

# METS2-17 series

## SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)



|                |            |             |              |
|----------------|------------|-------------|--------------|
| Environment    | Standard   | Servo motor | 400W / 750W  |
| Actuation type | Ball screw | Guide type  | Linear guide |

### Specification

| Model                          | METS2-17                        |     |      |
|--------------------------------|---------------------------------|-----|------|
| Positioning repeatability (mm) | ±0.01                           |     |      |
| Lead (mm)                      | 5                               | 10  | 20   |
| Max. speed (mm/s)              | 250                             | 500 | 1000 |
| Stroke (mm)                    | 100~1200 / 50 pitch             |     |      |
| Ball screw O.D. (mm)           | C7 ø20                          |     |      |
| Sensor switch                  | RLT (Please refer to page 5-16) |     |      |

| AC servo motor   | 400W            |     |     |
|------------------|-----------------|-----|-----|
| Coupling (mm)    | 10×14           |     |     |
| Max. payload     | Horizontal (kg) | 120 | 110 |
|                  | Vertical (kg)   | 40  | 30  |
| Rated thrust (N) | 1388 694 347    |     |     |

| AC servo motor   | 750W            |     |     |
|------------------|-----------------|-----|-----|
| Coupling (mm)    | 10×19           |     |     |
| Max. payload     | Horizontal (kg) | 120 | 120 |
|                  | Vertical (kg)   | 50  | 40  |
| Rated thrust (N) | 2563 1281 640   |     |     |

- \*1. When the stroke is over 750mm, the run-out of the ballscrew will occur.  
We recommend to low down the working speed under this circumstance.
- \*2. Acceleration and deacceleration value are set to 0.2 second.

### Order example

**METS2-17 - L05 - 100 - BC - M40 B - A3**

| Model      | Size  | Stroke                            | Motor position              | Motor brand         | Flange face                                     | Brakes              | Sensor switch      |
|------------|-------|-----------------------------------|-----------------------------|---------------------|-------------------------------------------------|---------------------|--------------------|
| <b>L05</b> | 5 mm  | <b>100~1200 mm</b><br>50 mm pitch | <b>M</b> Built-in (*1)      | <b>M</b> Mitsubishi | <b>40</b><br><b>75</b><br>400W<br>750W<br>servo | <b>-</b> No brake   | <b>-</b> No sensor |
| <b>L10</b> | 10 mm |                                   | <b>BC</b> Direct connection | <b>M</b> Yaskawa    |                                                 | <b>B</b> With brake | <b>A1</b> 1 pc     |
| <b>L20</b> | 20 mm |                                   | <b>BM</b> Lower side        | <b>P</b> Delta      |                                                 |                     | <b>A2</b> 2 pcs    |
|            |       |                                   | <b>BR</b> Right side        | <b>P</b> Panasonic  |                                                 |                     | <b>A3</b> 3 pcs    |
|            |       |                                   | <b>BL</b> Left side         | <b>E</b> Else       |                                                 |                     |                    |

\* With cable 2m.

\*1. Not applicable for 750W servo.

\*2. Standard type is without motor. Please refer to the list of standard motors for flange size.

\*3. Only for motor position "Built-in".

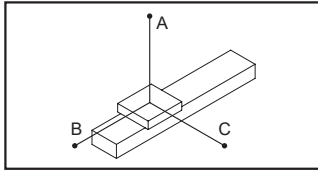
# METS2-17 Performance charts & Standard servo motors



## SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)

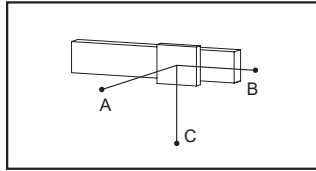
Mindman

### Allowable overhang



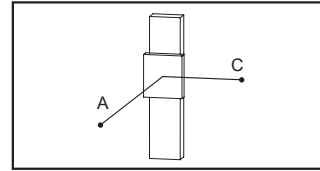
Unit: mm

| Horizontal installation    |        | A    | B   | C   |
|----------------------------|--------|------|-----|-----|
| AC servo motor 400W / 750W |        |      |     |     |
| Lead 5                     | 70kg   | 3235 | 349 | 408 |
|                            | 90kg   | 2482 | 263 | 306 |
|                            | 120kg  | 1850 | 187 | 217 |
| Lead 10                    | 65kg   | 1911 | 338 | 373 |
|                            | 85kg   | 1445 | 248 | 276 |
|                            | 110kg  | 1102 | 182 | 202 |
| Lead 20                    | 120kg* | 1000 | 164 | 182 |
|                            | 35kg   | 1666 | 547 | 538 |
|                            | 55kg   | 1030 | 331 | 328 |
|                            | 75kg   | 733  | 231 | 230 |
|                            | 83kg*  | 654  | 206 | 204 |



Unit: mm

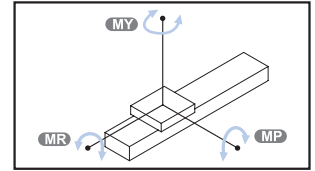
| Wall installation          |        | A   | B   | C    |
|----------------------------|--------|-----|-----|------|
| AC servo motor 400W / 750W |        |     |     |      |
| Lead 5                     | 75kg   | 377 | 322 | 2988 |
|                            | 95kg   | 288 | 246 | 2333 |
|                            | 120kg  | 218 | 187 | 1850 |
| Lead 10                    | 60kg   | 408 | 368 | 2092 |
|                            | 80kg   | 296 | 266 | 1554 |
|                            | 110kg  | 202 | 182 | 1102 |
|                            | 120kg* | 182 | 164 | 1002 |
| Lead 20                    | 30kg   | 633 | 644 | 1961 |
|                            | 50kg   | 365 | 369 | 1143 |
|                            | 75kg   | 230 | 231 | 733  |
|                            | 83kg*  | 204 | 206 | 656  |



Unit: mm

| Vertical installation      |       | A    | C    |
|----------------------------|-------|------|------|
| AC servo motor 400W / 750W |       |      |      |
| Lead 5                     | 20kg  | 1368 | 1368 |
|                            | 30kg  | 911  | 911  |
|                            | 40kg  | 683  | 683  |
|                            | 50kg* | 546  | 546  |
| Lead 10                    | 15kg  | 1618 | 1618 |
|                            | 25kg  | 970  | 970  |
|                            | 30kg  | 808  | 808  |
|                            | 40kg* | 607  | 607  |
| Lead 20                    | 10kg  | 1922 | 1922 |
|                            | 14kg  | 1377 | 1377 |
|                            | 25kg* | 769  | 769  |

### Static loading moment



Unit: N.m

| Horizontal                 |      |
|----------------------------|------|
| AC servo motor 400W / 750W |      |
| MY                         | 1032 |
| MP                         | 1034 |
| MR                         | 908  |

\* Only for 750W motor.

### Standard servo motors

| Brand      | Mark | Power output | Motor model (Without brake) | Motor model (With brake) | Motor rod dia-shaft length (mm) | Centring collar diameter (mm) | Centring collar depth (mm) | Motor mount P.C.D (mm) | Mounting port (mm) |
|------------|------|--------------|-----------------------------|--------------------------|---------------------------------|-------------------------------|----------------------------|------------------------|--------------------|
| Mitsubishi | M    | 400W         | HG-KN43J                    | HG-KN43B J               | ø14-30                          | ø50                           | 3                          | ø70                    | 4-ø5.8             |
|            |      | 750W         | HG-KN73J                    | HG-KN73B J               | ø19-40                          | ø70                           | 3                          | ø90                    | 4-ø6.6             |
| Yaskawa    |      | 400W         | SGM7J-04A7A21               | SGM7J-04A7A2C            | ø14-30                          | ø50                           | 3                          | ø70                    | 4-ø5.5             |
|            |      | 750W         | SGM7J-08A7A21               | SGM7J-08A7A2C            | ø19-40                          | ø70                           | 3                          | ø90                    | 4-ø7.0             |
| Delta      |      | 400W         | ECMA-C20604PS               | ECMA-C20604QS            | ø14-30                          | ø50                           | 3                          | ø70                    | 4-ø5.5             |
|            |      | 750W         | ECMA-C20807PS               | ECMA-C20807FS            | ø19-35                          | ø70                           | 3                          | ø90                    | 4-ø6.6             |
| Panasonic  | P    | 400W         | MHMF042L1U2M                | MHMF042L1V2M             | ø14-30                          | ø50                           | 3                          | ø70                    | 4-ø4.5             |
|            |      | 750W         | MHMF082L1U2M                | MHMF082L1V2M             | ø19-35                          | ø70                           | 3                          | ø90                    | 4-ø6.0             |

