

# METSC-6 series



## SLIDER ELECTRIC CYLINDER - BALL SCREW DRIVE (WITH MOTOR)

mindman



### Specification

| Model                     | METSC-6           |      |
|---------------------------|-------------------|------|
| Repeatability (mm)        | ±0.01             |      |
| Ball screw lead (mm)      | 5                 | 10   |
| Maximum speed (mm/s) (*1) | ≤250              | ≤500 |
| Maximum payload           | Horizontal (kg)   | ≤30  |
|                           | Vertical (kg)     | ≤15  |
| Rated thrust (N)          | 565               | 283  |
| Stroke / pitch (mm) (*2)  | 50~800 / 50 Pitch |      |
| Motor dimension (mm)      | □42               |      |
| Ball screw spec (mm)      | C7ø12             |      |

\*1. The maximum speed shown here is when software speed setting is 100%. When the stroke is over 600mm, the run-out of the ball screw will occur.

\*2. We recommend to low down the working speed under this circumstances.

### Order example of cylinder

**METSC-6 – L05 – 100 – M – TC100 – 03 – M5 – A0001**

|                         |                        |  |   |
|-------------------------|------------------------|--|---|
| <b>Model</b>            | <b>Spec.</b>           | <b>Stroke</b>  | <b>Special order no.</b>  |
|                         |                        | 50~800 mm<br>50 mm pitch   |   |
| <b>Ball screw brand</b> | <b>Ball screw lead</b> | <b>Motor position</b>  | <b>Corresponding controller</b>   |
| L T-Standard MIT        | 05 5 mm<br>10 10 mm    | M Built-in<br>BM On lower side<br>BR On right side<br>BL On left side  | TC100<br><small>* Please refer to 4-126.</small>  |
|                         |                        | <b>Cable length</b>  | <b>Installation hole</b>  |
|                         |                        | 01 1 m<br>03 3 m<br>05 5 m<br>10 10 m<br><small>* Standard: 3m</small> | - Upwards lock type<br>M5 Down lock type<br><small>* If the stroke is less than 100mm, it is restricted to select M5 down lock type only.</small> |

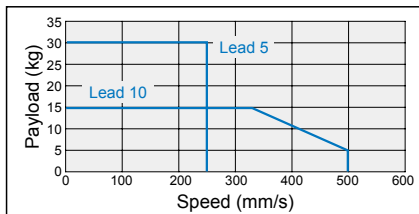
### Order example of controller

**TC100 – 03**

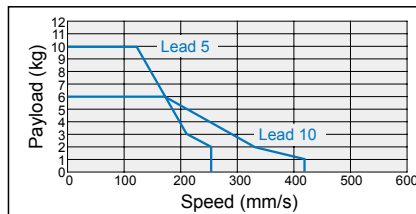
|                   |  |
|-------------------|--|
| <b>Controller</b> | <b>Cable length</b>  |
| TC100             | Blank No cable<br>01 1 m<br>03 3 m<br>05 5 m<br>10 10 m<br><small>* Standard: 3m</small> |

### Speed-payload curve diagram

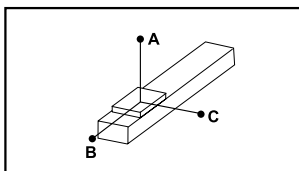
Horizontal



Vertical

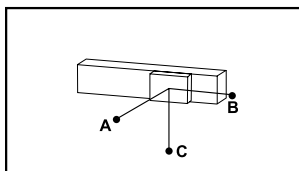


### Allowable overhang N.m



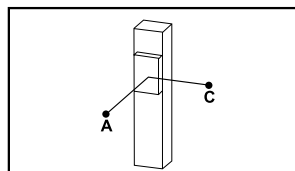
Unit: mm

| Horizontal installation |      | A   | B  | C   |
|-------------------------|------|-----|----|-----|
| Lead 5                  | 10kg | 650 | 30 | 80  |
|                         | 20kg | 390 | 15 | 40  |
|                         | 30kg | 250 | 10 | 25  |
| Lead 10                 | 5kg  | 460 | 60 | 145 |
|                         | 10kg | 400 | 35 | 85  |
|                         | 15kg | 250 | 20 | 50  |



