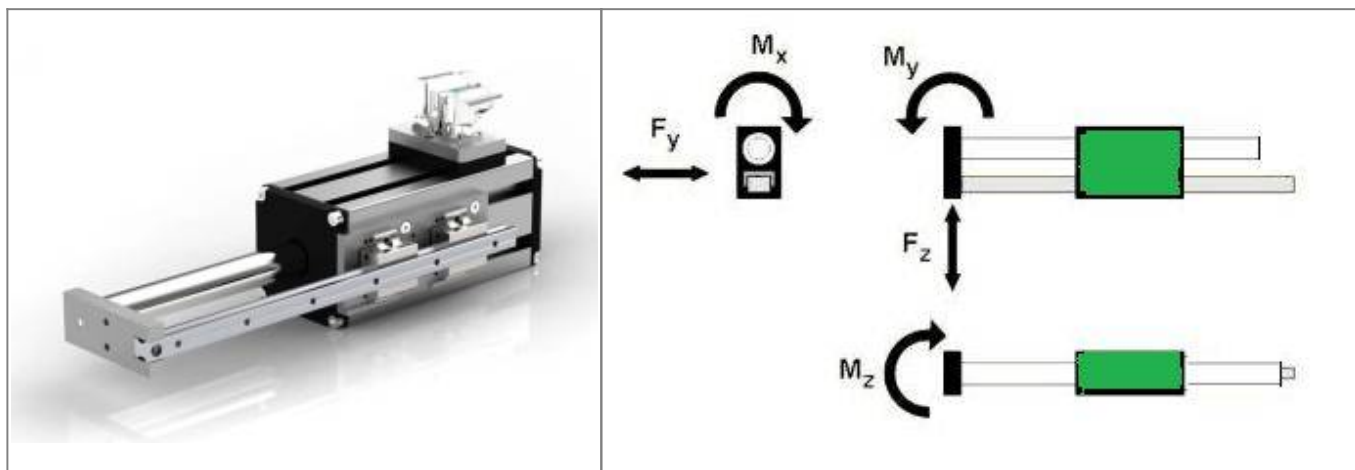


Antirotation mechanics



Force and momentum ratings

Parameter	GD160D/T/Q	GD250D/T/Q/X	GD350D/T/Q/X/E
F_y [N]	248	1000	1480
F_z [N]	248	1490	2450
M_x [Nm]	44	192	360
M_y [Nm]	77	435	720
M_z [Nm]	77	275	445
Lifespan [km]	> 90.000	> 100.000	> 90.000
Note that this lifespan is considering a lubrication interval of 5000 Km each 6 months. Theoretical value calculated considering miniature linear guide size 12 and 15 and standart linear guide size 15			

Bending rating

Extension [mm]	60	160	260
Bending [mm] per motor size GD160D/T/Q			
$F_z = 5$ N	0.004	0.081	0.34
$F_z = 10$ N	0.012	0.151	0.65
$F_z = 20$ N	0.021	0.300	1.31
Bending [mm] per motor size GD250D/T/Q/X			
$F_z = 10$ N	0.005	0.029	0.11
$F_z = 10$ N	0.008	0.049	0.22
$F_z = 20$ N	0.010	0.109	0.46
Bending [mm] per motor size GD350D/T/Q/X/E			
$F_z = 20$ N	0.002	0.019	0.089
$F_z = 40$ N	0.005	0.039	0.179
$F_z = 80$ N	0.009	0.079	0.359

Last
update:
2026/09/11 07:55 en:green_drive_motors:antirotation_mechanics https://www.nilab.at/dokuwiki/doku.php?id=en:green_drive_motors:antirotation_mechanics

From:
<https://www.nilab.at/dokuwiki/> - **NiLAB GmbH**
Knowledgebase

Permanent link:
https://www.nilab.at/dokuwiki/doku.php?id=en:green_drive_motors:antirotation_mechanics

Last update: **2026/09/11 07:55**

