



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

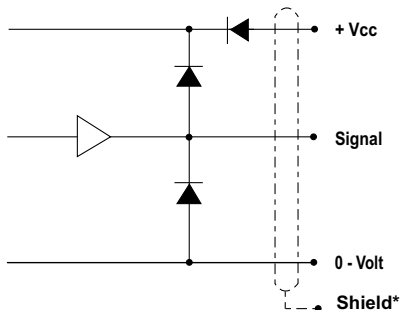
ELECTRICAL SPECIFICATIONS

	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



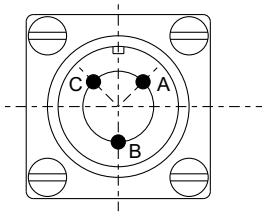
*Shield connected to housing

MECHANICAL DIMENSIONS

View next page

CONNECTIONS

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

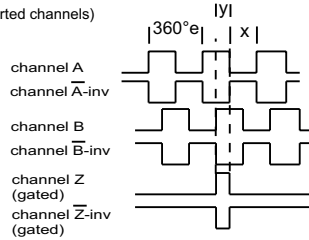


TP-Standard and diffirential output available with cable gland take out

OUTPUT WAVEFORM

Rotation: Clockwise (cw) from shaftside

(\bar{inv} = inverted channels)



X = $180^\circ \pm 36^\circ$ and Y = $90^\circ \pm 18^\circ$
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

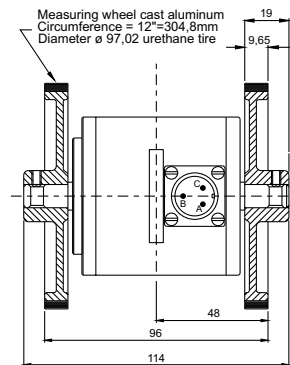
ORDERING CODES

	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		
32				

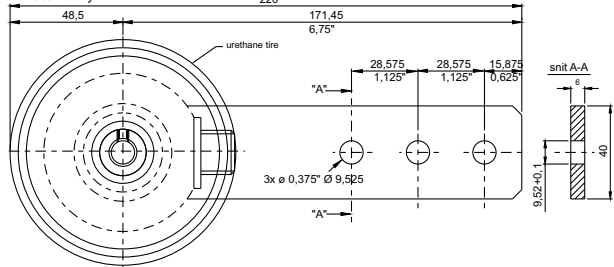
MECHANICAL DIMENSIONS



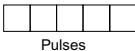
Dynamic seal between shaft and housing "variseal rotary"

Static seal between cap and housing O-ring

Teflon contact seal on ball-bearing



2RHIDS



A



3/8 X 20

Shaft ø Shaft length

64

IP-rating

CON

Connector

S

Cable take out