



Scancon 2QEX

Introduction

Explosion proof encoder for Zone 2 with Mil connector.

Square mounting flange and with various shaft sizes and IP 67.

Made in Seawater-proof aluminum anodizes to 22 microns for Salty air humidity at off shore areas. Suitable for chemical and printing areas with flammable dust, as well as on and off shore oil and gas area.

MECHANICAL SPECIFICATIONS

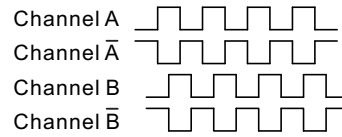
| | |
|------------------------|---|
| Weight | About 350 g + cable 60 g/meter |
| Material | Housing - Aluminum Shaft - Stainless steel Bearings - Lifetime lubricated ball bearings |
| Shaft Loads | axial maximum = 50N radial maximum = 100N |
| Max. rev. | 6,000 rev./min. |
| IP-rating | Standard IP 67 |
| Starting Torque | < 0,01 Nm at 25° C |
| Mass Moment of Inertia | 4 g/cm ² |
| Shock | maximum 100G / 11 ms |
| Bump | 10G - 16 ms (1000 X 3 axis) |
| Vibration | (10-2000Hz)/ 10G |

ELECTRICAL SPECIFICATIONS

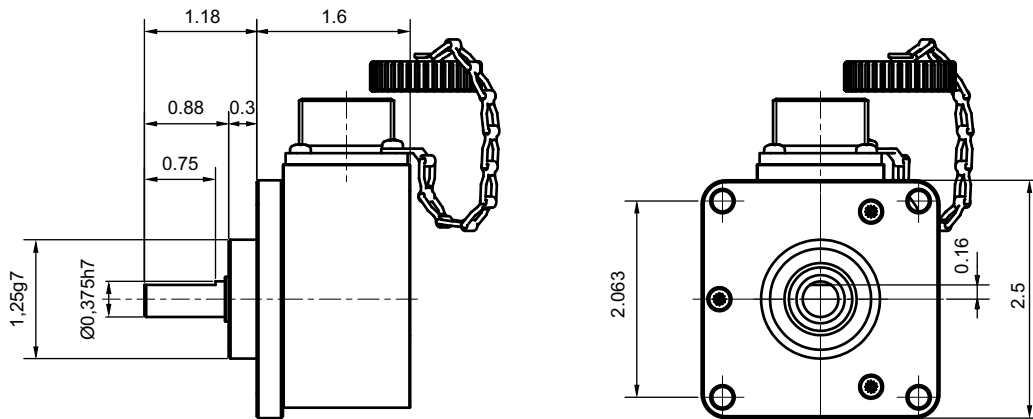
| | |
|-------------------------|--|
| Output Waveform | Incremental (A, B) |
| Output Signals | Normal (Standard) Inverted Differential (RS-422A compatible @ 5V) |
| Current No Load | 45 mA |
| Maximum Load per Output | 30 mA-(Short circuit protected)* |
| Supply Voltage | minimum 4.5 V to maximum 30 V (Reverse polarity protection) |
| V _{out} low | maximum 500 mV @ I = 10 mA |
| Operating Temp. | - 40°C to +85°C |
| Storage Temp. | - 40°C to +85°C |

OUTPUT WAVEFORM

↻ CW Seen from shaft end



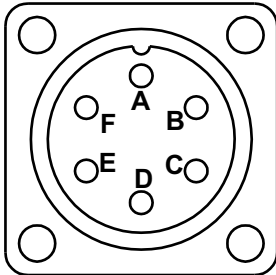
MECHANICAL DIMENSIONS



MIL - CONNECTOR

6 pin MIL

MS 3102A-14S-6P

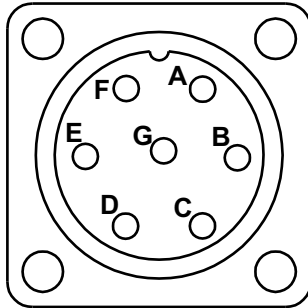


Encoder Receptical Connections

| Pin | Function |
|-----|-----------|
| A | 0 volt |
| B | Vcc |
| C | Channel Z |
| D | Channel B |
| E | Channel A |
| F | NC |

