

Serie ONE 50

Technical data

	Type
	ONE 50
Max. useful stroke length [mm]	3700
Max. positioning repeatability [mm]**1	± 0.05
Max. speed [m/s]	4
Max. acceleration [m/s ²]	50
Type of belt	22 AT 5
Type of pulley	Z 23
Pulley pitch diameter [mm]	36,61
Carriage displacement per pulley turn [mm]	115
Carriage weight [kg]	0.4
Zero travel weight [kg]	1.8
Weight for 100 mm useful stroke [kg]	0.4
Starting torque [Nm]	0.4
Moment of inertia of pulleys [g mm ²]	19810

**1) Positioning repeatability is dependant on the type of transmission used

Tab. 4

ONE 50 - Load capacity

Type	F_x [N]		F_y [N]		F_z [N]		M_x [Nm]		M_y [Nm]		M_z [Nm]	
	Stat.	Dyn.	Stat.	Dyn.	Stat.	Dyn.	Stat.	Dyn.	Stat.	Dyn.	Stat.	Dyn.
ONE 50	809	508	7000	4492	7000	4492	42	27	231	148	231	148

Moments of inertia of the aluminum body

Type	I_x [10 ⁷ mm ⁴]	I_y [10 ⁷ mm ⁴]	I_D [10 ⁷ mm ⁴]
ONE 50	0.025	0.031	0.056

Tab. 5

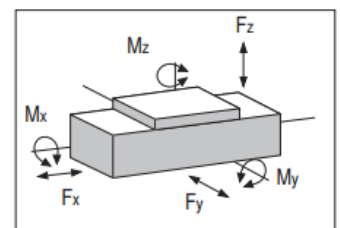
Driving belt

The driving belt is manufactured from a friction resistant polyurethane and with steel cords for high tensile stress resistance.

Type	Type of belt	Belt width [mm]	Weight kg/m
ONE 50	22 AT 5	22	0.072

Tab. 6

Belt length (mm) = 2 x L - 130



Serie ONE 80

Technical data

	Type
	ONE 80
Max. useful stroke length [mm]	6000
Max. positioning repeatability [mm]*1	± 0.05
Max. speed [m/s]	5
Max. acceleration [m/s ²]	50
Type of belt	32 AT 10
Type of pulley	Z 19
Pulley pitch diameter [mm]	60.48
Carriage displacement per pulley turn [mm]	190
Carriage weight [kg]	2.7
Zero travel weight [kg]	10.5
Weight for 100 mm useful stroke [kg]	1
Starting torque [Nm]	2.2
Moment of inertia of pulleys [g mm ²]	388075

*1) Positioning repeatability is dependant on the type of transmission used

Tab. 8

ONE 80 - Load capacity

Type	F _x [N]		F _y [N]		F _z [N]		M _x [Nm]		M _y [Nm]		M _z [Nm]	
	Stat.	Dyn.	Stat.	Dyn.	Stat.	Dyn.	Stat.	Dyn.	Stat.	Dyn.	Stat.	Dyn.
ONE 80	2013	1170	38480	21735	46176	25875	398	223	3371	1889	2809	1587

Moments of inertia of the aluminum body

Type	I _x [10 ⁷ mm ⁴]	I _y [10 ⁷ mm ⁴]	I _p [10 ⁷ mm ⁴]
ONE 80	0.136	0.195	0.331

Tab. 9

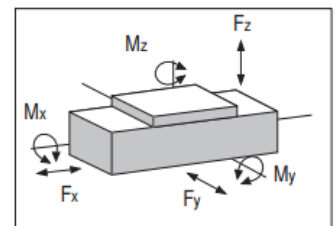
Driving belt

The driving belt is manufactured from a friction resistant polyurethane and with steel cords for high tensile stress resistance.

Type	Type of belt	Belt width [mm]	Weight kg/m
ONE 80	32 AT 10	32	0.185

Tab. 10

$$\text{Belt length (mm)} = 2 \times L - 230$$



Serie ONE 110

Technical data

	Type
	ONE 110
Max. useful stroke length [mm]	6000
Max. positioning repeatability [mm]*1	± 0.05
Max. speed [m/s]	5
Max. acceleration [m/s ²]	50
Type of belt	50 AT 10
Type of pulley	Z 27
Pulley pitch diameter [mm]	85.94
Carriage displacement per pulley turn [mm]	270
Carriage weight [kg]	5.6
Zero travel weight [kg]	22.5
Weight for 100 mm useful stroke [kg]	1.4
Starting torque [Nm]	3.5
Moment of inertia of pulleys [g mm ²]	2.193 · 10 ⁶

*1) Positioning repeatability is dependant on the type of transmission used

Tab. 12

ONE 110 - Load capacity

Type	F _x [N]		F _y [N]		F _z [N]		M _x [Nm]		M _y [Nm]		M _z [Nm]	
	Stat.	Dyn.	Stat.	Dyn.	Stat.	Dyn.	Stat.	Dyn.	Stat.	Dyn.	Stat.	Dyn.
ONE 110	4440	2940	92300	46003	110760	54765	1110	549	9968	4929	8307	4140

Moments of inertia of the aluminum body

Type	I _x [10 ⁷ mm ⁴]	I _y [10 ⁷ mm ⁴]	I _p [10 ⁷ mm ⁴]
ONE 110	0.446	0.609	1.054

Tab. 13

Driving belt

The driving belt is manufactured from a friction resistant polyurethane and with steel cords for high tensile stress resistance.

Type	Type of belt	Belt width [mm]	Weight kg/m
ONE 110	50 AT 10	50	0.290

Tab. 14

$$\text{Belt length (mm)} = 2 \times L - 290$$

