



SUPERIOR  
PROTECTION  
AGAINST DIRT,  
OIL and DUST

## PST SERIES

ISO 15552 //  $\varnothing 32$ -  $\varnothing 125$

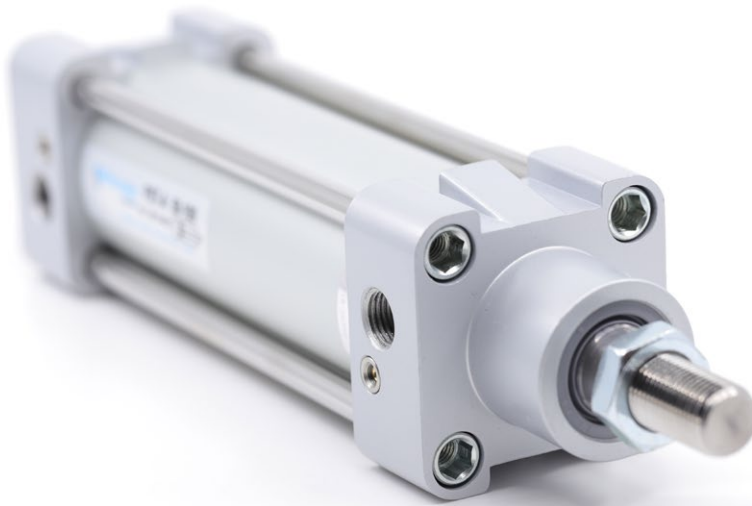
MAGNETIC and CUSHIONING CYLINDER WITH  
ALUMINIUM TUBE, TIE ROD



- Rod seal option for dusty and dirty environments. (K5: POM + PU)



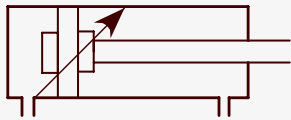
- Rod seal option for heavily soiled, oily and dusty environments. (K6: Bronze + PU)



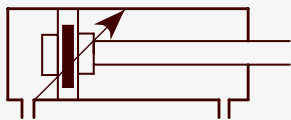
## PST SERIES

ISO 15552 //  $\varnothing 32 - \varnothing 125$

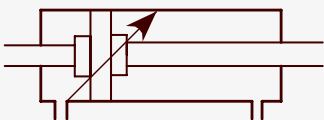
MAGNETIC and CUSHIONING CYLINDER WITH ALUMINIUM TUBE, TIE ROD



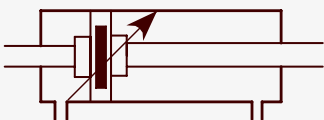
**PST**  
DOUBLE ACTING and  
CUSHIONING CYLINDER



**PST-A**  
DOUBLE ACTING,  
CUSHIONING and  
MAGNETIC CYLINDER



**PST-D**  
DOUBLE ACTING,  
CUSHIONING and  
DOUBLE ROD CYLINDER



**PST-AD**  
DOUBLE ACTING,  
CUSHIONING, MAGNETIC and  
DOUBLE ROD CYLINDER

Cushioning is standart on these products.

### WORK CONDITIONS

**Working Fluid:**

Filtered and lubricated or filtered and not lubricated air

**Operating Temperature Range:**

Polyurethane (PU) : (-20°C) - (+80°C)  
Viton (FKM) : (-30°C) - (+150°C)

**Max. Work Pressure:**

10 Bar

- RESISTANT AGAINST EXTERNAL FACTORS THANKS TO TIE ROD
- EASY MOUNTING DUE TO LARGE PERIPHERAL ELEMENTS
- ROD SEAL OPTION FOR DUSTY AND DIRTY ENVIRONMENTS
- METAL SCRAPER OPTION (K6)