7 pin MIL

MS 3102A-16S-1P

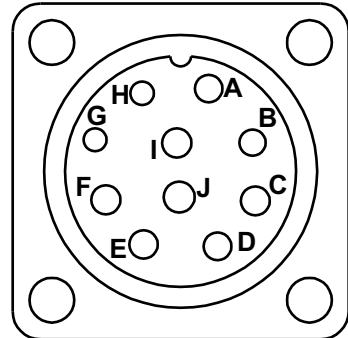


Encoder Receptical Connections

| Pin | Function |
|-----|-----------|
| A | Channel A |
| B | Channel B |
| C | Channel Z |
| D | +Vcc |
| E | NC |
| F | 0 volt |
| G | NC |

10 pin MIL

MS 3106-18A-1P



Encoder Receptical Connections

| Pin | Function |
|-----|---------------|
| A | Channel A |
| B | Channel B |
| C | Channel Z |
| D | +Vcc |
| E | NC |
| F | 0-Volt |
| G | NC |
| H | Channel A not |
| I | Channel B not |
| J | Channel Z not |

WARRANTY

Scancon A/S warrants against manufacturing defects for a period of 24 months from the date of manufacture. Product dimensions, weights and all product illustrations are approximate and may be modified without prior notice.

This warranty does not cover problems or consequences due to common usage (wear and tear) for which the product was designed. Nor does it cover product failures caused by improper installation or use, overloading, incorrect maintenance, or operation outside the product's specifications.

Detailed warranty information can be found in Scancon's Terms & Conditions

ORDERING CODES

Ordering Codes System Incremental Explosion Proof Encoder — 2QEX

Ordering Codes: 2QEX XXXXX — X — XXXX — XX — XX — X

| Pulses pr. rev: | No. of pulses | XXXXX | | | | | | |
|-----------------------------------|---|-------|-----|------|------|-------|--|--------|
| | 1 | 30 | 100 | 455 | 1250 | 9000 | | |
| | 2 | 32 | 125 | 500 | 1500 | 10000 | | |
| | 5 | 36 | 150 | 512 | 2000 | 12500 | | |
| | 6 | 40 | 180 | 600 | 2048 | | | |
| | 8 | 50 | 200 | 635 | 2500 | | | |
| | 10 | 60 | 250 | 720 | 3000 | | | |
| | 15 | 64 | 256 | 800 | 3600 | | | |
| | 16 | 75 | 300 | 1000 | 4000 | | | |
| | 20 | 80 | 360 | 1024 | 4096 | | | |
| | 25 | 90 | 400 | 1131 | 5000 | | | |
| Output signal: | Normal, Standard, A, B, Z (3 channels) | | | | | | | N |
| | Differential: A, B, Z and A-inv, B-inv, Z-inv (6 channels) | | | | | | | D |
| | Line driver OL 7272 for extra long cable, up to 100 meters (Differential) | | | | | | | M |
| | Line driver chip 26C31 (V out low <0,4 V) (RS-422A compatible @ 5V) Only 5 Volt (Differential) | | | | | | | L |
| | Line Driver RS-422, Chip 26C31 Volt out 5 volt Volt in 5 to 30 (Differential) | | | | | | | 5L |
| Shaft dimensions: | Ø6 mm x 15 mm | | | | | | | 06×15 |
| | Ø6 mm x 30 mm | | | | | | | 06×30 |
| | 1/4"(Ø6,35mm) x 15 mm | | | | | | | 1/4×15 |
| | Ø8 mm x 15 mm | | | | | | | 08×15 |
| | (option; Flat on Shaft) | | | | | | | 8F×15 |
| | 3/8"(Ø9,525) x 15 mm | | | | | | | 3/8×15 |
| | Ø10 mm x 15 mm | | | | | | | 10×15 |
| | Ø10 mm x 27 mm | | | | | | | 10×27 |
| | Ø10 mm x 40 mm | | | | | | | 10×40 |
| | Ø12 mm x 15 mm | | | | | | | 12×15 |
| IP-rating: | IP 67 | | | | | | | 67 |
| Length of cable: | Standard 1 meter | | | | | | | 01 |
| | No. of meters | | | | | | | XX |
| Cable take out: (or connector) | Back (Axial) | | | | | | | B |
| | Side (Radial) | | | | | | | S |