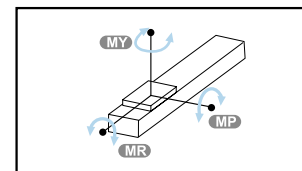
Unit: mm

| Wall installation |      | A   | B  | C   |
|-------------------|------|-----|----|-----|
| Lead 5            | 10kg | 75  | 30 | 650 |
|                   | 20kg | 45  | 17 | 450 |
|                   | 30kg | 25  | 10 | 250 |
| Lead 10           | 5kg  | 150 | 60 | 650 |
|                   | 10kg | 90  | 35 | 420 |
|                   | 15kg | 95  | 22 | 270 |



Unit: mm

| Vertical installation |      | A   | C   |
|-----------------------|------|-----|-----|
| Lead 5                | 5kg  | 90  | 90  |
|                       | 8kg  | 60  | 60  |
|                       | 10kg | 50  | 50  |
| Lead 10               | 2kg  | 150 | 150 |
|                       | 4kg  | 100 | 100 |
|                       | 6kg  | 75  | 75  |



Unit: N.m

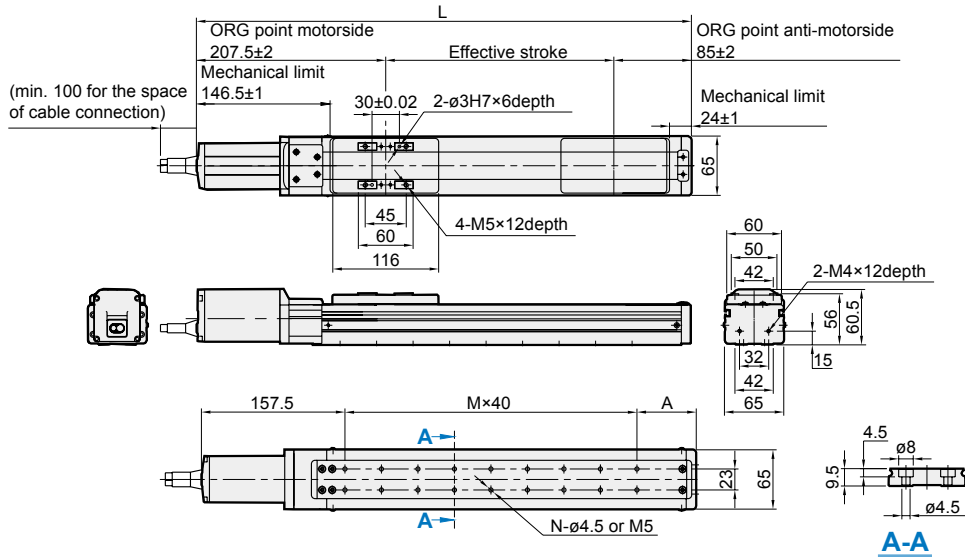
| Static loading moment |    |
|-----------------------|----|
| MY                    | 70 |
| MP                    | 80 |
| MR                    | 75 |

