... more than just an autopilot!

Fly-By-Wire Steering, Autopilots and Instruments. Swiss quality product at a very interesting price.

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TECNAUTIC Fly-By-Wire System

The best available Mono Cable System comprising Fly-By-Wire Steering, Cockpit Instruments, Sensors, Gyros, Autopilot, Jumbo Displays and Navigation.

Fly-By-Wire Steering: a steering wheel that holds the heading

The steering wheel determines the rate of turn, not the rudder angle. Furthermore is the ***heading*** held, with the wheel centered.

You may also forget the difficult and expensive installation of a conventional second steering station. Up to eight Fly-By-Wire steering wheels can be connected to the bus at a fraction of the cost of a mechanical or hydraulic helm. The rudder is driven by the autopilot drive or by servo valves. Motion is smooth with no backlash and is accurate to 1/10 of a degree.

Cockpit Displays include analog color LED-pointer

In addition to the digital LCD, an analog LED-pointer is included around the face of each cockpit display. Depending on the function selected at the cockpit display, the analog LED pointer may work as a compass needle, wind angle indicator, amplified boat speed indicator, rudder angle, depth or trim flap indicator etc.

Tecnautic Displays offer more safety and more flexibility

Each cockpit display can show all available data in the system, e.g. compass, log, wind, depth or GPS data etc. Every display unit can be simultaneously connected to an analog and digital sensor. The sensor input can be unrelated to the displayed function on that unit.

There is no dominant central processor in the system. Instead we find cleverly distributed functionality. For example, if a total of four display units have been installed, there is true four fold redundancy.

EMC Mono Cable: cannot be disturbed and doesn't disturb

Fly-By-Wire steering, instruments and autopilot are connected with identical cable. The cable has two wire pairs, one for data and one for the supply. If custom wiring is selected, branching of the bus cable is accomplished with RJ-45 connectors. These can be installed with a simple crimp tool,. Standard cables have connectors already installed.

The TECNAUTIC network is based on the BOSCH® developed CAN® protocol. It has a so called multi master architecture and it guarantees data transmission within a defined time period. Most other protocols slow down when an increasing number of nodes (equipment pieces) is connected to the bus. Transmission speed is 125 kbit/s. The distance between any two nodes on the bus may be more than 200 m.

Silent and power saving autopilot

The TECNAUTIC autopilot maintains full torque while controlling the rudder speed continuously between its zero and maximum rates. This results in a natural and silent rudder motion. Power drain from the battery is up to four times less than the effective motor current, thanks to state of the art 35kHz pulse width modulation. The motor current flows back to the battery via Schottky rectifiers during the off state and produces torque without consuming anything from the battery. A current filter in the supply leads takes care of a constant and noise free load on the battery.

On larger vessels where constant hydraulic pressure is normally available, the same autopilot can drive electric servo valves instead of the rudder motor.