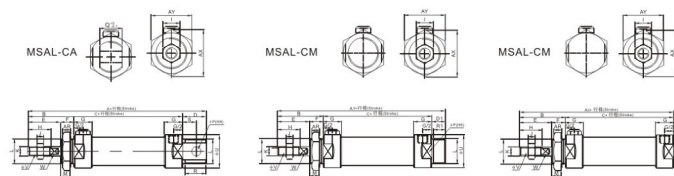


# MAL 系列铝合金迷你气缸/MAL Series Aluminum Alloy Mini Cylinder

## 外形尺寸图/Main Dimensions(mm)



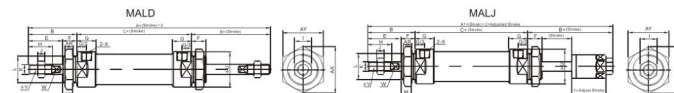
## 尺寸表/Dimension Sheet

| 符号/Symbol         | A    | A1     | A2   | B      | C    | D      | D1 | E  | F   | G  | H  | I  | J  |   |
|-------------------|------|--------|------|--------|------|--------|----|----|-----|----|----|----|----|---|
| 内径/行程/Bore/Stroke | 0-50 | 51-100 | 0-50 | 51-100 | 0-50 | 51-100 |    |    |     |    |    |    |    |   |
| 20                | 131  | 156    | 122  | 147    | 110  | 135    | 40 | 70 | 95  | 21 | 12 | 28 | 12 | 6 |
| 25                | 135  | 160    | 128  | 153    | 114  | 139    | 44 | 70 | 95  | 21 | 14 | 30 | 14 | 6 |
| 32                | 141  | 166    | 128  | 153    | 114  | 139    | 44 | 70 | 95  | 27 | 14 | 30 | 14 | 6 |
| 40                | 165  | 190    | 152  | 177    | 138  | 163    | 46 | 92 | 117 | 27 | 14 | 32 | 14 | 7 |

| 内径/符号/<br>Inside Diameter/Symbol | K        | L       | M  | P  | Q  | R  | R1 | S  | U    | V  | W  | X     | AR | AX | AY |
|----------------------------------|----------|---------|----|----|----|----|----|----|------|----|----|-------|----|----|----|
| 20                               | M8×1.25  | M22×1.5 | 10 | 8  | 16 | 19 | 10 | 12 | 29   | 8  | 6  | G1/8" | 7  | 33 | 29 |
| 25                               | M10×1.25 | M22×1.5 | 12 | 8  | 16 | 19 | 12 | 12 | 34   | 10 | 8  | G1/8" | 7  | 33 | 29 |
| 32                               | M10×1.25 | M24×2.0 | 12 | 10 | 16 | 25 | 12 | 15 | 39.5 | 12 | 10 | G1/8" | 8  | 37 | 32 |
| 40                               | M12×1.25 | M30×2.0 | 12 | 12 | 20 | 25 | 12 | 15 | 49.5 | 16 | 14 | G1/4" | 9  | 47 | 41 |

## 外形尺寸图/Main Dimensions(mm)



## 尺寸表/Dimension Sheet

| 内径/符号/Inside Diameter/Symbol | A   | A1  | B  | C  | E  | F  | G  | H  | I  | I | K        |
|------------------------------|-----|-----|----|----|----|----|----|----|----|---|----------|
| 20                           | 150 | 147 | 40 | 70 | 28 | 12 | 16 | 20 | 12 | 6 | M8×1.25  |
| 25                           | 158 | 155 | 44 | 70 | 30 | 14 | 16 | 22 | 17 | 6 | M10×1.25 |
| 32                           | 158 | 155 | 44 | 70 | 30 | 14 | 16 | 22 | 17 | 6 | M10×1.25 |
| 40                           | 184 | 180 | 46 | 92 | 32 | 14 | 22 | 24 | 17 | 7 | M12×1.25 |

| 内径/符号/Inside Diameter/Symbol | L       | M  | U    | V  | W  | X     | AR | AX | AY | T  |
|------------------------------|---------|----|------|----|----|-------|----|----|----|----|
| 20                           | M22×1.5 | 10 | 29   | 8  | 6  | G1/8" | 7  | 33 | 29 | 19 |
| 25                           | M22×1.5 | 12 | 34   | 10 | 8  | G1/8" | 7  | 33 | 29 | 21 |
| 32                           | M24×1.5 | 12 | 39.5 | 12 | 10 | G1/8" | 8  | 37 | 32 | 21 |
| 40                           | M30×2.0 | 12 | 49.5 | 16 | 14 | G1/4" | 9  | 47 | 41 | 21 |

