

MS Thread Mounted Nut



- MS Thread Mounted Nut

Call: 01386 421 005

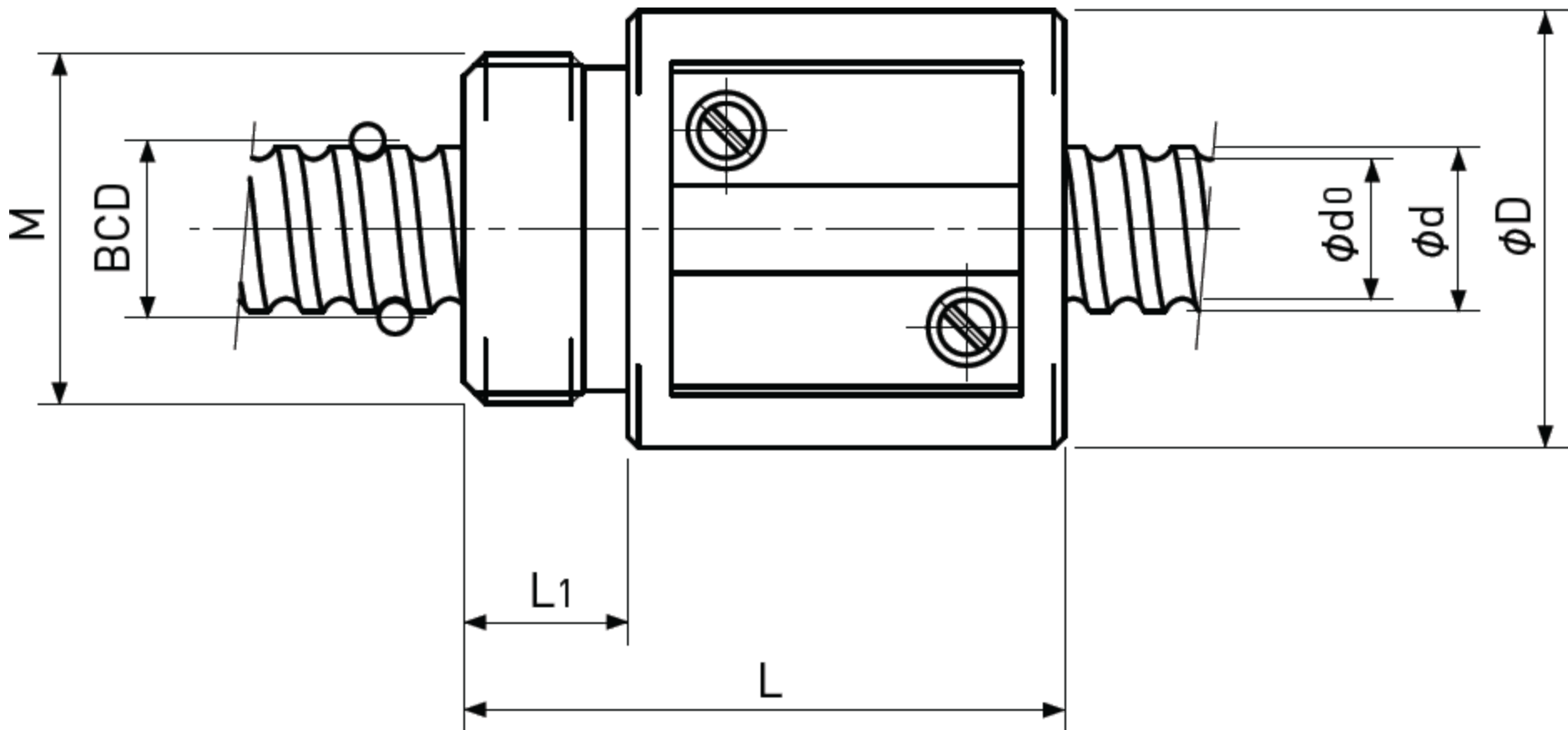
Email: sales@abssac.co.uk

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Precision Ball Screws

Single Nut with M-thread

Backlash type/Preload type



Type-1: Return-plate type

Unit : mm

| Ball Nut Model number | Shaft nominal dia. d | Lead | Ball size | BCD | Lead angle | Root dia. d ₀ | Number of Circuit | Basic Load Rating N | | Nut Rigidity N/μm |
|-----------------------|----------------------|------|-----------|------|------------|--------------------------|-------------------|---------------------|-------------|-------------------|
| | | | | | | | | Dynamic Ca | Static Coa | |
| MS 0401 B | 4 | 1 | 0.8 | 4.15 | 4°23' | 3.3 | 3.7×1 | 560 / 350 | 790 / 400 | 54 / 45 |
| MS 0602 A | 6 | 2 | 1 | 6.2 | 5°52' | 5.1 | 2.7×1 | 750 / 470 | 1200 / 590 | 58 / 49 |
| MS 0801.5 B | 8 | 1.5 | 1 | 8.2 | 3°20' | 7.1 | 3.7×1 | 1100 / 700 | 2200 / 1100 | 99 / 83 |
| MS 0802 B | 8 | 2 | 1.5875 | 8.3 | 4°23' | 6.6 | 3.7×1 | 2400 / 1550 | 4100 / 2100 | 111 / 94 |
| MS 0802.5 Ti1j | 8 | 2.5 | 1.5875 | 8 | 5°41' | 6.3 | 3.5×1 | 2300 / - | 3900 / - | 102 / - |
