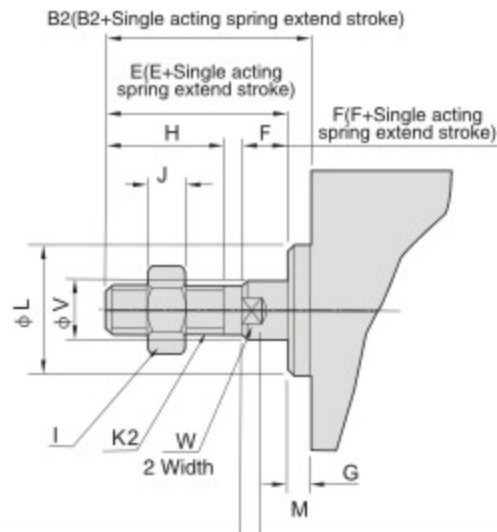
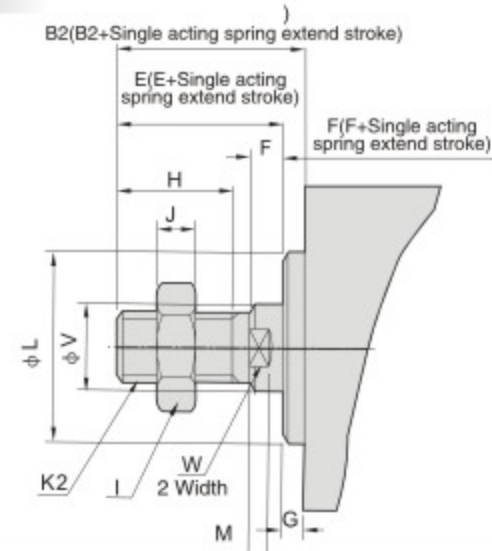