# SDA 系列薄型气缸/SDA Series Thin Type(Compact) Cylinder



## 订购码/Ordering Code

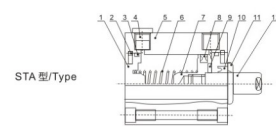
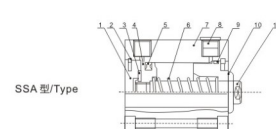
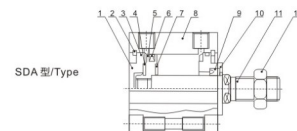
| 系列代号                                                                                                                                                                                                                                                                            | 缸径                                      | 行程                 | 可调行程                                                  | 磁石代号                                                                                    | 牙型                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|--------------------|-------------------------------------------------------|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| SDA: 复动型<br>SSA: 单动伸出型<br>STA: 单动吸入型<br>SDAD: 双轴复动型<br>SDAJ: 复动可调行程型<br>Series Code<br>SDA: Double Action Type<br>SSA: Single Action Extrusion Type<br>STA: Single Action Drawing-in Type<br>SDAD: Double-shaft Double Action Type<br>SDAJ: Double-shaft Adjustable Stroke Type | 20<br>缸径<br>Cylinder Bore<br>12mm-100mm | 30<br>行程<br>Stroke | 5<br>可调行程<br>Adjustable Stroke<br>5mm<br>15mm<br>25mm | S<br>磁石代号<br>空白:标准型<br>S:内置磁环<br>Magnet Code<br>Blank:Without Magnet<br>S:Attach Magnet | B<br>牙型<br>空白:内螺纹<br>B:外螺纹<br>N:无螺纹<br>Cog Type<br>Blank:Inner Thread<br>B:outer Thread<br>N:no Thread |

## 内部结构/Internal structure

| 序号<br>NO. | 名称<br>Designation           | 序号<br>NO. | 名称<br>Designation       |
|-----------|-----------------------------|-----------|-------------------------|
| 1         | 后盖/Back cover               | 2         | C型扣环/Type C buckle ring |
| 3         | 前后盖O令/O-ring                | 4         | 防撞垫片/Anti-crash cushion |
| 5         | 活塞/Piston                   | 6         | 活塞O令/Piston O-ring      |
| 7         | 防撞垫片/Anti-crash cushion     | 8         | 缸筒/Barrel               |
| 9         | 前盖密封圈/Front cover seal ring | 10        | 前盖/Front cover          |
| 11        | 活塞杆/Piston rod              | 12        | 活塞杆螺母/Piston Rod Nut    |

| 序号<br>NO. | 名称<br>Designation       | 序号<br>NO. | 名称<br>Designation       |
|-----------|-------------------------|-----------|-------------------------|
| 1         | 前盖/Back cover           | 2         | C型扣环/Type C buckle ring |
| 3         | 防撞垫片/Anti-crash cushion | 4         | 活塞/Piston               |
| 5         | 活塞O令/Piston O-ring      | 6         | 压缩弹簧 /Compressed spring |
| 7         | 缸筒/Barrel               | 8         | 消音器/Silencer            |
| 9         | 前后盖O令/Cover O-ring      | 10        | 前盖/Front cover          |
| 11        | 活塞杆/Piston rod          |           |                         |

| 序号<br>NO. | 名称<br>Designation       | 序号<br>NO. | 名称<br>Designation           |
|-----------|-------------------------|-----------|-----------------------------|
| 1         | 后盖/Back cover           | 2         | C型扣环/Type C buckle ring     |
| 3         | 前后盖O令/Cover O-ring      | 4         | 消音器/Silencer                |
| 5         | 缸筒/Barrel               | 6         | 压缩弹簧 /Compressed spring     |
| 7         | 活塞/Piston               | 8         | 活塞O令/Piston O-ring          |
| 9         | 防撞垫片/Anti-crash cushion | 10        | 前盖密封圈/Front cover seal ring |
| 11        | 前盖/Front cover          | 12        | 活塞杆/Piston rod              |





SDA 系列薄型气缸/SDA Series Thin Type(Compact) Cylinder

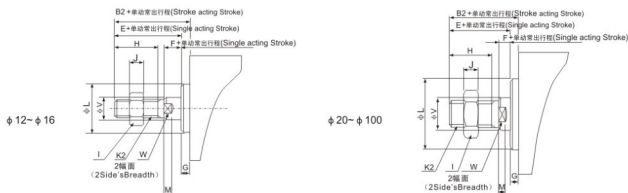
规格/Specifications

| 内径/Bore(mm)                        |  | 12                     | 16 | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 |
|------------------------------------|--|------------------------|----|----|----|----|----|----|----|----|-----|
| 动作形式/Motion Pattern                |  | 单动型/Single Acting      |    |    |    |    |    |    |    |    |     |
| 工作介质/Working Medium                |  | 空气/Air                 |    |    |    |    |    |    |    |    |     |
| 使用压力范围/Operating Pressure Range    |  | 0.1-0.9MPa             |    |    |    |    |    |    |    |    |     |
| 保证耐压/Ensured Pressure Resistance   |  | 1.35MPa                |    |    |    |    |    |    |    |    |     |
| 使用温度范围/Operating Temperature Range |  | -5~70℃                 |    |    |    |    |    |    |    |    |     |
| 使用速度范围/Operating Speed Range       |  | 30~500mm/s             |    |    |    |    |    |    |    |    |     |
| 缓冲型式/Buffer Type                   |  | 固定缓冲/Fixed Type Buffer |    |    |    |    |    |    |    |    |     |
| 接管口径/Port Size                     |  | M5×0.8                 |    |    |    |    |    |    |    |    |     |

