Linear Actuators
Technical Description

Ganter Norm®

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End cover

Lead nut / Drive key

Trapezoidal threaded spindle

Deep-groove ball bearing

M_x

F_z

M_y

F_y

M_z

F_x

Ø Linear actuator	Fx in N	Fy in N			Fz in N			Mx in Nm	My in Nm	Mz in Nm
		l = 500	l = 1000	l = 1500	l = 500	l = 1000	l = 1500			
18	400	80	-	-	65	-	-	1,5	4,5	4,5
30	850	500	70	15	550	55	10	6,5	15	15
40	1100	2150	250	65	1900	150	50	15	42	42
50	1750	3100	650	150	3100	650	150	29	69	69
60	2600	4550	1500	400	4550	1400	350	45	125	125

The load data are applicable to linear actuators GN 291, GN 292, GN 293 made of steel (SCR) or stainless steel (NI).
The specified forces Fy and Fz cause a flexure of the guide tube of approx. 0.5 mm.

Description

A lead nut moves in axial direction over the ball bearing trapezoidal thread spindle of the linear actuator. The follower ensures the anti-rotation and makes the link to the different linear actuator connectors. The linear actuators have been designed for manual operation (handwheel).

The positioning accuracy is 0.2 mm / 300 mm stroke, the maximum reverse play is 0.1 mm.

Guide tubes are available in chromed steel (SCR) or stainless steel (NI) non-rusting. They are made with the tolerance range of precision steel tubes DIN 2391 or DIN 2462.

A wide variety of different components are available in the tube clamp connector program to fix the linear actuators in place and to upgrade these into linear actuator connectors.

Also, digital position indicators (GN 953 / GN 954 / GN 9053 / GN 9054 ➔ *Page 396 / 398 / 402 / 404*) may be attached to measure the displacement or the positioning.

In applications where high torsion forces Mx occur, linear actuators with square tubing or double tube linear actuators should be given preference.

A wide variety of different components from the tube clamp connector program is also available for the square tubings. The linear actuator connectors are composed of two-part elements, with the effect that the precision of the square tubes involves no special requirements.