\* If your inquiry is not included in above table, please contact us.

# METS2-17 Dimensions

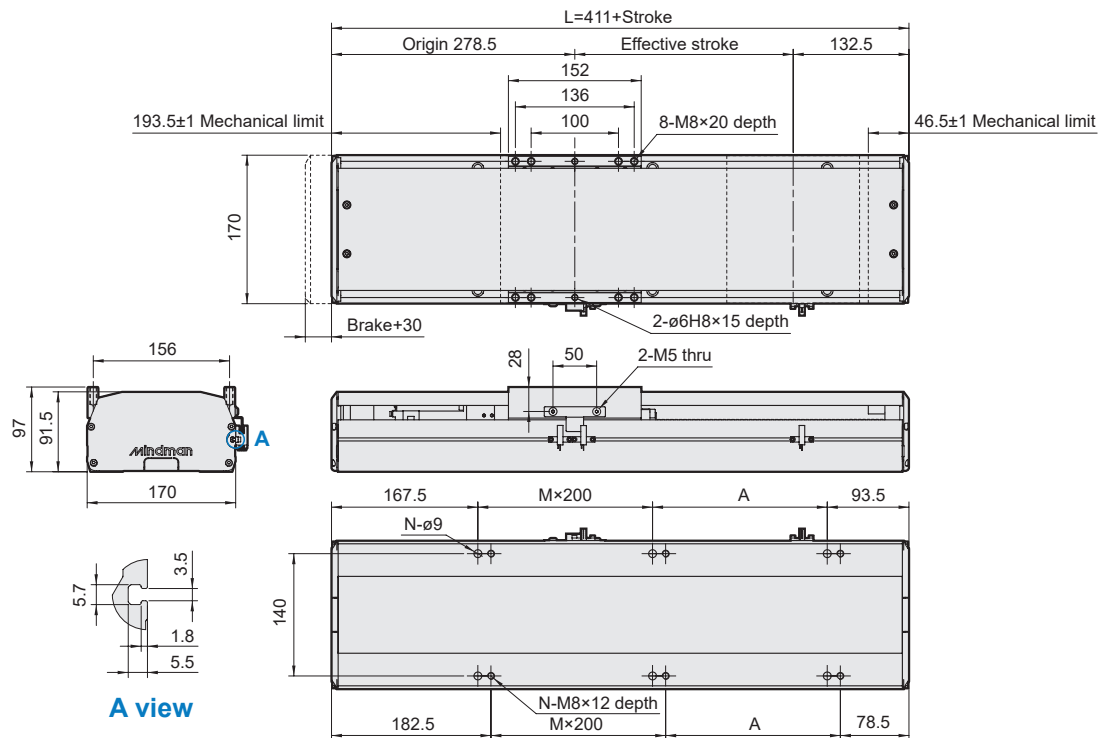
## SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)



