

PROPULSION CONTROL SYSTEM

Microshift is a simple, safe and reliable way of providing electronic bridge control for vessels with fixed pitch propellers and reversing gearboxes.



Microshift is a proven control system that also provides, sequential control and safety interlock for both engine speed and gearbox clutches.

Module type AG6324/M provides a mechanical control interface for both the engine speed setting and clutch control. With this mechanical option, emergency manual control is provided via the levers on the outside of the unit.

Vessels that require either the engine speed setting or the clutch control to be electric, are catered for by the AG6324/M2 unit.

Up to 4 independent control stations can be connected with pre-programmed control station transfer options, which are switch selectable during commissioning.

MICROSHIFT ACTUATOR - MECHANICAL DESIGN

The mechanical motion to control engine speed and gearbox clutches is derived from a precision lead screw that is driven direct from a high quality stepper motor. This elegant solution avoids the need for reduction gearboxes and also allows the actuator to be back driven with the power off, thus providing a convenient emergency manual control facility which is a requirement of Surveying Societies.



CONTROL HEAD



STATUS PANEL

Call us now for prices for your vessel

Tel: +44 (0)1635 40528

MICROSHIFT BRIDGE CONTROL LOGIC FEATURES FOR AG6324/M & AG6324/M2

SYSTEM SAFETY

Engine start inhibit unless safety system is “on” and clutch actuator is set to neutral

Engine revs increased during clutch engagement

Variable delay on opposite direction manoeuvres

System self diagnostic 12 status LED's

Volt free output to operate ships alarm system

SYSTEM SELECTION SWITCHES

Direction of speed setting actuator

Clutch engage speed boost time

Direction for clutch setting actuator

Clutch actuator travel

Sequence for Station-In-Control transfer

Opposite direction delay with clutch held engaged or set to neutral

POTENTIOMETER SETTINGS

1. Clutch engagement speed boost
2. Speed setting actuator stroke
3. Sets rate for engine speed increase
4. Opposite direction manoeuvre delay ramp
(The delay ramp is set to suit the type of vessel after the speed setting and time at that setting is computed by the system)

ADDITIONAL FEATURES AVAILABLE WITH THE AG6324/M2 UNIT

This card has all the features of the basic card and the following additional features:

Current or voltage output for electronic governor control

Switched output for solenoid operated clutches

Voltage output to operate trolling valve logic, which is sequenced with gearbox clutches and engine speed control.

Facility to inhibit opposite direction manoeuvres interlocked from propeller shaft speed switches

