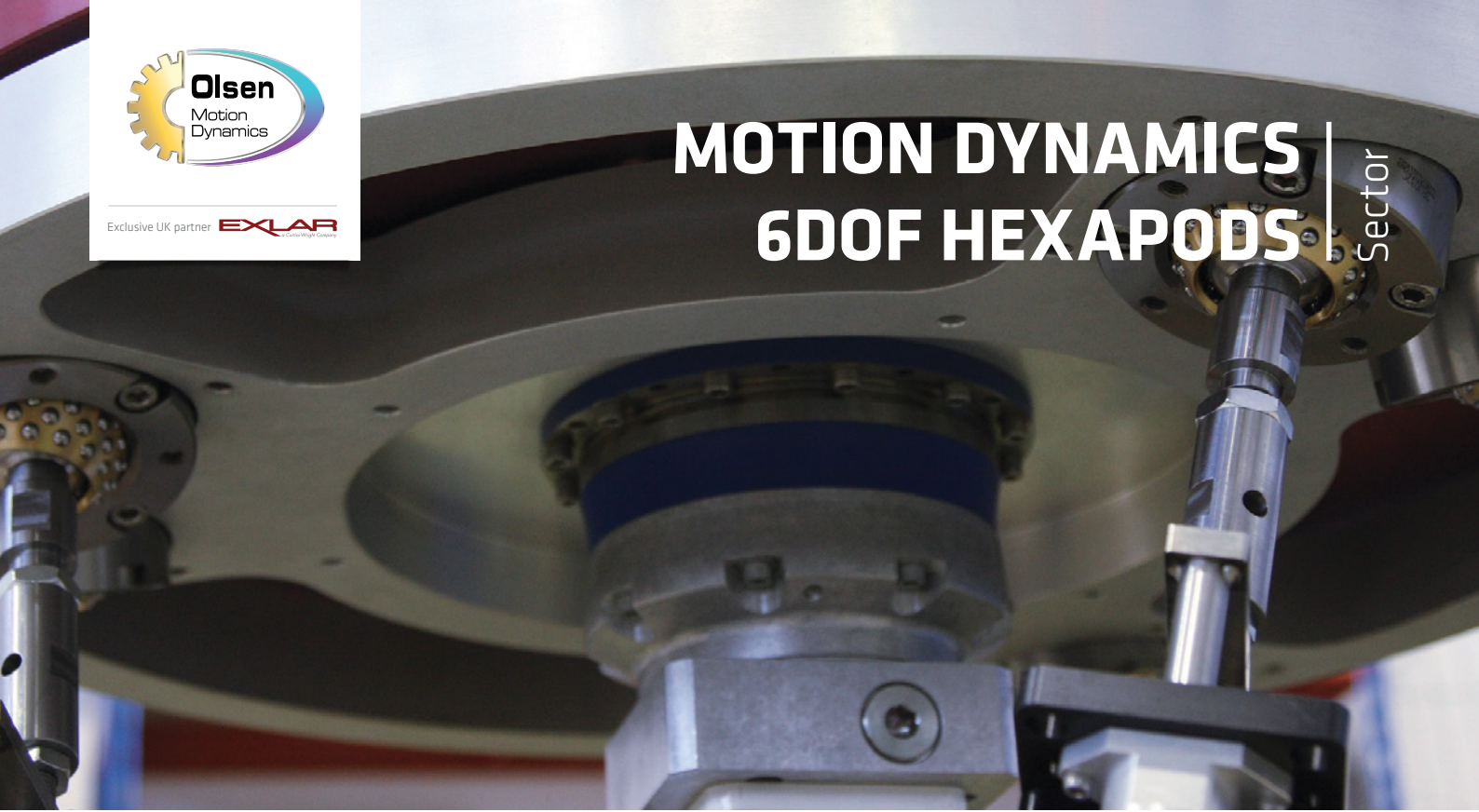




Exclusive UK partner **EXLAR**

MOTION DYNAMICS 6DOF HEXAPODS

Sector



Supplying Advanced Motion Solutions

Utilising Exlar patented roller screw linear actuators with optional fully integrated servo amplifier power electronics. Olsen motion platforms offer long life, low maintenance solutions, whilst giving very compact physical footprint. We have developed easy to use and fully supported motion software with customised integration possibilities.