| MS 0802.5 Ti2j | 8 | 2.5 | 1.5875 | 8 | 5°41' | 6.3 | 3.5×1 | 2300 / - | 3900 / - | 102 / - |
| MS 0803 A | 8 | 3 | 2 | 8.3 | 6°34' | 6.2 | 2.7×1 | 2600 / 1650 | 4200 / 2100 | 85 / 70 |
| MS 0804 T | 8 | 4 | 1.5875 | 8 | 9°03' | 5.9 | 2.5×1 | 1750 / - | 2800 / - | 75 / - |
| MS 0805 A | 8 | 5 | 1.5875 | 8.3 | 10°51' | 6.6 | 2.7×1 | 1850 / 1150 | 3000 / 1500 | 82 / 67 |

| Ball Nut Model number | Nut dimension | | | | |
|-----------------------|---------------|------|------|----------------|---------|
| | Nut type | D | L | L ₁ | M |
| MS 0401 B | 1 | 11 | 17 | 4 | M9x0.75 |
| MS 0602 A | 1 | 16.5 | 22 | 8 | M14×1.0 |
| MS 0801.5 B | 1 | 16.5 | 24 | 8 | M14×1.0 |
| MS 0802 B | 1 | 20 | 27.5 | 7.5 | M16×1.0 |
| MS 0802.5 Ti1j | 2 | 16.5 | 22 | 8 | M14×1.0 |
| MS 0802.5 Ti2j | 2 | 17.5 | 25.5 | 7.5 | M15×1.0 |
| MS 0803 A | 1 | 20 | 28.5 | 7.5 | M16×1.0 |
| MS 0804 T | 2 | 16.5 | 24 | 8 | M14×1.0 |
| MS 0805 A | 1 | 18 | 32.5 | 7.5 | M15×1.0 |

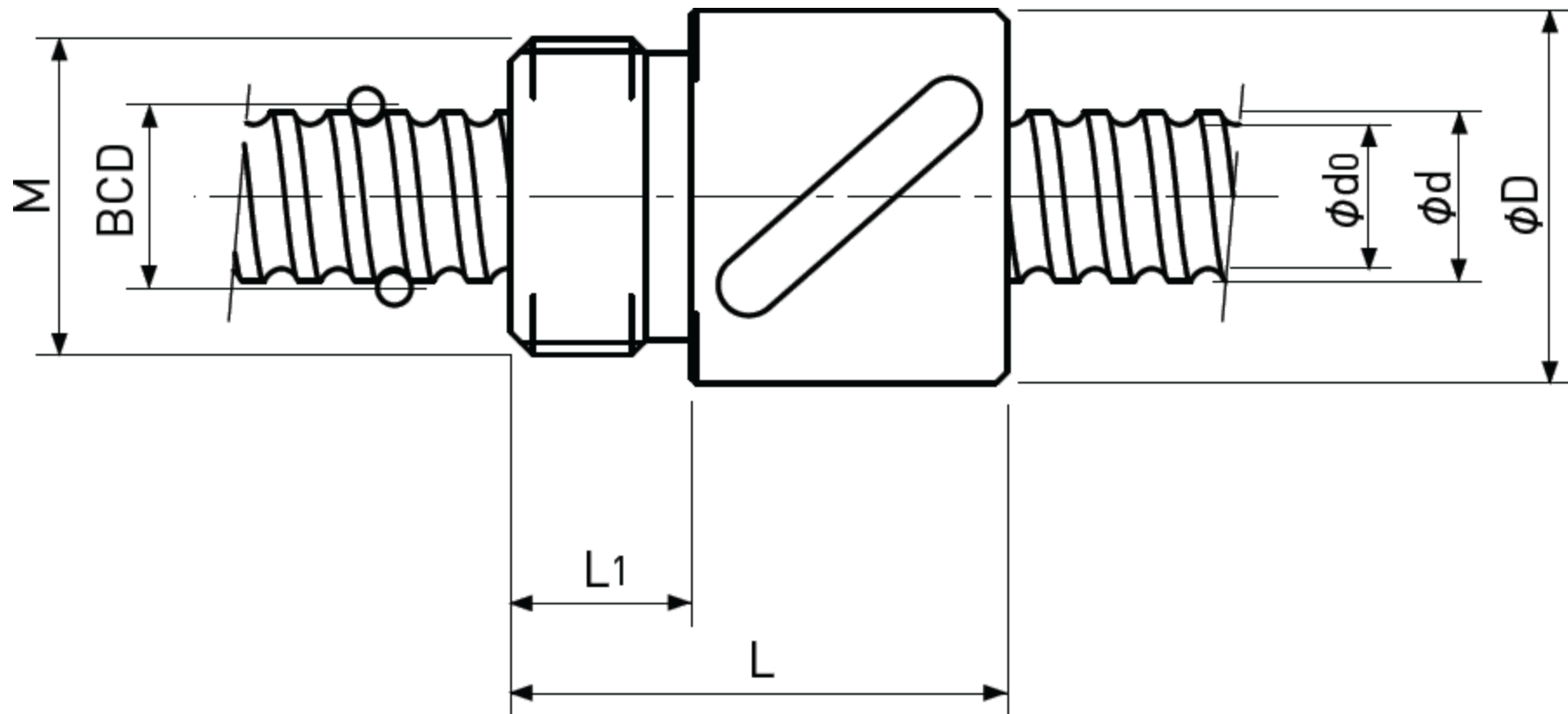
| Basic Load Rating N | | Nut Rigidity N/μm |
|---------------------|-------------|-------------------|
| Dynamic Ca | Static Coa | |
| 1000 / 640 | 3300 / 1650 | 164 / 138 |
| | | Preload type |
| | | Backlash type |