# METSC-6 Dimensions

## SLIDER ELECTRIC CYLINDER - BALL SCREW DRIVE (WITH MOTOR)



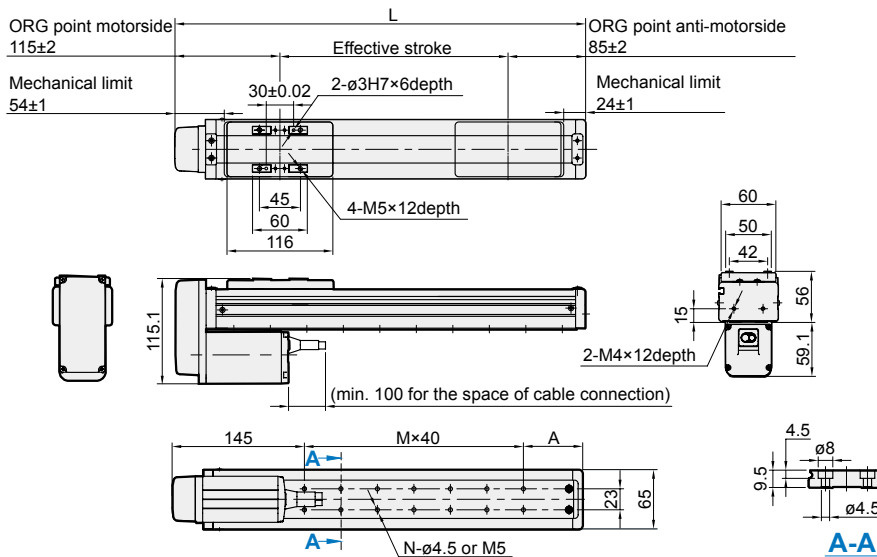
### M Motor built-in



Unit: mm

| Stroke    | 50    | 100   | 150   | 200   | 250   | 300   | 350   | 400   | 450   | 500   | 550   | 600   | 650   | 700   | 750    | 800    |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| <b>L</b>  | 342.5 | 392.5 | 442.5 | 492.5 | 542.5 | 592.5 | 642.5 | 692.5 | 742.5 | 792.5 | 842.5 | 892.5 | 942.5 | 992.5 | 1042.5 | 1092.5 |
| <b>A</b>  | 65    | 35    | 45    | 55    | 65    | 35    | 45    | 55    | 65    | 35    | 45    | 55    | 65    | 35    | 45     | 55     |
| <b>M</b>  | 3     | 5     | 6     | 7     | 8     | 10    | 11    | 12    | 13    | 15    | 16    | 17    | 18    | 20    | 21     | 22     |
| <b>N</b>  | 8     | 12    | 14    | 16    | 18    | 22    | 24    | 26    | 28    | 32    | 34    | 36    | 38    | 42    | 44     | 46     |
| <b>KG</b> | 3.09  | 3.32  | 3.55  | 3.77  | 4     | 4.22  | 4.44  | 4.67  | 4.89  | 5.12  | 5.34  | 5.56  | 5.79  | 6.01  | 6.24   | 6.44   |

### BM Motor on lower side



Unit: mm

| Stroke    | 50   | 100  | 150  | 200  | 250  | 300  | 350  | 400  | 450  | 500  | 550 | 600  | 650  | 700  | 750 | 800  |
|-----------|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|-----|------|
| <b>L</b>  | 250  | 300  | 350  | 400  | 450  | 500  | 550  | 600  | 650  | 700  | 750 | 800  | 850  | 900  | 950 | 1000 |
| <b>A</b>  | 65   | 35   | 45   | 55   | 65   | 35   | 45   | 55   | 65   | 35   | 45  | 55   | 65   | 35   | 45  | 55   |
| <b>M</b>  | 1    | 3    | 4    | 5    | 6    | 8    | 9    | 10   | 11   | 13   | 14  | 15   | 16   | 18   | 19  | 20   |
| <b>N</b>  | 4    | 8    | 10   | 12   | 14   | 18   | 20   | 22   | 24   | 28   | 30  | 32   | 34   | 38   | 40  | 42   |
| <b>KG</b> | 3.13 | 3.36 | 3.59 | 3.81 | 4.04 | 4.27 | 4.49 | 4.72 | 4.94 | 5.17 | 5.4 | 5.62 | 5.85 | 6.07 | 6.3 | 6.49 |