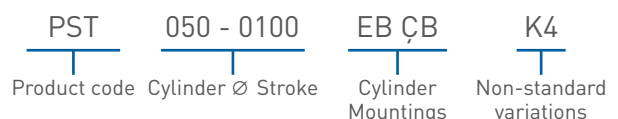
### FORCE

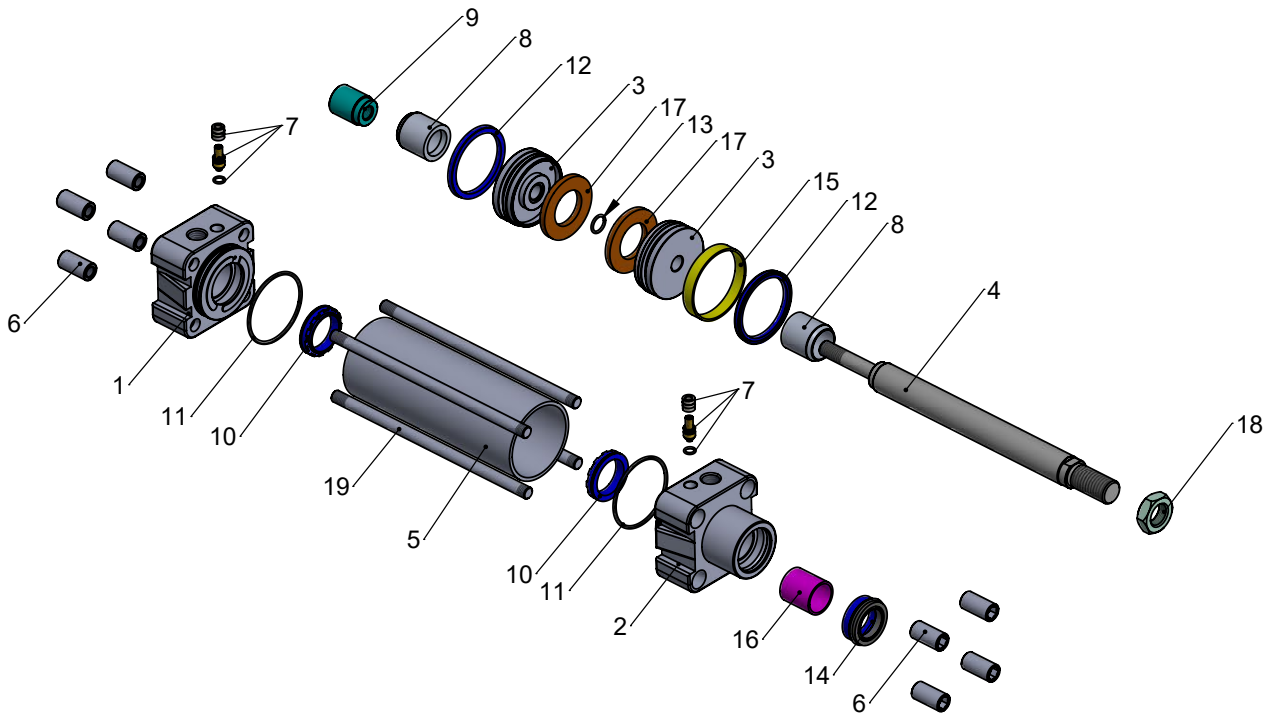
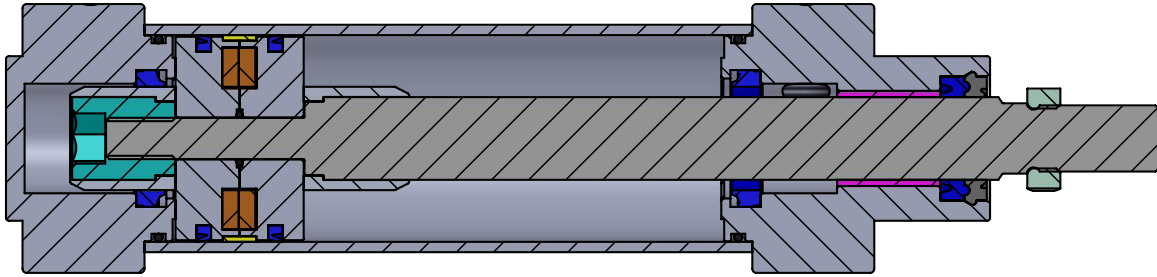
| Cylinder<br>$\varnothing$ mm | Rod<br>$\varnothing$ mm | Thrust and traction forces (6 Bar) |                    |
|------------------------------|-------------------------|------------------------------------|--------------------|
|                              |                         | Thrust force (N)                   | Traction force (N) |
| 32                           | 12                      | 482                                | 415                |
| 40                           | 16                      | 754                                | 633                |
| 50                           | 20                      | 1178                               | 990                |
| 63                           | 20                      | 1870                               | 1682               |
| 80                           | 25                      | 3016                               | 2721               |
| 100                          | 25                      | 4712                               | 4418               |
| 125                          | 32                      | 7363                               | 6881               |

