

# Indexing Plungers

## Fine Thread / Coarse Thread

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RoHS 10

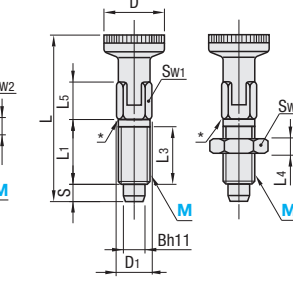
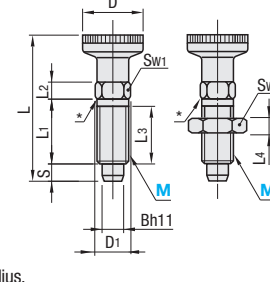
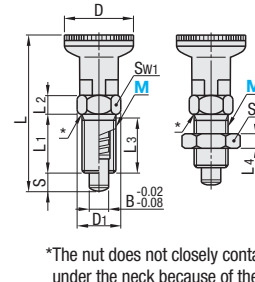
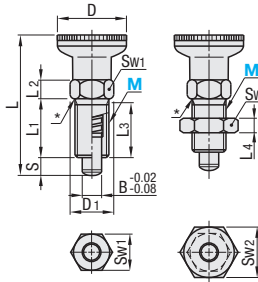
| Screw         | Returning | Rest Position | Knob                |                    | Main Body   |          | Pin            |                   |        | Spring   |                    | Lock Nut          |   |
|---------------|-----------|---------------|---------------------|--------------------|-------------|----------|----------------|-------------------|--------|----------|--------------------|-------------------|---|
|               |           |               | M                   | Material           | M           | Material | S              | Surface Treatment | M      | Material | S                  | Surface Treatment | M |
| Fine Thread   | PXA       | PXYA          | Nylon 6 (Mat Black) | SUM22L             | Black Oxide | S45C     | 50~60HRC       | Black Oxide       | SWP-B  | -        | -                  | -                 | - |
|               | PXK       | PXYK          |                     |                    |             |          |                |                   |        | S45C     | Black Oxide        |                   |   |
|               | SXPA      | -             |                     |                    |             |          |                |                   |        | -        | -                  |                   |   |
| Coarse Thread | SXPK      | SXYK          | SUS303              | -                  | -           | -        | Nickel Plating | SUS301            | SUS303 | -        | -                  | -                 | - |
|               | PMXA      | PMXYA         | SUM22L              | Trivalent Chromate | SUS303      | -        | -              | -                 | -      | S45C     | Trivalent Chromate |                   |   |
|               | PMXK      | PMXYK         | -                   | -                  | -           | -        | -              | -                 | -      | -        | -                  |                   |   |

[Fine Thread] Returning Without Lock Nut With Lock Nut

[Fine Thread] Rest Position Without Lock Nut With Lock Nut

[Coarse Thread] Returning Without Lock Nut With Lock Nut

[Coarse Thread] Rest Position Without Lock Nut With Lock Nut



\*The nut does not closely contact under the neck because of the radius.

### Tolerance

| B | h11    |
|---|--------|
| 4 | 0      |
| 5 | -0.075 |
| 6 | 0      |
| 8 | -0.090 |

• Features of the Returning Type and Rest Position Type [P.1779](#)

