

# JET CONTROL SYSTEM - COMPACT



KONGSBERG



CONTROL SYSTEM FOR KONGSBERG WATERJETS

## Jet Control System - Compact

Standard closed loop control system solution for waterjets

**Jet Control System – Compact** (JCS Compact) is a small sized electrical system for operating waterjets steering, reversing bucket and optional interceptor movement, using one or two control stations and including up to two waterjet propulsion units redundant and safely.

The JCS Compact control system provides accurate and reliable operation of the waterjet hydraulic valves using integrated feedback signals. The system together with waterjet propulsors provide smooth operation for steering and reversing, with engine throttle and clutch signals handled by external devices. In single waterjet applications, the system reversing bucket lever can be combined with the external engine signal, in order to reduce the installation area.

The JCS Compact is easy to install and commission due to its compact size, plug-in assembly and the seamless system startup by shipyard according to provided instructions.

### In operation

The compact system includes a selection of suitable steering devices like steering wheel, steering knob or steering tiller. When required, the system can be integrated with a hydraulic steering wheel for single waterjet systems, with visual indication of steering angle in the system display.

The reversing bucket operation is handled with a re-designed lever providing different grip variations. Depending on the waterjet propulsion setup there is a single or combined lever available for single waterjets and a twin lever for two waterjet operation.

### KEY PRODUCT BENEFITS

- Very compact design
- Plug-in assembly
- Up to two control stations and two waterjets
- High contrast display
- Park mode
- Interceptor control
- Optional autopilot interface
- An optional compact electric solution to manual hydraulic system



Steering wheel



Combo lever



2.8" Display

When docked in marine areas with risk of sea-growth, the Park mode can be activated to automatically withdrawing cylinders, in order to lower risk of contamination on hydraulic cylinder rods.

The indications, alarms and settings are visualized in a high contrast 2.8" display - one display per waterjet line. The brightness of the display is adjustable to provide optimal visibility in both bright sun light as well as night operations.

### System delivery

The compact control system is factory tested and pre-calibrated including the waterjet unit and hydraulic components, before delivery.

The main electrical components, located close to the waterjet and at the bridge, are installed using standard cable harness and interacts over included communication lines.

System power supply is required at the waterjet unit and at the bridge. In twin waterjet applications the complete system is thoroughly planned to be redundant in power supply and maneuvering of each waterjet propulsion line in case of any unexpected issue on any propulsion line.

## PRODUCT DATA

Waterjet systems	For operating Single or Twin waterjets. (Kamewa Aluminum and Steel series, small to mid sizes)
Operation stations	One to two operation stations. Synchronized command transfer.
Bridge devices	Steering wheel, steering knob or steering tiller. Single-, combo-or twin lever. One 2.8" display with pushbuttons for visual indication of waterjets actual behavior and alarms per propulsion line. Rocker switch for optional interceptor operation.
Scope of delivery	Bridge devices, lever height 110mm, dept 65mm, steering wheel 320 mm. Main components located with the waterjet and at the bridge.
Autopilot interface	Solenoid drive using two digital inputs.
Typical applications	Work boats, rescue boats, patrol boats, leisure boats