Mindman

**M**

Motor  
built-in



| Stroke      | 100   | 150   | 200   | 250   | 300   | 350   | 400   | 450   | 500   | 550   | 600   | 650   | 700   | 750   | 800   | 850   | 900   | 950   | 1000  | 1050  | 1100  | 1150  | 1200  |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| L           | 511   | 561   | 611   | 661   | 711   | 761   | 811   | 861   | 911   | 961   | 1011  | 1061  | 1111  | 1161  | 1211  | 1261  | 1311  | 1361  | 1411  | 1461  | 1511  | 1561  | 1611  |
| A           | 50    | 100   | 150   | 200   | 50    | 100   | 150   | 200   | 50    | 100   | 150   | 200   | 50    | 100   | 150   | 200   | 50    | 100   | 150   | 200   | 50    | 100   | 150   |
| M           | 1     | 1     | 1     | 1     | 2     | 2     | 2     | 2     | 3     | 3     | 3     | 3     | 4     | 4     | 4     | 4     | 5     | 5     | 5     | 5     | 6     | 6     | 6     |
| N           | 6     | 6     | 6     | 6     | 8     | 8     | 8     | 8     | 10    | 10    | 10    | 10    | 12    | 12    | 12    | 12    | 14    | 14    | 14    | 14    | 16    | 16    | 16    |
| Weight (kg) | 10.69 | 11.54 | 12.40 | 13.25 | 14.11 | 14.96 | 15.81 | 16.67 | 17.52 | 18.38 | 19.23 | 20.08 | 20.94 | 21.79 | 22.65 | 23.50 | 24.35 | 25.21 | 26.06 | 26.91 | 27.77 | 28.62 | 29.48 |

\* Gross weight + 0.41kg.

