | G1/8 | Φ30 | Φ20 | 27 | 27 | G1/8 | 72 | G1/8 | 20 | 70g |

## 双动吸附金具 Double action adsorption fittings

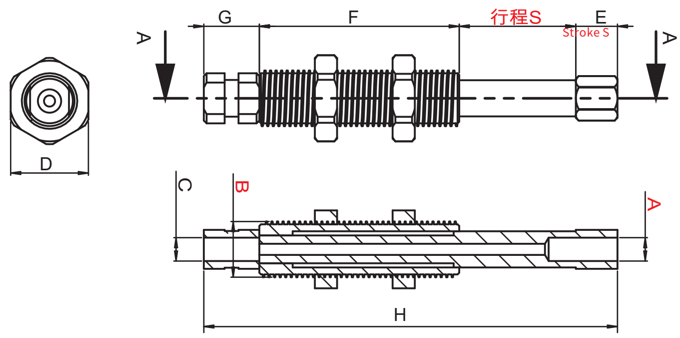



| 货号(PN) | 型号(Model) | A | B | C | D | E | F | G | H | I | J | K | S | Weight |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.Y00451 | VFGD30-20 | G1/8 | Φ20 | 27 | 27 | G1/8 | 32 | Φ30 | 95 | M5 | 40 | M4 | 20 | 198.2g |

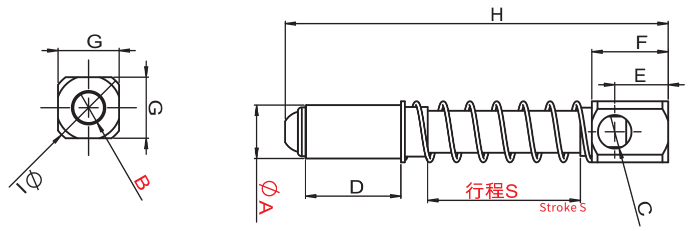
### 型号表示方法
### Model representation methods

VFRS - 20 M10 - M5

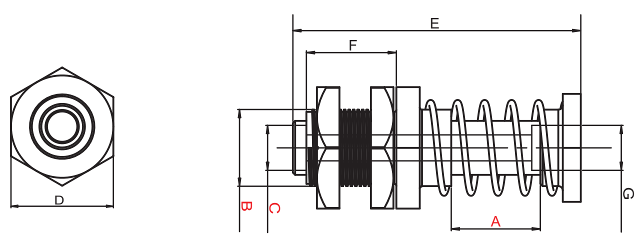
- 系列 Series → VFRS
- 行程 Stroke → 20
- 安装尺寸 Installation size M10 M17 → M10
- 吸盘座安装孔 Vacuum Cup Fitting hole for fastening M5 G1/8 → M5




| 货号(PN) | 型号(Model) | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) | F(mm) | G(mm) | H(mm) | S(mm) | Weight(g) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.Y00026 | VFRS-20M10-M5 | M5 | M10*1 | M5 | 14 | 7 | 36 | 10 | 73.5 | 20 | 27g |
| 4.Y00023 | VFRS-20M16-G18 | G1/8 | M16*1 | G1/8 | 21 | 4 | 36 | 15 | 77 | 20 | 76g |

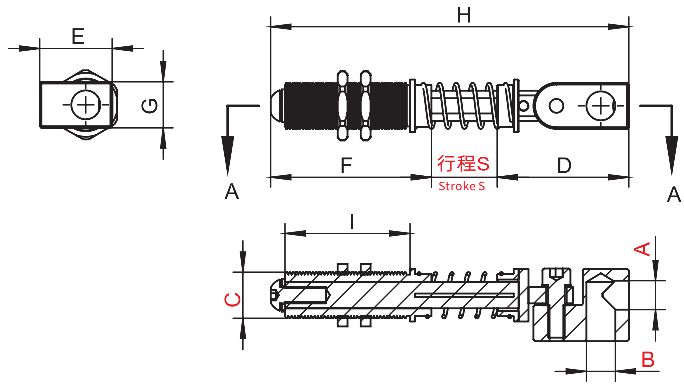



| 货号(PN) | 型号(Model) | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) | F(mm) | G(mm) | H(mm) | I(mm) | S(mm) | Weight(g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.Y01452 | VFM-4014-G18 | Ø14 | G1/8 | G1/8 | 25 | 14 | 20 | 16 | 100 | Ø20 | 40 | 48g |
| 1.Y01451 | VFM-2020-G14 | Ø20 | G1/4 | G1/8 | 48 | 15 | 26 | 22 | 113 | Ø27 | 20 | 136g |

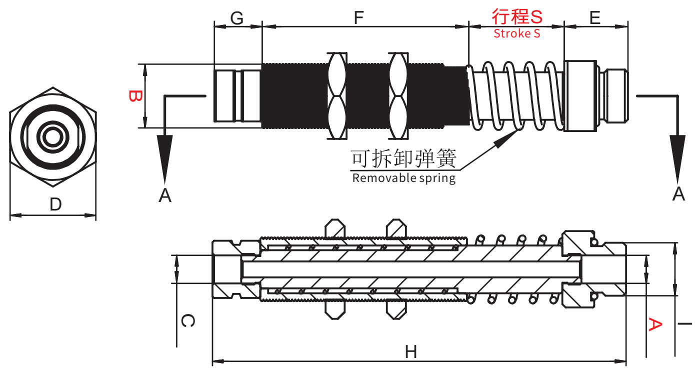



| 货号(PN) | 型号(Model) | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) | F(mm) | G(mm) | Weight(g) |
|---|---|---|---|---|---|---|---|---|---|
| 1.Y01453 | VFL-20M17-G18 | 20 | M17*1 | G1/8 | 27 | 64 | 20 | G1/8 | 119g |

