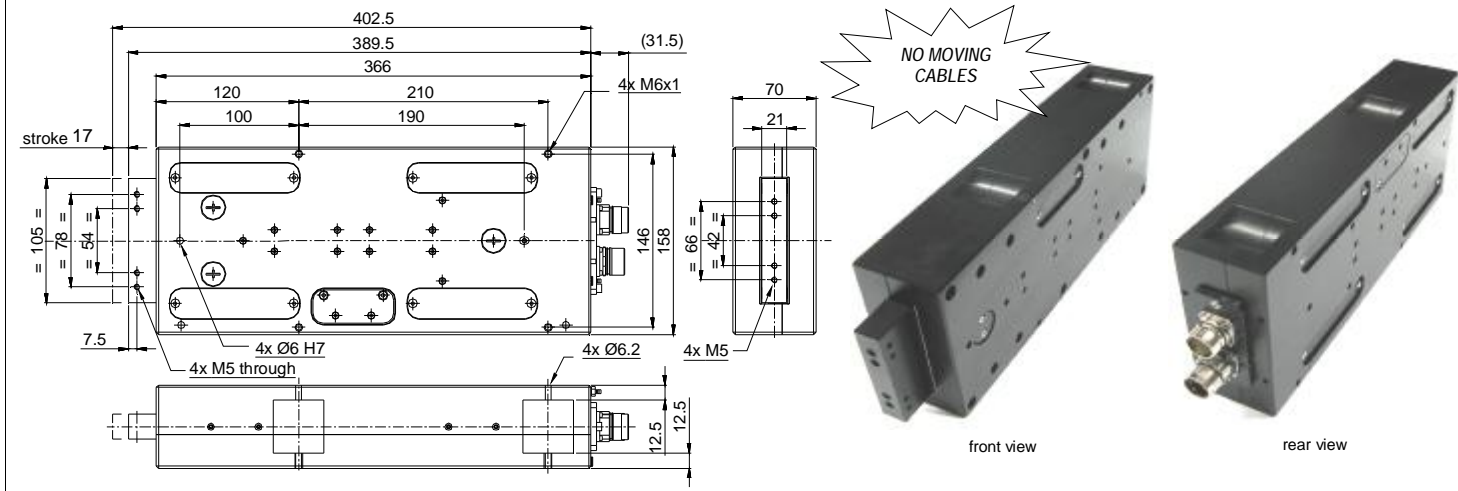


HIGH DYNAMIC LINEAR ACTUATOR LHD-080.017-DV

DATA SHEET

MAGER's High Dynamic Linear Actuators are suitable to the movement of masses and tools with short strokes, high frequency and with very high positioning accuracy. The actuator performances can be also defined giving priority to the control of the developed force instead of the positioning control.



2D (dxf, dwg) or 3D (step) drawings available by request

MAIN SPECIFICATIONS	MU	LHD-080.017-DV
standard code	-	F0210-000100
chassis	-	anodized aluminium
bearings tecnology	-	linear rolling bearings
protection ⁽¹⁾	-	IP30
environment temperature	-	-10°C ÷ +30°C
environment humidity	-	24% ÷ 50%
Length × Width × Height (body)	mm	L366 × W70 × H158
total mass / mass of the moving parts	kg	9,5 / 1,6
cooling	-	free / forced air / water

MOTOR SPECIFICATIONS ⁽³⁾	MU	LHD-080.017-DV
tecnology	-	linear motor
nominal voltage U	VDC	600
peak current I_p	Arms	26
continous current I_c	Arms	4,2

LINEAR ENCODER SPECIFICATIONS ⁽²⁾	MU	LHD-080.017-DV
tecnology	-	optical
type	-	incremental with zero
period	µm	20
accuracy	µm	±5
supply	V	5 ±5%
signal	Vpp	1

PERFORMANCES	MU	LHD-080.017-DV
peak force F_p ⁽⁴⁾	N	800
continous force F_c ⁽⁴⁾	N	180
stall force F_s ⁽⁴⁾	N	127
maximum stroke T_r	mm	17,0
position accuracy ⁽⁴⁾	µm	±8
position repeatability ⁽⁴⁾	µm	±3
maximum payload M	kg	6,0
maximum speed V_{mx}	m/s	8,0
maximum acceleration a_{mx} ^{(4) (5)}	m/s ²	200
averager life ⁽⁶⁾	cycles	≥ 400.000.000

Notes: ⁽¹⁾ with internal 0,5 bar pressurization ⁽²⁾ different encoders available by request ⁽³⁾ electric and force tolerances +/- 10% (where not specified) ⁽⁴⁾ depending on the drive - shown values refer to shown encoder and use of ETEL's drives ⁽⁵⁾ higher values will bring irreversible damages ⁽⁶⁾ the rolling guiding system will need specific lubrication, it's compulsory the planning of: 3x forward/back full stroke every 5.000 cycles - max 2 mm/s (general suggestion)

POWER CONNECTOR	PIN	description	PIN	description
	1	U phase	A	---
	4	W phase	B	---
	3	V phase	C	---
	2	Protective Ground Conductor	D	---

SIGNAL CONNECTOR	PIN	description	PIN	description	PIN	description
	1	---	7	+5 VDC power supply	13	Cos -
	2	Ref -	8	---	14	---
	3	Ref +	9	---	15	Sin +
	4	---	10	0 VDC power supply	16	Sin -
	5	---	11	Shield	17	---
	6	---	12	Cos +		

NOTES