Male thread dimensions

Φ12~Φ16

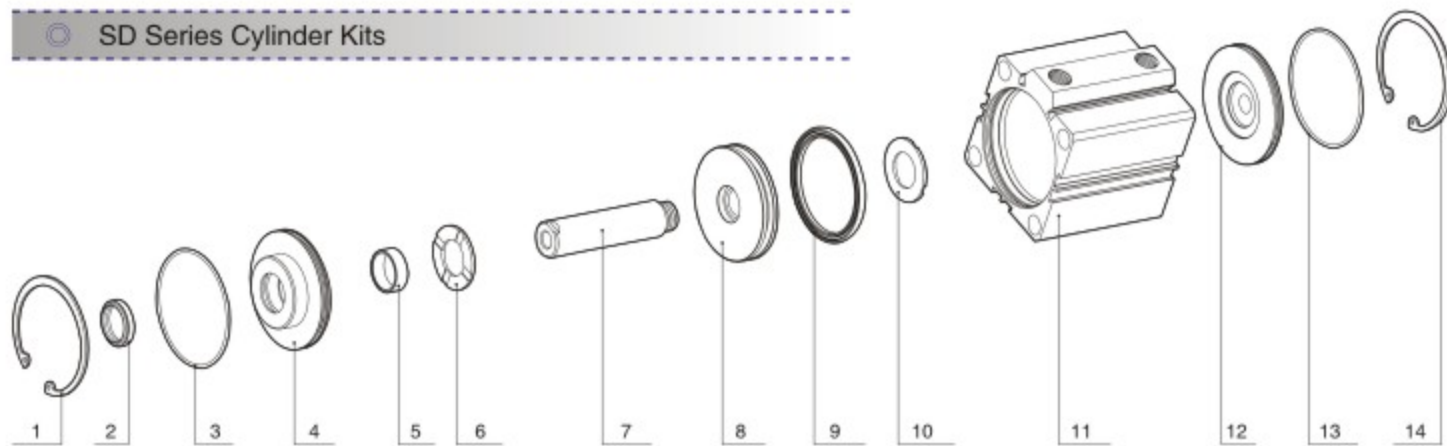


Φ20~Φ100



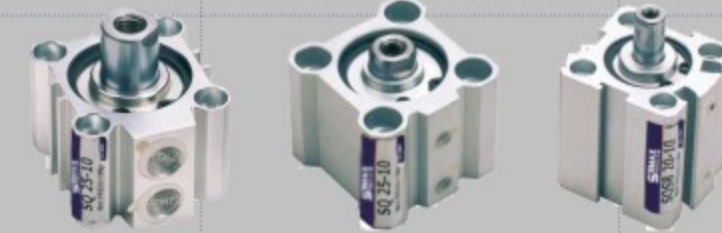
| Bore/Sign | B2   | E  | F | G   | H  | I  | J  | K2       | L    | M   | V  | W  |
|-----------|------|----|---|-----|----|----|----|----------|------|-----|----|----|
| 12        | 17   | 16 | 4 | 1   | 10 | 8  | 4  | M5X0.8   | 10.2 | 2.8 | 6  | 5  |
| 16        | 17.5 | 16 | 4 | 1.5 | 10 | 8  | 4  | M5X0.8   | 11   | 2.8 | 6  | 5  |
| 20        | 20.5 | 19 | 4 | 1.5 | 13 | 10 | 5  | M6X1.0   | 15   | 2.8 | 8  | 6  |
| 25        | 23   | 21 | 4 | 2   | 15 | 12 | 6  | M8X1.25  | 17   | 2.8 | 10 | 8  |
| 32        | 25   | 22 | 4 | 3   | 15 | 17 | 6  | M10X1.25 | 22   | 2.8 | 12 | 10 |
| 40        | 35   | 32 | 4 | 3   | 25 | 19 | 8  | M14X1.5  | 28   | 2.8 | 16 | 14 |
| 50        | 37   | 33 | 5 | 4   | 25 | 27 | 11 | M18X1.5  | 38   | 2.8 | 20 | 17 |
| 63        | 37   | 33 | 5 | 4   | 25 | 27 | 11 | M18X1.5  | 40   | 2.8 | 20 | 17 |
| 80        | 44   | 39 | 6 | 5   | 30 | 32 | 13 | M22X1.5  | 45   | 4   | 25 | 22 |
| 100       | 50   | 45 | 7 | 5   | 35 | 36 | 13 | M26X1.5  | 55   | 4   | 32 | 27 |

SD Series Cylinder Kits



| No          | 1             | 2               | 3      | 4          | 5                        | 6                 | 7          |
|-------------|---------------|-----------------|--------|------------|--------------------------|-------------------|------------|
| Designation | C-type buckle | Piston rod seal | O-ring | Head cover | Self lubricating bearing | Anti-bump cushion | Piston Rod |

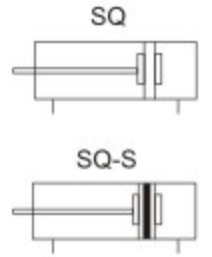
| No          | 8      | 9      | 10                | 11     | 12         | 13     | 14            |
|-------------|--------|--------|-------------------|--------|------------|--------|---------------|
| Designation | Piston | C-ring | Anti-bump cushion | Barrel | Rear cover | O-ring | C-type buckle |



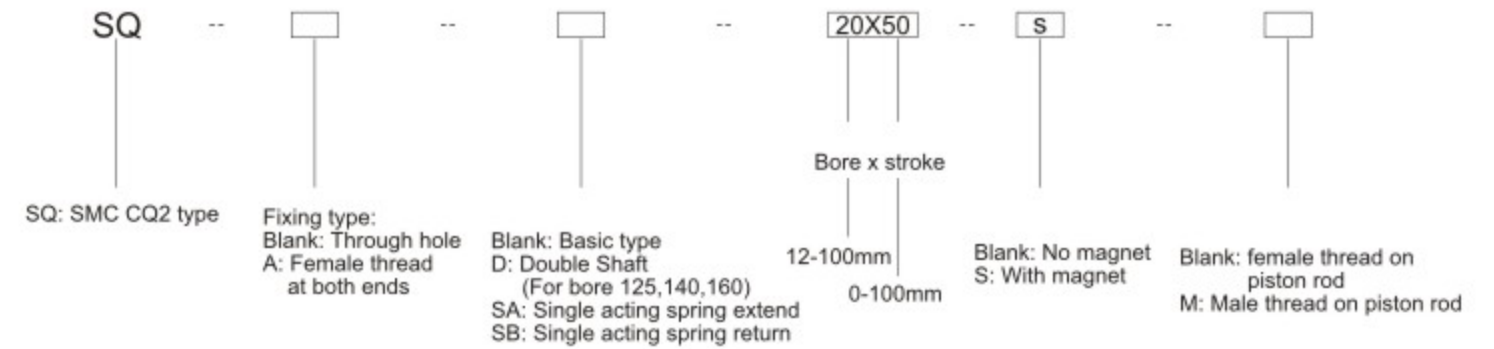
SQSA 25x10

SQ 25x10

SQSB 20x10



How to Order?



\* SQ type compact cylinder, basic type, through hole, 50mm bore, 85mm stroke, model: SQ 50x85

\* SQ type compact cylinder, single acting spring return, 63mm bore, 100mm stroke, with magnet, model: SQSB 63x100-S

Product Features

- \* Similar to SMC appearance
- \* Compact body and light-weighted
- \* Suitable slot on the cylinder barrel to make it easy for magnetic sensor to fit on
- \* with self-lubricating bearing, the piston rod is lubrication free
- \* Magnet is optional