# 吸着金具 Suction Stems



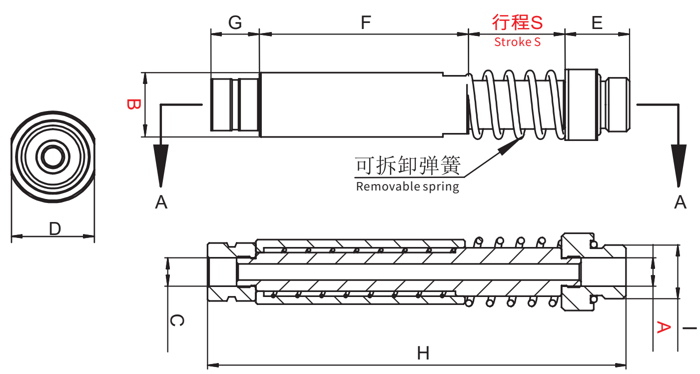

| 货号(PN) | 型号(Model) | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) | F(mm) | G(mm) | H(mm) | I(mm) | S(mm) | Weight(g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.Y00319 | VFMT-20M14-G18 | G1/8 | G1/8 | M14X1.0 | 40 | 22 | 49 | 14 | 109 | 38 | 20 | 97g |
| 8.Y00320 | VFMT-40M14-G18 | G1/8 | G1/8 | M14X1.0 | 40 | 22 | 64 | 14 | 144 | 50 | 40 | 123g |




| 货号(PN) | 型号(Model) | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) | F(mm) | G(mm) | H(mm) | I(mm) | S(mm) | Weight(g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.Y00409 | VFHT-30M20-G38F-G18M | G1/8 | M20*1 | G1/8 | 27 | 20 | 65 | 15 | 130 | G3/8 | 30 | 260g |

*安装单弹簧时，所能承受的压力为7N-18N。安装双弹簧时，所能承受的压力为60N-150N

*When installing a single spring, the pressure it can bear is 7N-18N. When installing the double spring, the pressure that can bear is 60N-150N.




| 货号(PN) | 型号(Model) | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) | F(mm) | G(mm) | H(mm) | I(mm) | S(mm) | Weight(g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.Y00410 | VFH-30M20-G38F-G18M | G1/8 | Ø20 | G1/8 | 22 | 20 | 65 | 15 | 130 | G3/8 | 30 | 235g |

*安装单弹簧时，所能承受的压力为7N-18N。安装双弹簧时，所能承受的压力为60N-150N

*When installing a single spring, the pressure it can bear is 7N-18N. When installing the double spring, the pressure that can bear is 60N-150N.

## 型号表示方法
## Model representation methods

VFS T - 30 M10

系列
Series

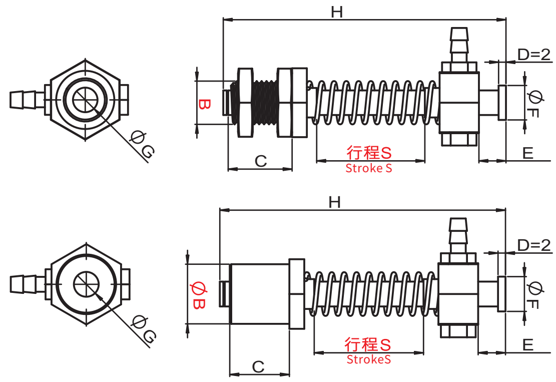
无 圆柱型 Non Cylindrical type
T 螺牙型 T Thread type