Advantages of roller screw motion platforms

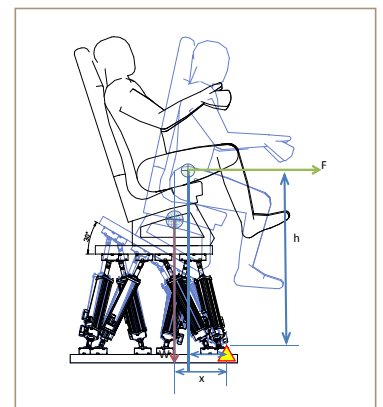
Electric servo Roller Screw actuators offer 15 times the travel life compared to equivalent ball screws, or higher force density in the same footprint, this allows compact motion bases with long life and low maintenance. Compared with hydraulic cylinders there is lower energy consumption usually 5 times less, no risk of oil leaks and lower maintenance.

- The GSX series based motion platforms are rated to 55kN
- The FT series motion platforms are rated to 37 tonnes

Advanced Motion Software Integration

We have developed a modern kinematics algorithm which runs on the latest 2015 generation of Beckhoff high speed motion controller giving UDP translation to set point in less than 10ms. We have experience and working flight model integration to Level D, successfully with BAE Systems and CAE software.

We plan to build a full library of flight model translations for flexible integration to your system. For scientific or testing applications we can easily import motion profile using .csv files or you can enter your own profiles manually from the front end software. Optional range of voltages using a wide selection of commercially off the shelf COTS power electronics 24Vdc, 48Vdc, 60Vdc, 110Vac, 240Vac, 240V3ph, 400V3ph. Our tailored solutions gives flexibility in terms of foot print and performance levels.



New player in the Market

Having developed our solution using a comprehensive suite of design software tools and an optimised manufacturing process, you can be sure that our design includes the highest quality precision components and gives reliable dynamic performance.

Applications

- Helicopter Simulation
- Earthquake simulation
- Remote Weapons Platform
- Tank / Mobile Equipment Turret
- Automotive testing
- Automotive Simulation
- Flight Simulation Level D
- Low Cost Flight Kinematics
- Simulation Tables for components
- Testing Applications low frequency <10Hz
- Driving Simulators flight model update to 10ms
- Mining Simulators
- Marine Simulators
- Foot Pedal
- Collector control with Force feedback
- G seat Actuators
- 3DOF Motion Bases
- 6DOF Motion Bases
- Customised Motion Bases
- Complete motion solutions
- 3D/4D Motion Theatres
- 3D/4D Motion rides
- Virtual Reality simulation



OMX 1200kg

| | |
|-----------|--------------------|
| Surge Max | 00.24/+0.27m;1m/s |
| Sway Max | +/-0.23m;1m/s |
| Heavy Max | +/-0.19;0.58m/s |
| Roll Max | +/-20 deg;60 deg/s |
| Pitch Max | +/-20 deg;60 deg/s |
| Yaw Max | *360 deg;360 deg/s |

| | |
|-----------------|-----------------------------------|
| Accel/Vibration | 10m/s ² ;10Hz Max 10Hz |
| Stroke Typical | 250mm |
| Ground Diameter | 1m |
| Power Source | 24Vdc; 240V1ph;400V 3ph |
| Average Power | 4.0kW |
| Peak Power | 12.0kW |

We Only Supply The Best

Roller Screw Electric cylinders offer +10 times energy savings compared with pneumatics and +5 times compared with hydraulics without the risk of air or oil leaks and provide a long life, low maintenance solution.

They are quieter in operation, offer faster cycle times, they are easier to install and have better positional accuracy.

- ✓ Portable light weight solutions to 55kN using GSX series and then FT series to 370kN
- ✓ 100% repeatable motion with synchronisation to 10ms
- ✓ Tailored easy to use interface software provides minimal training requirements
- ✓ Optional 7th axis rotary turret including gyro stabilisation



CONSULT OLSEN MOTION DYNAMICS LTD TODAY FOR THE COMPLETE LISTING OF MOTION PLATFORMS AND SIMULATION PRODUCTS.

The Global Leader in Motion Technology



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