

UP TO 300 BAR

Linear and rotary actuators for subsea applications

Olsen Actuation (UK) provides the OLX linear actuator series and the ORX rotary actuator series with CAN interfaces. The company recently joined the CAN in Automation (CiA) association.



Subsea actuators (Source: Olsen Actuation)

The OLX linear actuators include versions for 50 bar to 300 bar and cover force ratings from 2,5 kN to 110 kN. Travel lengths of up to 450 mm are offered. The devices come with integrated servo drive electronics as an option. Multi-axis operation can be implemented. Further options of the CAN-connectable actuators include secondary redundant sealing systems, salinity sensors, temperature sensors, and pressure level sensors. Manual docking, side or rear drive, visual position indication, "diverse mounting arrangements, as well as marine subsea-rated cables are offered. Customization of the actuators e.g. regarding housing materials, is possible. Internal anti-rotate and hard stops as well as back-drive with fail-safe spring can be included. Internal limit switch assemblies are available. Field-bus or fiber-optic connectivity for distances up to 3 km can be provided as well.

ORX rotary actuators are available in 50 bar, 60 bar, 100 bar, and 300 bar versions. Torque ratings of up to 40 kNm and diverse speed ratings are provided. The devices feature a painted stainless-steel construction and a pressure-compensated design as standard and can be customized for special applications. A tooth

brake and parking fail-safe option as well as fail-safe spring options for low torque applications are available. Additional options (e.g. sensors, servo drive electronics, supply voltage) are the same as for the OLX actuator series. The servo drive electronics is available with ratings up to 4 kW. It can be supplied with nitrogen-filled 1-bar sealed housings or oil-filled versions. Supported supply voltages include 24 V_{DC}, 48 V_{DC}, 230 V_{AC} (single-phase), and 230 V_{AC}/ 400 V_{AC} (three-phase).

OLX and ORX actuators are built around the company's Exlar GSX actuators, which has been proven time and again on Virginia Class nuclear submarines. The devices are suited for applications in submarines such as winch brake control, winch cable guide control, umbilical cutters, hatch and door actuation, sonar array cutters, and sonar mast deployment. They also find application in pipeline inspection tools, thrusters, and manipulators.

Olsen Actuation provides actuator technologies and components for applications in demanding environments. The manufacturer also offers customization and integration of complete electromechanical systems. Subsea, general industrial applications, and defense are the target application fields of the company.

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