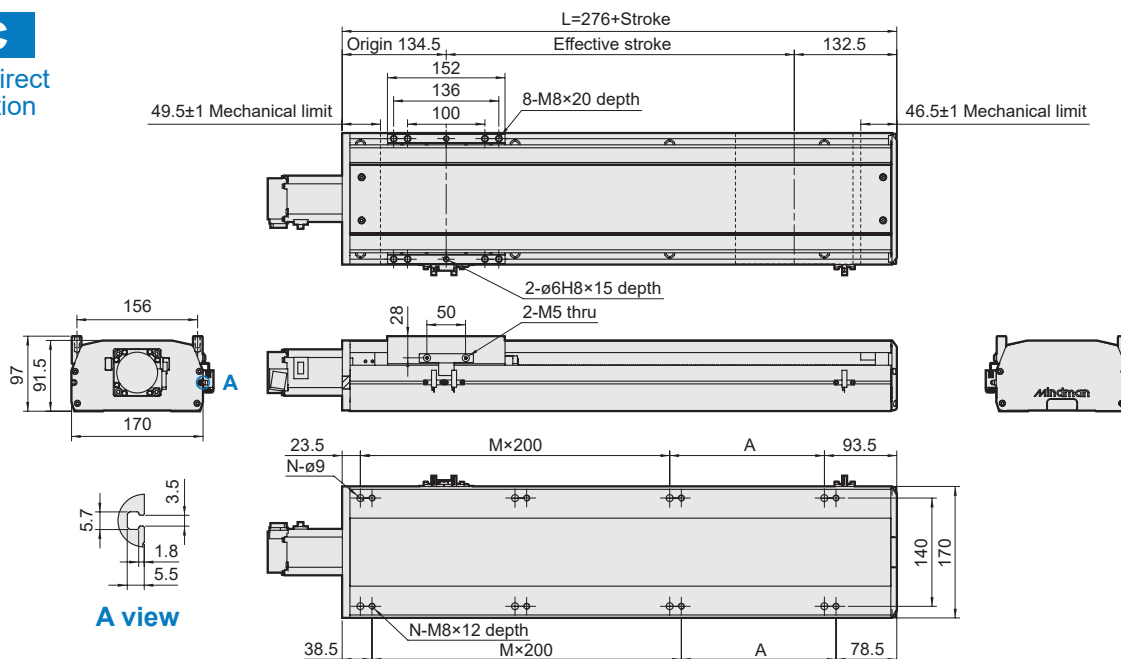
# METS2-17 Dimensions

## SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)



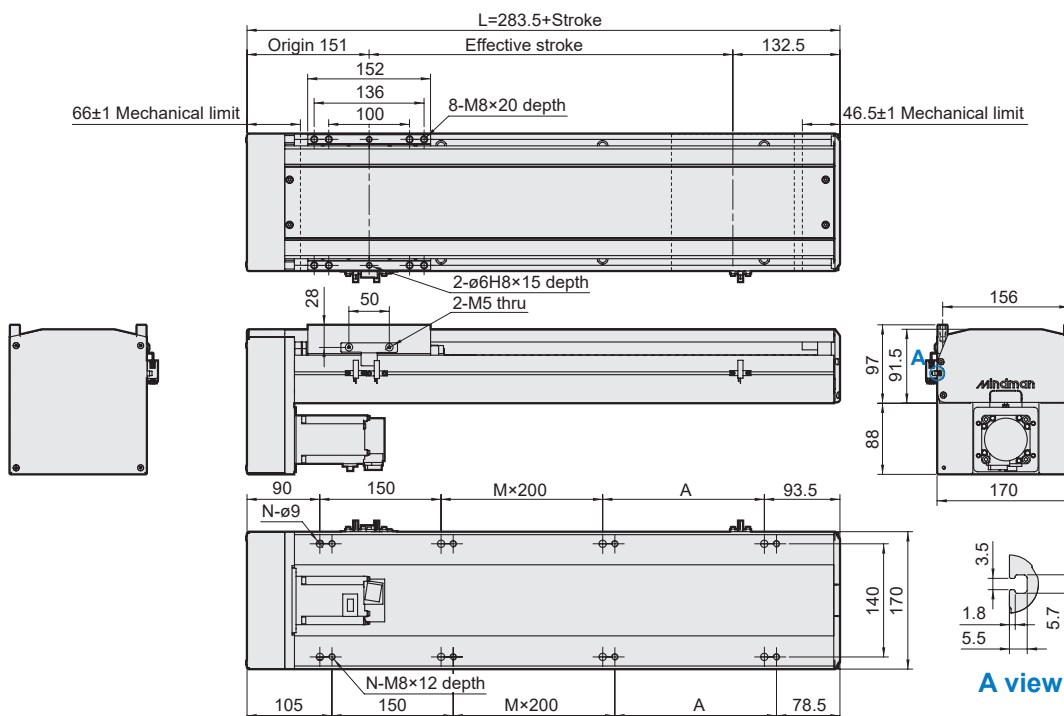
### BC

Motor direct  
connction



### BM

Motor on  
lower side



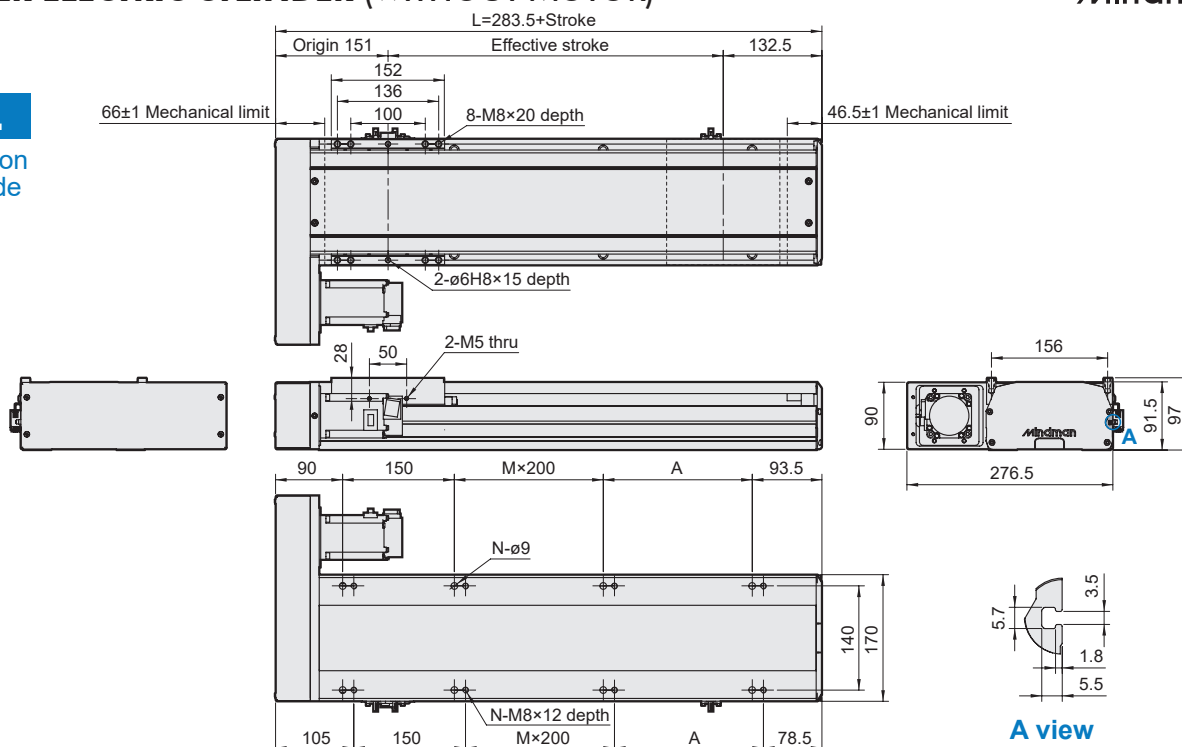
| Stroke      | 100 | 150   | 200   | 250   | 300   | 350   | 400   | 450   | 500   | 550   | 600   | 650   | 700   | 750   | 800    | 850    | 900    | 950    | 1000   | 1050   | 1100   | 1150   | 1200   |        |
|-------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| L           | BC  | 367   | 417   | 467   | 517   | 567   | 617   | 667   | 717   | 767   | 817   | 867   | 917   | 967   | 1017   | 1067   | 1117   | 1167   | 1217   | 1267   | 1317   | 1367   | 1417   | 1467   |
|             | BM  | 383.5 | 433.5 | 483.5 | 533.5 | 583.5 | 633.5 | 683.5 | 733.5 | 783.5 | 833.5 | 883.5 | 933.5 | 983.5 | 1033.5 | 1083.5 | 1133.5 | 1183.5 | 1233.5 | 1283.5 | 1333.5 | 1383.5 | 1433.5 | 1483.5 |
| A           |     | 50    | 100   | 150   | 200   | 50    | 100   | 150   | 200   | 50    | 100   | 150   | 200   | 50    | 100    | 150    | 200    | 50     | 100    | 150    | 200    | 50     | 100    | 150    |