行程 Stroke

M 螺牙尺寸
M Thread type

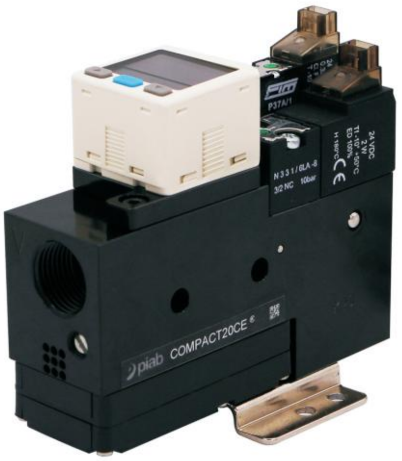
VFST

VFS




| 货号(PN) | 型号(Model) | B(mm) | C(mm) | E(mm) | F(mm) | G(mm) | H(mm) | S(mm) | Weight(g) |
|---|---|---|---|---|---|---|---|---|---|
| 8.Y00283 | VFST-5M10 | M10*1 | 18 | 5.5 | Ø7 | Ø3.4 | 49 | 5 | 14g |
| 8.Y00284 | VFST-10M10 | M10*1 | 18 | 5.5 | Ø7 | Ø3.4 | 54 | 10 | 15g |
| 8.Y00285 | VFST-20M10 | M10*1 | 18 | 5.5 | Ø7 | Ø3.4 | 64 | 20 | 15g |
| 8.Y00286 | VFST-30M10 | M10*1 | 18 | 5.5 | Ø7 | Ø3.4 | 74 | 30 | 16g |
| 8.Y00287 | VFS-0508 | Ø8 | 18 | 5.5 | Ø7 | Ø3.4 | 49 | 5 | 9g |
| 8.Y00288 | VFS-0512 | Ø12 | 18 | 5.5 | Ø7 | Ø3.4 | 49 | 5 | 13g |
| 8.Y00289 | VFS-1008 | Ø8 | 18 | 5.5 | Ø7 | Ø3.4 | 54 | 10 | 9g |
| 8.Y00007 | VFS-1012 | Ø12 | 18 | 5.5 | Ø7 | Ø3.4 | 54 | 10 | 14g |
| 8.Y00290 | VFS-2008 | Ø8 | 18 | 5.5 | Ø7 | Ø3.4 | 64 | 20 | 10g |
| 8.Y00008 | VFS-2012 | Ø12 | 18 | 5.5 | Ø7 | Ø3.4 | 64 | 20 | 14g |
| 8.Y00291 | VFS-3008 | Ø8 | 18 | 5.5 | Ø7 | Ø3.4 | 74 | 30 | 11g |
| 8.Y00292 | VFS-3012 | Ø12 | 18 | 5.5 | Ø7 | Ø3.4 | 74 | 30 | 15g |
| 8.Y00293 | VFMT-5M12 | M12*1 | 18 | 9 | Ø11 | Ø4.6 | 52.5 | 5 | 20g |
| 8.Y00294 | VFMT-10M12 | M12*1 | 18 | 9 | Ø11 | Ø4.6 | 57.5 | 10 | 21g |
| 8.Y00295 | VFMT-20M12 | M12*1 | 18 | 9 | Ø11 | Ø4.6 | 67.5 | 20 | 22g |
| 8.Y00296 | VFMT-30M12 | M12*1 | 18 | 9 | Ø11 | Ø4.6 | 77.5 | 30 | 24g |
| 8.Y00297 | VFM-0512 | Ø12 | 18 | 9 | Ø11 | Ø4.6 | 52.5 | 5 | 15g |
| 8.Y00298 | VFM-0520 | Ø20 | 18 | 9 | Ø11 | Ø4.6 | 52.5 | 5 | 29g |
| 8.Y00299 | VFM-1012 | Ø12 | 18 | 9 | Ø11 | Ø4.6 | 57.5 | 10 | 16g |
| 8.Y00300 | VFM-1020 | Ø20 | 18 | 9 | Ø11 | Ø4.6 | 57.5 | 10 | 29g |
| 8.Y00301 | VFM-2012 | Ø12 | 18 | 9 | Ø11 | Ø4.6 | 67.5 | 20 | 18g |
| 8.Y00302 | VFM-2020 | Ø20 | 18 | 9 | Ø11 | Ø4.6 | 67.5 | 20 | 31g |
| 8.Y00303 | VFM-3012 | Ø12 | 18 | 9 | Ø11 | Ø4.6 | 77.5 | 30 | 19g |
| 8.Y00304 | VFM-3020 | Ø20 | 18 | 9 | Ø11 | Ø4.6 | 77.5 | 30 | 32g |

# Compact 20CE 真空发生器 Compact 20CE Vacuum Generator




## 真空发生器 Vacuum Generator

- 配置Piab 多级真空发生器
  Configure Piab multistage vacuum generator

## 阀 valve

- 真空阀和吹气阀
  Integrated electric vacuum and blow-off valve
- 吹气流量调节阀
  Blowing flow control valve

## 真空传感器 Vacuum sensor

- 可选配具有用户友好型界面的真空传感器，或者选配预留真空检测端口。
  Vacuum sensor with user-friendly interface or reserved vacuum detection port is optional.

## 模块式设计 Modular design

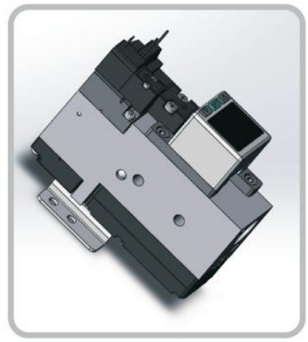
- 多级真空发生器可拆卸清洗和更换，故障排除更加简单。
  The multistage vacuum generator can be disassembled, cleaned and replaced, and the troubleshooting is simpler.

## 快插接头 Quick connector

- 可配置8mm或者10mm的快插接头。
  8mm or 10mm quick connector can be configured.

*连接线线材长为两米 The wire's length is 2 meters

| 货号(PN) | 型号(Model) | 类型(Type) |
|---|---|---|
| 1.Y13062 | COMPACT 20CE PNP | PNP |
| 1.Y13063 | COMPACT 20CE NPN | NPN |



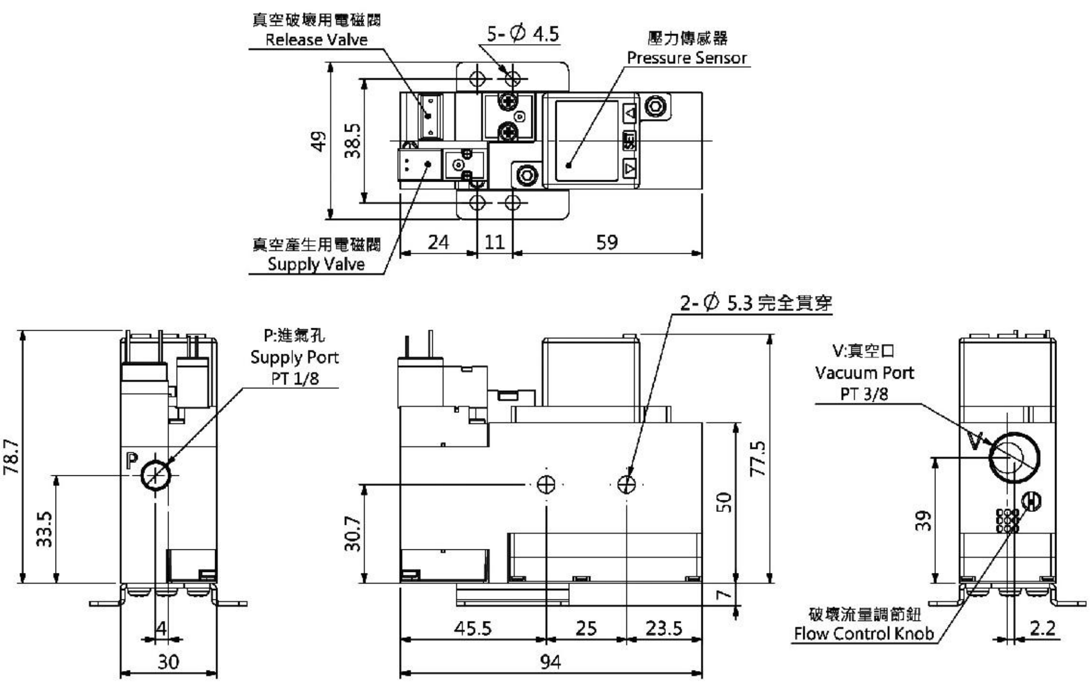
## Compact 20CE 技术参数/Compact 20CE technical parameter