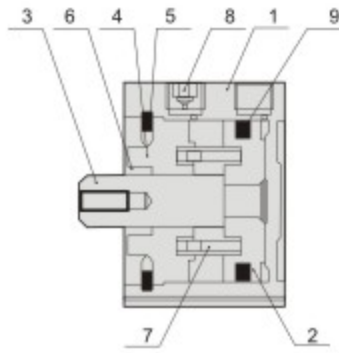
Specifications

| Bore Size(mm)             | 12  | 16 | 20 | 25    | 32 | 40 | 50    | 63 | 80    | 100 |
|---------------------------|---|----|----|-------|----|----|-------|----|-------|-----|
| Acting type               | Double acting / Single acting spring return / Single acting spring extend |    |    |       |    |    |       |    |       |     |
| Working medium            | Clean air (25 μm filtration)  |    |    |       |    |    |       |    |       |     |
| Working pressure(Bar)     | 1~10  |    |    |       |    |    |       |    |       |     |
| Guaranteed pressure (Bar) | 15  |    |    |       |    |    |       |    |       |     |
| Working temperature (°C)  | 5~60  |    |    |       |    |    |       |    |       |     |
| Cushion type              | None  |    |    |       |    |    |       |    |       |     |
| Tolerance of stroke(mm)   | +1.0<br>0   |    |    |       |    |    |       |    |       |     |
| Lubrication               | Not Required  |    |    |       |    |    |       |    |       |     |
| Port size                 | M5x0.8  |    |    | G 1/8 |    |    | G 1/4 |    | G 3/8 |     |

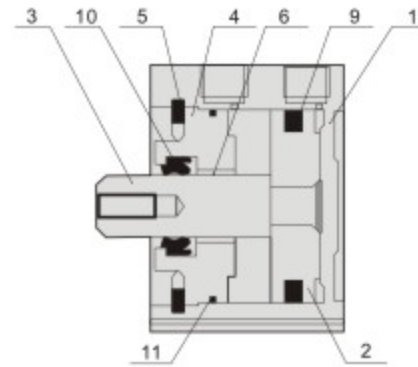


Internal structure

Single acting (with spring return)



Double acting

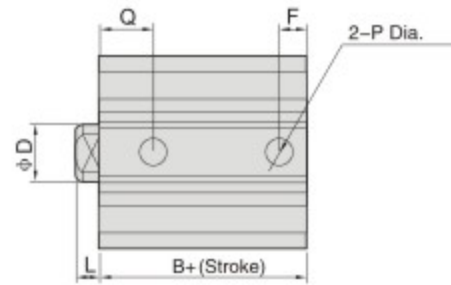
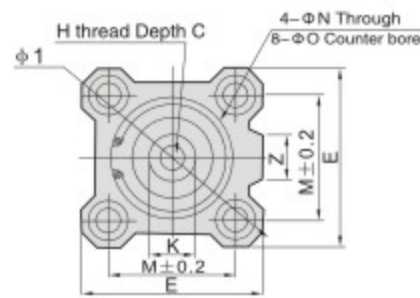


| No | Designation              |
|----|--------------------------|
| 1  | Barrel                   |
| 2  | Piston                   |
| 3  | Piston rod               |
| 4  | Head cover               |
| 5  | C type buckle            |
| 6  | Self lubricating bearing |
| 7  | Spring                   |
| 8  | Muffler                  |
| 9  | Piston seal              |
| 10 | Piston rod seal          |
| 11 | Cover O-ring             |

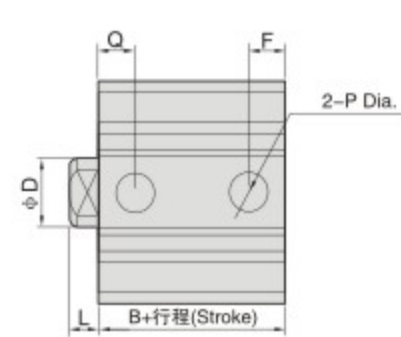
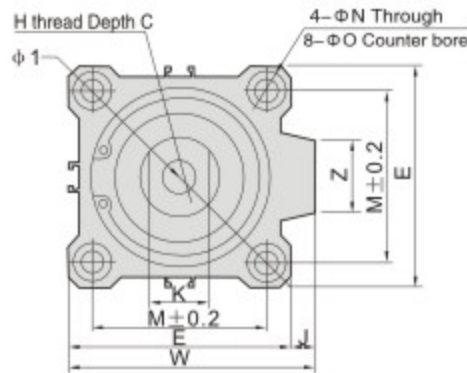
Main Dimensions (mm)

