



CHARACTERISTICS

ENCODER CATEGORY	Dobbelt shaft encoder
SMD - TECHNOLOGY	Strong compact electronics
HIGH IP-RATING	Std. IP 64
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

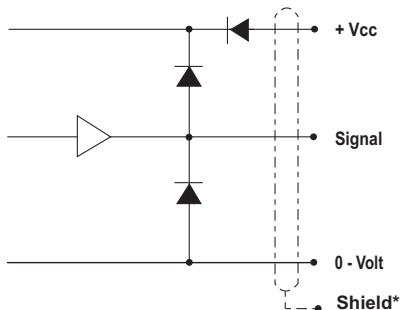
ELECTRICAL SPECIFICATIONS

At +25°C	
Output waveform	Incremental (A, B)
Zero or index pulse	(Z) one pr./rev.
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, B channel only
EMC certified acc. to	EN 50081-1 and EN 50082-2
* = It is not recommended to combine max. value for all 3 parameters	

MECHANICAL SPECIFICATIONS

Weight	About 930 g (+ cable 60 g/meter)
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	<0,1 Nm at 25°C
Mass moment of inertia	45 gcm ²
Max. shock	100 G/11 ms
Bump	10 G - 16 ms (1000 x 3 Axis)
Vibration	(10 - 2000 Hz)/10 G

OUTPUT CIRCUIT



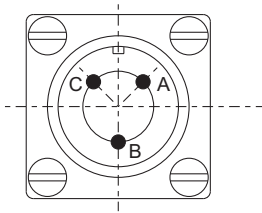
*Shield connected to housing

MECHANICAL DIMENSIONS

View next page

CONNECTIONS

A=Vcc8/30V
B=Channel
C=GND

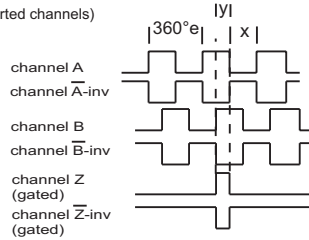


TP-Standard and diffirential output available with cable gland take out

OUTPUT WAVEFORM

Rotation: Clockwise (cw) from shaftside

(inv = inverted channels)



X = $180^\circ \pm 36^\circ e$ and Y = $90^\circ \pm 18^\circ e$
Z puls: Gated with A and B (standard)

Options: TTL or HTL compatible. Open Collector NPN or PNP
Gated Z-puls or none-gated Z-puls.
View more Output options in section 15 - page 1 to 2

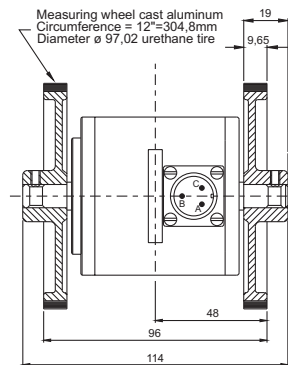
ORDERING CODES

	Options	Ordering codes
Pulses pr. rev.:	No. of pulses	XXXXX
Output signal:	TP-Standard (Normal)	N
	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:	3/8" (ø9,525) x 20 mm	38x20
IP-rating:	IP 64	64
Cable take out:	Side	S

PULSES/REV.

1	36	180	635	2500
2	40	200	720	3000
5	50	250	800	3600
6	60	256	1000	4000
8	64	300	1024	4096
10	75	360	1131	5000
15	80	400	1250	9000
16	90	455	1500	10000
20	100	500	2000	
25	125	512	2048	
30	150	600		
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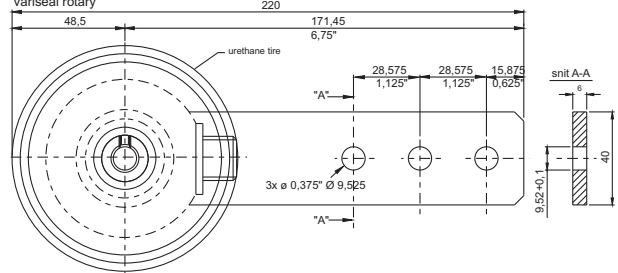
MECHANICAL DIMENSIONS



Dynamic seal between shaft and housing "variseal rotary"

Static seal between cap and housing O-ring

Teflon contact seal on ball-bearing



2RHIDS



Pulses

A

A



Output signal

3/8 X 20

Shaft ø Shaft length

64

IP-rating

CON

Connector

S

Cable take out