

## Ship ahoy! - Linear encoder certified for maritime applications.

Triple redundant linear encoder LMR70-A now approved for offshore applications.

The double or triple redundant absolute linear encoders LMR70 from TR have been reliably performing their service in particularly difficult environments for many years. Up to 3 sensor elements work simultaneously in this measuring system. Each has its own connection with supply voltage and signal output, from the power supply unit via sensor wire and receiver coil to the output driver, everything is set up three times. Each of the three systems works individually. If several are active at the same time, they synchronize so as not to interfere with one another.

This leaves it up to the user to operate the measuring systems individually or to increase the reliability with cross comparison or a "2 out of 3" evaluation. The measured values are output via the proven and robust analog interface, whereby the transmission as 4..20mA current brings further advantages especially for extensive systems.

These highly reliable measuring systems are now also available in a version that is certified for maritime applications. The DNV-GL Group, which emerged from the merger of Det Norske Veritas and Germanischer Lloyd, is a world leader in the certification of maritime applications. DNV-GL has tested the devices and approved their use for ships, offshore systems, high-speed and light boats. The LMR70-A measuring systems are suitable for direct installation in hydraulic cylinders, the housing is designed for up to 400 bar continuous pressure and can withstand pressure peaks of up to 600 bar.

Especially maritime special machine construction such as floating cranes, cable-laying ships or wind power plant maintenance ships benefit from the reliability and reproducibility of the contactless recording of measured values with magnetostriction. With the certificate now available, use in these applications is possible without any problems. Applications such as position feedback in hydraulic rudder drives are also conceivable.

The measuring systems measure linear movements up to 1.25 m, the sensor length can be selected in steps. The LMR70 are optionally equipped with two or three measuring systems.

[www.tr-electronic.com](http://www.tr-electronic.com)

<https://www.tr-electronic.com/products/linear-encoders/magnetostriction/redundant-lmr70.html>

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Redundant linear measurement system with marine approval LA70 by TR-Electronic