Basic type with through hole: SQ

Φ12-Φ25



Φ32-Φ100



| NO      | Note 1) Stroke Range | B    | φD | E   | F    | H       | C  | φI  | J   | K  | L   | M    | φN  | φO              | P      | Q    | W     | Z  |
|---------|----------------------|------|----|-----|------|---------|----|-----|-----|----|-----|------|-----|-----------------|--------|------|-------|----|
| SQ12-□  | 5-30                 | 17   | 6  | 25  | 5    | M3x0.5  | 6  | 32  | -   | 5  | 3.5 | 15.5 | 3.5 | 6.5 Depth 3.5   | M5x0.8 | 7.5  | -     | -  |
| SQ16-□  | 5-30                 | 18.5 | 8  | 29  | 5.5  | M4x0.7  | 8  | 38  | -   | 6  | 3.5 | 20   | 3.5 | 6.5 Depth 3.5   | M5x0.8 | 8    | -     | 10 |
| SQ20-□  | 5-50                 | 19.5 | 10 | 36  | 5.5  | M5x0.8  | 7  | 47  | -   | 8  | 4.5 | 25.5 | 5.5 | 9 Depth 7       | M5x0.8 | 9    | -     | 10 |
| SQ25-□  | 5-50                 | 22.5 | 12 | 40  | 5.5  | M6x1.0  | 12 | 52  | -   | 10 | 5   | 28   | 5.5 | 9 Depth 7       | M5x0.8 | 11   | -     | 10 |
| SQ32-□  | 5                    | 23   | 16 | 45  | 5.5  | M8x1.25 | 13 | 60  | 4.5 | 14 | 7   | 34   | 5.5 | 9 Depth 7       | M5x0.8 | 11.5 | 49.5  | 14 |
|         | 7.5                  |      |    |     | 1/8  |         |    |     |     |    |     |      |     |                 | 10.5   |      |       |    |
| SQ40-□  | 5-50                 | 29.5 | 16 | 52  | 8    | M8x1.25 | 13 | 69  | 5   | 14 | 7   | 40   | 5.5 | 9 Depth 7       | 1/8    | 11   | 57    | 14 |
| SQ50-□  | 10-50                | 30.5 | 20 | 64  | 10.5 | M10x1.5 | 15 | 86  | 7   | 17 | 8   | 50   | 6.6 | 11 Depth 8      | 1/4    | 10.5 | -     | 19 |
| SQ63-□  | 10-50                | 36   | 20 | 77  | 10.5 | M10x1.5 | 15 | 103 | 7   | 17 | 8   | 60   | 9   | 14 Depth 10.5   | 1/4    | 15   | 84    | 19 |
| SQ80-□  | 10-50                | 43.5 | 25 | 98  | 12.5 | M16x2.0 | 21 | 132 | 6   | 22 | 10  | 77   | 11  | 17.5 Depth 13.5 | 3/8    | 16   | 104   | 26 |
| SQ100-□ | 10-50                | 53   | 30 | 117 | 13   | M20x2.5 | 27 | 156 | 6.5 | 27 | 12  | 94   | 11  | 17.5 Depth 13.5 | 3/8    | 23   | 123.5 | 26 |

Long stroke

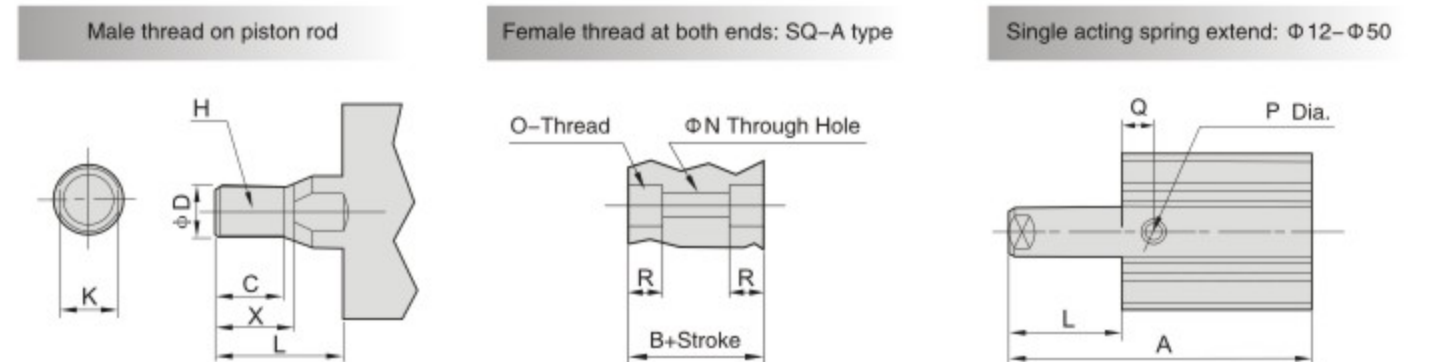
| NO      | Note 2) Stroke(mm) | B    | F    | P   | Q    |
|---------|--------------------|------|------|-----|------|
| SQ32-□  | 75,100             | 33   | 7.5  | 1/8 | 10.5 |
| SQ40-□  | 75,100             | 39.5 | 8    | 1/8 | 11   |
| SQ50-□  | 75,100             | 40.5 | 10.5 | 1/4 | 10.5 |
| SQ63-□  | 75,100             | 46   | 10.5 | 1/4 | 15   |
| SQ80-□  | 75,100             | 53.5 | 12.5 | 3/8 | 16   |
| SQ100-□ | 75,100             | 63   | 13   | 3/8 | 23   |

Note 1) Standard stroke is at 5mm interval  
 Note 2) The stroke is medium stroke between 55mm and 100mm (55,60,65,70,80,85,90,95) plus 5,10,15 or 20mm thick backing plate  
 Note 3) Unless specified, the dimensions of the model with through hole is the same as those of the model with female thread at both ends

