

Positioning with System

Ball Bushing Slide Type KCL with integrated linear motor

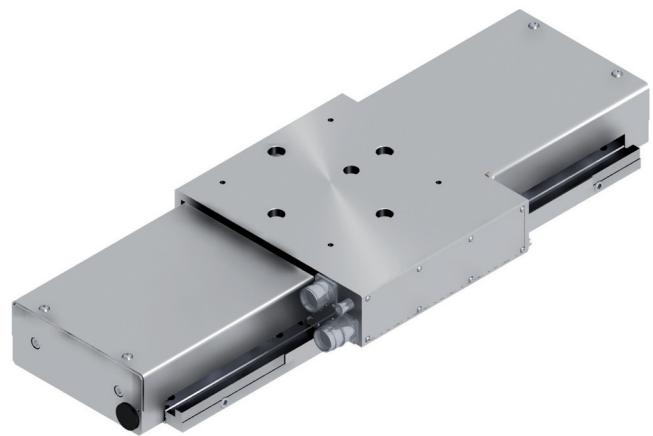
Handling, Assembly Technique, Machining Technique, etc.
... but also for your applications

Föhrenbach's precision slide guide type KCL with ball bushings and integrated linear motor, is an alternative solution to belt and rack axes.

The type KCL is characterized by

- very compact design
- optimum running characteristics
- low noise operation
- high dynamics
- high power density
- continuous high positioning and repeating accuracy by zero backlash (without mechanical transmission components with clearance)
- good regulation characteristics
- high rigidity and damping
- small maintenance costs

Possible speed up to 3 m/s and accelerations up to 10 m/s².



Material

- Aluminium anodised natural

Slide

- Ball bushing slide

Drive

- Föhrenbach linear motor
(control by conventional servo controllers)

Protection class

- Protection class: IP 50 (Other protection classes on request)

Lubrication

- With first greasing run achievement above 6000 km;
longer running times on request

Ambient temperature

- Allowable temperature at the operating location:
+10 °C up to +40 °C

Field of applications

- Assembly technique, handling and machining technique, automation systems, electronic and packaging industry

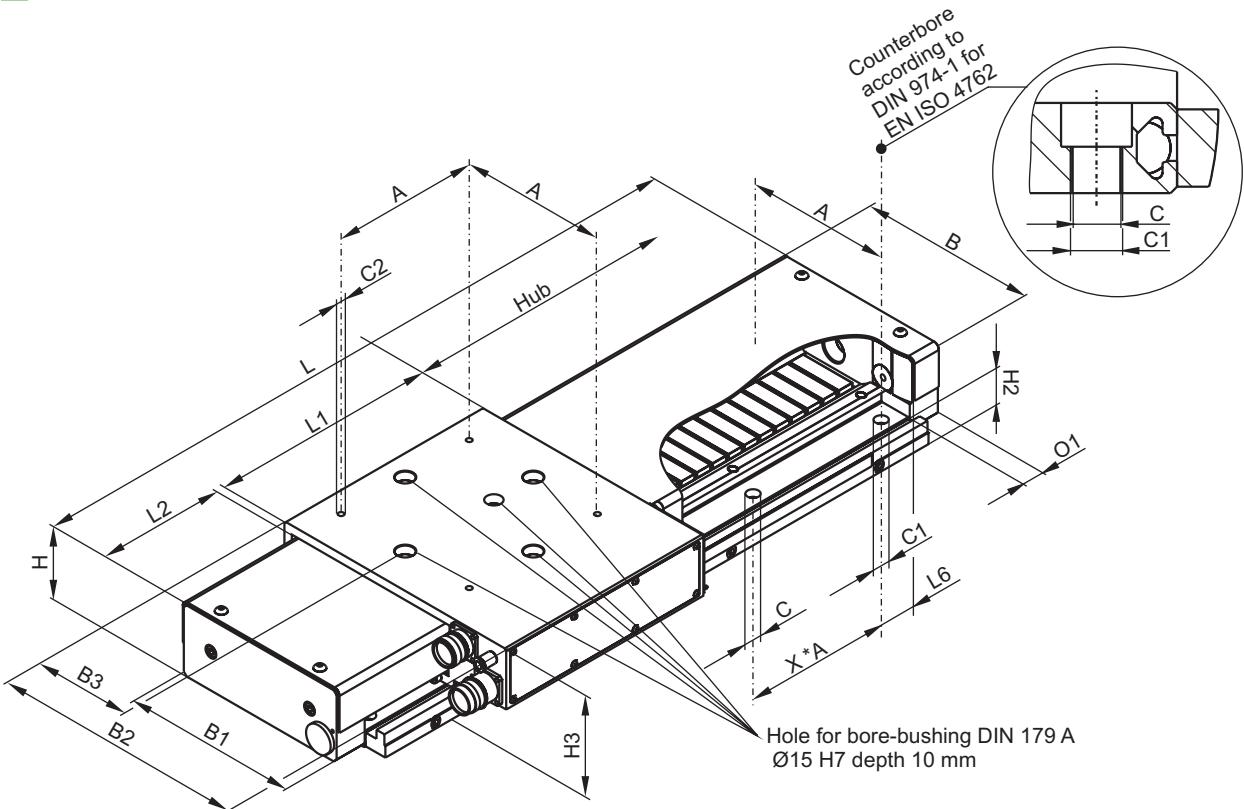
Measuring systems

- Position measuring systems, absolute
- Position measuring systems, incremental

Technical data

- | | |
|------------------------------|---------------|
| ■ Positioning accuracy | ± 20 µm |
| ■ Accuracy with compensation | ± 5 µm |
| ■ Traversing range (stroke) | up to 3000 mm |

Ball Bushing Slide Type KCL 155



Dimensions

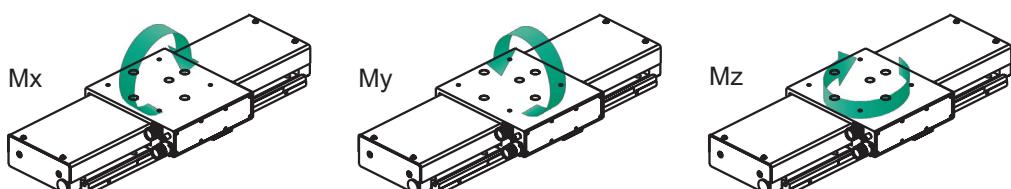
Dimensions [mm]

A	B	B1	B2	B3	C	C1	C2	H	H1	H2	H3	L1	O1	L2
130	159	155	225	87.5	7.4	M8	M6	65.5	—	14	75	200	28.5	42.5

Dimensions [mm] and weight [kg] at standard strokes

Stroke	300	400	500	600	800	1000	1200	1400	1500	1800	2000	2500	3000
L	609	709	809	909	1109	1309	1509	1709	1809	2109	2309	2809	3309
X *A	4	4	5	6	7	9	11	12	13	15	17	21	24
L6	44.5	94.5	79.5	64.5	99.5	69.5	39.5	74.5	59.5	79.5	49.5	39.5	94.5
Weight	11.8	12.5	14.4	16.4	20.4	24.4	28.4	32.4	34.3	40.3	44.3	54.3	64.2

Torque loading capacity and torsional stiffness of the non-supported slide



Static torque loading capacity [Nm]
(for strokes >= length L1)

Torsional stiffness K_T [Nm/°]

M_x	M_y	M_z	M_x	M_y	M_z
154	146	220	2496	2915	5812