

Product Information

Electro-mechanical testing actuator EZ005 to EZ030

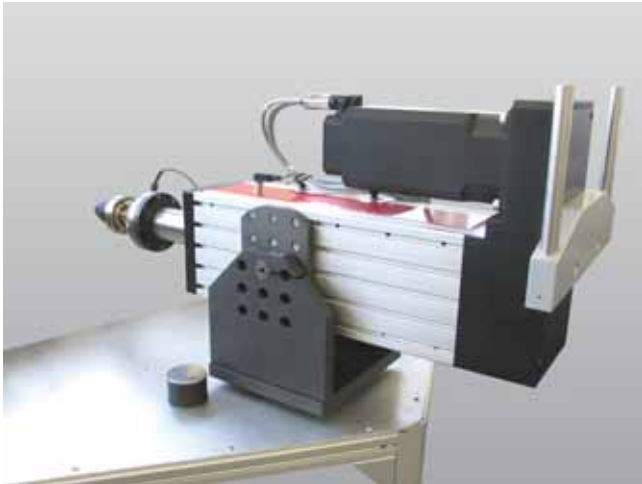


Figure: Electro-mechanical testing actuator large type

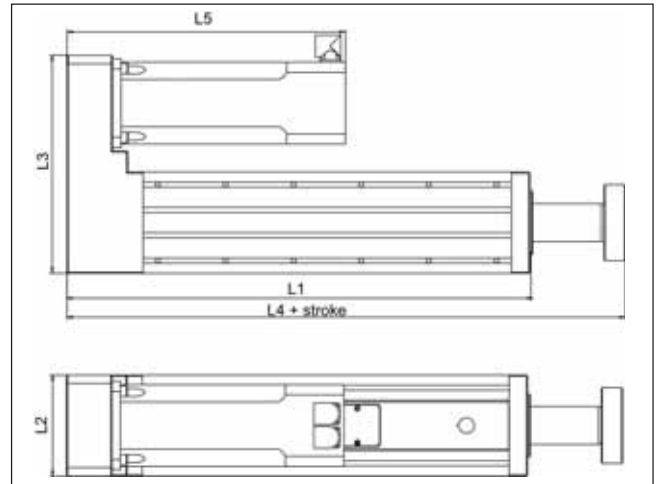


Figure: Drawing of electro-mechanical testing actuator

Application range

Multi-purpose testing axis for tensile and compression applications. For variable integration in test stands, production lines or customized constructions.

Dedicated for force/travel measurements with high demands on resolution, accuracy and speed.

Typical application areas

- Testing of materials, assemblies, components and complete end products
- Manufacturing processes with measurement performance (e.g. automatic assembly, mounting)
- Cyclic tests with large strokes

Advantages and features

Flexible usage

- Variable mounting via front or rear flange or via trunion mount
- Measurement and control electronics *testControl* in separate free positioning rack resulting in free positioning (rack optional in IP54 design)
- Flexible programming of test sequences due to versatile interfaces
- Ideally usage for clean room areas

High performance

- Speeds up to 30 m/min
- High resolution measurement and control electronics *testControl* for precise data acquisition with up to 500 Hz
- Closed loop control of force and travel with smooth switching between those modes

Integration in production lines

- Optional plug-in card provides freely definable digital inputs and outputs
- Easy integration of additional measurement devices (e.g. digital multi-meters)
- Optional operation via remote interface

Large variety of standard modules

- Easy mounting of Zwick load cells and tooling
- Operation via standard PC and *testXpert*® software
- Proven digital drive technology controlled by Zwick standard electronics

Easy to install and maintain

- Installation possible without additional infrastructure (like e.g. hydraulic pumps or pneumatic connections)
- Low maintenance costs and long lifetime

Product Information

Electro-mechanical testing actuator EZ005 to EZ030

Large type	EZ005	EZ010	EZ010	EZ020	EZ020	Z030
Electro-mechanical testing actuator						
Fmax (tensile/compression) [kN]	5	10	10	20	20	30
Max. test speed						
[mm/min]	30000	3300	15000	1500	7500	6000
[mm/s]	500	55	250	26,6	125	100
Position resolution [µm]	0.4069	0.0895	0.2035	0.0448	0.1017	0.0936
Repeatability of position [µm]	± 8	± 8	± 8	± 8	± 8	± 8
L1 – Length [mm]	669	669	669	669	669	669
L2 – Width [mm]	180	180	180	180	180	180
L3 – Depth [mm]	385	385	385	385	385	385
L4 – Length						
including piston [mm]	837	837	837	837	837	837
L5 – Length including motor [mm]	385	340	385	340	385	385
Overall weight (approx.) [kg]	72	65	72	65	72	72
Maximal piston stroke						
standard [mm]	200	200	200	200	200	200
option [mm]	400	400	400	400	400	400
Ambient temperature [°C]	+10 ... +35	+10 ... +35	+10 ... +35	+10 ... +35	+10 ... +35	+10 ... +35
Air humidity [%]	20 – 90	20 – 90	20 – 90	20 – 90	20 – 90	20 – 90
Measurement and control electronics testControl						
Measurement range [von Fmax]	≤ 165%	≤ 165%	≤ 165%	≤ 165%	≤ 165%	≤ 165%
Acquisition rate, internal [Hz]	500	500	500	500	500	500
Transmission rate to PC, [Hz]	100	100	100	100	100	100
adjustable (option)	500	500	500	500	500	500
Electrical connections						
1 Ph/N/PE [V]		120 / 230		120 / 230		
3 Ph/N/PE [V]	400		400		400	400
Max. power consumption [VA]	5000	2300	5000	2300	5000	5000
Mains frequency [Hz]	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
Item no.						
Piston stroke standard	• 642504	• 639797	• 639794	• 642500	• 642503	• 639798
Piston stroke option ¹	• 642505	• 639796	• 639795	• 642501	• 642502	• 639799
	(BX1-EZ005.A4K)	(BX1-EZ010.A1K)	(BX1-EZ010.A4K)	(BX1-EZ020.A1K)	(BX1-EZ020.A4K)	(BX1-EZ030.A4K)

¹ with optional piston stroke the values of the length and weight are changed

Required Accessories

Item	Fmax [kN]	Item no.
Load cell	5	• 637920 (BXC-LC005KN.G02-002)
Load cell	10	• 318938 (BTC-LC010KN.G02)
Load cell	20	• 318936 (BTC-LC020KN.G02)
Load cell	30	• 325642 (BTC-LC030KN.G02)

Optional Accessories

Item	Item no.
Trunnion mount	• 639752 (BXC-FR030KN.EZ-002)
Load frame	• 639728 (BXC-FR030KN.EZ-001)
IP54-casing	• 639792 (BXC-OPIP54-001)
Remote control	• 639773 (BXC-OPRCSTD-001)