行程/Stroke

| 内径/Bore(mm)       |                       | 12                                        | 16                                        | 20                                        | 25                                           | 32                                        | 40                                           | 50 | 63 | 80 | 100 |
|-------------------|-----------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|----------------------------------------------|-------------------------------------------|----------------------------------------------|----|----|----|-----|
| 单动型/Single Acting | 不附磁/Not attach magnet | 5-60 mm 每5mm一级<br>is grouped as one grade | 5-85 mm 每5mm一级<br>is grouped as one grade | 5-90 mm 每5mm一级<br>is grouped as one grade | 100-100 mm 每5mm一级<br>is grouped as one grade | 5-90 mm 每5mm一级<br>is grouped as one grade | 100-130 mm 每5mm一级<br>is grouped as one grade |    |    |    |     |
|                   | 附磁型/Attach magnet     | 5-50 mm 每5mm一级<br>is grouped as one grade | 5-75 mm 每5mm一级<br>is grouped as one grade | 5-90 mm 每5mm一级<br>is grouped as one grade | 100 mm                                       | 5-90 mm 每5mm一级<br>is grouped as one grade | 100-120 mm 每5mm一级<br>is grouped as one grade |    |    |    |     |
| 双动型/Double Acting | 不附磁/Not attach magnet | 5-30 mm 每5mm一级<br>is grouped as one grade | 5-30 mm 每5mm一级<br>is grouped as one grade | 5-30 mm 每5mm一级<br>is grouped as one grade | 5-30 mm 每5mm一级<br>is grouped as one grade    | 5-30 mm 每5mm一级<br>is grouped as one grade | 5-30 mm 每5mm一级<br>is grouped as one grade    |    |    |    |     |
|                   | 附磁型/Attach magnet     | 5-30 mm 每5mm一级<br>is grouped as one grade | 5-30 mm 每5mm一级<br>is grouped as one grade | 5-30 mm 每5mm一级<br>is grouped as one grade | 5-30 mm 每5mm一级<br>is grouped as one grade    | 5-30 mm 每5mm一级<br>is grouped as one grade | 5-30 mm 每5mm一级<br>is grouped as one grade    |    |    |    |     |
| 最大行程/Max.Stroke   |                       | 60mm                                      | 100mm                                     | 120mm                                     | 130mm                                        |                                           |                                              |    |    |    |     |

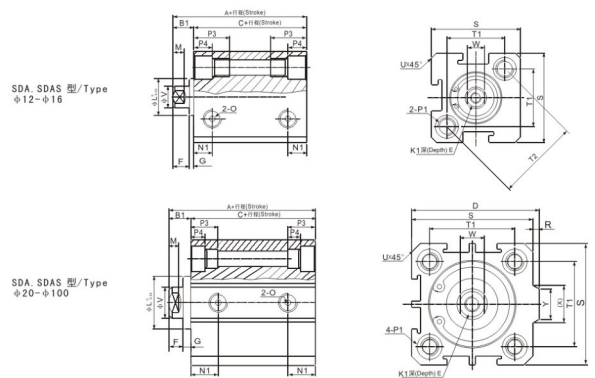
外形尺寸图/Main Dimensions(mm)



| 缸径/行程/<br>Bore/Stroke | B2   | E  | F | G   | H  | I  | J  | K2      | L    | M   | V  | W  |
|-----------------------|------|----|---|-----|----|----|----|---------|------|-----|----|----|
| 12                    | 17   | 16 | 4 | 1   | 10 | 8  | 4  | M5×0.8  | 10.2 | 2.8 | 6  | 5  |
| 16                    | 17.5 | 16 | 4 | 1.5 | 10 | 8  | 4  | M5×0.8  | 11   | 2.8 | 6  | 5  |
| 20                    | 20.5 | 19 | 4 | 1.5 | 13 | 10 | 5  | M6×1.0  | 16   | 2.8 | 8  | 6  |
| 25                    | 23   | 21 | 4 | 2   | 15 | 12 | 6  | M10×1.5 | 17   | 2.8 | 10 | 8  |
| 32                    | 25   | 22 | 4 | 3   | 15 | 17 | 6  | M14×1.5 | 22   | 2.8 | 12 | 10 |
| 40                    | 35   | 32 | 4 | 3   | 25 | 19 | 8  | M18×1.5 | 28   | 2.8 | 16 | 14 |
| 50                    | 37   | 33 | 5 | 4   | 25 | 27 | 11 | M18×1.5 | 38   | 2.8 | 20 | 17 |
| 63                    | 37   | 33 | 5 | 4   | 25 | 27 | 11 | M22×1.5 | 40   | 2.8 | 20 | 17 |
| 80                    | 44   | 39 | 6 | 5   | 30 | 32 | 13 | M22×1.5 | 45   | 4   | 25 | 22 |
| 100                   | 50   | 45 | 7 | 5   | 35 | 36 | 13 | M26×1.5 | 55   | 4   | 32 | 27 |