### NON-STANDARD VARIATIONS

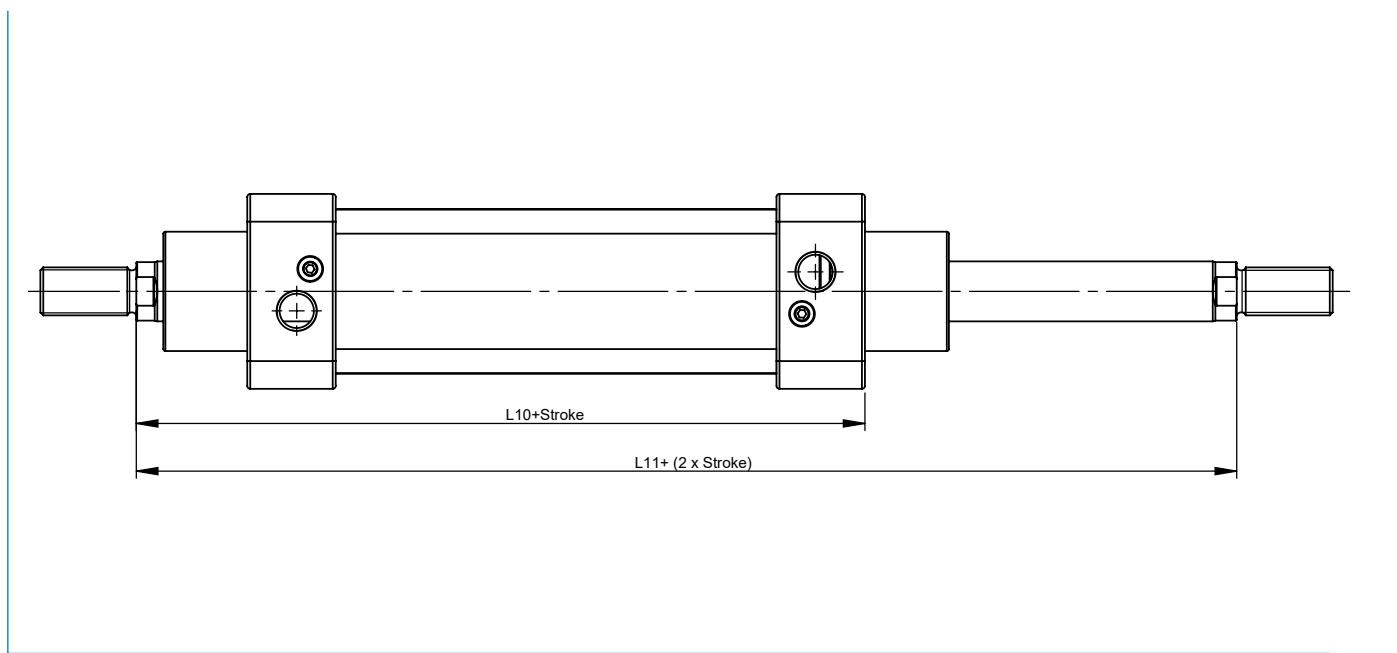
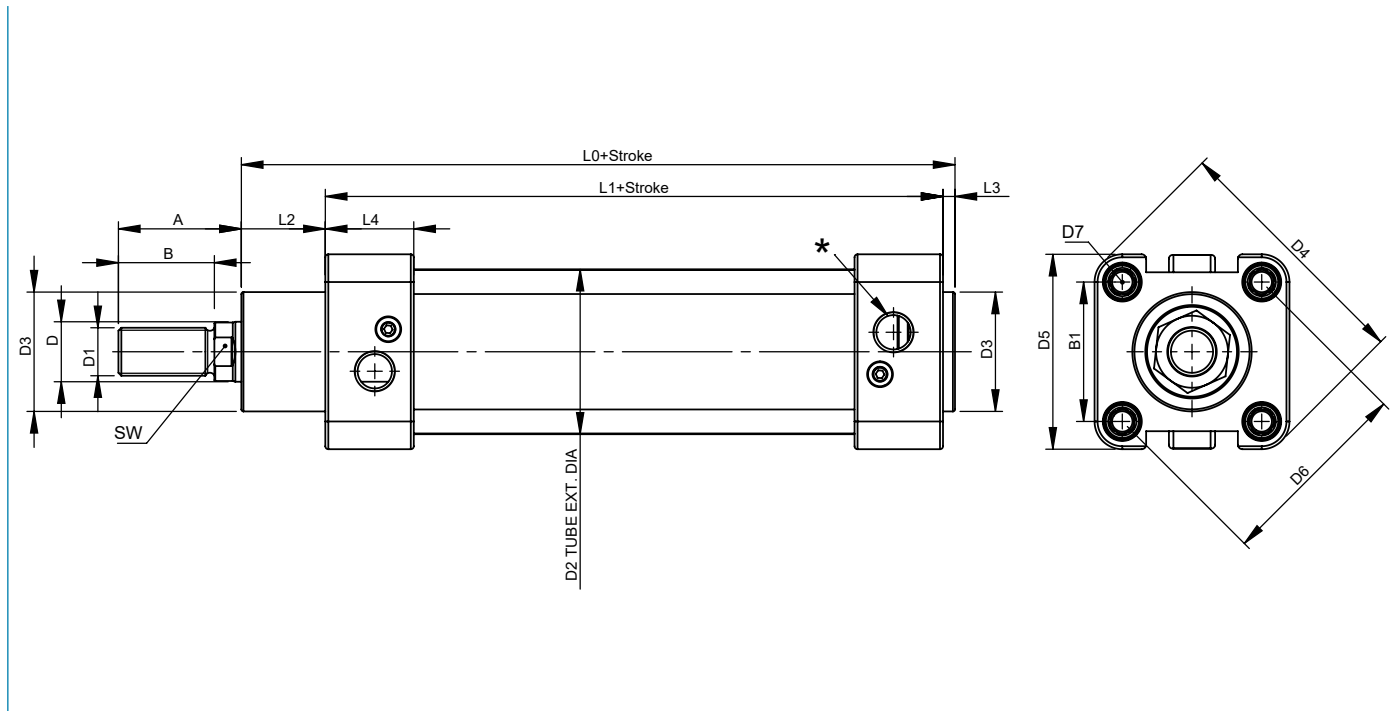
- R1: Stainless Steel Piston Rod (SS 304, SS 316)
- R3: Stainless Steel Screws for Cylinder Covers (SS 304)
- R4: Stainless Steel Nut for Piston Rod (SS 304)
- R5: Piston Rod as CK 45 (Hard Chrome Plated)
- M1: Extended Male Piston Rod Thread
- M2: Female Piston Rod Thread
- M3: Special Piston Rod Thread
- M4: Extended Piston Rod
- E1: Hard Eloxal Plated, Anticorrosive Aluminium Covers
- K1: Seals for 150°C (Viton)
- K2: Piston Rod Seal NBR+PA
- K3: Seals NBR
- K4: Piston Rod Seal Viton
- K5: For dusty and dirty environments rod seal option. (K5: POM + PU)
- K6: For heavily soiled, oily and dusty environments rod seal option. (K6: Bronze + PU)