| M           | BC  | 1     | 1     | 1     | 1     | 2     | 2     | 2     | 2     | 3     | 3     | 3     | 3     | 4     | 4      | 4      | 4      | 5      | 5      | 5      | 5      | 6      | 6      | 6      |
|             | BM  | 0     | 0     | 0     | 0     | 1     | 1     | 1     | 1     | 2     | 2     | 2     | 2     | 3     | 3      | 3      | 3      | 4      | 4      | 4      | 4      | 5      | 5      | 5      |
| N           |     | 6     | 6     | 6     | 6     | 8     | 8     | 8     | 8     | 10    | 10    | 10    | 10    | 12    | 12     | 12     | 12     | 14     | 14     | 14     | 14     | 16     | 16     | 16     |
| Weight (kg) | BC  | 9.60  | 10.45 | 11.30 | 12.16 | 13.01 | 13.87 | 14.72 | 15.57 | 16.43 | 17.28 | 18.13 | 18.99 | 19.84 | 20.70  | 21.55  | 22.40  | 23.26  | 24.11  | 24.96  | 25.82  | 26.67  | 27.53  | 28.38  |
|             | BM  | 10.72 | 11.57 | 12.43 | 13.28 | 14.13 | 14.99 | 15.84 | 16.69 | 17.55 | 18.40 | 19.26 | 20.11 | 20.96 | 21.82  | 22.67  | 23.52  | 24.38  | 25.23  | 26.09  | 26.94  | 27.79  | 28.65  | 29.50  |