SDA 系列薄型气缸/SDA Series Thin Type(Compact) Cylinder

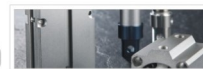
外形尺寸图/Main Dimensions(mm)



尺寸表/Dimension Sheet

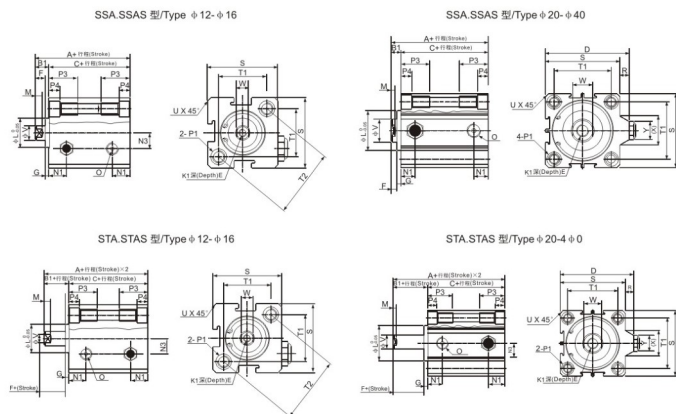
| 型式/Type               | 标准型/Standard type | 附磁型/Attach Magnet |      | D    | E   |      | F       | G       | K1 | L   | M       | N1   |     |      |
|-----------------------|-------------------|-------------------|------|------|-----|------|---------|---------|----|-----|---------|------|-----|------|
| 内径符号/Bore Size/Symbol | A                 | B1                | C    | A    | B1  | C    | 附磁行程<10 | 附磁行程<10 |    |     |         |      |     |      |
| 12                    | 22                | 5                 | 17   | 32   | 5   | 27   | -       | 6       | 4  | 1   | M3×0.5  | 10.2 | 2.8 | 6.3  |
| 16                    | 24                | 5.5               | 18.5 | 34   | 5.5 | 28.5 | -       | 6       | 4  | 1.5 | M3×0.5  | 11   | 2.8 | 7.3  |
| 20                    | 25                | 5.5               | 19.5 | 35   | 5.5 | 29.5 | 36      | 8       | 4  | 1.5 | M4×0.7  | 15   | 2.8 | 7.5  |
| 25                    | 27                | 6                 | 21   | 37   | 6   | 31   | 42      | 10      | 4  | 2   | M5×0.8  | 17   | 2.8 | 8    |
| 32                    | 31.5              | 7                 | 24.5 | 41.5 | 7   | 34.5 | 50      | 12      | 4  | 3   | M6×1    | 22   | 2.8 | 9    |
| 40                    | 33                | 7                 | 28   | 43   | 7   | 36   | 58.5    | 12      | 4  | 3   | M8×1.25 | 28   | 2.8 | 10   |
| 50                    | 37                | 9                 | 28   | 47   | 9   | 38   | 71.5    | 15      | 5  | 4   | M10×1.5 | 38   | 2.8 | 10.5 |
| 63                    | 41                | 9                 | 32   | 51   | 9   | 42   | 84.5    | 15      | 5  | 4   | M10×1.5 | 40   | 2.8 | 11.8 |
| 80                    | 52                | 11                | 41   | 62   | 11  | 51   | 104     | 15      | 6  | 5   | M14×1.5 | 45   | 4   | 14.5 |
| 100                   | 63                | 12                | 51   | 73   | 12  | 61   | 124     | 18      | 7  | 5   | M18×1.5 | 55   | 4   | 20.5 |