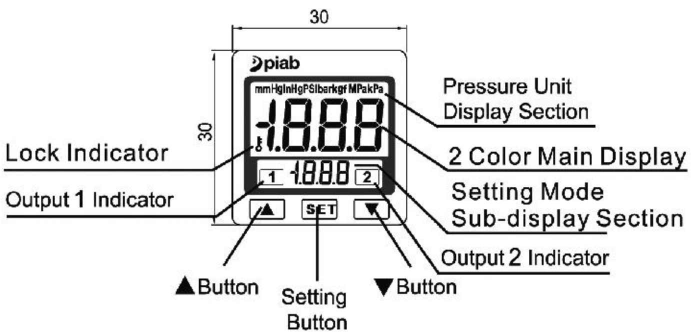
| 真空技术 Vacuum technology | 多级真空发生器 Multistage vacuum generator |
|---|---|
| 工作气源压力（Mpa）Working air pressure | 0.38~0.6 |
| 最大真空流量（NL/s) Maximum Vacuum flow | 2.4 |
| 最高真空度（-Kpa) Maximum Vacuum level | 84 |
| 耗气量（NL/s) Air comsuption | 1.5~2.2 |
| 工作温度（℃) Working temperature | -5~50 |
| 尺寸（mm) Size | 94x78x30 |
| 噪音（dBA) Noise level | 57-68 |
| 真空口尺寸 Vacuum port size | G3/8" |
| 净重（g) Net Weight | 370 |
| 真空传感器 Vacuum Sensor | PNP/NPN |
| 电磁阀 Solenoid Valve | NC/NO |
| 消耗功率 Power consumption | 24V±10% VDC,2W |

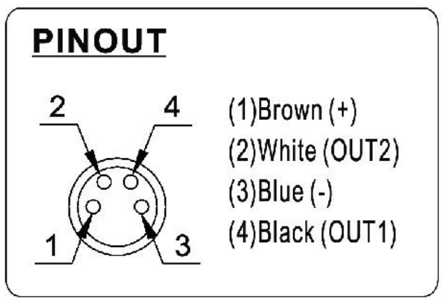
# Compact 20CE 真空发生器 Compact 20CE Vacuum Generator

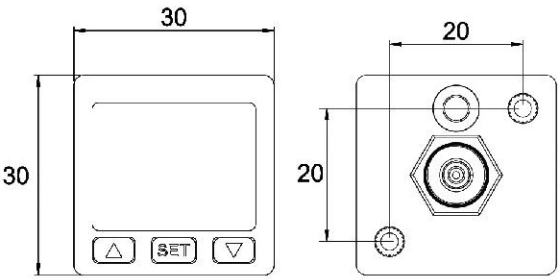
Compact 20CE 真空发生器和传感器尺寸图

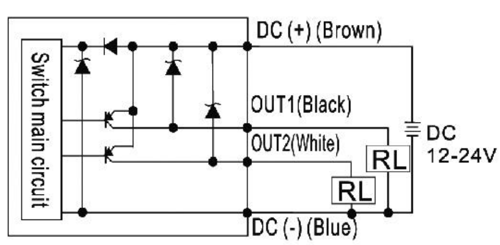
Dimensional drawing of Compact 20CE Vacuum Generator and Sensor



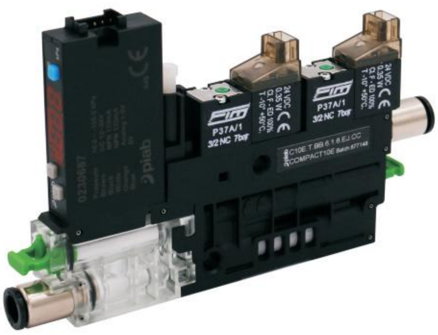



# Compact 10CE 集成式真空发生器 Compact 10CE Integrated vacuum generator



*连接线线材长为两米 The wire's length is 2 meters

| 货号(PN) | 型号(Model) | 类型(Type) |
|---|---|---|
| 1.Y13064 | COMPACT10E PNP | PNP |
| 1.Y13279 | COMPACT10E NPN | NPN |

## 数据表所指明的数值可进行测试:

- 室温 (20 C [68 F] ± 3 C [5.5 F])。
- 标准大气压 (101.3 [29.9 inHg] ± 1.0 Kpa [0.3 inHg])。
- 相对湿度：35-85%, 无冷凝。
- 压缩空气质量，DIN ISO 8573-1 class 4 标准。

## Values specified in the data sheet are tested at:

- Room temperature (20 C [68 F] ± 3 C [5.5 F])
- Standard atmosphere (101.3 [29.9 inHg] ± 1.0 kPa [0.3 inHg])
- Relative humidity: 35-85%, non condensation
- Compressed air quality DIN ISO 8573-1 class 4 standard

## 技术参数/Technical data

| 说明 Description | 单位 Unit | 值 Value |
|---|---|---|
| 推荐进气压力 Recommended feed pressure | Mpa | 0.5 |
| 最大进气压力 Feed pressure, max. | Mpa | 0.7 |
| 温度范围 Temperature range | °C | 0-50 |
| 重量* Weight* | g | 74 |
| 材料 Material | - | PA, AL, CuZn, PE, NBR, PC, SS, TPV, FKM,Steel, Glass epoxy |
| 1-8 个真空通道条件下的噪音等级范围 Noise level range of 1-8 vacuum channels | dB | 46-60 |
| 连接，压缩空气 Connection, compressed air | - | ø6 推入式连接器 ø6 push-in connector |
| 连接，真空 Connection, vacuum | - | ø6 推入式连接器 ø6 push-in connector |

*) 注意！重量不包括运输中包含的电缆。*) Note! The weight does not include the cables that are included in the shipping.