# METS2-17 Dimensions

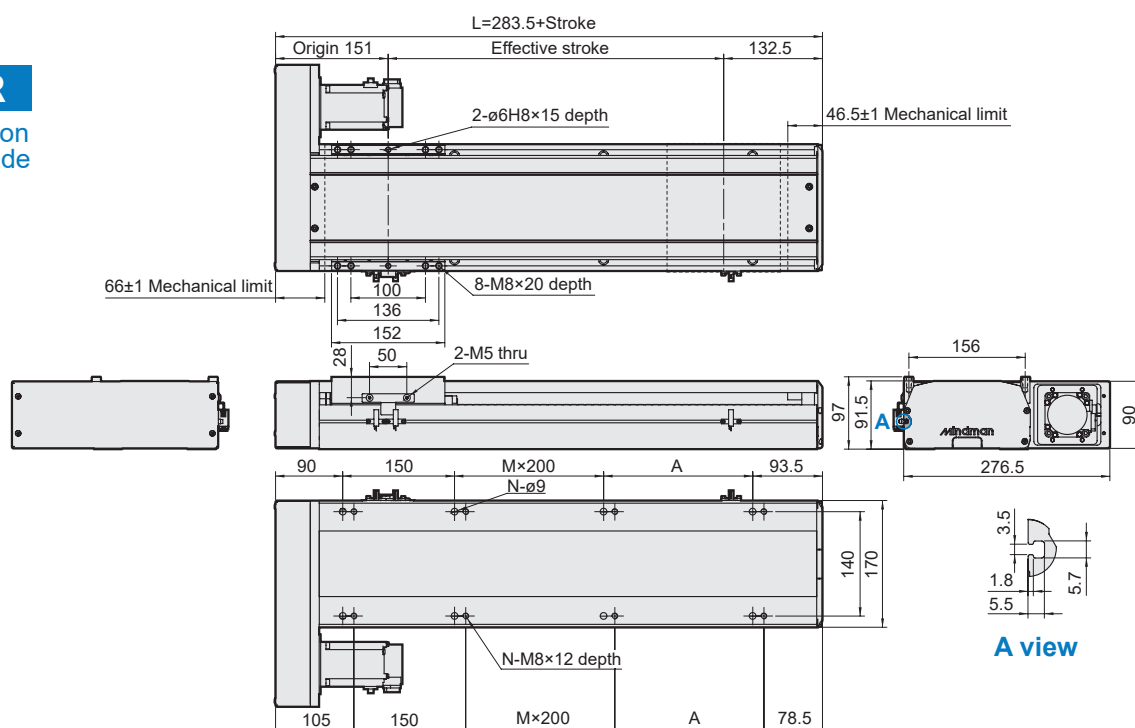
## SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)



**BL**  
Motor on  
left side



**BR**  
Motor on  
right side



| Stroke      | 100   | 150   | 200   | 250   | 300   | 350   | 400   | 450   | 500   | 550   | 600   | 650   | 700   | 750    | 800    | 850    | 900    | 950    | 1000   | 1050   | 1100   | 1150   | 1200   |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| L           | 383.5 | 433.5 | 483.5 | 533.5 | 583.5 | 633.5 | 683.5 | 733.5 | 783.5 | 833.5 | 883.5 | 933.5 | 983.5 | 1033.5 | 1083.5 | 1133.5 | 1183.5 | 1233.5 | 1283.5 | 1333.5 | 1383.5 | 1433.5 | 1483.5 |
| A           | 50    | 100   | 150   | 200   | 50    | 100   | 150   | 200   | 50    | 100   | 150   | 200   | 50    | 100    | 150    | 200    | 50     | 100    | 150    | 200    | 50     | 100    | 150    |
| M           | 0     | 0     | 0     | 0     | 1     | 1     | 1     | 1     | 2     | 2     | 2     | 2     | 3     | 3      | 3      | 3      | 4      | 4      | 4      | 4      | 5      | 5      | 5      |
| N           | 6     | 6     | 6     | 6     | 8     | 8     | 8     | 8     | 10    | 10    | 10    | 10    | 12    | 12     | 12     | 12     | 14     | 14     | 14     | 14     | 16     | 16     | 16     |
| Weight (kg) | 10.55 | 11.40 | 12.26 | 13.11 | 13.97 | 14.82 | 15.67 | 16.53 | 17.38 | 18.23 | 19.09 | 19.94 | 20.80 | 21.65  | 22.50  | 23.36  | 24.21  | 25.06  | 25.92  | 26.77  | 27.63  | 28.48  | 29.33  |