

Overview

The incremental shaft encoder type 01-08 has been designed for heavy duty application, especially for use in environments where potentially explosive atmospheres can be expected. This makes the 01-08 encoder especially suitable for use in petrol, LPG and diesel dispensing systems. The rugged and compact construction is also an advantage in other applications such as machine control and monitoring.

Approval

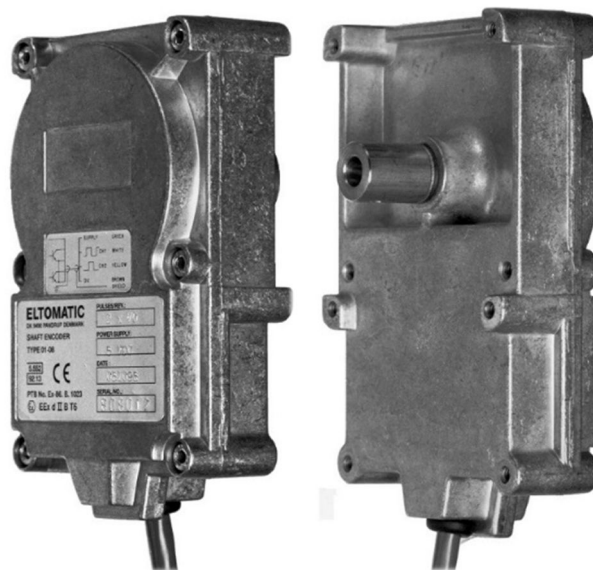
The shaft encoder has been tested and granted ATEX, IECEx and EMC approval. The ATEX approval is II 2G Ex d IIB T6 Gb according to EN 60079-0 and EN 60079-1. The 01-08 holds a MID part certificate and is W&M approved in most countries.

Options

Eltomatic holds a wide selection of shaft couplings, including couplings with built-in backlash clutch facility. The standard encoder is bi-directional, but with an option to be supplied with a CW or CCW freewheel clutch. Several options for standard and specially manufactured sealing screws are available. The fuel resistant cable can be customized regarding length, wire colour coding and cable end termination.

Accessories

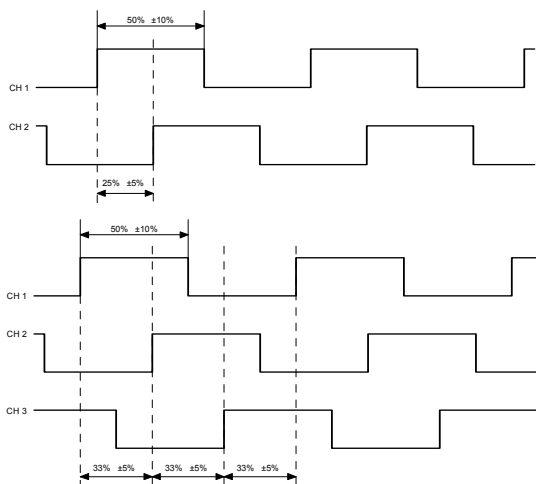
Brackets to suit our encoders to most meters found on the fuel dispenser market are available. Our portfolio contains mechanical 7 digit totalizers comprising 2 integrated and 2 remote models and the gearing is available with a variety of ratios. To drive remote totalizers, we can supply a range of flexdrive cables in various standard lengths from stock and can supply special lengths to order. We also offer an electronic upgrade kit with aluminum cover and bracket for Avery Hardoll meters on request.



Specifications

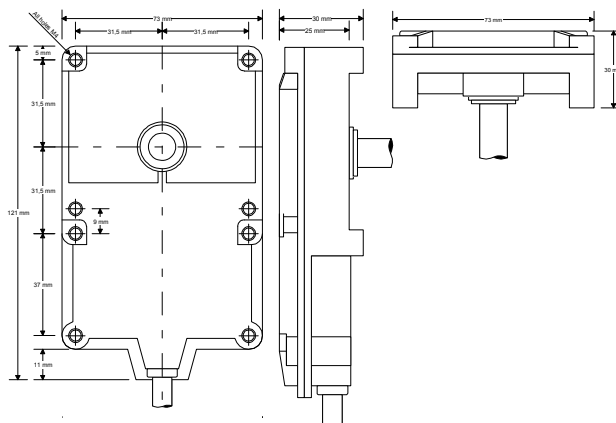
Electrical specifications

Power supply	5–24 VDC, fixed or variable.
Current consumption	Standard 10 to 30mA, max 90mA
Number of channels	1ch., 2ch. or 3ch.
Number pulses	1 to 250ppr.
Output signal	Square wave duty cycle 50% ±10% Predefined pulse width
Phase shift	2 channels 90° (25% ±5%) 3 channels 120° (33% ±5%)
Output stage	NPN, PNP or Totem pole
Output current	Max. 30mA
Output frequency	rpm/60 x ppr = ≤1000Hz
Hysteresis	Minimum 0.2°
Temperature range	ATEX-approved -30°C to +70°C Working temperature -25°C to +60°C
Direction of rotation	CW or CCW



Mechanical specifications

Housing	Die cast, seawater resistant aluminum alloy
Bearing	Self-lubricating sintered bronze
Clutch	None or optional free wheel CW or CCW
Coupling	Several types available
Totalizergear	Several types available
RPM	600 rpm (ATEX/IECEx) or max. 1000 rpm
Sealing	One screw sealed with tin
Labels	Type label, wire connection label
Mounting	With 4 pcs. M4 screws
Weight	Approx. 340g excl. the cable



Wiring (standard colour code, customized codes to be agreed upon)

	Channel 1	Channel 2	Channel 3
Green	VCC	VCC	VCC
Brown	GND	GND	GND
White	Ch1	Ch1	Ch1
Yellow	-	Ch2	Ch2
Grey	-	-	Ch3

Shield is connected internally to the housing