Dimensions of Single Acting Cylinder

| Type    | B    |      |      | φD | E  | F    |      | H       | C  | φI | J   | K  | L   | M    | φN  | φO            | P      |      |      | Q    |      | W    | Z  |
|---------|------|------|------|----|----|------|------|---------|----|----|-----|----|-----|------|-----|---------------|--------|------|------|------|------|------|----|
|         | 5st  | 10st | 20st |    |    | 5st  | 10st |         |    |    |     |    |     |      |     |               | 5st    | 10st | 20st | 5st  | 10st |      |    |
| SQ12-SB | 22   | 27   | -    | 6  | 25 | 5    | 5    | M3x0.5  | 6  | 32 | -   | 5  | 3.5 | 15.5 | 3.5 | 6.5 Depth 3.5 | M5x0.8 | -    | 7.5  | 7.5  | -    | -    |    |
| SQ16-SB | 23.5 | 28.5 | -    | 8  | 29 | 5.5  | 5.5  | M4x0.7  | 8  | 38 | -   | 6  | 3.5 | 20   | 3.5 | 6.5 Depth 3.5 | M5x0.8 | -    | 8    | 8    | -    | 10   |    |
| SQ20-SB | 24.5 | 29.5 | -    | 10 | 36 | 5.5  | 5.5  | M5x0.8  | 7  | 47 | -   | 8  | 4.5 | 25.5 | 5.5 | 9 Depth 7     | M5x0.8 | -    | 9    | 9    | -    | 10   |    |
| SQ25-SB | 27.5 | 32.5 | -    | 12 | 40 | 5.5  | 5.5  | M6x1.0  | 12 | 52 | -   | 10 | 5   | 28   | 5.5 | 9 Depth 7     | M5x0.8 | -    | 11   | 11   | -    | 10   |    |
| SQ32-SB | 28   | 33   | -    | 16 | 45 | 5.5  | 7.5  | M8x1.25 | 13 | 60 | 4.5 | 14 | 7   | 34   | 5.5 | 9 Depth 7     | M5x0.8 | 1/8  | -    | 11.5 | 10.5 | 49.5 | 18 |
| SQ40-SB | 34.5 | 39.5 | -    | 16 | 52 | 8    | 8    | M8x1.25 | 13 | 69 | 5   | 14 | 7   | 40   | 5.5 | 9 Depth 7     | 1/8    | -    | 11   | 11   | 57   | 18   |    |
| SQ50-SB | -    | 40.5 | 50.5 | 20 | 64 | 10.5 | 10.5 | M10x1.5 | 15 | 86 | 7   | 17 | 8   | 50   | 6.6 | 11 Depth 8    | -      | 1/4  | 10.5 | 10.5 | 71   | 22   |    |

Dimensions of Thread



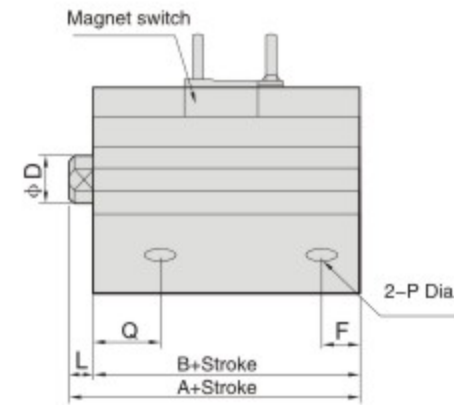
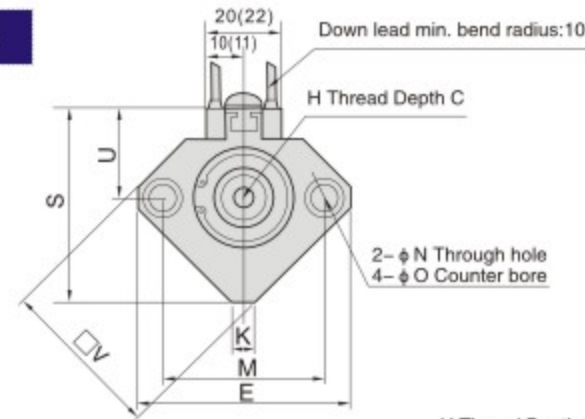
| (mm) Bore size | C    | X    | φD | H        | L    | K  | (mm) Bore size | O        | R  | A    |      |      | L   |      |      |
|----------------|------|------|----|----------|------|----|----------------|----------|----|------|------|------|-----|------|------|
|                |      |      |    |          |      |    |                |          |    | 5st  | 10st | 20st | 5st | 10st | 20st |
| 12             | 9    | 10.5 | 6  | M5x0.8   | 14   | 5  | 12             | M4x0.7   | 7  | 30.5 | 40.5 | -    | 8.5 | 13.5 | -    |
| 16             | 10   | 12   | 8  | M6x1.0   | 15.5 | 6  | 16             | M4x0.7   | 7  | 32   | 42   | -    | 8.5 | 13.5 | -    |
| 20             | 12   | 14   | 10 | M8x1.25  | 18.5 | 8  | 20             | M6x1.0   | 10 | 34   | 44   | -    | 9.5 | 14.5 | -    |
| 25             | 15   | 17.5 | 12 | M10x1.25 | 22.5 | 10 | 25             | M6x1.0   | 10 | 37.5 | 47.5 | -    | 10  | 15   | -    |
| 32             | 20.5 | 23.5 | 16 | M14x1.5  | 28.5 | 14 | 32             | M6x1.0   | 10 | 40   | 50   | -    | 12  | 17   | -    |
| 40             | 20.5 | 23.5 | 16 | M14x1.5  | 28.5 | 14 | 40             | M6x1.0   | 10 | 46.5 | 56.5 | -    | 12  | 17   | -    |
| 50             | 26   | 28.5 | 20 | M18x1.5  | 33.5 | 17 | 50             | M8x1.25  | 14 | -    | 58.5 | 78.5 | -   | 18   | 28   |
| 63             | 26   | 28.5 | 20 | M18x1.5  | 33.5 | 17 | 63             | M10x1.5  | 18 | -    | -    | -    | -   | -    | -    |
| 80             | 32.5 | 35.5 | 25 | M22x1.5  | 43.5 | 22 | 80             | M12x17.5 | 22 | -    | -    | -    | -   | -    | -    |
| 100            | 32.5 | 35.5 | 30 | M26x1.5  | 43.5 | 27 | 100            | M12x1.75 | 22 | -    | -    | -    | -   | -    | -    |