## 阀门模块/Valve module

| 说明 Description | 单位 Unit | 值 Value |
|---|---|---|
| 阀门功能 Valve function | - | NC 真空常闭 + NC 吹气常闭<br>NC vacuum normally closed +NC blowing normally closed |
| 电源电压 Supply voltage | VDC | 24 (21.6 – 26.4) |
| 功率 Power | W | 3.5 |
| 响应时间 Response time | ms | ≤ 3 |
| 电气连接 Electrical connection | - | Supplied cable, Red (+) Black (-) |

## 真空传感器/Vacuum sensor

| 说明 Description | 单位 Unit | 值 Value |
|---|---|---|
| 电源电压 Supply voltage | VDC | 12-24 ±10%，波动 P-P 10% 或更低<br>12-24 ±10%, Fluctuation P-P 10% or less |
| 电流消耗(无负载) Current consumption (with no load) | mA | ≤ 40 |
| 切换输出 Switch output | - | NPN |
| 响应时间 Response time | ms | ≤ 2,5 |
| 模拟输出 Analog output | VDC | 1-5 ±2.5% F.S. |
| 电气连接 Electrical connection | - | JST PAP-05V |

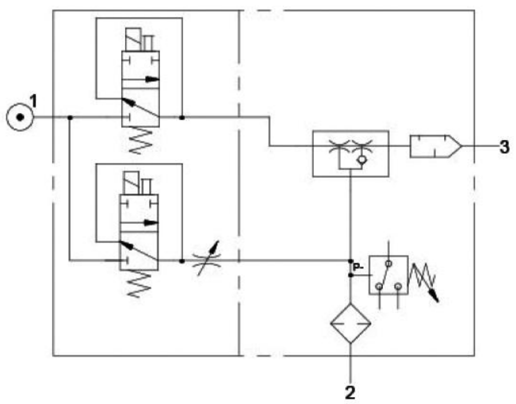
## 真空流量/Vacuum flow

| 供气压力真空泵/喷嘴 Feed pressure vacuum pump/nozzle | 每个泵/喷嘴的空气消耗量 Air consumption per pump /nozzle | 不同真空度 (-kPa) 下的真空流量（Nl/s） Vacuum flow (Nl/s) under different vacuum degrees (-kPa) | | | | | | | | 最大真空度 Max vacuum |
|---|---|---|---|---|---|---|---|---|---|---|
| Mpa | Nl/s | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | -kpa |
| 0.50/0.40 | 0.23 | 0.26 | 0.24 | 0.19 | 0.14 | 0.088 | 0.063 | 0.045 | 0.023 | 84 |

## 抽真空时间/Vacuum time

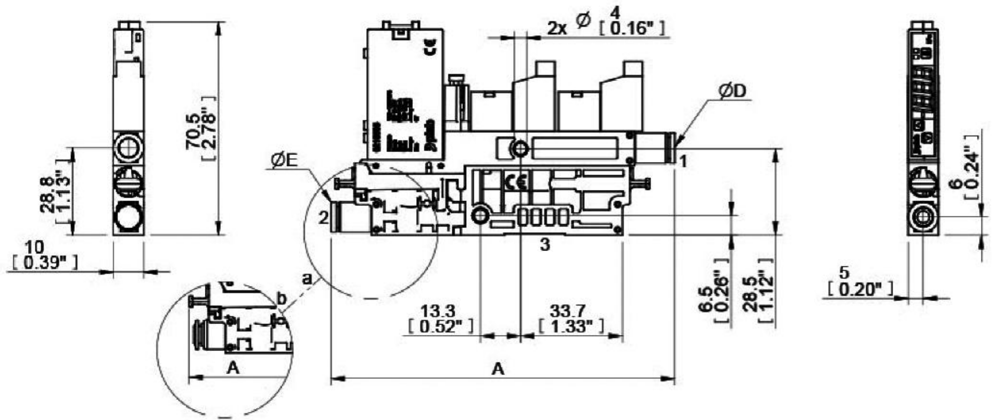
| 供气压力真空泵/喷嘴 Feed pressure vacuum pump/nozzle | 每个泵/喷嘴的空气消耗量 Air consumption per pump /nozzle | 达到不同真空度 (-kPa) 的抽气时间 Pumping time to different vacuum (- kPa) | | | | | | | | 最大真空度 Max vacuum |
|---|---|---|---|---|---|---|---|---|---|---|
| Mpa | Nl/s | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | -kpa |
| 0.50/0.40 | 0.23 | 0.40 | 0.87 | 1.49 | 2.38 | 3.71 | 5.57 | 8.52 | 15.44 | 84 |

## 外形尺寸/Dimensions




| 说明 Description | 单位 Unit | 值 Value |
|---|---|---|
| A | mm | 113.6 |
| ΦD | mm | Φ6 |
| ΦE | mm | Φ6 |

| 配置 Configuration | 值 Value |
|---|---|
| a | ø6 推入式连接器<br>ø6 push-in connector |