### EXAMPLE OF ORDER





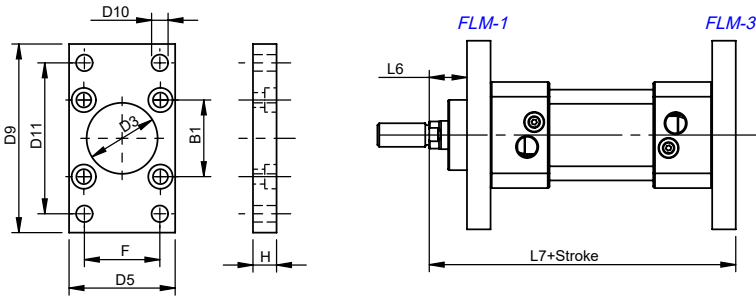
| No | Material name         | Characteristic             | Pc |
|----|-----------------------|----------------------------|----|
| 1  | Rear Head             | Aluminium                  | 1  |
| 2  | Front Head            | Aluminium                  | 1  |
| 3  | Middle Piston         | Aluminium                  | 2  |
| 4  | Piston Rod            | X20Cr13 Hard Chrome Plated | 1  |
| 5  | Tube                  | Aluminium+Eloxal Plated    | 1  |
| 6  | Bolt                  | Galvanized Steel           | 8  |
| 7  | Cushioning Screw      | Brass + AISI 303 +NBR      | 2  |
| 8  | Cushioning Tube       | Polyacetal                 | 2  |
| 9  | Cushioning Fem.Thread | Galvanized Steel           | 1  |
| 10 | Cushioning Seal       | PU                         | 2  |
| 11 | Head O-ring           | NBR                        | 2  |
| 12 | Piston Seal           | PU                         | 2  |
| 13 | Middle Piston O-ring  | NBR                        | 1  |
| 14 | Rod Seal              | HYTREL+PU                  | 1  |
| 15 | Guiding Band          | Polyacetal                 | 1  |
| 16 | Guiding Bush          | CSB-40                     | 1  |
| 17 | Magnet                |                            | 2  |
| 18 | Nut                   | Galvanized Steel           | 1  |
| 19 | Tie Rod               | SS 304                     | 4  |



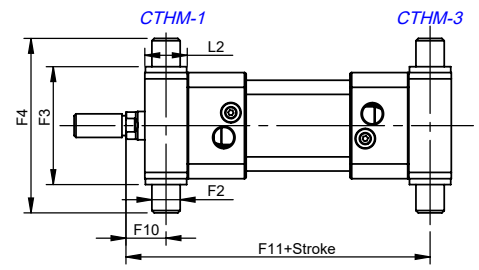
| Cylinder Ø mm | A    | B  | B1   | D Ø | D1       | D2 Ø | D3 Ø | D4    | D5  | D6 Ø  | D7  | L0    | L1  | L2   | L3 | L4   | L10 | L11 | SW | *     |
|---------------|------|----|------|-----|----------|------|------|-------|-----|-------|-----|-------|-----|------|----|------|-----|-----|----|-------|
| 32            | 30   | 22 | 32,5 | 12  | M10x1.25 | 37   | 30   | 59    | 45  | 46    | M6  | 116   | 94  | 18   | 4  | 25   | 120 | 146 | 10 | G1/8" |
| 40            | 34   | 24 | 38   | 16  | M12x1.25 | 45   | 35   | 70,2  | 54  | 53,7  | M6  | 129   | 105 | 20   | 4  | 27   | 135 | 165 | 13 | G1/4" |
| 50            | 41   | 32 | 46,5 | 20  | M16x1.5  | 55   | 40   | 84,2  | 65  | 65,7  | M8  | 138   | 106 | 28   | 4  | 29,5 | 143 | 180 | 17 | G1/4" |
| 63            | 42   | 32 | 56,5 | 20  | M16x1.5  | 68   | 45   | 99,5  | 76  | 80    | M8  | 152   | 121 | 27   | 4  | 34,5 | 158 | 195 | 17 | G3/8" |
| 80            | 52   | 40 | 72   | 25  | M20x1.5  | 85   | 45   | 123,8 | 94  | 101,8 | M10 | 167   | 128 | 34   | 4  | 35   | 174 | 220 | 22 | G3/8" |
| 100           | 52,5 | 40 | 89   | 25  | M20x1.5  | 107  | 55   | 148,8 | 112 | 125,9 | M10 | 182,5 | 138 | 38,5 | 4  | 38   | 189 | 240 | 22 | G1/2" |
| 125           | 73   | 54 | 110  | 32  | M27x2    | 133  | 60   | 179,5 | 134 | 155,5 | M12 | 213   | 160 | 46   | 6  | 44   | 225 | 290 | 27 | G1/2" |



