



**Stainless Steel or Aluminum**

**CHARACTERISTICS**

ENCODER TYPE	Hollow shaft or shaft encoder
APPROVAL	II 2 G/D EEx d IIB T6
SMD - TECHNOLOGY	Strong compact electronics
HIGH IP-RATING	Std. IP 65
LOW CURRENT CONSUMPTION	To be connected directly to PLC'S and counters
SHORT CIRCUIT PROTECTION	Thermal shut down at 155°C
WIDE SUPPLY RANGE	Min. 4,5V to max. 30V
STRONG MEC. CONSTRUCTION	Based on 2 precision ball bearings, for harsh industrial environments

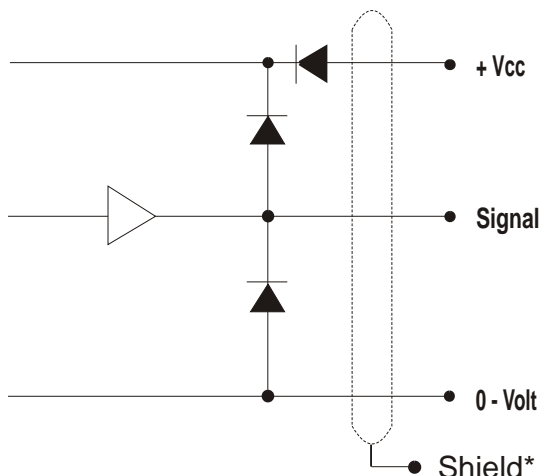
**ELECTRICAL SPECIFICATIONS**

	At +25°C
Output waveform	Incremental (A, B)
Zero or index pulse	Rotation detector
Output	Totempole
Supply-voltage (Vin)	Min. 4,5V to max. 30V * Reverse polarity protection
Current (no load)	Max. 45 mA
Max. load pr. output	30 mA - (Short circuit protected) *
V Out low	Max. 500 mV @ I = 10mA
Operating temp.	- 40°C to + 75°C
Storage temp.	- 40°C to + 75°C
Max. pulse frequency	300 kHz *
V out high	Min. (Vin -0,6) @ I = -10mA Min. (Vin -1,3) @ I = -25mA
Cable data	Connector
Output signals	Standard + rotation detector
EMC certified acc. to EEx certified acc. to	EN 50081-1 and EN 50082-2 EN 50014 and EN 50018 and 94 / 9 / EC (ATEX)
* = It is not recommended to combine max. value for all 3 parameters	

**MECHANICAL SPECIFICATIONS**

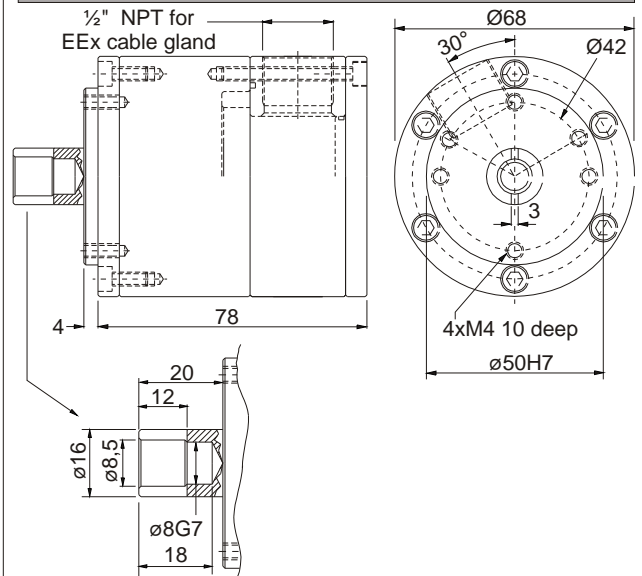
Weight	About 730 g
Materials : Housing	Aluminum
Shaft	Stainless steel
Bearings	Lifetime lubricated ball bearings
Shaft dimensions	Optional
Shaft loads	Axial max. 50 N Radial max. 50 N
Max. rev.	3.000 Rev./min.
IP-rating	Standard IP 65
Start torque	IP 66 < 0,05 Nm at 25°C IP 67 < 0,2 Nm at 25°C IP 68 < 0,2 Nm at 25°C
Mass moment of inertia	45 gcm <sup>2</sup>
Max. shock	100 G/11 ms
Bump	10 G - 16 ms (1000 x 3 Axis)
Vibration	(10 - 2000 Hz)/10 G

**OUTPUT CIRCUIT**




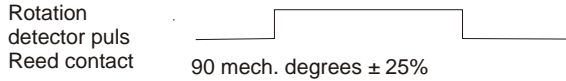
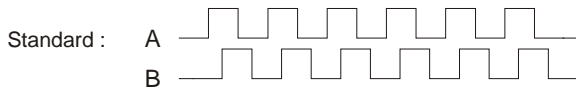
\* Shield connected to housing

**MECHANICAL DIMENSIONS**



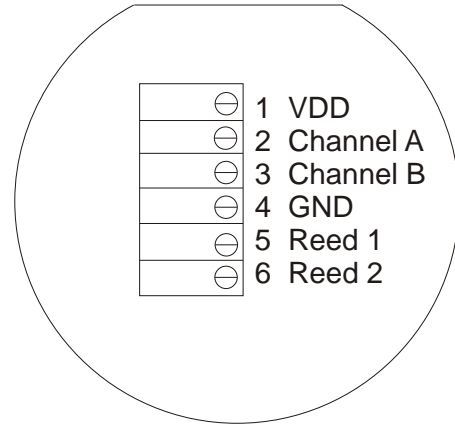
## OUTPUT WAVEFORMS

 Rotation: Clockwise (cw) from shaftside



## CONNECTIONS

### Terminal Block



## ORDERING CODES

	Options	Ordering codes
Pulses pr. Rev.:	No. of pulses	XXXXX
Material:	Aluminium	AL
	Stainless Steel	SR
Output signal:	Normal, Standard, A, B, Z (3 channel)	N
	Inverted (A-inv, B-inv, Z-inv)	I
	Differential: A, B, Z and A-inv, B-inv, Z-inv (6 channel)	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
Shaft dimensions:	Optional	XX
	IP 65	65
	IP 66 IP 67	66 67
Cable take out:	Side	S

## PULSES/REV.

1	16	50	125	400	1000	2500
2	20	60	150	455	1024	3000
5	25	64	180	500	1131	3600
6	30	75	200	600	1250	4000
8	32	80	250	635	1500	4096
10	36	90	300	720	2000	5000
15	40	100	360	800	2048	9000

**2REXI**



Pulses



Material



Output signal



Shaft



IP-rating



Cable take out