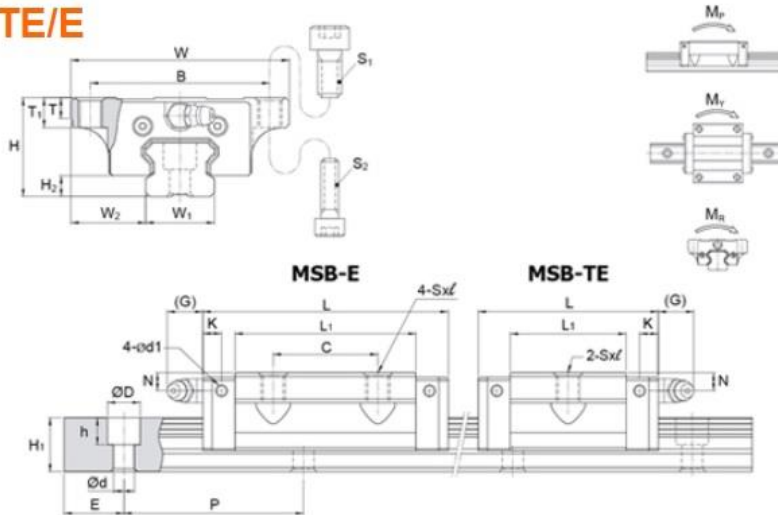


MSB TE/E



| Model No. | Bolt Size | |
|---------------|----------------|----------------|
| | S ₁ | S ₂ |
| MSB 15 | M5 | M4 |
| MSB 20 | M6 | M5 |
| MSB 25 | M8 | M6 |
| MSB 30 | M10 | M8 |
| MSB 35 | M10 | M8 |

Note: Rail mounting holes for M3 (6x4.5x3.5) and M4 (7.5x5.3x4.5) are available for MSB15 rail. The codes of rail type are MSB15R for M3 mounting holes, and MSB15U for M4 mounting holes.

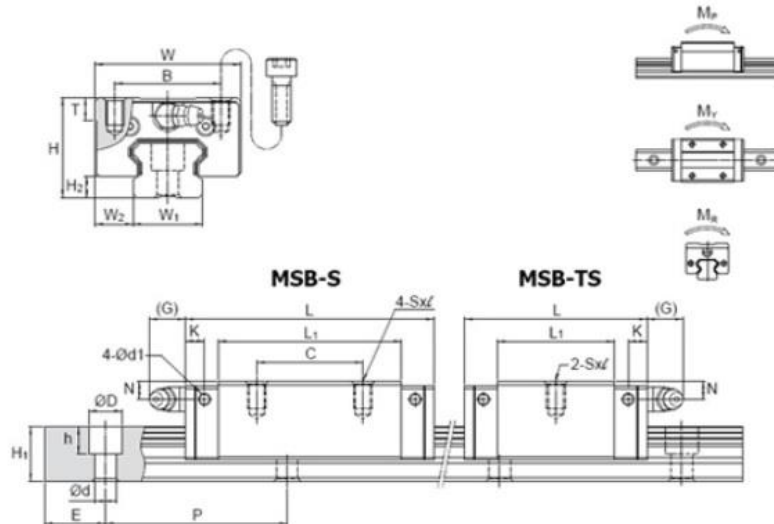
Note: The basic dynamic load rating C of ball type is based on the 50 km for nominal life. The conversion between C for 50 km and C₁₀₀ for 100 km is C=1.26 x C₁₀₀.

Note*: Single: Single carriage/ Double: Double carriages closely contacting with each other.