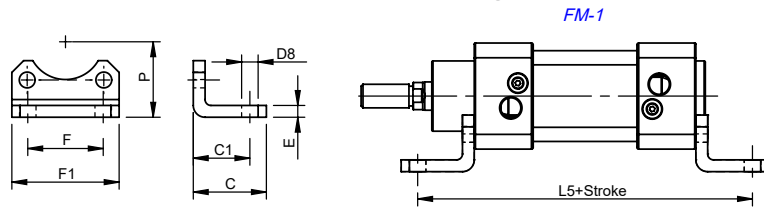
**FLM Flange Mounting**



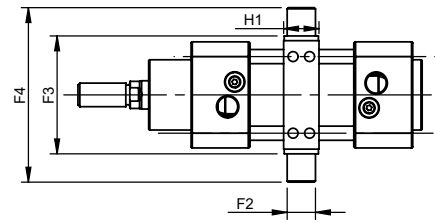
**CTHM Central Trunnion Head Mounting**



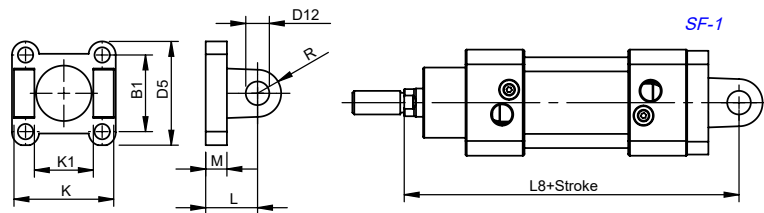
**FM Foot Mounting**



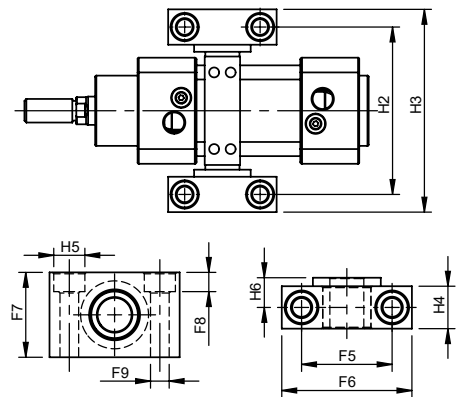
**CTM-3 Central Trunnion Mounting**



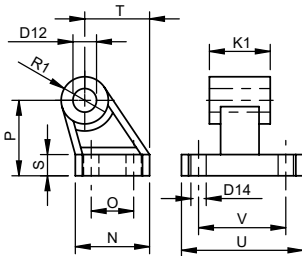
**SF Swivel Flange**



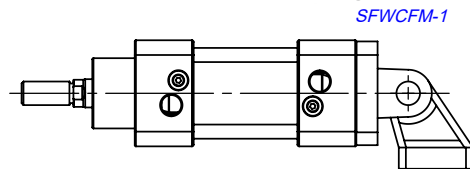
**TSM Trunnion Support Mounting**



**CFM Clevis Foot Mounting**



**SFWCFM Swivel Flange with Clevis Foot Mounting**



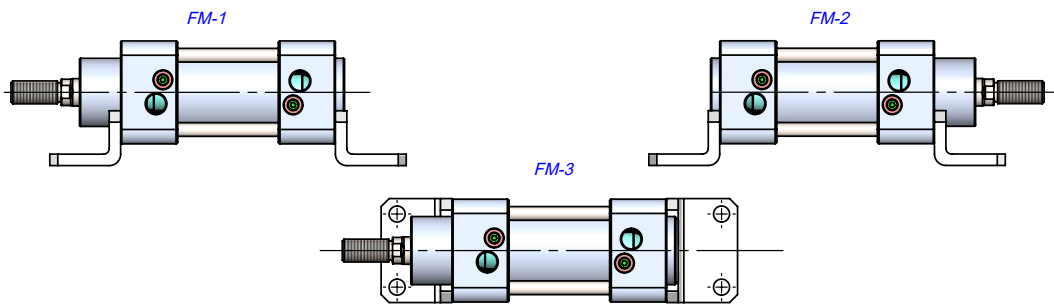
| Cylinder Ø mm | B1   | C  | C1 | D3 Ø H11 | D5  | D8 Ø H14 | D9  | D10 Ø H13 | D11 JS14 | D12 Ø H9 | D14 Ø H13 | E | F JS14 | F1 JS14 | F2 Ø e9 | F3 h14 | F4 ±0,2 | F5 ±0,2 | F6 ±0,2 | F7 ±0,2 | F8 ±0,2 | F9 Ø H13 | F10  | F11   |
|---------------|------|----|----|----------|-----|----------|-----|-----------|----------|----------|-----------|---|--------|---------|---------|--------|---------|---------|---------|---------|---------|----------|------|-------|
| 32            | 32.5 | 30 | 24 | 30       | 45  | 7        | 80  | 7         | 64       | 10       | 6.6       | 5 | 32     | 45.5    | 12      | 50     | 74      | 32      | 46      | 30      | 6.8     | 6.6      | 17   | 129   |
| 40            | 38   | 37 | 28 | 35       | 54  | 10       | 90  | 9         | 72       | 12       | 6.6       | 5 | 36     | 54.5    | 16      | 63     | 95      | 36      | 55      | 36      | 9       | 9        | 20   | 145   |
| 50            | 46.5 | 41 | 32 | 40       | 65  | 10       | 110 | 9         | 90       | 12       | 9         | 6 | 45     | 65      | 16      | 75     | 107     | 36      | 55      | 36      | 9       | 9        | 23   | 157   |
| 63            | 56.5 | 44 | 32 | 45       | 76  | 10       | 120 | 9         | 100      | 16       | 9         | 6 | 50     | 76      | 20      | 90     | 130     | 42      | 65      | 40      | 11      | 11       | 23.5 | 171.5 |
| 80            | 72   | 56 | 41 | 45       | 94  | 12       | 150 | 12        | 126      | 16       | 11        | 6 | 63     | 94      | 20      | 110    | 150     | 42      | 65      | 40      | 11      | 11       | 29   | 191   |