| 内径符号/<br>Bore Size/Symbol | N3  | O      | P1               | P3                          | P4    | R  | S    | T1  | T2  | U    | V  | W    | X  | Y  |
|---------------------------|-----|--------|------------------|-----------------------------|-------|----|------|-----|-----|------|----|------|----|----|
| 12                        | 6   | M5×0.8 | 双动(Double Sides) | 0.6.5/5/5(Through ports)    | 0.4.2 | 12 | 4.5  | -   | 25  | 16.2 | 23 | 1.6  | 6  | 5  |
| 16                        | 6.5 | M5×0.8 | 双动(Double Sides) | 0.6.5/5/5(Through ports)    | 0.4.2 | 12 | 4.5  | -   | 29  | 19.8 | 28 | 1.6  | 6  | 5  |
| 20                        | -   | M5×0.8 | 双动(Double Sides) | 0.6.5/5/5(Through ports)    | 0.4.2 | 14 | 4.5  | 2   | 34  | 24   | -  | 2.1  | 8  | 6  |
| 25                        | -   | M5×0.8 | 双动(Double Sides) | 0.6.5/5/5(Through ports)    | 0.4.6 | 15 | 5.5  | 2   | 40  | 28   | -  | 3.1  | 10 | 8  |
| 32                        | -   | G1/8"  | 双动(Double Sides) | 0.6.2/5/5(Through ports)    | 0.4.6 | 16 | 5.5  | 6   | 44  | 34   | -  | 2.15 | 12 | 10 |
| 40                        | -   | G1/8"  | 双动(Double Sides) | 0.6.2/5/5(Through ports)    | 0.4.6 | 20 | 7.5  | 6.5 | 52  | 40   | -  | 2.25 | 16 | 14 |
| 50                        | -   | G1/4"  | 双动(Double Sides) | 0.6.11/5/5(Through ports)   | 0.4.6 | 25 | 8.5  | 9.5 | 62  | 48   | -  | 4.15 | 20 | 17 |
| 63                        | -   | G1/4"  | 双动(Double Sides) | 0.6.11/5/5(Through ports)   | 0.4.6 | 25 | 8.5  | 9.5 | 75  | 60   | -  | 3.15 | 20 | 17 |
| 80                        | -   | G3/8"  | 双动(Double Sides) | 0.6.14/5/5(Through ports)   | 0.4.6 | 25 | 10.5 | 10  | 94  | 74   | -  | 3.65 | 25 | 22 |
| 100                       | -   | G3/8"  | 双动(Double Sides) | 0.6.17.5/5/5(Through ports) | 0.4.6 | 30 | 13   | 10  | 114 | 90   | -  | 3.65 | 32 | 27 |



### SDA 系列薄型气缸/SDA Series Thin Type(Compact) Cylinder

#### ● 外形尺寸图/Main Dimensions(mm)



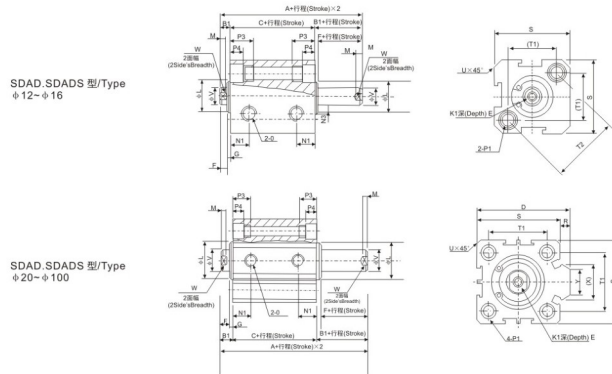
#### ● 尺寸表/Dimension Sheet

| 型式/Type     | 标准型/Standard Type | 附磁性/Attach magnet |     |      |      |      |      |     |      |      |      |    |   |     |         |     |
|-------------|-------------------|-------------------|-----|------|------|------|------|-----|------|------|------|----|---|-----|---------|-----|
| 行程 / Stroke | A                 | B1                | C   | A    | B1   | C    | D    | E   | F    | G    | K1   | L  | M | N1  |         |     |
| 12          | 32                | 42                | 5   | 27   | 37   | 42   | 52   | 5   | 37   | 47   | -    | 6  | 4 | 1   | M3×0.5  | 6.3 |
| 16          | 34                | 44                | 5.5 | 28.5 | 38.5 | 44   | 54   | 5.5 | 38.5 | 48.5 | -    | 6  | 4 | 1.5 | M3×0.5  | 7.3 |
| 20          | 35                | 45                | 5.5 | 29.5 | 39.5 | 45   | 55   | 5.5 | 39.5 | 49.5 | 36   | 8  | 4 | 1.5 | M4×0.7  | 7.5 |
| 25          | 37                | 47                | 6   | 34   | 41   | 47   | 57   | 6   | 41   | 51   | 42   | 10 | 4 | 2   | M5×0.8  | 8   |
| 32          | 41.5              | 51.5              | 7   | 34.5 | 44.5 | 51.5 | 61.5 | 7   | 44.5 | 54.5 | 50   | 12 | 4 | 3   | M6×1    | 9   |
| 40          | 43                | 53                | 7   | 36   | 46   | 53   | 63   | 7   | 46   | 56   | 58.5 | 12 | 4 | 3   | M8×1.25 | 10  |