## 订购信息/Ordering information

| 说明 Description | 产品代码 Product code |
|---|---|
| COMPACT10E, 超高真空流量 (micro), 显示屏，模拟和数字输出，NPN, ø6 推入式连接器, 1 通道, Φ6推入式连接器, 集成式消音器, NC 真空常闭 + NC 吹气常闭<br>COMPACT10E, ultra high vacuum flow (micro), display screen, analog and digital output, NPN, ø6 push in connector, 1 channel, ø6 push in connector, integrated muffler, NC vacuum normally closed + NC blowing normally closed | C10E.T.BB.6.1.6.EJ.CC |

# VLCLASSIC XI x 2 真空发生器 VLCLASSIC XI x 2 Vacuum Generator

| 货号(PN) | 型号(Model) |
|---|---|
| 1.Y13065 | VLCLASSIC XI x 2 |

- 高效节能发生器技术。
- 真空发生管可在高达 95 -kPa 的真空度下提供高流量。
- 适用于需高真空度的无渗透应用。
- 大容量范围，可提供 1 至 6 个真空发生管如有需要，VLCLASSIC 可以由较小的容量很轻松的升级为更大容量。
- 轻巧、可配置的和模块化设计。
- 易于拆卸维护。
- High efficiency and energy saving generator technology.
- The vacuum generating tube can provide high flow rate under the vacuum degree up to 95 - kPa.
- Suitable for non permeable applications requiring high vacuum.
- Large capacity range, 1 to 6 vacuum tubes can be provided. If necessary, vlclassic can be easily upgraded from smaller capacity to larger capacity.
- Lightweight, configurable and modular design.
- Easy to disassemble and maintain.

## 概述/Summary

| 物料 Materiel | CuZn, NBR (FKM), PA, SS, Al |
|---|---|
| 噪音 Noise level | 64 – 69 dBA |
| 温度范围 Temperature | -10 – 80 °C |
| 重量 Weight | 550 g |
| 消音器重量 Muffler weight | 120 g |

## 性能/Performance

| 最大进气压力 Feed pressure, max. | 0.7 MPa |
|---|---|
| 最佳进气压力 Feed pressure, optimum | 0.45 MPa |
| 最大真空度 Max vacuum | 95 -kPa |

## 气动参数/Aerodynamic parameters

| 内部容积 Internal volume | 140 cm³ |
|---|---|

## 真空流量/Vacuum flow (Nl/s)

| 进气压力 Feed pressure | 耗气量 Gas consumption | 真空流量 (Nl/s) @真空度 (-kPa) Vacuum flow(Nl/s) @ vacuum (- kPa) | | | | | | | | | | 最大真空度 Max vacuum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mpa | Nl/s | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | -kPa |
| 0.45 | 3.66 | 11.8 | 6 | 4 | 2.6 | 1.46 | 1.16 | 0.86 | 0.64 | 0.36 | 0.06 | 95 |

## 排气时间/Exhaust time (s/l)

| 进气压力 Feed pressure | 耗气量 Gas consumption | 排气时间 (s/l) 真空度 (-kPa) Exhaust time (s / L) Vacuum (- kPa) | | | | | | | | | 最大真空度 Max vacuum |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mpa | Nl/s | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | -kPa |
| 0.45 | 3.66 | 0.011 | 0.031 | 0.06 | 0.11 | 0.19 | 0.29 | 0.42 | 0.6 | 1.1 | 95 |

## 数据表所指明的数值可进行测试：

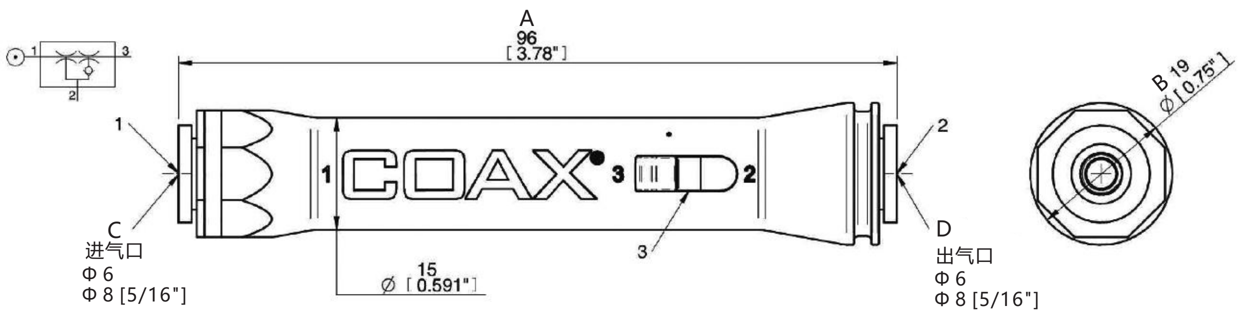
The values indicated in the data sheet can be tested:

| 室温 Room temperature | (20 C [68 F] ± 3 C [5.5 F]) |
|---|---|
| 标准大气压 Standard atmosphere | (101.3 [29.9 inHg] ± 1.0 kPa [0.3 inHg]) |
| 相对湿度 Relative humidity | 0-100% |
| 压缩空气质量 Compressed air quality | DIN ISO 8573-1 class 4 |

## piINLINE® vacuum generator MINI Si , 真空发生器 Vacuum Generator


- 获得专利的COAX®盒式磁带技术。
- 与能耗相关的高真空流量。
- 低重量内联设计，带有用于真空和压缩空气的推入式配件。
- 直接在软管上快速方便地安装。
- 用于额外真空流的Si滤筒。
- 用于在低进料压力下实现高性能的Pi滤筒
- 需要高流量和深真空时的Xi滤筒。
- Patented COAX® cartridge technology.
- High vacuum flow capacity in relation to energy consumption.
- Low weight inline design with push-in fittings for vacuum and compressed air.
- Quick and easy installation directly on the hose.
- Si cartridge for extra vacuum flow.
- Pi cartridge for high performance at low feed pressures.
- Xi cartridge when high flow and deep vacuum is needed.