| 100           | 89   | 58 | 41 | 55       | 112 | 14       | 175 | 14        | 150      | 20       | 11        | 6 | 75     | 112     | 25      | 132    | 182     | 50      | 75      | 50      | 13      | 14       | 31.8 | 208.3 |
| 125           | 110  | 67 | 45 | 60       | 134 | 16       | 210 | 16        | 180      | 25       | 14        | 8 | 90     | 131     | 25      | 160    | 210     | 50      | 75      | 50      | 13      | 14       | 42   | 248   |

| Cylinder Ø mm | H  | H1 -0,2 | H2  | H3  | H4   | H5 H13 | H6 Ø | K h14 | K1 H14 | L  | L2   | L5  | L6 | L7  | L8  | M  | N  | O JS14 | P JS16 | R  | R1   | S  | T    | U   | V JS14 |
|---------------|----|---------|-----|-----|------|--------|------|-------|--------|----|------|-----|----|-----|-----|----|----|--------|--------|----|------|----|------|-----|--------|
| 32            | 10 | 28      | 71  | 86  | 15   | 11     | 10.5 | 45    | 26     | 22 | 18   | 142 | 16 | 130 | 142 | 9  | 31 | 18     | 32     | 10 | 10   | 8  | 27.5 | 51  | 38     |
| 40            | 10 | 28      | 87  | 105 | 18   | 15     | 12   | 52    | 28     | 25 | 20   | 161 | 20 | 145 | 160 | 9  | 35 | 22     | 36     | 12 | 11   | 10 | 30.5 | 54  | 41     |
| 50            | 12 | 34      | 99  | 117 | 18   | 15     | 12   | 60    | 32     | 27 | 28   | 170 | 25 | 155 | 170 | 11 | 45 | 30     | 45     | 13 | 13   | 12 | 40.5 | 65  | 50     |
| 63            | 12 | 34      | 116 | 136 | 20   | 18     | 13   | 70    | 40     | 32 | 27   | 185 | 25 | 170 | 190 | 11 | 50 | 35     | 50     | 16 | 15   | 12 | 44.5 | 67  | 52     |
| 80            | 16 | 34      | 136 | 156 | 20   | 18     | 13   | 90    | 50     | 36 | 34   | 210 | 30 | 190 | 210 | 14 | 60 | 40     | 63     | 16 | 15   | 14 | 57   | 86  | 66     |
| 100           | 16 | 44      | 164 | 189 | 24.5 | 20     | 16   | 110   | 60     | 41 | 38.5 | 220 | 35 | 205 | 230 | 14 | 70 | 50     | 71     | 20 | 19   | 15 | 65   | 96  | 76     |
| 125           | 20 | 44      | 192 | 217 | 24.5 | 20     | 16   | 130   | 70     | 50 | 46   | 250 | 45 | 245 | 275 | 15 | 90 | 60     | 90     | 25 | 22.5 | 20 | 85   | 124 | 94     |