| 内径/符号 / Bore Size/Symbol | N3  | O      | P1                                                         | P3 | P4  | R   | S  | T1   | T2 | U    | V  | W  | X    | Y  |
|--------------------------|-----|--------|------------------------------------------------------------|----|-----|-----|----|------|----|------|----|----|------|----|
| 12                       | 6   | M5×0.8 | 双边(Double Sides) φ6.5牙(Thread)M5×0.8通孔(Through ports) φ4.2 | 12 | 4.5 | -   | 25 | 16.2 | 23 | 1.6  | 6  | 5  | -    | -  |
| 16                       | 6.5 | M5×0.8 | 双边(Double Sides) φ6.5牙(Thread)M5×0.8通孔(Through ports) φ4.2 | 12 | 4.5 | -   | 29 | 19.8 | 28 | 1.6  | 6  | 5  | -    | -  |
| 20                       | -   | M5×0.8 | 双边(Double Sides) φ6.5牙(Thread)M5×0.8通孔(Through ports) φ4.2 | 14 | 4.5 | 2   | 34 | 24   | -  | 2.1  | 8  | 6  | 11.3 | 10 |
| 25                       | -   | M5×0.8 | 双边(Double Sides) φ8.2牙(Thread)M6×1.0通孔(Through ports) φ4.6 | 15 | 5.5 | 2   | 40 | 28   | -  | 3.1  | 10 | 8  | 12   | 10 |
| 32                       | -   | G1/8"  | 双边(Double Sides) φ8.2牙(Thread)M6×1.0通孔(Through ports) φ4.6 | 16 | 5.5 | 6   | 44 | 34   | -  | 2.15 | 12 | 10 | 18.3 | 15 |
| 40                       | -   | G1/8"  | 双边(Double Sides) φ10牙(Thread)M8×1.25通孔(Through ports) φ6.5 | 20 | 7.5 | 6.5 | 52 | 40   | -  | 2.25 | 16 | 14 | 21.3 | 16 |

### SDA 系列薄型气缸/SDA Series Thin Type(Compact) Cylinder

#### ● 外形尺寸图/Main Dimensions(mm)



#### ● 尺寸表/Dimension Sheet

| 型式/Type                  | 标准型/Standard Type | 附磁性/Attach magnet | D    | E    | F   | G    | K1          | L                        | M  | N1  |
|--------------------------|-------------------|-------------------|------|------|-----|------|-------------|--------------------------|----|-----|
| 内径/符号 / Bore Size/Symbol | A                 | B1                | C    | A    | B1  | C    | Stroke ≤ 10 | Stroke > 10              |    |     |
| 12                       | 27                | 5.5               | 17   | 37   | 5   | 27   | -           | 6                        | 4  | 1   |
| 16                       | 29.5              | 5.5               | 18.5 | 39.5 | 5.5 | 28.5 | -           | 6                        | 4  | 1.5 |
| 20                       | 30.5              | 5.5               | 19.5 | 40.5 | 5.5 | 29.5 | 36          | 8行程(Stroke)=5 时为(its)6.5 | 4  | 1.5 |
| 25                       | 33                | 6                 | 21   | 43   | 6   | 31   | 42          | 10行程(Stroke)=5 时为(its)7  | 4  | 2   |
| 32                       | 38.5              | 7                 | 24.5 | 48.5 | 7   | 34.5 | 50          | 8                        | 12 | 4   |
| 40                       | 40                | 7                 | 28   | 50   | 7   | 36   | 58.5        | 9                        | 12 | 4   |
| 50                       | 46                | 9                 | 28   | 56   | 9   | 38   | 71.5        | 11                       | 15 | 5   |
| 63                       | 50                | 9                 | 32   | 60   | 9   | 42   | 84.5        | 11                       | 15 | 5   |
| 80                       | 63                | 11                | 41   | 73   | 11  | 51   | 104         | 14                       | 20 | 6   |
| 100                      | 75                | 12                | 51   | 85   | 12  | 61   | 124         | 18                       | 20 | 7   |

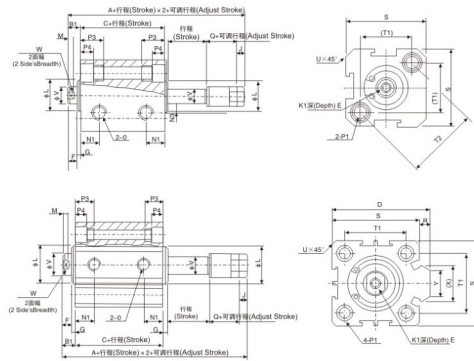
| 内径/符号 / Bore Size/Symbol | N3  | O      | P1                                                          | P3 | P4   | R   | S   | T1   | T2 | U    | V  | W  | X    | Y  |
|--------------------------|-----|--------|-------------------------------------------------------------|----|------|-----|-----|------|----|------|----|----|------|----|
| 12                       | 6   | M5×0.8 | 双边(Double Sides) φ6.5牙(Thread)M5×0.8通孔(Through ports) φ4.2  | 12 | 4.5  | -   | 25  | 16.2 | 23 | 1.6  | 6  | 5  | -    | -  |
| 16                       | 6.5 | M5×0.8 | 双边(Double Sides) φ6.5牙(Thread)M5×0.8通孔(Through ports) φ4.2  | 12 | 4.5  | -   | 29  | 19.8 | 28 | 1.6  | 6  | 5  | -    | -  |
| 20                       | -   | M5×0.8 | 双边(Double Sides) φ6.5牙(Thread)M5×0.8通孔(Through ports) φ4.2  | 14 | 4.5  | 2   | 34  | 24   | -  | 2.1  | 8  | 6  | 11.3 | 10 |
| 25                       | -   | M5×0.8 | 双边(Double Sides) φ8.2牙(Thread)M6×1.0通孔(Through ports) φ4.6  | 15 | 5.5  | 2   | 40  | 28   | -  | 3.1  | 10 | 8  | 12   | 10 |
| 32                       | -   | G1/8"  | 双边(Double Sides) φ8.2牙(Thread)M6×1.0通孔(Through ports) φ4.6  | 16 | 5.5  | 6   | 44  | 34   | -  | 2.15 | 12 | 10 | 18.3 | 15 |
| 40                       | -   | G1/8"  | 双边(Double Sides) φ10牙(Thread)M8×1.25通孔(Through ports) φ6.5  | 20 | 7.5  | 6.5 | 52  | 40   | -  | 2.25 | 16 | 14 | 21.3 | 16 |
| 50                       | -   | G1/4"  | 双边(Double Sides) φ11牙(Thread)M8×1.25通孔(Through ports) φ6.5  | 25 | 8.5  | 9.5 | 62  | 48   | -  | 4.15 | 20 | 17 | 30   | 20 |
| 63                       | -   | G1/4"  | 双边(Double Sides) φ11牙(Thread)M8×1.25通孔(Through ports) φ6.5  | 25 | 8.5  | 9.5 | 75  | 60   | -  | 3.15 | 20 | 17 | 28.7 | 20 |
| 80                       | -   | G3/8"  | 双边(Double Sides) φ14牙(Thread)M12×1.75通孔(Through ports) φ9.2 | 25 | 10.5 | 10  | 94  | 74   | -  | 3.65 | 25 | 22 | 36   | 26 |
| 100                      | -   | G3/8"  | 双边(Double Sides) φ17.5牙(Thread)M14×2通孔(Through ports) φ11.3 | 30 | 13   | 10  | 114 | 90   | -  | 3.65 | 32 | 27 | 35   | 28 |



