

## Description

## Material:

Bearing block and carriage aluminium alloy.
Guide column and threaded spindle stainless steel.
Plain bearing for guide columns and spindle nut high-quality special plastic. Claw coupling aluminium with polyurethane coupling spider.

## Version:

Aluminium alloy anodised.
Stainless steel hardened and ground.
Threaded spindle with ball bearing.

## Note for ordering:

The unit is supplied with the position of cable outlet or control unit as shown in the drawing.

## Note:

Positioning stages for motorised adjustment and positioning tasks. The plain bearings and spindle nuts are suitable for dry running, however lubrication with a grease for plastic plain bearings is recommended. The suitable programming software and interface cable for the stepper motor with positioning control are available as accessories (25000-15).
The stepper motor with a resolution of 200 increments per rotation allows a single direction calculated positioning accuracy of 0.005 mm . The absolute single direction positioning accuracy is 0.01 mm . The system can be operated with a duty cycle of 100\%.

Can be combined with all other parts of the same size.

## Technical data:

Threaded spindle pitch: 2 mm
Axial backlash of threaded spindle: $<0.04 \mathrm{~mm}$
Radial play of guides: $<0.02 \mathrm{~mm}$
Max. input speed: 600 rpm
Max. travel speed: $20 \mathrm{~mm} / \mathrm{s}$
Max. duty cycle: 100 \%
Application temperature: $+10^{\circ} \mathrm{C}$ to $+50^{\circ} \mathrm{C}$
(A)
A-A

(B)

(C)


Overview of items

| Order No. | Size | Form | Form definition |
| :---: | :---: | :---: | :---: |
| $21082-080$ | 8 | A | without motor |
| $21082-0811$ | 8 | B | with stepper motor |
| $21082-0821$ | 8 | C | stepper motor with control |
| $21082-120$ | 12 | A | without motor |
| $21082-1211$ | 12 | B | with stepper motor |
| $21082-1221$ | 12 | C | stepper motor with control |

## Specifications

| Size | B | B1 | B2 | D2 | D3 | D4 | D5 | H | H1 | H3 | H4 | H5 | H6 | L1 | L2 | L3 | L.4 | L5 | L6 | L7 | L8 | $\begin{gathered} \hline \text { Travel } \\ \hline \mathrm{S} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | 46 | 36 | 21 | $8 \times 2$ | 8 | 4 | M4 | 28 | 20 | 23 | 14 | 6 | 24 | 134 | 46 | 36 | 26 | 8,5 | 20 | 12 | 6 | 50 |
| 12 | 75 | 60 | 38 | $8 \times 2$ | 12 | 6 | M4 | 29,5 | 25 | 27 | 15,5 | 7 | 28 | 180 | 75 | 60 | 15 | 11 | 7,5 | 15 | 7,5 | 75 |

## Force tables

| Size | F1 | F2 | $F 3$ | $M x$ | Nm |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | N | N | My |  |
| 8 | 60 | 80 | 60 | 0,7 | Nm |
| 12 | 60 | 120 | 100 | 1 | 0,7 |