**FLM Flange Mounting**



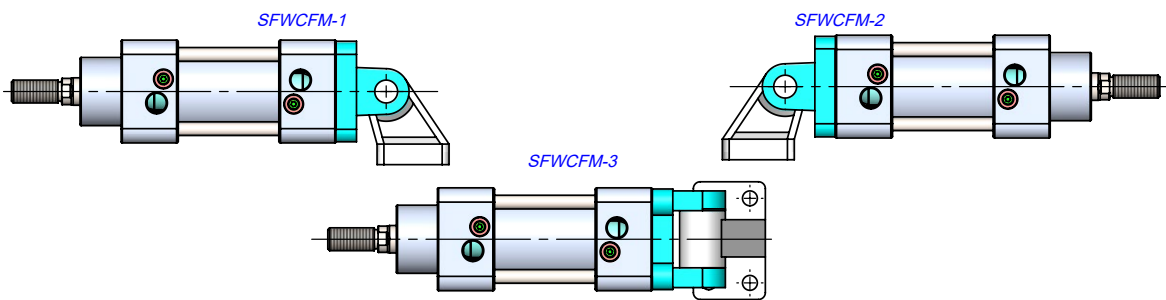
**FM Foot Mounting**



**SF Swivel Flange**



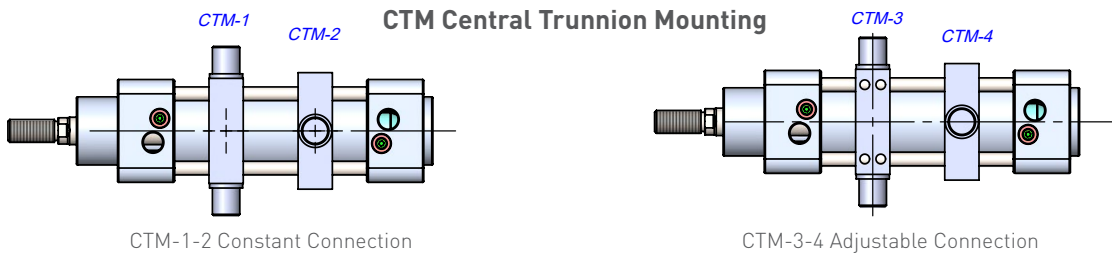
**SFWCFM Swivel Flange with Clevis Foot Mounting**

