

JOYSTICKS AND PEDALS

Marine controls and levers

Caldaro (Sweden) is focused on joysticks, pedals, as well as marine controls and levers. Many of the offered industrial products provide CAN connectivity.



At Bauma 2019, the Swedish company presented armrest sets with CAN joystick modules (Source: Caldaro)

Caldaro is an OEM supplier primarily located in Scandinavia, United Kingdom, Germany, and USA. Historically, industrial joystick manufacturers have been predominantly local, but the company established itself on an international level. The product portfolio includes a variety of marine and off-shore applications such as dynamic positioning systems, propulsion control, propeller pitch, rudder control, thrusters, deck winches, operator chairs, offshore cranes, fishing radars, CCTV systems and so on. "We have divided our joystick program in three different ranges relating to their size," informed the Swedish company. "In all three ranges you have the possibility to choose between traditional resistive joysticks or contactless hall-effect joysticks, with or without redundancy on vital functions, whether you require a CAN interface or not."

Industrial joysticks are provided since the early 80ies. This includes fingertip joysticks for sensitive precision tasks such as in medical equipment, palm-grip joysticks for ergonomic use in the harshest environment, and full-grip joysticks for heavy-duty vehicles. They all come with an optional CAN/CANopen interface; some of them are also support the J1939 application layer.

The C15 series of palm-grip joysticks can be used in tough working environments. The products can be fitted with numerous grips, functions. They are available with high protection classes. The CAN interface supports optionally the CANopen and J1939 application layers and profile specifications. The CAN interface was implemented without affecting the physical dimensions of the joysticks.

The palm grip joysticks are designed with particular emphasis on operator comfort and precision control. After decades of experience working with joysticks, the company's technical advisers are well placed to supply customers with a solution for their individual needs and always with various CAN options. These joysticks provide a redundant hardware, so that functional safety including a safe CAN communication can be realized.

The company also offers foot pedals for heavy-duty throttle-, brake-, and retardation control. Additionally, there are available floor pedals, wall pedals, and wigwag pedals. Most of them are equipped with contactless Hall effect sensors for durability. Some are based on potentiometers. The P03 and P04 foot pedals come optionally with CAN ports.



C15 joysticks are ready for functional safety providing redundant electronics (Source: Caldaro)

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