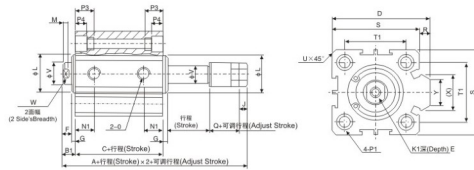
SDA 系列薄型气缸/SDA Series Thin Type(Compact) Cylinder

外形尺寸图/Main Dimensions(mm)

SDAJ SDAJS 型/Type  
φ12~φ16



SDAJ SDAJS 型/Type  
φ20~φ100



尺寸表/Dimension Sheet

| 型式/Type                | 标准型/Standard type | 附磁柱/Attach Magnet | D    | E    | F   | G    | K1   | L  | M | N1  |
|------------------------|-------------------|-------------------|------|------|-----|------|------|----|---|-----|
| 内径/符号/Bore Size/Symbol | A                 | B1                | C    | A    | B1  | C    |      |    |   |     |
| 12                     | 22                | 5                 | 17   | 32   | 5   | 27   | -    | 6  | 4 | 1   |
| 16                     | 24                | 5.5               | 18.5 | 34   | 5.5 | 28.5 | -    | 6  | 4 | 1.5 |
| 20                     | 25                | 5.5               | 19.5 | 35   | 5.5 | 29.5 | 36   | 8  | 4 | 1.5 |
| 25                     | 27                | 6                 | 21   | 37   | 6   | 34   | 42   | 10 | 4 | 2   |
| 32                     | 31.5              | 7                 | 24.5 | 41.5 | 7   | 34.5 | 50   | 12 | 4 | 3   |
| 40                     | 33                | 7                 | 28   | 43   | 7   | 36   | 58.5 | 12 | 4 | 3   |
| 50                     | 37                | 9                 | 28   | 47   | 9   | 38   | 71.5 | 15 | 5 | 4   |
| 63                     | 41                | 9                 | 32   | 51   | 9   | 42   | 84.5 | 15 | 5 | 4   |
| 80                     | 52                | 11                | 41   | 62   | 11  | 51   | 104  | 15 | 6 | 5   |
| 100                    | 63                | 12                | 51   | 73   | 12  | 61   | 124  | 18 | 7 | 5   |

