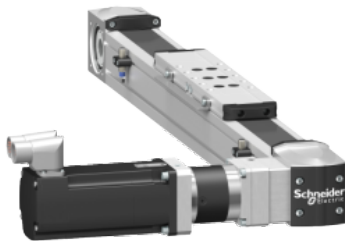


# Product data sheet

Specifications



Portal axis, Lexium PAS, model range 4, profile size 80 x 80 mm, toothed belt, ball guide

PAS43BB

## Main

|                              |                 |
|------------------------------|-----------------|
| Range of product             | Lexium PAS      |
| Product or component type    | Portal axis     |
| Product specific application | For 1 direction |
| Load position                | On carriage     |
| Drive type                   | Toothed belt    |
| Type of guide                | Ball            |

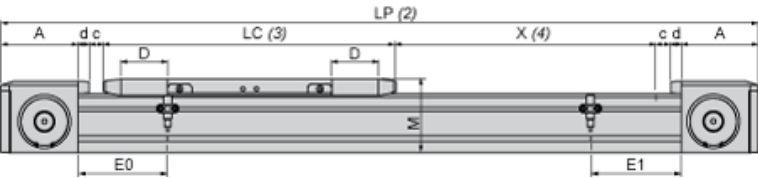
## Complementary

|                      |                                                                                                                                                                                                                                                                                                                                                              |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating position   | Horizontal                                                                                                                                                                                                                                                                                                                                                   |
| Function available   | Different type of guides<br>Different types of sensors for the limit switch function<br>Different carriage lengths adapted to the load<br>Additional carriages option<br>Increased corrosion resistance<br>Anti-static toothed belt<br>Protective cover strip for the axis inner parts<br>Motor and gearbox mounting options                                 |
| Operating force      | 1100 N for Fx<br>4410 N for Fy<br>4410 N for Fz                                                                                                                                                                                                                                                                                                              |
| Maximum speed        | 16.40 ft/s (5 m/s)                                                                                                                                                                                                                                                                                                                                           |
| Maximum acceleration | 164.04 ft/s² (50 m/s²)                                                                                                                                                                                                                                                                                                                                       |
| Max. drive torque    | 318.63 lbf.in (36 N.m)                                                                                                                                                                                                                                                                                                                                       |
| Max. torque          | <371.73 lbf.in (42 N.m) for Mx<br><1433.82 lbf.in (162 N.m) for My carriage type 1)<br><3354.43 lbf.in (379 N.m) for My carriage type 2)<br><6080.45 lbf.in (687 N.m) for My carriage type 4)<br><1433.82 lbf.in (162 N.m) for Mz carriage type 1)<br><3354.43 lbf.in (379 N.m) for Mz carriage type 2)<br><6080.45 lbf.in (687 N.m) for Mz carriage type 4) |
| Min. ... Max. stroke | 0.43...216.54 in (11...5500 mm)                                                                                                                                                                                                                                                                                                                              |
| Repeat accuracy      | +/- 0.05 mm                                                                                                                                                                                                                                                                                                                                                  |
| Profile dimension    | 80 x 100 mm                                                                                                                                                                                                                                                                                                                                                  |
| Service life         | 30000 km                                                                                                                                                                                                                                                                                                                                                     |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Size Characteristics



- (2) LP : total length of axis  
(3) LC : length of carriage  
(4) X : Stroke, depending on application

|    |     | Without protective metal strip |  | With protective metal strip |  |
|----|-----|--------------------------------|--|-----------------------------|--|
| A  | mm  | 110                            |  | 110                         |  |
|    | in. | 4.33                           |  | 4.33                        |  |
| c  | mm  | 25                             |  | 25                          |  |
|    | in. | 0.98                           |  | 0.98                        |  |
| d  | mm  | –                              |  | 15                          |  |
|    | in. | –                              |  | 0.59                        |  |
| D  | mm  | –                              |  | 60                          |  |
|    | in. | –                              |  | 2.36                        |  |
| LP | mm  | = 270 + LC + X                 |  | = 300 + LC + X              |  |
|    | in. | = 10.63 + LC + X               |  | = 11.81 + LC + X            |  |
| M  | mm  | 100                            |  | 100                         |  |
|    | in. | 3.94                           |  | 3.94                        |  |

Carriage type 1

|    |     | Without protective metal strip |  | With protective metal strip |  |
|----|-----|--------------------------------|--|-----------------------------|--|
| E0 | mm  | 62                             |  | 138                         |  |
|    | in. | 2.44                           |  | 5.43                        |  |
| E1 | mm  | 62                             |  | 138                         |  |
|    | in. | 2.44                           |  | 5.43                        |  |
| LC | mm  | 244                            |  | 364                         |  |
|    | in. | 9.61                           |  | 14.33                       |  |

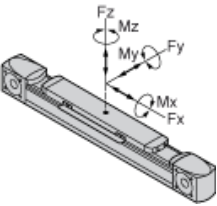
Carriage type 2

|    |     | Without protective metal strip |  | With protective metal strip |  |
|----|-----|--------------------------------|--|-----------------------------|--|
| E0 | mm  | 62                             |  | 138                         |  |
|    | in. | 2.44                           |  | 5.43                        |  |
| E1 | mm  | 133                            |  | 208                         |  |
|    | in. | 5.24                           |  | 8.19                        |  |
| LC | mm  | 314                            |  | 434                         |  |
|    | in. | 12.36                          |  | 17.09                       |  |

Carriage type 4

|    |     | Without protective metal strip |  | With protective metal strip |  |
|----|-----|--------------------------------|--|-----------------------------|--|
| E0 | mm  | 62                             |  | 138                         |  |
|    | in. | 2.44                           |  | 5.43                        |  |
| E1 | mm  | 273                            |  | 348                         |  |
|    | in. | 10.75                          |  | 13.70                       |  |
| LC | mm  | 454                            |  | 574                         |  |
|    | in. | 17.87                          |  | 22.60                       |  |

Forces and Torques Exerted on the Lexium PAS B Portal Axis



Types of Interface for the Drive Element

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Drive Element Fixed on Right-Hand Side



Drive Element Fixed on Left-Hand Side

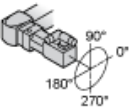


Without Connection / Without Adaptor Plate

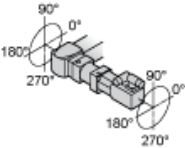


Possible Motor Drive Configurations and Orientations

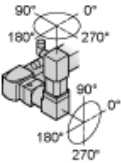
Motor Only Without Gearbox



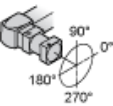
Motor With Planetary Gearbox



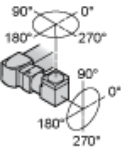
Motor With Angular Planetary Gearbox



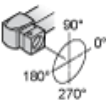
Planetary Gearbox Only



Angular Planetary Gearbox Only



Without Motor, Without Gearbox, With Adaptor Plate for the Drive Element



Without Motor, Without Gearbox

