

TSOP - TSOG

Anti-Rotation Level Compensators



The TSOP and TSOG series spring systems are anti-rotation spring systems. They are used for horizontal handling of parts at different levels. The anti-rotation function ensures that objects are always gripped in the same position

The TSOP range is designed for applications requiring very precise handling.

- The hexagonal rod prevents the suction cup from rotating.
- Protected spring.

Characteristics - TSOP

| References | A | F1 | F2 | C | D | L | 1 | 2 | Fres (lbf/in) | Frep (lbf) | (g) |
|------------|------|------|---------|----|----|-------|---|----|---------------|------------|-----|
| TSOP 107 | M5-F | M5-F | G1/8"-M | 7 | 18 | 42 | 7 | 14 | 3.88 | 0.29 | 20 |
| TSOP 110 | M5-F | M5-F | G1/8"-M | 10 | 22 | 49 | 7 | 14 | 2.57 | 0.40 | 22 |
| TSOP 120 | M5-F | M5-F | G1/8"-M | 20 | 39 | 73.5 | 7 | 14 | 1.37 | 0.38 | 33 |
| TSOP 140 | M5-F | M5-F | G1/8"-M | 40 | 64 | 118.5 | 7 | 14 | 0.74 | 0.36 | 50 |

Note: All dimensions are in mm

C = Stroke

Fres = Spring force

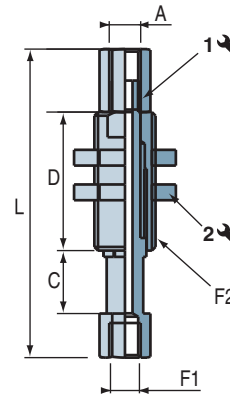
Frep = Force at rest

Materials

Spring Stainless steel

Tubing Anodized aluminum

Slider Nickel-plated steel



Characteristics - TSOG

| References | A | F1 | F2 | C | B | D | E | G | L | 1 | 2 | 3 | Fres (lbf/in) | Frep (lbf) | (g) |
|------------|---------|---------|-----------|----|----|------|----|----|-------|----|----|----|---------------|------------|------|
| TSOG2 20F | G1/8"-F | G1/8"-F | M16x1-M | 20 | 22 | 52 | 7 | 7 | 107 | 12 | 19 | 12 | 1.44 | 0.82 | 46.5 |
| TSOG2 35F | G1/8"-F | G1/8"-F | M16x1-M | 35 | 22 | 72 | 7 | 7 | 142 | 12 | 19 | 12 | 0.78 | 0.97 | 58 |
| TSOG3 25F | G1/4"-F | G1/4"-F | M20x1.5-M | 25 | 28 | 58 | 10 | 10 | 126 | 16 | 24 | 16 | 1.47 | 0.99 | 86 |
| TSOG3 50F | G1/4"-F | G1/4"-F | M20x1.5-M | 50 | 28 | 90.5 | 10 | 10 | 183.5 | 16 | 24 | 16 | 0.74 | 1.00 | 115 |
| TSOG4 40F | G3/8"-F | G3/8"-F | M25x1.5-M | 40 | 28 | 90 | 11 | 11 | 173 | 22 | 32 | 22 | 1.31 | 1.37 | 205 |
| TSOG4 80F | G3/8"-F | G3/8"-F | M25x1.5-M | 80 | 28 | 140 | 11 | 11 | 263 | 22 | 32 | 22 | 0.68 | 1.35 | 275 |

Note: All dimensions are in mm

C = Stroke

Fres = Spring force

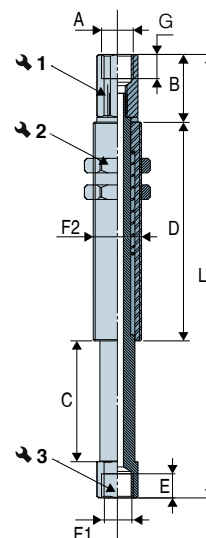
Frep = Force at rest

Materials

Spring Stainless steel

Tubing Anodized aluminum

Slider Anodized aluminum



Please specify the part e.g.: TSOG350F
See part n° table above.