

# Product data sheet

Specifications



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

PAS43BR

## 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                | Roller          |

## 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>1760 N for Fy<br>1040 N for Fz  |
| Maximum Speed        | 26.25 ft/s (8 m/s)   |
| Maximum Acceleration | 65.62 ft/s² (20 m/s²)  |
| Max. Drive Torque    | 318.63 lbf.in (36 N.m)   |
| Max. Torque          | <256.67 lbf.in (29 N.m) for Mx<br><451.39 lbf.in (51 N.m) for My carriage type 1<br><770.01 lbf.in (87 N.m) for My carriage type 2<br><1416.12 lbf.in (160 N.m) for My carriage type 4<br><761.16 lbf.in (86 N.m) for Mz carriage type 1<br><1309.91 lbf.in (148 N.m) for Mz carriage type 2<br><2398.55 lbf.in (271 N.m) for Mz carriage type 4 |
| Min. ... Max. Stroke | 6.89...216.54 in (175...5500 mm)   |
| Repeat Accuracy      | +/- 0.05 mm  |
| Profile Dimension    | 80 x 100 mm  |
| Service Life         | 30000 km   |

## Packing Units

|                              |     |
|------------------------------|-----|
| Unit Type Of Package 1       | PCE |
| Number Of Units In Package 1 | 1   |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

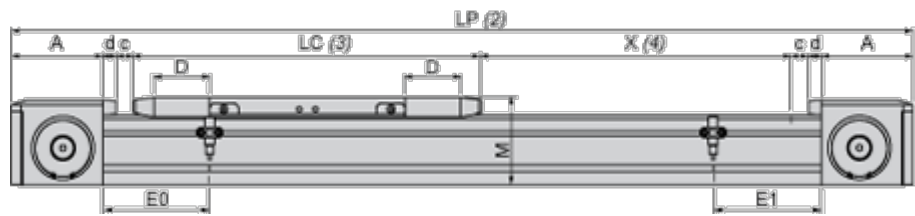
Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

# Contractual warranty

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

Dimensions Drawings

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                         |

| Carriage type 1 |     |                                |                             |
|-----------------|-----|--------------------------------|-----------------------------|
|                 |     | Without protective metal strip | With protective metal strip |
|                 | in. | 9.61                           | 14.33                       |

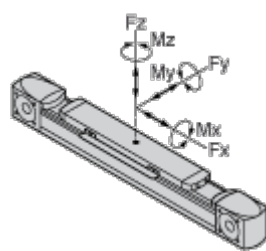
| Carriage type 2 |     |                                |                             |
|-----------------|-----|--------------------------------|-----------------------------|
|                 |     | Without protective metal strip | With protective metal strip |
| E0              | mm  | 62                             | 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                       |

Technical Description

Forces and Torques Exerted on the Lexium PAS B Portal Axis

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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

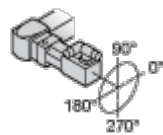


Without Connection / Without Adaptor Plate

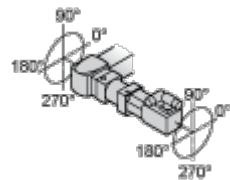


Possible Motor Drive Configurations and Orientations

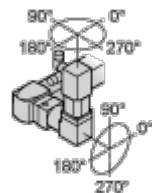
Motor Only Without Gearbox



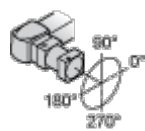
Motor With Planetary Gearbox



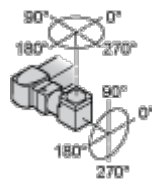
Motor With Angular Planetary Gearbox



Planetary Gearbox Only



Angular Planetary Gearbox Only



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



Without Motor, Without Gearbox