- Note 1) The diameter of one of the Screw Shaft ends must be less than the Screw Shaft Root diameter, otherwise Ball Nut cannot be installed.
- Note 2) Ball Nut dimension is without seal at the both ends. All type of Ball Nuts cannot equip with seals.
- Note 3) The Rigidity values shown in the table are theoretical values of Ball Nut Rigidity calculated from the amount of Elastic Displacement under the following conditions.
Backlash type ; Apply the Axial load equivalent to 30% of the Basic Dynamic Load Rating Ca.
Preload type ; Apply the Preload equivalent to 5% of the Basic Dynamic Load Rating Ca.
- Note 4) All models are Right-hand Screw. If Left-hand Screw is required, please ask ABSSAC representative.
- Note 5) Across Flats or drill hole is available on the Ball Nut for the convenience of assembly. Please ask ABSSAC representative.
- Note 6) Basic Load Rating or Rigidity for Backlash type and Preload type are described in the same cell.

Precision Ball Screws

Single Nut with M-thread

Backlash type/Preload type



Type-2: Return-tube type

Unit : mm

| Ball Nut Model number | Shaft nominal dia. d | Lead | Ball size | BCD | Lead angle | Root dia. d ₀ | Number of Circuit | Basic Load Rating N | | Nut Rigidity N/μm |
|-----------------------|----------------------|------|-----------|------|------------|--------------------------|-------------------|---------------------|--------------|-------------------|
| | | | | | | | | Dynamic Ca | Static Coa | |
| MS 1002 B | 10 | 2 | 1.5875 | 10.3 | 3°32' | 8.6 | 3.7×1 | 2700 / 1750 | 5300 / 2700 | 134 / 112 |
| MS 1202 B | 12 | 2 | 1.5875 | 12.3 | 2°58' | 10.6 | 3.7×1 | 3000 / 1900 | 6400 / 3200 | 156 / 132 |
| MS 1204 T | 12 | 4 | 2.381 | 12.3 | 5°55' | 9.8 | 2.5×1 | 3900 / - | 7000 / - | 113 / - |
| MS 1402 B | 14 | 2 | 1.5875 | 14.3 | 2°33' | 12.6 | 3.7×1 | 3200 / 2000 | 7500 / 3800 | 176 / 148 |
| MS 1404 B | 14 | 4 | 2.381 | 14.3 | 5°05' | 11.8 | 3.7×1 | 5700 / 3600 | 11600 / 5800 | 187 / 157 |

| Ball Nut Model number | Nut dimension | | | | |
|-----------------------|---------------|------|------|----------------|---------|
| | Nut type | D | L | L ₁ | M |
| MS 1002 B | 1 | 23 | 27.5 | 7.5 | M17×1.0 |
| MS 1202 B | 1 | 25 | 30 | 10 | M20×1.0 |
| MS 1204 T | 2 | 25.5 | 34 | 10 | M20×1.0 |
| MS 1402 B | 1 | 26 | 30 | 10 | M22×1.5 |
| MS 1404 B | 1 | 30 | 38 | 10 | M25×1.0 |

| Basic Load Rating N | | Nut Rigidity N/μm |
|---------------------|-------------|-------------------|
| Dynamic Ca | Static Coa | |
| 1000 / 640 | 3300 / 1650 | 164 / 138 |
| | | Preload type |
| | | Backlash type |

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