| Model No. | External dimension | | | | | | | | | | | | | | | | Carriage dimension | | | | | | | | | | | | | | | | Unit:mm |
|------------------------------------------------------|-----------------------------------|---------|--------------------|----------------|----------------|-----|---------------|----------|-------------------|--------------|----------------|-----|-----|-----|----------------|---------------|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---------|
| | Height H | Width W | Length L | W ₂ | H ₂ | B | C | S x L | L ₁ | T | T ₁ | N | G | K | d ₁ | Grease Nipple | | | | | | | | | | | | | | | | | |
| | MSB 15TE MSB 15E | 24 | 52 | 40.2 57.2 | 18.5 | 4.5 | 41 | - 26 | M5 x 7 | 23.5 40.5 | 5 | 7 | 5.5 | 5.5 | 5.1 | 3.3 | G-M4 | | | | | | | | | | | | | | | | |
| MSB 20TE MSB 20E | 28 | 59 | 48 67 | 19.5 | 6 | 49 | - 32 | M6 x 9 | 29 48 | 5 | 9 | 5.5 | 12 | 5.9 | 3.3 | G-M6 | | | | | | | | | | | | | | | | | |
| MSB 25TE MSB 25E | 33 | 73 | 60.2 82 | 25 | 7 | 60 | - 35 | M8 x 10 | 38.7 60.5 | 7 | 10 | 6 | 12 | 6.2 | 3.3 | G-M6 | | | | | | | | | | | | | | | | | |
| MSB 30TE MSB 30E | 42 | 90 | 68 96.7 | 31 | 9.5 | 72 | - 40 | M10 x 10 | 43.3 72 | 7 | 10 | 8 | 12 | 6.3 | 3.3 | G-M6 | | | | | | | | | | | | | | | | | |
| MSB 35TE MSB 35E MSB 35LE | 48 | 100 | 78 112 137.5 | 33 | 9.5 | 82 | - 50 72 | M10 x 13 | 46 80 105.5 | 9 | 13 | 8.5 | 12 | 9.8 | 3.3 | G-M6 | | | | | | | | | | | | | | | | | |

| Model No. | Rail dimension | | | | | Basic load rating | | Static moment rating | | | | Weight | | |
|------------------------------------------------------|----------------------|-----------------------|---------|--------|------------------------------------|----------------------|-----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------|
| | Width W ₁ | Height H ₁ | Pitch P | E std. | D x h x d | Dynamic C kN | Static Co kN | M _p kN-m | | M _y kN-m | | M _R kN-m | Carriage kg | Rail kg/m |
| | | | | | | | | | Single* | Double* | Single* | Double* | | |
| MSB 15TE MSB 15E | 15 | 12.5 | 60 | 20 | 6 x 4.5 x 3.5 (7.5 x 5.3 x 4.5) | 6.7 10.0 | 9.6 16.9 | 0.04 0.10 | 0.26 0.61 | 0.04 0.10 | 0.26 0.61 | 0.07 0.13 | 0.12 0.21 | 1.2 |
| MSB 20TE MSB 20E | 20 | 15 | 60 | 20 | 9.5 x 8.5 x 6 | 9.7 13.9 | 14.2 23.6 | 0.07 0.18 | 0.44 0.97 | 0.07 0.18 | 0.44 0.97 | 0.14 0.24 | 0.20 0.34 | 2 |
| MSB 25TE MSB 25E | 23 | 18 | 60 | 20 | 11 x 9 x 7 | 15.6 22.3 | 22.1 36.9 | 0.13 0.35 | 0.91 1.87 | 0.13 0.35 | 0.91 1.87 | 0.26 0.43 | 0.39 0.60 | 3 |
| MSB 30TE MSB 30E | 28 | 23 | 80 | 20 | 11 x 9 x 7 | 23.1 32.9 | 31.8 53.1 | 0.23 0.60 | 1.39 3.15 | 0.23 0.60 | 1.39 3.15 | 0.45 0.74 | 0.65 1.08 | 4.4 |
| MSB 35TE MSB 35E MSB 35LE | 34 | 27.5 | 80 | 20 | 14 x 12 x 9 | 35.7 52.0 63.6 | 44.0 75.5 100.6 | 0.34 0.93 1.60 | 2.81 5.47 8.67 | 0.34 0.93 1.60 | 2.81 5.47 8.67 | 0.75 1.28 1.67 | 0.91 1.61 1.80 | 6.2 6.6 |

MSB TS/S



Note: Rail mounting holes for M3 (6x4.5x3.5) and M4 (7.5x5.3x4.5) are available for MSB15 rail. The codes of rail type are MSB15R for M3 mounting holes, and MSB15U for M4 mounting holes.

Note: The basic dynamic load rating C of ball type is based on the 50 km for nominal life.
The conversion between C for 50 km and C₁₀₀ for 100 km is C=1.26 x C₁₀₀.

Note*: Single: Single carriage/ Double: Double carriages closely contacting with each other.