| 内径/符号/Bore Size/Symbol | N3  | O      | P1                                                            | P3 | P4   | R   | S   | T1   | T2 | U    | V  | W  | X    | Y  |
|------------------------|-----|--------|---------------------------------------------------------------|----|------|-----|-----|------|----|------|----|----|------|----|
| 12                     | 6   | M5×0.8 | 双边(Double Sides) φ6.5牙(Thread)M5×0.8通孔(Through ports) φ4.2    | 12 | 4.5  | -   | 25  | 16.2 | 23 | 1.6  | 6  | 5  | -    | -  |
| 16                     | 6.5 | M5×0.8 | 双边(Double Sides) φ6.5牙(Thread)M5×0.8通孔(Through ports) φ4.2    | 12 | 4.5  | -   | 29  | 19.8 | 28 | 1.6  | 6  | 5  | -    | -  |
| 20                     | -   | M5×0.8 | 双边(Double Sides) φ6.5牙(Thread)M5×0.8通孔(Through ports) φ4.2    | 14 | 4.5  | 2   | 34  | 24   | -  | 2.1  | 8  | 6  | 11.3 | 10 |
| 25                     | -   | M5×0.8 | 双边(Double Sides) φ6.5牙(Thread)M5×0.8通孔(Through ports) φ4.6    | 15 | 5.5  | 2   | 40  | 28   | -  | 3.1  | 10 | 8  | 12   | 10 |
| 32                     | -   | O18°   | 双边(Double Sides) φ6.5牙(Thread)M6×1.0通孔(Through ports) φ4.6    | 16 | 5.5  | 6   | 44  | 34   | -  | 2.15 | 12 | 10 | 18.3 | 15 |
| 40                     | -   | O18°   | 双边(Double Sides) φ6.5牙(Thread)M6×1.25通孔(Through ports) φ4.6   | 20 | 7.5  | 6.5 | 52  | 40   | -  | 2.25 | 16 | 14 | 21.3 | 16 |
| 50                     | -   | O14°   | 双边(Double Sides) φ6.5牙(Thread)M6×1.25通孔(Through ports) φ6.5   | 25 | 8.5  | 9.5 | 62  | 48   | -  | 4.15 | 20 | 17 | 30   | 20 |
| 63                     | -   | O14°   | 双边(Double Sides) φ6.5牙(Thread)M6×1.25通孔(Through ports) φ6.5   | 25 | 8.5  | 9.5 | 75  | 60   | -  | 3.15 | 20 | 17 | 28.7 | 20 |
| 80                     | -   | G3/8"  | 双边(Double Sides) φ6.5牙(Thread)M12×1.75通孔(Through ports) φ9.2  | 25 | 10.5 | 10  | 94  | 74   | -  | 3.65 | 25 | 22 | 36   | 26 |
| 100                    | -   | G3/8"  | 双边(Double Sides) φ6.5牙(Thread)M12×1.75通孔(Through ports) φ11.3 | 30 | 13   | 10  | 114 | 90   | -  | 3.65 | 32 | 27 | 35   | 26 |

SG 系列新薄型带导杆气缸/SG Series Three Shaft Cylinder

订购码/Ordering Code



SG — 20x50 — S

SG: SMC MGP 系列导杆气缸 (带磁柱已附磁)  
SG: SMC MGP three-shaft cylinder with magnet

M: 滑动轴承  
B: 滚珠导向轴承  
M: Slide bearing type  
B: Ball bearing type

内径×行程  
Bore x Stroke  
12-100mm  
0-200mm

S: Always with magnet

\* SG 系列滑动轴承, 内径20mm, 行程60mm, 正确型号: SGM20X60  
\* SG 系列滚珠导向轴承, 内径32mm, 行程75mm, 正确型号: SGM32X75  
Order example:  
\* SG type three-shaft cylinder, slide bearing type, 20mm bore, 60mm stroke, Model: SGM20X60-S  
\* SG type three-shaft cylinder, ball bearing type, 32mm bore, 75mm stroke, with magnet, Model: SGB32X75-S

规格/Specifications

| 内径 / Bore Size (mm)               | 12                    | 16 | 20 | 25 | 32 | 40     | 50 | 63 | 80 | 100 |
|-----------------------------------|-----------------------|----|----|----|----|--------|----|----|----|-----|
| 保证耐压力 / Guaranteed pressure (Bar) | 15.3                  |    |    |    |    |        |    |    |    |     |
| 工作压力 / Working pressure (Bar)     | 1.2~10.2              |    |    |    |    |        |    |    |    |     |
| 工作温度 / Working temperature (°C)   | -10~60                |    |    |    |    |        |    |    |    |     |
| 活塞速度 / Piston speed (mm/s)        | 50-500                |    |    |    |    | 50-400 |    |    |    |     |
| 缓冲 / Cushion                      | 橡胶缓冲 / Rubber cushion |    |    |    |    |        |    |    |    |     |

| 内径 / Bore (mm)                    | 12                                              | 16     | 20     | 25     | 32     | 40    | 50 | 63    | 80 | 100 |
|-----------------------------------|-------------------------------------------------|--------|--------|--------|--------|-------|----|-------|----|-----|
| 行程公差 / Tolerance of stroke        | +1.5<br>0                                       |        |        |        |        |       |    |       |    |     |
| 轴承 / Bearing                      | 滑动轴承 / 珠导向轴承 Slide bearing / Ball guide bearing |        |        |        |        |       |    |       |    |     |
| 活塞杆不转动精度<br>Non-rotating accuracy | ±0.08°                                          | ±0.07° | ±0.06° | ±0.05° | ±0.04° |       |    |       |    |     |
| 滚珠导向精度<br>Ball guide bearing      | ±0.10°                                          | ±0.09° | ±0.08° | ±0.06° | ±0.05° |       |    |       |    |     |
| 接管口径 / Port Size                  | M5x0.8                                          |        | G 1/8  |        |        | G 1/4 |    | G 3/8 |    |     |