\* Unless specified, the dimensions of the model with through hole are the same as those of the model with female thread at both ends

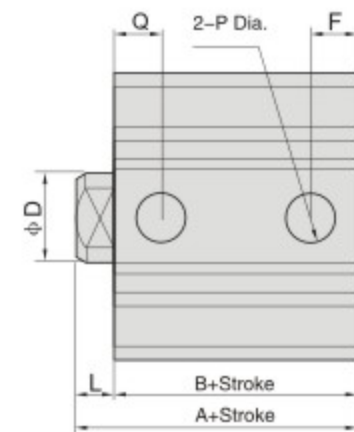
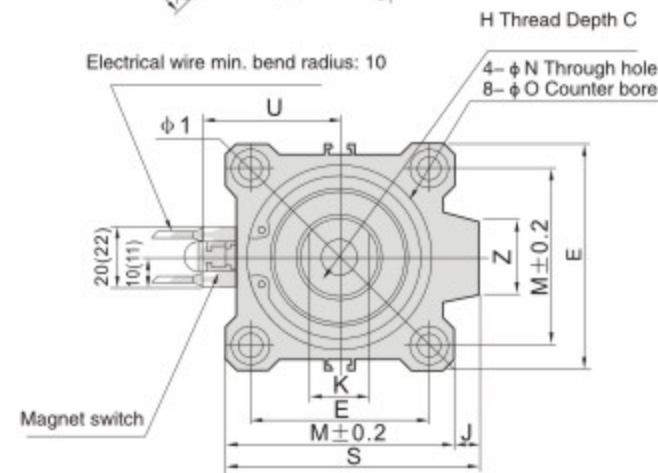


○ Main Dimensions (mm)

With magnet: SQ-S series



Φ12-Φ25



| NO       | Note 1) Stroke Range | A    | B    | ΦD | E    | F    | H       | C  | ΦI  | J   | K  | L   | M  | ΦN  | ΦO             | P      | Q    | S     | U    | V  | Z  |
|----------|----------------------|------|------|----|------|------|---------|----|-----|-----|----|-----|----|-----|----------------|--------|------|-------|------|----|----|
| SQ12-□S  | 5-30                 | 31.5 | 28   | 6  | 32   | 6.5  | M3x0.5  | 6  | -   | -   | 5  | 3.5 | 22 | 3.5 | 6.5 Depth 3.5  | M5x0.8 | 11   | 35.5  | 19.5 | 25 | -  |
| SQ16-□S  | 5-30                 | 34   | 30.5 | 8  | 38   | 5.5  | M4x0.7  | 8  | -   | -   | 6  | 3.5 | 28 | 3.5 | 6.5 Depth 3.5  | M5x0.8 | 10   | 41.5  | 22.5 | 29 | -  |
| SQ20-□S  | 5-50                 | 36   | 31.5 | 10 | 46.8 | 5.5  | M5x0.8  | 7  | -   | -   | 8  | 4.5 | 36 | 5.5 | 9 Depth 7      | M5x0.8 | 10.5 | 48    | 24.5 | 36 | -  |
| SQ25-□S  | 5-50                 | 37.5 | 32.5 | 12 | 52   | 5.5  | M6x1.0  | 12 | -   | -   | 10 | 5   | 40 | 5.5 | 9 Depth 7      | M5x0.8 | 11   | 53.5  | 27.5 | 40 | -  |
| SQ32-□S  | 5-50                 | 40   | 33   | 16 | 45   | 7.5  | M8x1.25 | 13 | 60  | 4.5 | 14 | 7   | 34 | 5.5 | 9 Depth 7      | 1/8    | 10.5 | 58.5  | 31.5 | -  | 18 |
| SQ40-□S  | 5-50                 | 46.5 | 39.5 | 16 | 52   | 8    | M8x1.25 | 13 | 69  | 5   | 14 | 7   | 40 | 5.5 | 9 Depth 7      | 1/8    | 11   | 66    | 35   | -  | 18 |
| SQ50-□S  | 10-50                | 48.5 | 40.5 | 20 | 64   | 10.5 | M10x1.5 | 15 | 86  | 7   | 17 | 8   | 50 | 6.6 | 11 Depth 8     | 1/4    | 10.5 | 80    | 41   | -  | 22 |
| SQ63-□S  | 10-50                | 54   | 46   | 20 | 77   | 10.5 | M10x1.5 | 15 | 103 | 7   | 17 | 8   | 60 | 9   | 14 Depth 10.5  | 1/4    | 15   | 93    | 47.5 | -  | 22 |
| SQ80-□S  | 10-50                | 63.5 | 53.5 | 25 | 98   | 12.5 | M16x2.0 | 21 | 132 | 6   | 22 | 10  | 77 | 11  | 17.5 Depth 3.5 | 3/8    | 16   | 112.5 | 57.5 | -  | 26 |
| SQ100-□S | 10-50                | 75   | 63   | 30 | 117  | 13   | M20x2.5 | 27 | 156 | 6.5 | 27 | 12  | 94 | 11  | 17.5 Depth 3.5 | 3/8    | 23   | 132.5 | 67.5 | -  | 26 |