### 外形尺寸/Dimensions




| 型号 (Model) | piINLINE® vacuum generator MINI Si, 6-6 mm | piINLINE® vacuum generator MINI Si, 8-8 mm |
|---|---|---|
| 货号 (PN) | 1.Y13066 | 1.Y13067 |
| 直径 Diameter | 19 mm (B) | 19 mm (B) |
| 进气口直径 Air inlet diameter | 6 mm (C) | 8 mm (C) |
| 出气口直径 Air outlet diameter | 6 mm (D) | 8 mm (D) |
| 长度 Length | 96 mm (A) | 96 mm (A) |

### 概述/Summary

| 产品编号（备选） Product number (optional) | E12842188 |
|---|---|
| 物料 Materiel | CuZn, PA, SS, 丁腈橡胶 |
| 重量 Weight | 21.8 g |

### 性能/Performance

| 耗气量 Gas consumption | 25.7 l/m (.9 scfm) Nl/s |
|---|---|
| 最大进气压力 Feed pressure, max. | 0.7 MPa |

## 真空流量/Vacuum flow(Nl/s)

| 进气压力 Feed pressure | 耗气量 Gas consumption | 真空流量 (Nl/s) @真空度 (-kPa) Vacuum flow(Nl/s) @ vacuum (- kPa) | | | | | | | | 最大真空度 Max vacuum |
|---|---|---|---|---|---|---|---|---|---|---|
| Mpa | Nl/s | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | -kPa |
| 0.6 | 0.44 | 0.69 | 0.55 | 0.42 | 0.28 | 0.23 | 0.16 | 0.12 | 0.08 | 75 |

## 排气时间/Exhaust time (s/l)

| 进气压力 Feed pressure | 耗气量 Gas consumption | 排气时间 (s/l) 真空度 (-kPa) Exhaust time (s / L) Vacuum (- kPa) | | | | | | | 最大真空度 Max vacuum |
|---|---|---|---|---|---|---|---|---|---|
| Mpa | Nl/s | 10 | 20 | 30 | 40 | 50 | 60 | 70 | -kPa |
| 0.6 | 0.44 | 0.16 | 0.37 | 0.66 | 1.1 | 1.4 | 2.1 | 3.1 | 75 |

## 数据表所指明的数值可进行测试:
The values indicated in the data sheet can be tested:

| 室温 Room temperature | (20 C [68 F] ± 3 C [5.5 F]) |
|---|---|
| 标准大气压 Standard atmosphere | (101.3 [29.9 inHg] ± 1.0 kPa [0.3 inHg]) |
| 相对湿度 Relative humidity | 0-100% |
| 压缩空气质量 Compressed air quality | DIN ISO 8573-1 class 4 |

# 真空模组　SCPSb系列 Vacuum Module SCPSb Series

体型轻巧的集成式真空发生器采用高效eco nozzle技术，适用于空间局限下的工况。

The compact and lightweight integrated vacuum generator adopts high-efficiency eco nozzle technology, which is suitable for working conditions under limited space.

*连接线线材长为五米　The wire's length is 5 meters

### 亮点Highlights

- 高效eco nozzle技术
- 体积小巧，材质为极其耐用的塑料
- 最佳流体结构，以高效产生真空
- 快插式接口
- 可供DIN标导轨连接的连接口
- 开放式消音器

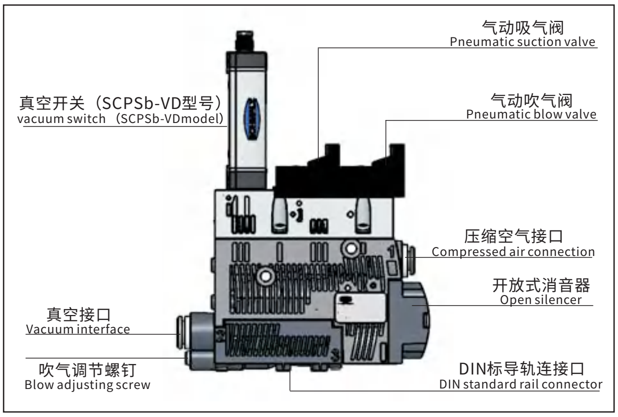
- Efficient eco nozzle technology
- Small size, made of extremely durable plastic
- Optimal fluid structure for efficient vacuum generation
- Quick-plug interface
- Connecting port for DIN standard rail connection
- Open silencer

### 优势Advantage

- 压缩空气消耗量极少，抽吸速率更高
- 装置小巧耐用；可直接安装在搬运系统上
- 动作周期极短，频率高
- 无需额外螺丝
- 安装简单；也可直接安装于配电箱上
- 噪声低，维护时间间隔长，维护频率低

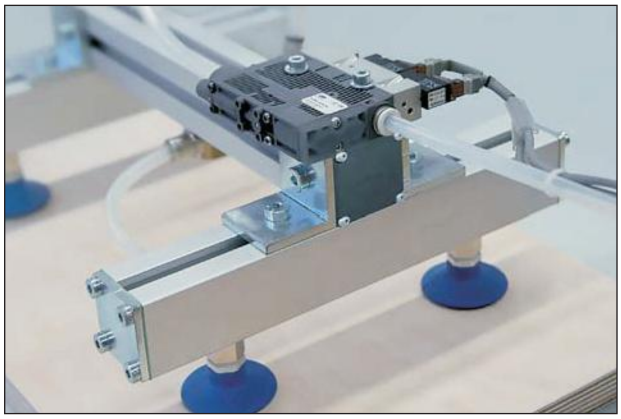
- The compressed air consumption is very small, and the suction rate is higher
- The device is small and durable; it can be directly installed on the handling system
- The action cycle is extremely short, the frequency is high
- No extra screws required
- Simple installation; can also be installed directly on the distribution box
- Low noise, long maintenance interval, low maintenance frequency

## 结构　Structure




集成式真空发生器SCPSb-VD采用系统化设计

The integrated vacuum generator SCPSb-VD adopts a systematic design.



