

### Overview

The encoder type 01-09 is a very compact and rugged unit which is suitable for easy mounting in all types of equipment.

Link: [kits for VR mechanical registers](#)

Link: [Kits for direct mount on PD meters](#)

### Approval

The encoder is approved for use in environments where potentially explosive atmospheres can be expected.

The shaft encoder has been tested and granted ATEX, IECEx and EMC approval.

The ATEX-approval is "II 2 G Ex d IIB T6 Gb" according to CENELEC EN60079-0 and EN60079-1.

The 01-09 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.

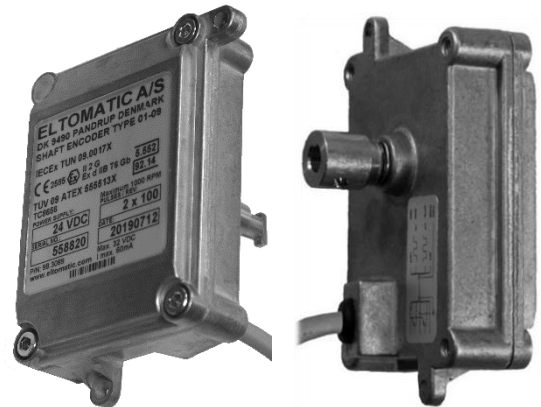
Several options for standard and specially manufactured sealing screws are available.

The fuel resistant cable can be customized regarding length, wire color coding and cable end termination.

Microcontroller controlled backwards rotations suppression and/or alarm mode can be made on request.

### Accessories

Eltomatic has an extensive range of auxiliary equipment for shaft encoders and we are always prepared to find solutions together with our customers. We have several brackets to suit our encoders to most meters found on the fuel dispenser market are available. We also do customized versions for other applications.



### Specifications

#### Electrical specifications

Power supply	5-24 VDC, fixed or variable.
Current consumption	Standard 10 to 30mA, max 60mA
Number of channels	1ch., 2ch. or <i>special design with 3 ch. available</i>
Number pulses	1 to 400ppr.
Output signal	Quadrature duty cycle 50% ±10% or predefined pulse width.
Phase shift	2 channels 90° (25% ±5%)
Output stage	NPN, PNP or Totem pole
Output/sink current	Max. 30mA
Output frequency	RPM/60 x ppr = ≤1000Hz
Hysteresis	Minimum 0.2°
Cabling	Shielded cable. Shield connected to housing.
Temperature range	ATEX approved -30°C to +60°C Working -40°C to +70°C
Direction of rotation	CW or CCW
Optional	RS-485 Modbus-RTU

#### Mechanical specifications

Housing	Die cast, seawater resistant aluminum alloy
Bearing	Self-lubricating sintered bronze
Clutch	None
Coupling	Several types available
Totalizergear	<i>Only special design to be agreed upon</i>
RPM	Max.1000 rpm (ATEX/IECEx)
Sealing	One screw sealed with tin
Labels	Type label, wire connection label
Mounting	With 4 pcs. M4 screws
Weight	Approx. 200g excl. the cable

### Output Signal

