# INTERNATIONAL STANDARD

**ISO** 9775

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### Small craft — Remote steering systems for single outboard motors of 15 kW to 40 kW power

Navires de plaisance — Appareils à gouverner commandés à distance pour moteurs hors-bord uniques de puissance comprise entre 15 kW et 40 kW



### **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the international Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Adolication as an International Standard requires approval by at least 55% of the member bodies casting a vote.

International Standard ISO 9775 was prepared by Technical Committee ISO/TC 188, Small craft.

NOTE 1 This International Standard specifies requirements and test methods for remote steering systems as cited in clause 1. They are thus more specialized requirements than those given in a parallel document, ISO 8848, Small Cost — Remote steering systems.

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## Small craft — Remote steering systems for single outboard motors of 15 kW to 40 kW power

#### 1 Scope

This International Standard specifies requirements and test methods for remote push pull cable steering systems and their major component items, used for small craft with a single outboard motor of 15 kW to 40 kW power.

#### 2 Definitions

For the purposes of this International Standard following definitions apply.

- **2.1 steering system:** Assembly including all components necessary to transmit remote manual effort to the outboard motor.
- **2.2 boat-mounted steering system:** System in which an output ram guide tube is secured to the boat.
- 2.3 motor-mounted steering system: System in which an output ram guide tube is secured to the engine.
- **2.4 drag link:** Device in a motor-mounted steering system by which the linear force of the output ram is transmitted to the motor steering arm.

- 2.5 helm: Mechanism, exclusive of a steeringwheel or other means for manual application of controlling force, by which controlling force is fed into a steering system cable or other forcetransmission means.
- 2.6 minimum retained system performance: System capability after test(s) such that at least 90 % of the steering arc normally available each side of the mid-position may be obtained by exertion of no more than 27 N·m of torque at the helm, through the wheel or other normal control.

This criterion does not define steering system performance while a boat is underway but is intended to provide quantitative limits for design and test purposes.

### 3 General requirements

3.1 When steering systems are factory-installed in the boat, the complete system shall be supplied. In outboard motor boats, the system shall be supplied complete to the interface point at the ram output end as shown in figure.