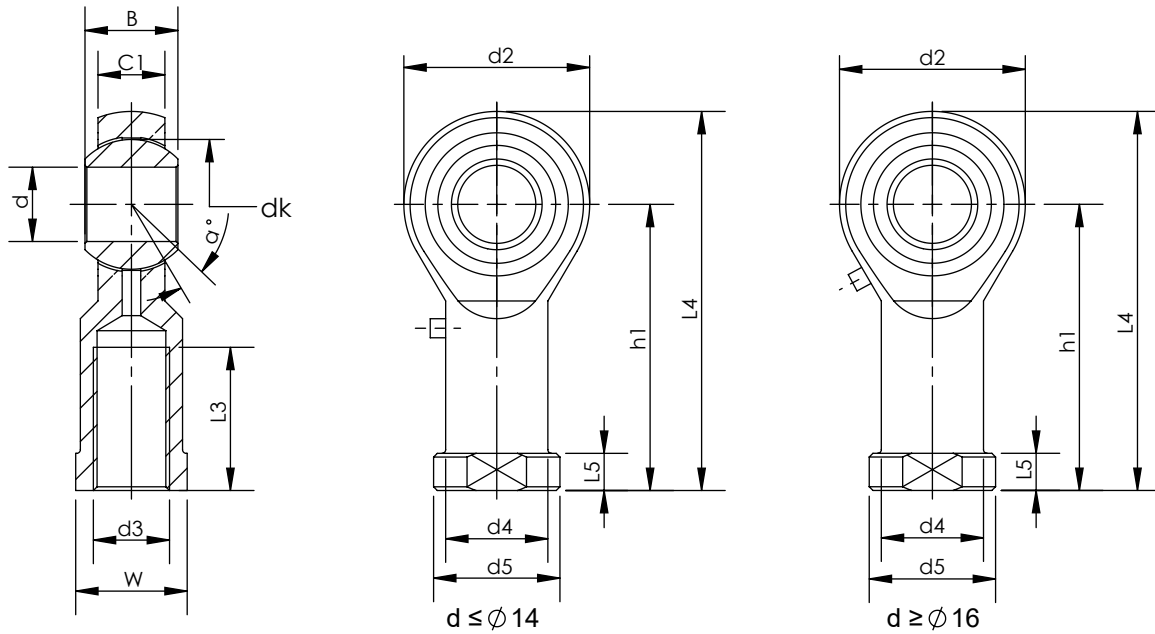


**CTHM Central Trunnion Head Mounting**

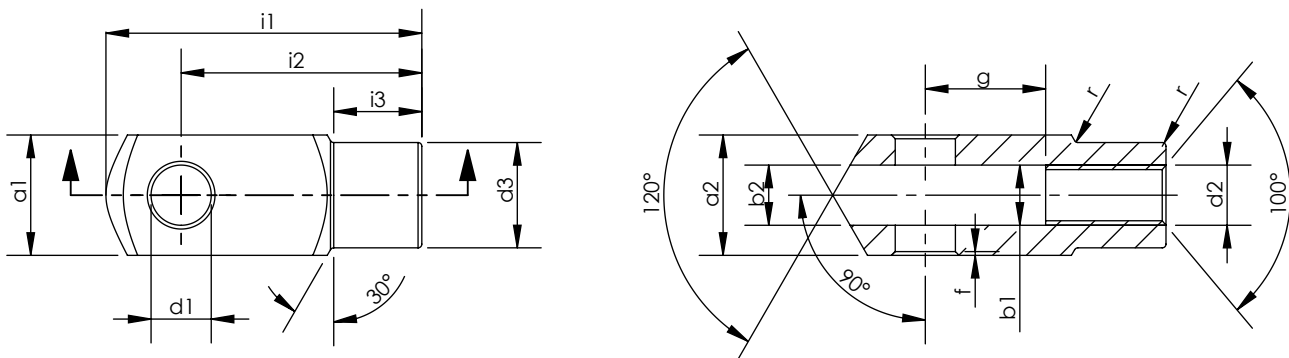


**CTM Central Trunnion Mounting**





| Part No.  | Dimensions (mm) |          |    |      |    |           |    |     |     |     |      |    |        |    |
|-----------|-----------------|----------|----|------|----|-----------|----|-----|-----|-----|------|----|--------|----|
|           | d               | d3<br>6H | B  | C1   | W  | L3<br>min | d2 | L4  | h1  | L5  | d4   | d5 | dk     | a° |
| KMB 10 -1 | 10              | M10x1.25 | 14 | 10.5 | 17 | 20        | 26 | 56  | 43  | 6.5 | 15   | 19 | 19.05  | 13 |
| KMB 12 -1 | 12              | M12x1.25 | 16 | 12   | 19 | 22        | 30 | 65  | 50  | 6.5 | 17.5 | 22 | 22.225 | 13 |
| KMB 16 -1 | 16              | M16x1.5  | 21 | 15   | 22 | 28        | 40 | 84  | 64  | 8   | 22   | 27 | 28.575 | 15 |
| KMB 20    | 20              | M20x1.5  | 25 | 18   | 30 | 33        | 50 | 102 | 77  | 10  | 27.5 | 34 | 34.925 | 14 |
| KMB 28    | 28              | M27x2    | 35 | 24   | 41 | 48        | 66 | 136 | 103 | 14  | 37   | 46 | 47.6   | 15 |
| KMB 30-1  | 30              | M27x2    | 37 | 25   | 41 | 51        | 70 | 145 | 110 | 15  | 40   | 50 | 50.8   | 17 |
| KMB 30    | 30              | M30x2    | 37 | 25   | 41 | 51        | 70 | 145 | 110 | 15  | 40   | 50 | 50.8   | 17 |



| Cylinder Ø<br>mm | d1<br>H9 | g<br>±0,5 | a1<br>h 11 | a2<br>+0,3<br>-0,16 | b1<br>B 13 | b2 | d2<br>6H | d3<br>±0,3 | f<br>±0,2 | i1<br>±0,5 | i2  | i3<br>±0,2 | r   |
|------------------|----------|-----------|------------|---------------------|------------|----|----------|------------|-----------|------------|-----|------------|-----|
| 32               | 10       | 20        | 20         | 20                  | 10         | 10 | M10x1.25 | 18         | 0.5       | 52         | 40  | 15         | 0.5 |
| 40               | 12       | 24        | 24         | 24                  | 12         | 12 | M12x1.25 | 20         | 0.5       | 62         | 48  | 18         | 0.5 |
| 50               | 16       | 32        | 32         | 32                  | 16         | 16 | M16x1.5  | 26         | 1         | 83         | 64  | 24         | 1   |
| 63               | 16       | 32        | 32         | 32                  | 16         | 16 | M16x1.5  | 26         | 1         | 83         | 64  | 24         | 1   |
| 80               | 20       | 40        | 40         | 40                  | 20         | 20 | M20x1.5  | 34         | 1.5       | 105        | 80  | 30         | 1.5 |
| 100              | 20       | 40        | 40         | 40                  | 20         | 20 | M20x1.5  | 34         | 1.5       | 105        | 80  | 30         | 1.5 |
| 125              | 25       | 50        | 50         | 50                  | 25         | 25 | M27x2    | 42         | 1.5       | 132        | 100 | 36         | 1.5 |