



CHARACTERISTICS

ENCODER TYPE	Shaft encoder, Micro
APPROVAL	II 2 G/D Eex d IIC T6
SMD - TECHNOLOGY	Strong compact electronics
HIGH IP-RATING	IP 64 standard (option: IP 67)
LOW CURRENT CONSUMPTION	To be connected directly to PLC'S and counters
SHORT CIRCUIT PROTECTION	Thermal shut down at 155°C
POWER SUPPLY	5V ± 10%
STRONG MEC. CONSTRUCTION	Based on 2 precision ballbearings for industrial environments

ELECTRICAL SPECIFICATIONS

	At +25°C
Output	Totempole
Output waveform	Incremental (A, B)
Zero or index pulse	(Z) one pr./rev.
Supply-voltage	5V ± 10%
Current (no load)	35mA
Max. load pr. output	20mA
V out low	Max 500 mV at I out low = 10 mA
Operating temp.	-20°C to +70° C
Storage temp.	-20° C to +85°C
Max. pulse frequency	200 kHz
V out high	Min. (Vin -0,6) @ I = -10mA Min. (Vin -1,3) @ I = -25mA
Cable data	8 leads
Output signals	Differential (RS-422A compatible)
EMC Certified acc. to	EN 50081-1 and EN 50082-2*
Eex certified acc. to	EN 50014 and En 50018 and 94 / 9 / EC (ATEX)

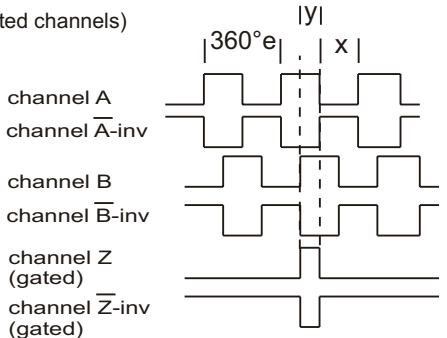
MECHANICAL SPECIFICATIONS

Weight, excl. Cable	About 80 g
Materials:	
Housing	Brass / Aluminum
Shaft	Stainless Steel
Bearings	Lifetime lubricated ball-bearings
Shaft dimensions	Ø4, Ø5, Ø6
Shaft loads	Axial max. 10 N Radial max. 10 N
Max speed	12,000 rev./min.
IP-rating	IP 64, IP 67
Start torque	<0,001 Nm at 25°C
Massmoment of inertia	0.2 gcm ²
Max. shock	100 G/11 ms.
Bump	10 G - 16 ms (1000 x 3axis)
Vibration	(10 - 2000 Hz)/10 G

OUTPUT WAVEFORM

Rotation: Clockwise (cw) from shaftside

($\bar{\text{inv}}$ = inverted channels)

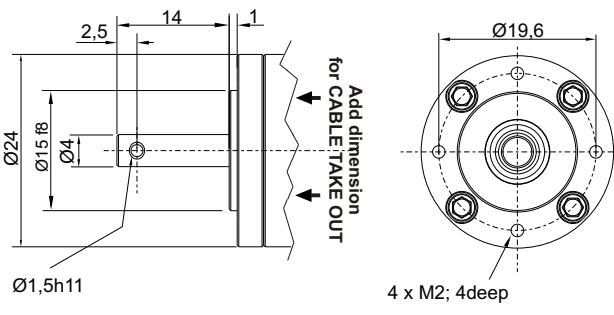


X = 180°e ± 36°e and Y = 90°e ± 18°e
Z pulsed: Gated with A and B (standard)

Options: TTL or HTL compatible. Open Collector NPN or PNP
Gated Z-pulsed or none-gated Z-pulsed.
View more Output options 52 - page 1

MECHANICAL DIMENSIONS

Face Mount A (Standard)
More options, view next page



Standard:
Face mount: A
Shaft:
Ø4 x 14 mm