○ Note 2) Long stroke

| NO       | Note 2) Stroke(mm) | A    | B    | F    | P   | Q    |
|----------|--------------------|------|------|------|-----|------|
| SQ32-□S  | 75,100             | 40   | 33   | 7.5  | 1/8 | 10.5 |
| SQ40-□S  | 75,100             | 46.5 | 39.5 | 8    | 1/8 | 11   |
| SQ50-□S  | 75,100             | 48.5 | 40.5 | 10.5 | 1/4 | 10.5 |
| SQ63-□S  | 75,100             | 54   | 46   | 10.5 | 1/4 | 15   |
| SQ80-□S  | 75,100             | 63.5 | 53.5 | 12.5 | 3/8 | 16   |
| SQ100-□S | 75,100             | 75   | 63   | 13   | 3/8 | 23   |

Note 1) Standard stroke is at 5mm interval.  
 Note 2) The stroke is between 55mm and 100mm (55,60,65,70,80,85,90,95) plus 5, 10, 15 or 20mm thick backing plate.  
 Note 3) Unless specified, the dimensions of the model with through hole is the same as those of the model with female thread at both ends.  
 Note 4) On the cylinder with 5mm stroke, only one magnetic can be mounted.

○ Dimensions of Thread

Female thread at both ends with magnet: SQ-A-S type

| Bore | O        | R  |
|------|----------|----|
| 12   | M4x0.7   | 7  |
| 16   | M4x0.7   | 7  |
| 20   | M6x1.0   | 10 |
| 25   | M6x1.0   | 10 |
| 32   | M6x1.0   | 10 |
| 40   | M6x1.0   | 10 |
| 50   | M8x1.25  | 14 |
| 63   | M10x1.5  | 18 |
| 80   | M12x1.75 | 22 |
| 100  | M12x1.75 | 22 |

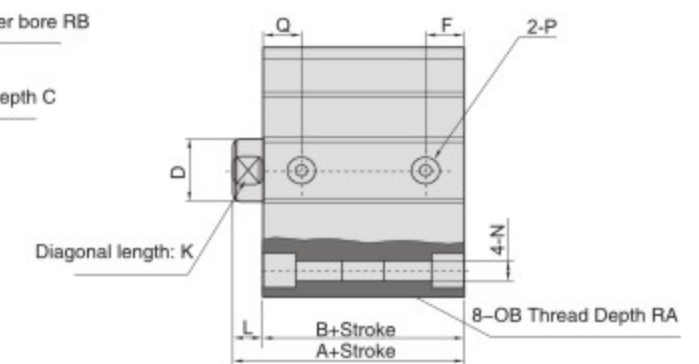
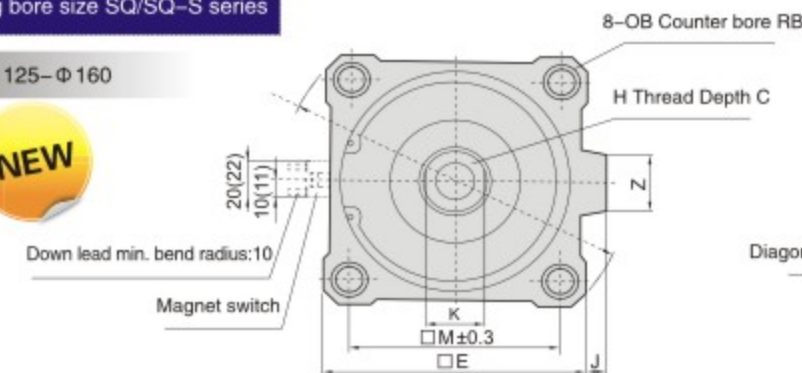
Male thread at piston rod ends with magnet: SQ-A-S type