# METSC-6 Dimensions

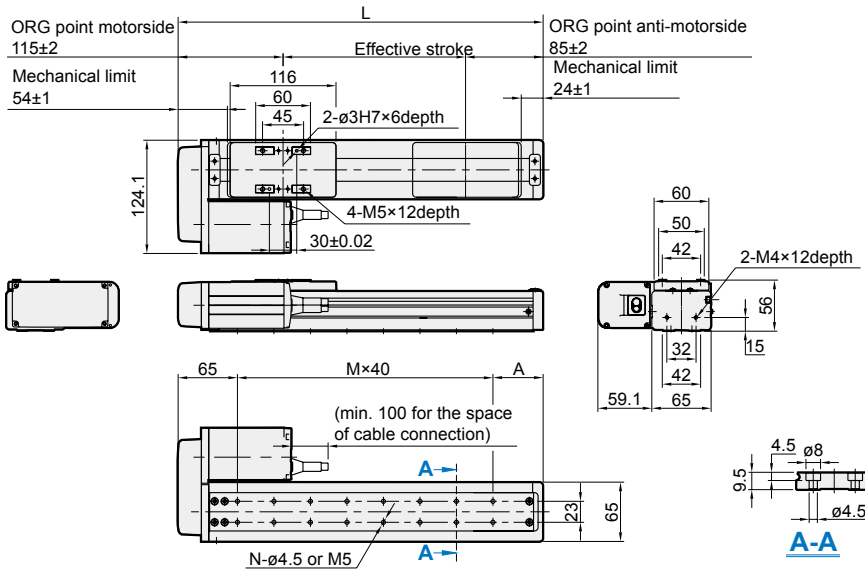


## SLIDER ELECTRIC CYLINDER - BALL SCREW DRIVE (WITH MOTOR)

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### BL

Motor on left side

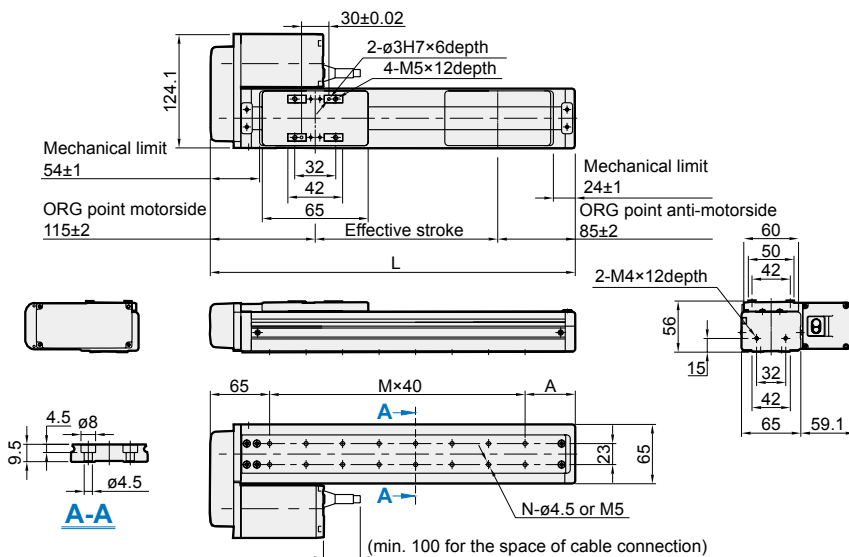


Unit: mm

| Stroke    | 50   | 100  | 150  | 200  | 250  | 300  | 350  | 400  | 450  | 500  | 550 | 600  | 650  | 700  | 750 | 800  |
|-----------|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|-----|------|
| <b>L</b>  | 250  | 300  | 350  | 400  | 450  | 500  | 550  | 600  | 650  | 700  | 750 | 800  | 850  | 900  | 950 | 1000 |
| <b>A</b>  | 65   | 35   | 45   | 55   | 65   | 35   | 45   | 55   | 65   | 35   | 45  | 55   | 65   | 35   | 45  | 55   |
| <b>M</b>  | 3    | 5    | 6    | 7    | 8    | 10   | 11   | 12   | 13   | 15   | 16  | 17   | 18   | 20   | 21  | 22   |
| <b>N</b>  | 8    | 12   | 14   | 16   | 18   | 22   | 24   | 26   | 28   | 32   | 34  | 36   | 38   | 42   | 44  | 46   |
| <b>KG</b> | 3.13 | 3.36 | 3.59 | 3.81 | 4.04 | 4.27 | 4.49 | 4.72 | 4.94 | 5.17 | 5.4 | 5.62 | 5.85 | 6.07 | 6.3 | 6.49 |

### BR

Motor on right side



Unit: mm

| Stroke    | 50   | 100  | 150  | 200  | 250  | 300  | 350  | 400  | 450  | 500  | 550 | 600  | 650  | 700  | 750 | 800  |
|-----------|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|-----|------|
| <b>L</b>  | 250  | 300  | 350  | 400  | 450  | 500  | 550  | 600  | 650  | 700  | 750 | 800  | 850  | 900  | 950 | 1000 |
| <b>A</b>  | 65   | 35   | 45   | 55   | 65   | 35   | 45   | 55   | 65   | 35   | 45  | 55   | 65   | 35   | 45  | 55   |
| <b>M</b>  | 3    | 5    | 6    | 7    | 8    | 10   | 11   | 12   | 13   | 15   | 16  | 17   | 18   | 20   | 21  | 22   |
| <b>N</b>  | 8    | 12   | 14   | 16   | 18   | 22   | 24   | 26   | 28   | 32   | 34  | 36   | 38   | 42   | 44  | 46   |
| <b>KG</b> | 3.13 | 3.36 | 3.59 | 3.81 | 4.04 | 4.27 | 4.49 | 4.72 | 4.94 | 5.17 | 5.4 | 5.62 | 5.85 | 6.07 | 6.3 | 6.49 |