通过集成式真空发生器SCPSb可中央式供给真空

Vacuum can be supplied centrally through the integrated vacuum generator SCPSb.

## 技术参数　Technical Parameter

| 货号 (PN) | 型号 (Model) | 喷嘴-Ø Nozzle [mm] | 真空度 Vacuum [%] | 最大抽吸速率 Maximum suction rate [l/min] | 耗气量 (1) Air consumption [l/min] | | 噪音等级 (1) Noise level [dB(A)] | | 工作压力 Work pressure [bar] | 推荐真空管内径 Recommended vacuum tube inner diameter[mm] | | 工作温度 Work temperature [°C] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 吸气 Inhale | 吹气 Blow | 空载状态 No-load state | 吸取状态 Absorption state | | 压缩空气管 Compressed air pipe | 真空管 Vacuum tube | |
| 1.Y13276 | SCPSb-07-S04-NC-VD | 0.7 | 85 | 16 | 22 | 116 | 61 | 58 | 2...6 | 4 | 4 | 0...50 |
| 1.Y13277 | SCPSb-10-S04-NC-VD | 1.0 | 85 | 34 | 46 | 116 | 73 | 60 | 2...6 | 4 | 4 | 0...50 |
| 1.Y13278 | SCPSb-15-S04-NC-VD | 1.5 | 85 | 64 | 59 | 116 | 76 | 65 | 2...6 | 4 | 6 | 0...50 |

*所有流量参数均指的是环境大气压(ANR)为101.3kPa，温度和湿度分别为20°C和65%条件下的参数。

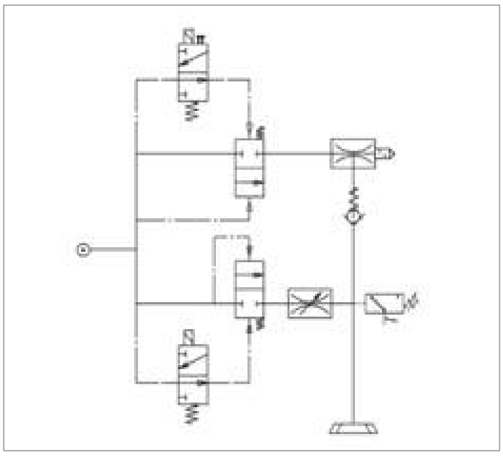
*All flow parameters refer to the parameters under the conditions of ambient atmospheric pressure (ANR) of 101.3kPa, temperature and humidity of 20°C and 65% respectively

*压缩空气质量：达到ISO 8573-1，3-3-3级，过滤等级(40 µm)含油或不含油。

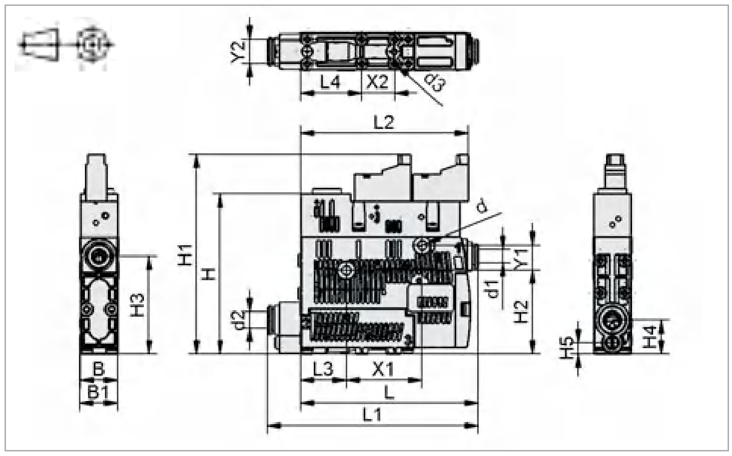
*Compressed air quality: up to ISO 8573-1, level 3-3-3, filter grade (40 µm) with or without oil.

(1)工作压力4bar以下。

(1) Working pressure below 4 bar.



气路图
Gas circuit diagram




尺寸图
Dimensions

## 结构参数 Structural parameters

| 货号 (PN) | 型号 (Model) | B | B1 | d | d1 | d2 | d3 | H | H1 | H2 | H3 | H4 | H5 | L | L1 | L2 | L3 | L4 | X1 | X2 | Y1 | Y2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.Y13276 | SCPSb-07-S04-NC-VD | 18 | 18.6 | 4.4 | 6 | 6 | 2.6 | 77.5 | 147 | 40.8 | 47.5 | 16.5 | 5.5 | 86.2 | 102.5 | 81.4 | 22 | 29.5 | 36.9 | 16 | 12 | 12 |
| 1.Y13277 | SCPSb-10-S04-NC-VD | 18 | 18.6 | 4.4 | 6 | 6 | 2.6 | 77.5 | 147 | 40.8 | 47.5 | 16.5 | 5.5 | 86.2 | 102.5 | 81.4 | 22 | 29.5 | 36.9 | 16 | 12 | 12 |
| 1.Y13278 | SCPSb-15-S04-NC-VD | 18 | 18.6 | 4.4 | 6 | 8 | 2.6 | 77.5 | 147 | 40.8 | 47.5 | 16.5 | 5.5 | 86.2 | 102.5 | 81.4 | 22 | 29.5 | 36.9 | 16 | 12 | 12 |

型材、钢管 Profile、SUS Tube
支架模组 Stents Module
快换 Quick Changer
夹具组件 Grip Module
气动剪刀 Air Nipper
真空组件 Vacuum Module
附件 Accessory Components