Z STANDALONE ACTUATOR

ASME-TMMA00100151PAS0010

Data sheet

Version 2.4

MOTION TECHNOLOGY

REFLEX SERIES
SHORT STROKE ACTUATOR

ASME-TMMA00100151PAS0010-Z STANDALONE ACTUATOR

DIMENSIONAL DATA	UNIT	VALUES
Axis width	mm (in)	38 (1.49)
Axis length	mm (in)	42.7 (1.68)
Axis height	mm (in)	120 (4.72)
Total stroke (1)	mm (in)	10.7 (0.42)
Total mass	kg (lbs)	0.4 (0.88)
Moving mass	kg (lbs)	0.077 (0.17)

FORCE CAPABILITIES		UNIT	VALUES
Fp	Peak force (2)	N	29
Fc	Continuous force (2)	N	11.5
Fmax	Maximum transmissible effort (3)	N	200

LOAD CAPACITY	UNIT	VALUES
Typical load capacity (4)	kg (lbs)	0.05 (0.11)

DYNAMIC PERFORMANCE	UNIT	RECOMMENDED VALUES
Maximum speed (5)	m/s (in/s)	1 (39.37)
Maximum acceleration	m/s² (in/s²)	300 (11811)

STAGE ACCURACY	UNIT	TYPICAL VALUES
Unidirectional repeatability (6) (7)	µm	< ±5

ELECTRICAL SPECIFICATIONS		UNIT	
Kt	Force constant (9)	N/Arms	9.07
Ku	Back EMF constant (8)	Vrms/(m/s)	9.68
R20	Electrical resistance at 20°C (8)	Ohm	3.85
L1	Electrical inductance (8)	mH	6.6
Ip	Peak current	Arms	3.4
Ic	Continuous current (2)	Arms	1.6
Udc	Nominal input voltage (10)	VDC	48
Pc	Max. cont. power dissipation (2)	W	9.8

GUIDING ELEMENTS	
Type	Plain bearing

ENCODER CHARACTERISTICS	
Encoder type	Linear optical incremental TTL
Output signal	2 channels digital output
Signal period	4 µm
Minimum increment	1 µm

MATERIALS AND FINISH	
Housing	Aluminum black anodized
Moving rod	Steel

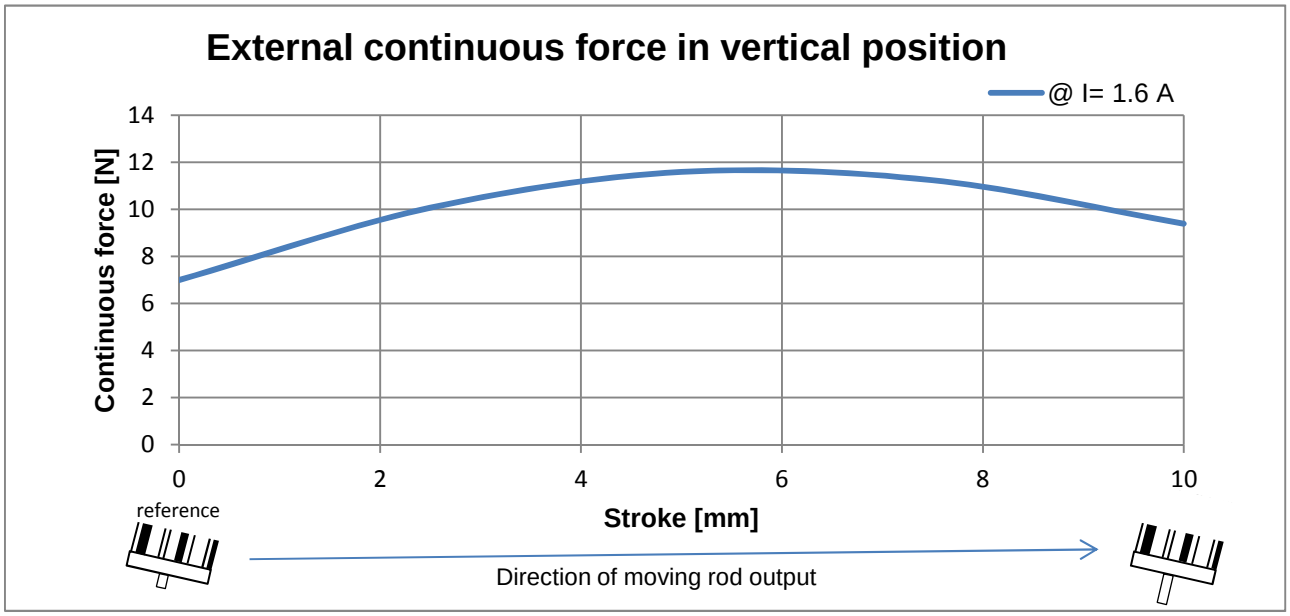
WORKING ENVIRONMENT

IP protection grade	IP40

OPTIONS

Safety option	Weight compensation without external mass

CONT. FORCE = f (STROKE)



According to the Machinery Directive 2006/42/EC, the system presently described falls into the "partly completed machinery" category and fully complies with it as long as the system is operated according to the working conditions described in the corresponding 'Integration Manual'. Customer is responsible for setting safeties/limitations that will keep the motor in its safe operating area. ETEL cannot be held responsible if the system is used in an improper way.

Notes: The specifications given may be mutually exclusive.

(1) Standard strokes ±0.3mm.

(2) Coils at 80°C. See diagram below: 20°C vertical position natural convection.

(3) Maximum external force that the actuator can withstand (including impact force).

(4) Indicative load capacity in axial direction. No lateral force allowed!

(5) Recommended value. Please contact ETEL for any other case.

(6) With ETEL electronics.

(7) Top to bottom.

(8) Terminal to terminal.

(9) Vertical working position, at 6mm, moving down.

(10) The maximal input voltage must be lower than 50 VDC