### Fine Thread

| M  | Pitch (Fine Thread) | D  | D <sub>1</sub> | B | S min. | L         |               | L <sub>1</sub> | L <sub>2</sub> | L <sub>3</sub> | L <sub>4</sub> | Sw <sub>1</sub> | Sw <sub>2</sub> | Load (N) |           |          |           | Mass (g)  |           |     |     |
|----|---------------------|----|----------------|---|--------|-----------|---------------|----------------|----------------|----------------|----------------|-----------------|-----------------|----------|-----------|----------|-----------|-----------|-----------|-----|-----|
|    |                     |    |                |   |        | Returning | Rest Position |                |                |                |                |                 |                 | PXA min. | PXYA min. | PXK min. | PXYK min. | SXPA min. | SXYK min. | PXA | PXK |
| 10 | 1.0                 | 21 | 13.8           | 5 | 5      | 45        | 51            | 17             | 5              | 15             | 5              | 12              | 17              | 7        | 17        | 6        | 15        | 20        | 27        | 23  | 30  |
| 12 | 1.5                 | 25 | 16.2           | 6 | 6      | 54.5      | 61            | 20             | 6              | 17             | 6              | 14              | 18              | 9        | 24        | 8        | 21        | 32        | 42        | 38  | 48  |
| 16 | 1.5                 | 31 | 21.9           | 8 | 8(7)   | 69        | 75.5          | 26             | 8              | 23             | 8              | 19              | 24              | 11       | 30        | 9        | 26        | 70        | 90        | 79  | 99  |

⚠ Min. S dimension of Rest Position Type M16 is shown in the ( ).

kgf=Nx0.101972

| Part Number                |    | Unit Price |      |     |      |               |      |      |  |
|----------------------------|----|------------|------|-----|------|---------------|------|------|--|
| Type                       | M  | Returning  |      |     |      | Rest Position |      |      |  |
|                            |    | PXA        | SXPA | PXK | SXPK | PXYA          | PXYK | SXYK |  |
| (Stainless Steel)          | 10 |            |      |     |      |               |      |      |  |
| PXA<br>PXK<br>PXYA<br>PXYK | 12 |            |      |     |      |               |      |      |  |
| SXPA<br>SXPK<br>SXYK       | 16 |            |      |     |      |               |      |      |  |

### Coarse Thread

| Part Number | Pitch (Coarse Thread) | D    | D <sub>1</sub> | B    | S min. | L         |               | L <sub>1</sub> | L <sub>2</sub> | L <sub>3</sub> | L <sub>4</sub> | L <sub>5</sub> | Sw <sub>1</sub> | Sw <sub>2</sub> | Load (N) |      | Mass (g) |      |       |       | Unit Price |       |      |
|-------------|-----------------------|------|----------------|------|--------|-----------|---------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|----------|------|----------|------|-------|-------|------------|-------|------|
|             |                       |      |                |      |        | Returning | Rest Position |                |                |                |                |                |                 |                 | min.     | max. | PMXA     | PMXK | PMXYA | PMXYK | PMXA       | PMXYA | PMXK |
| PMXA        | 6M                    | 1.0  | 12             | 6.9  | 4      | 4         | 30.5          | 33             | 12             | 4.5            | 10             | 3.2            | 7               | 6               | 10       | 3    | 12       | 5    | 9     | 4     | 8          |       |      |
| PMXK        | 8M                    | 1.25 | 16             | 9.2  | 5      | 5         | 40            | 43.5           | 16             | 6              | 14             | 4              | 9.5             | 8               | 13       | 5    | 24       | 10   | 15    | 11    | 16         |       |      |
| PMXYA       | 10M                   | 1.5  | 18             | 11.5 | 6      | 6         | 49            | 52             | 20             | 7.5            | 18             | 5              | 10.5            | 10              | 16       | 5    | 21       | 17   | 24    | 18    | 15         |       |      |
| PMXYK       | 12M                   | 1.75 | 21             | 13.8 | 8      | 8         | 59            | 63.5           | 24             | 9              | 22             | 6              | 13.5            | 12              | 18       | 6    | 22       | 31   | 41    | 36    | 46         |       |      |

kgf=Nx0.101972



Ordering Example

### Part Number

SXPA16  
PMXK10M

Since the Coarse Thread Type (PMXA, PMXK, PMXYA, PMXYK) are thin threaded, do not exceed the tightening torques shown in the table to the right.

| M  | Allowable Tightening Torque (N · m) |
|----|-------------------------------------|
| 6  | 2                                   |
| 8  | 7                                   |
| 10 | 15                                  |
| 12 | 20                                  |