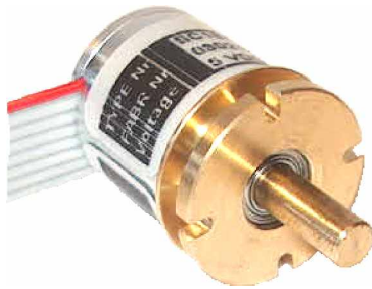




Only 18 mm in diameter and up to 5000 ppr. -True lines.
Up to 20000 Counts



CHARACTERISTICS

ENCODER TYPE	Micro shaft encoder
SMD - TECHNOLOGY	Strong compact electronics
IP-RATING	Std. IP 64 (with IDC; IP 50)
LOW CURRENT CONSUMPTION	To be connected directly to PLC'S and counters
SHORT CIRCUIT PROTECTION	Thermal shut down at 155°C
SUPPLY RANGE	5 volts to 12 Volts \pm 10% (TTL) (on request up to 24 Volts)
MEC. CONSTRUCTION	Based on 2 precision ball bearings for industrial environment

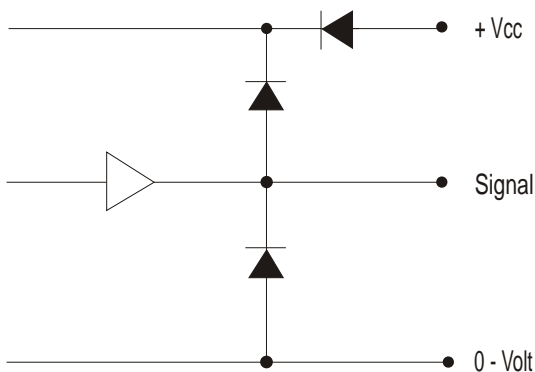
ELECTRICAL SPECIFICATIONS

At +25°C	
Output	NPN Open collector
Output waveform	Incremental (A, B)
Zero or index pulse	(Z) one pr./rev.
Supply-voltage	5 to 12 V (on request up to 24 Volts)
Current (no load)	35mA
Max. load pr. output	20mA (Short circuit protected)
V out low	Max. 500 mV @ I = 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 flat band cable (0,14mm ²)
Output signals	Differential (RS-422A compatible)
Certified acc. to	EN 50081-1 and EN 50082-2

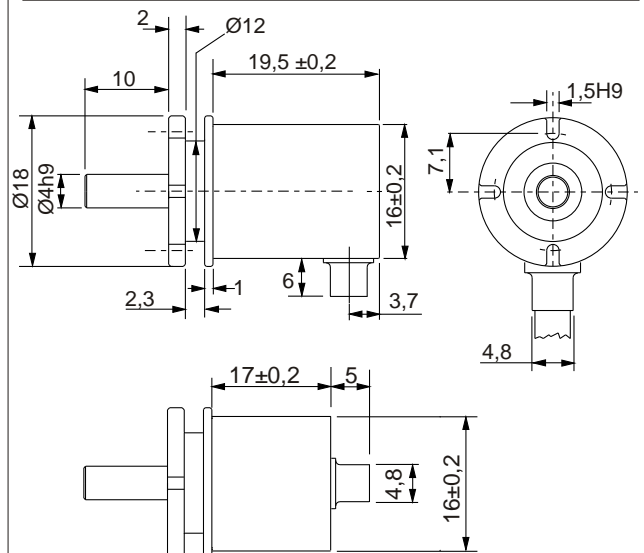
MECHANICAL SPECIFICATIONS

Weight, excl. Cable	About 15 g
Materials: Housing	Brass / Aluminum
Shaft	Brass
Bearings	Lifetime lubricated ball-bearings
Shaft dimensions	Ø4mm x 10 mm
Shaft loads	Axial max. 20 N Radial max. 20 N
Max. rev.	12.000 rev./min.
IP-rating	IP 64 (with IDC; IP 50)
Start torque	<0,005 Nm at 25°C
Mass moment 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 CIRCUIT



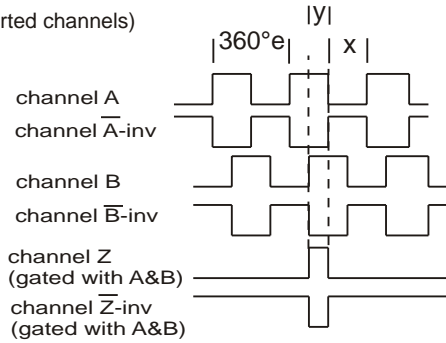
MECHANICAL DIMENSIONS



OUTPUT WAVEFORM

Rotation: Clockwise (cw) from shaftside

(inv = inverted channels)



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

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

CONNECTIONS

8 leads cable

Color code	Differential
Pink	Ch A
Grey	Ch A inv
Green	Ch B
Yellow	Ch B inv
White	Ch Z
Brown	Ch Z inv
Red	Vcc
Blue	0-Volt

PULSES/REV.

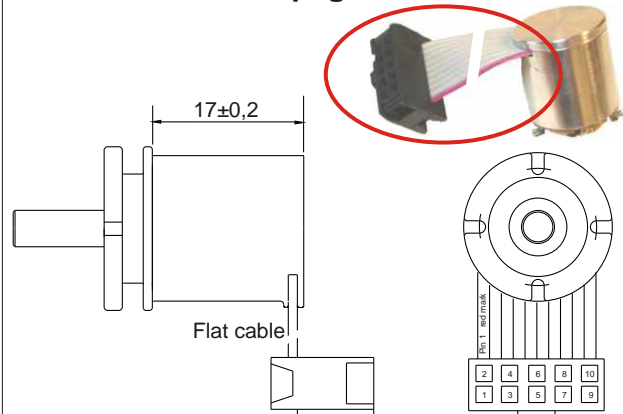
100	300	500	2000	3600
125	360	1024	2500	5000

ORDERING CODES

	Options	Order code
Pulses pr.rev.:	No. of pulses	XXXX
Output signal:	TP-Differential, 6 channel A, B, Z and A-inv, B-inv, Z-inv	D
Shaft dimensions:	ø4mm x 10 mm	04 x 10
IP-rating:	IP 64	64
Round Cable	Standard 1 meter	01
Length of cable:	No. of meters	XX
Round Cable take out:	Side Back	S B
Anti rotation spring coupling Or Flange / Plate:		View Section 9 page 1 to 6
Flat Ribbon Cable + IDC:		View Section 20 page 10

Flat Ribbon Cable and/or Connector

View Section 20 page 10



Advanced Output Options:

Options	Ordering codes
Normal Open Collector NPN	NON
Differential Open Collector NPN	DON
Normal Open Collector PNP	NOP
Differential Open collector PNP	DOP

To order replace with O
Output signal

SCA18

Pulses

D
Output signal

04 X
Shaft

10
Shaft length

64
IP-rating

Length of round cable

Cable take out

Anti Rotation Spring Coupling
Or Flange / Plate Order Number