EVO-30

EVO Series
High Precision Three-Axis Positioning & Rate Tables

Testing and calibration solutions for sensors, inertial systems and components with hardware-in-the-loop (HWIL) simulation. Three axes with unlimited rotation to simulate flight and target trajectories.

FEATURES

- Several EVO-30 table configurations
- Models N (standard), M (medium), L (large)
- Three-axis unlimited rotation
- Advanced NGine model-based controller with auto-tuning function (patents)
- Opened or closed gimbals available
- Thermal chamber (optional)

BENEFITS

- Effective cost & performance for all testing applications
- Unrivalled capabilities with automatic set-up
- Precise absolute positioning
- High rate accuracy with no drift and excellent rate stability
- Bandwidth testing capabilities with no attenuation and no phase shift

APPLICATIONS
• Aeronautics • Space • Defense • Marine • Automotive • Scientific • Consumer industry
• Simulation laboratories for research & development

IX3LUE
DEEP INSIGHT. SHARPER SENSES.

EVO-30
TECHNICAL SPECIFICATIONS

PERFORMANCE depending on characteristics of payloads under test

Rotational freedom	Unlimited
Direct mechanism	Direct / AC brushless motor

Position

Accuracy	+/- 2 or +/- 10 arc sec
Repeatability	+/- 1 or +/- 5 arc sec
Resolution	0,0001 deg
Wobble	< 3 or < 10 arc sec
Orthogonality	< 3 or < 10 arc sec

Dynamic	**Inner Axis**	**Middle Axis**	**Outer Axis**
Rate (deg/sec)	+/- 300 to +/- 3000	+/- 300 to +/- 2000	+/- 300 to +/- 1000
Resolution (deg/sec)	+/- 0,001	+/- 0,001	+/- 0,001
Accuracy & stability over 360 deg		0.5 % (over 0,1°) to 0,005 % (360 deg)	
		0.5 % (over 0,1°) to 0,001 % (360 deg) with HP option	
Max acceleration with payload (deg/sec2)	+/- 800 to +/- 1500	+/- 400 to +/- 800	+/- 300 to +/- 600
Bandwidth with no attenuation and no phase shift in sinus mode	up to 100 Hz	up to 45 Hz	up to 20 Hz

PHYSICAL CHARACTERISTICS

Nominal payloads N, M, L	10 kg (22 lbs), 25 kg (55 lbs.), 50 kg (110 lbs.)
Nominal volumes of payloads N, M, L	200 mm (7,8 in.), 300 mm (11,8 in.), 400 mm (15,7 in.) (square)
Table tops N, M, L	Ø 300 mm (11,8 in.), Ø 450 mm (17,7 in.), Ø 600 mm (23,6 in.)
Slip-rings N, M, L	32 lines 2A, 52 lines 2A, 72 lines 2A
Weight of tables N, M, L	300 kg (661 lbs) 1500 kg (3306 lbs), 3000 kg (6613 lbs)
Power supply	Power lines according to the standards

GENERAL SPECIFICATIONS

Command	**iXBlue** ProAxe Graphical User Interface
Control	MCU unit with **iXBlue** NGine Controller with advanced patented functions and real-time control
Communication interfaces	RS232, RS422, Ethernet

OPTIONS & ACCESSORIES

I/O	Analog I/O (one input and two outputs per axis)
	Digital I/O (two inputs and two outputs per axis)
RT	Real time interfaces (RS-422, ScramNet, VMIC, other on demand)
TC	CO2/LN2 gas thermal chamber
VC	Vacuum & pressure chamber
HP	High mechanical performances
HD	High dynamic performances

Performance can change depending on configuration / Specifications are subject to change without notice / Please contact **iXBlue** for special requirements

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