| Bore | C    | X    | ΦD | H        | L    | K  |
|------|------|------|----|----------|------|----|
| 12   | 9    | 10.5 | 6  | M5x0.8   | 14   | 5  |
| 16   | 10   | 12   | 8  | M6x1.0   | 15.5 | 6  |
| 20   | 12   | 14   | 10 | M8x1.25  | 18.5 | 8  |
| 25   | 15   | 17.5 | 12 | M10x1.25 | 22.5 | 10 |
| 32   | 20.5 | 23.5 | 16 | M14x1.5  | 28.5 | 14 |
| 40   | 20.5 | 23.5 | 16 | M14x1.5  | 28.5 | 14 |
| 50   | 26   | 28.5 | 20 | M18x1.5  | 33.5 | 17 |
| 63   | 26   | 28.5 | 20 | M18x1.5  | 33.5 | 17 |
| 80   | 32.5 | 35.5 | 25 | M22x1.5  | 43.5 | 22 |
| 100  | 32.5 | 35.5 | 30 | M26x1.5  | 43.5 | 27 |

○ Main Dimensions (mm)

Big bore size SQ/SQ-S series

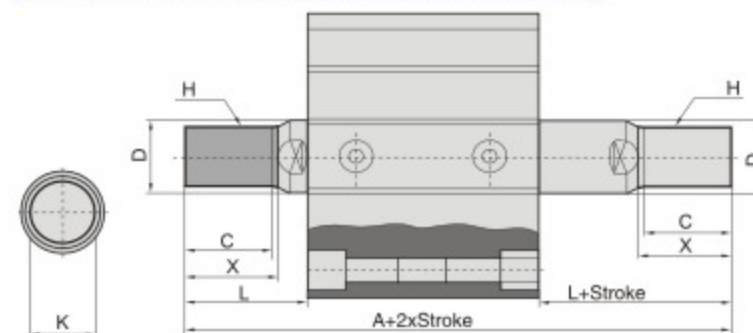
Φ125-Φ160



| Bore | 标准行程                | A   | B  | C  | D  | E   | F    | H       | I   | J  | K  | L  | M   | N    | OA    | OB   | P   | Q    | RA | RB   | Z  |
|------|---------------------|-----|----|----|----|-----|------|---------|-----|----|----|----|-----|------|-------|------|-----|------|----|------|----|
| 125  | 10, 20, 30, 40, 50, | 99  | 83 | 30 | 36 | 142 | 24.5 | M22X2.5 | 190 | 11 | 32 | 16 | 114 | 12.5 | M14X2 | 21.2 | 3/8 | 24.5 | 25 | 18.4 | 32 |
| 140  | 75, 100, 125, 150,  | 99  | 83 | 30 | 36 | 158 | 24.5 | M22X2.5 | 210 | 10 | 32 | 16 | 128 | 12.5 | M14X2 | 21.2 | 3/8 | 24.5 | 25 | 18.4 | 32 |
| 160  | 175, 200, 250, 300  | 108 | 91 | 33 | 40 | 178 | 27.5 | M24X3   | 238 | 10 | 36 | 17 | 144 | 14.5 | M16X2 | 24.2 | 3/8 | 27.5 | 28 | 21.2 | 32 |

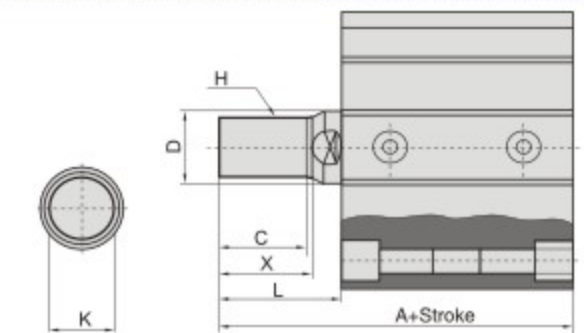
○ Dimensions of Thread

Double-shaft type: SQD (Male thread at both ends)



| Bore | A   | C  | H       | K  | L  | X  |
|------|-----|----|---------|----|----|----|
| 125  | 199 | 42 | M30X1.5 | 32 | 58 | 45 |
| 140  | 199 | 42 | M30X1.5 | 32 | 58 | 45 |
| 160  | 219 | 47 | M36X1.5 | 36 | 64 | 50 |

Male thread at both ends



| Bore | A   | C  | D  | H       | K  | L  | X  |
|------|-----|----|----|---------|----|----|----|
| 125  | 141 | 42 | 36 | M30X1.5 | 32 | 58 | 45 |
| 140  | 141 | 42 | 36 | M30X1.5 | 32 | 58 | 45 |
| 160  | 155 | 47 | 40 | M36X1.5 | 36 | 64 | 50 |