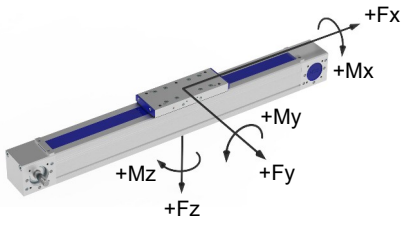
Performance Overview of Mechanical Linear Units, Compact Units and Linear Tables with Ball Screw

Description	Screw Drive	F_X [N]	F_Y [N]	F_Z [N]	$-F_Z$ [N]	M_X [Nm]	M_Y [Nm]	M_Z [Nm]	M_{idle} [Nm]	$d_{pn/ps}$ [mm]	d_s [mm]	SA	s_{max} [mm]	L_{max} [mm]
Beta 40-SGS	1205 / 1210	1000	80	150	75	6	6	8	0.3	0.08 / 0.03	0.03	2	1840	2040
Beta 40-SSS		1000	500	600	300	12	30	30	0.3	0.08 / 0.03	0.03	2	1840	2040
Beta 50-C-SRS	1205 / 1210	1000	300	600	400	30	50	50	0.3	0.08 / 0.03	0.03	-	860	1090
Beta 60-SGV	2005 / 2010 2020 / 2050	4000	-	-	-	-	-	-	0.7	0.08 / 0.03	0.03	8	5220	5500
Beta 60-SSS		4000	600	1800	1200	60	180	120	0.7	0.08 / 0.03	0.03	8	5220	5500
Beta 70-C-SRS	1605 / 1610 1620 / 1640	2000	300	1000	400	35	120	60	0.35	0.08 / 0.03	0.03	8	3725	4000
Beta 70-C-SSS		2000	600	1800	1200	60	180	120	0.4	0.08 / 0.03	0.03	8	3725	4000
Beta 80-SRS	2005 / 2010 2020 / 2050	4000	500	1500	800	50	180	100	0.6	0.08 / 0.03	0.03	8	5220	5600
Beta 80-SSS		4000	800	3000	2000	100	250	250	0.8	0.08 / 0.03	0.03	8	5220	5600
Beta 80-SGV	2505 / 2510 2525 / 2550	6000	-	-	-	-	-	-	1,00	0.1 / 0.04	0.03	8	5220	5600
Beta 100-D-SSS	2005 / 2010 2020 / 2050	4000	1800	4000	3000	350	750	750	1.3	0.08 / 0.03	0.03	8	5260	5600
Beta 110-SRS	2505 / 2510 2525 / 2550	6000	2000	5000	2500	300	600	450	1,00	0.1 / 0.04	0.03	8	5120	5600
Beta 110-SSS		6000	3000	8000	4000	400	800	600	1.5	0.1 / 0.04	0.03	8	5120	5600
Beta 110-C-SGV	4005 / 4010 4020 / 4040	16000	-	-	-	-	-	-	1.5	0.1 / 0.04	0.03	6	5120	5600
Beta 120-C-SSS	3205 / 3210 3220 / 3240 3260	12000	4000	12000	6000	600	1500	1000	2,00	0.1 / 0.04	0.03	8	5120	5600
Beta 140-C-SSS	2505 / 2510 2525 / 2550	6000	3200	7500	5000	600	1200	1200	1.5	0.1 / 0.04	0.03	8	5120	5600
Beta 165-SSS	4005 / 4010 4020 / 4040	18000	5000	15000	8000	700	1400	1100	3,00	0.1 / 0.04	0.03	8	5010	5600
Beta 165-SGV		18000	-	-	-	-	-	-	3,00	0.1 / 0.04	0.03	8	5020	5600
Beta 165-C-SGV	5010 / 5020	25000	-	-	-	-	-	-	3.2	0.1 / 0.04	0.03	6	5020	5600
Beta 165-C-SSF	5010 / 5020	25000	5000	15000	8000	800	1800	1400	3.2	0.1 / 0.04	0.03	6	5010	5600
Beta 180-SSS	3205 / 3210 3220/ 3240 3260	12000	6000	12000	6000	1500	3000	1500	2.5	0.1 / 0.04	0.03	8	5030	5600
Beta 180-C-SSS		12000	8000	15000	8000	1800	3600	1800	2.5	0.1 / 0.04	0.03	8	5030	5600
Delta 90-SRS	1205 / 1210	1000	500	1000	1000	60	80	80	0.8	0.08 / 0.03	0.03	2	1185	1500
Delta 110-C-SSS	1605 / 1610 1620 / 1640	2000	1200	3000	1500	500	550	550	1,00	0.08 / 0.03	0.03	8	5455	5600
Delta 145-C-SSS	2005 / 2010 2020 / 2050	4000	2500	5000	3000	800	1000	1000	1,00	0.08 / 0.03	0.03	8	5275	5600
Delta 200-SSS	3205 / 3210 3220 / 3240 3260	10000	5000	8000	5000	3500	4300	3200	2.8	0.1 / 0.04	0.03	4	1620	2000
Delta 240-SSS		12000	6000	12000	8000	4500	6000	4500	2.8	0.1 / 0.04	0.03	4	2600	3000
Delta 240-C-SSS		12000	6000	12000	8000	4500	6000	4500	2.8	0.1 / 0.04	0.03	4	5400	5600
Alpha 15-B-155	2005 / 2010 2020 / 2050	4000	2000	20000	15000	1000	900	400	0.35	0.08 / 0.03	0.03	-	1235	1500
Alpha 20-B-225	2505 / 2510 2525 / 2550	6000	5000	58000	40000	4000	3000	1200	1.2	0.1 / 0.04	0.03	-	1645	2000
Alpha 30-B-325	3205 / 3210 3220 / 3240	12000	11000	95000	63000	6300	7500	3750	1.6	0.1 / 0.04	0.03	-	2540	3000
Alpha 35-B-455	4005 / 4010 4020 / 4040	18000	14000	120000	80000	12000	10000	5000	2.5	0.1 / 0.04	0.03	-	2420	3000

For mechanical linear drives with roller guides, the static load rating (C_{stat} page TL11) applies for static loads.

M_{idle} = Idle torque ±30 %
$d_{pn/ps}$ = Axial clearance (normal/low backlash)
d_s = Repeat accuracy ±
SA = Maximum number of spindle supports
s_{max} = Maximum standard stroke length without spindle support (longer on request)
L_{max} = Maximum standard length (longer on request)



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