Unit:mm

| Model No. | External dimension | | | | | Carriage dimension | | | | | | | | | |
|------------------------------------------------------|--------------------|---------|--------------------|----------------|----------------|--------------------|---------------|---------|-------------------|------|-----|------|-----|----------------|---------------|
| | Height H | Width W | Length L | W ₂ | H ₂ | B | C | S x ℓ | L ₁ | T | N | G | K | d ₁ | Grease Nipple |
| MSB 15TS MSB 15S | 24 | 34 | 40.2 57.2 | 9.5 | 4.5 | 26 | - 26 | M4 x 6 | 23.5 40.5 | 6 | 5.5 | 5.5 | 5.1 | 3.3 | G-M4 |
| MSB 20TS MSB 20S | 28 | 42 | 48 67 | 11 | 6 | 32 | - 32 | M5 x 7 | 29 48 | 6 | 5.5 | 12 | 5.9 | 3.3 | G-M6 |
| MSB 25TS MSB 25S | 33 | 48 | 60.2 82 | 12.5 | 7 | 35 | - 35 | M6 x 9 | 38.7 60.5 | 8 | 6 | 12 | 6.2 | 3.3 | G-M6 |
| MSB 30TS MSB 30S | 42 | 60 | 68 96.7 | 16 | 9.5 | 40 | - 40 | M8 x 12 | 43.3 72 | 8 | 8 | 12 | 6.3 | 3.3 | G-M6 |
| MSB 35TS MSB 35S MSB 35LS | 48 | 70 | 78 112 137.5 | 18 | 9.5 | 50 | - 50 72 | M8 x 12 | 46 80 105.5 | 12.5 | 8.5 | 11.5 | 9.8 | 3.3 | G-M6 |

| Model No. | Rail dimension | | | | | Basic load rating | | Static moment rating | | | | Weight | | |
|------------------------------------------------------|----------------------|-----------------------|---------|--------|------------------------------------|-------------------|--------------|----------------------|---------|---------------------|---------|---------------------|-------------|-----------|
| | Width W ₁ | Height H ₁ | Pitch P | E std. | D x h x d | Dynamic C kN | Static Co kN | M _p kN-m | | M _y kN-m | | M _R kN-m | Carriage kg | Rail kg/m |
| | | | | | | | | Single* | Double* | Single* | Double* | | | |
| MSB 15TS MSB 15S | 15 | 12.5 | 60 | 20 | 6 x 4.5 x 3.5 (7.5 x 5.3 x 4.5) | 6.7 | 9.6 | 0.04 | 0.26 | 0.04 | 0.26 | 0.07 | 0.09 | 1.2 |
| 10.0 | | | | | | 16.9 | 0.10 | 0.61 | 0.10 | 0.61 | 0.13 | 0.16 | | |
| MSB 20TS MSB 20S | 20 | 15 | 60 | 20 | 9.5 x 8.5 x 6 | 9.7 | 14.2 | 0.07 | 0.44 | 0.07 | 0.44 | 0.14 | 0.16 | 2 |
| 13.9 | | | | | | 23.6 | 0.18 | 0.97 | 0.18 | 0.97 | 0.24 | 0.26 | | |
| MSB 25TS MSB 25S | 23 | 18 | 60 | 20 | 11 x 9 x 7 | 15.6 | 22.1 | 0.13 | 0.91 | 0.13 | 0.91 | 0.26 | 0.29 | 3 |
| 22.3 | | | | | | 36.9 | 0.35 | 1.87 | 0.35 | 1.87 | 0.43 | 0.45 | | |
| MSB 30TS MSB 30S | 28 | 23 | 80 | 20 | 11 x 9 x 7 | 23.1 | 31.8 | 0.23 | 1.39 | 0.23 | 1.39 | 0.45 | 0.52 | 4.4 |
| 32.9 | | | | | | 53.1 | 0.60 | 3.15 | 0.60 | 3.15 | 0.74 | 0.86 | | |
| MSB 35TS MSB 35S MSB 35LS | 34 | 27.5 | 80 | 20 | 14 x 12 x 9 | 35.7 | 44.0 | 0.34 | 2.81 | 0.34 | 2.81 | 0.75 | 0.81 | 6.2 |
| 52.0 | | | | | | 75.5 | 0.93 | 5.47 | 0.93 | 5.47 | 1.28 | 1.13 | | |
| 63.6 | | | | | | 100.6 | 1.60 | 8.67 | 1.60 | 8.67 | 1.67 | 1.49 | | |