2RCI

CE

Introduction

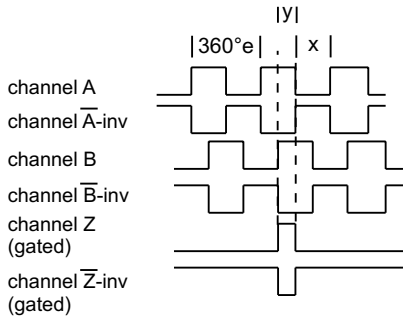
Standard shaft encoder
Std. IP 66
Thermal shut down at 155°C
Strong compact electronics
Based on 3 precision ball bearings,
for harsh industrial environments

MECHANICAL SPECIFICATIONS	
Weight	About 575g + cable 60g/meter
Material	Housing - Anodized Aluminum / Aluminum Shaft - Stainless Steel Bearings - Lifetime lubricated ball bearings
Shaft Loads	axial maximum = 100 N radial maximum = 100 N
Max. rev.	5,000 rev./min.
IP-rating	Standard IP 66
Start Torque	< 0,1 Nm at 25° C
Mass Moment of Inertia	8 gcm^2
Shock	maximum 100G / 11 ms
Bump	10G - 16 ms (1000 × 3 axis)
Vibration	(10-2000Hz)/ 10G

ELECTRICAL SPECIFICATIONS	
Output Waveform	Incremental (A, B, Z and inverted)
Output Signals	Normal (Standard), Differential (RS-422A compatible @ 5V)
Current No Load	Max.45 mA
Max. load pr. output	30 mA - (Short circuit protected)*
Supply-Voltage(Vin)	Min 4,5V to Max. 30V* , Reverse polarity protection
V_{out} low	maximum 500 mV @ I = 10 mA
V_{out} high	minimum (Vin -0.6) @ I = -10 mA minimum (Vin -1.3) @ I = -25 mA
Operating Temp.	- 40°C to +85°C
Storage Temp.	- 40°C to +85°C

OUTPUT WAVEFORM

Rotation: Clockwise (cw) from shaftside

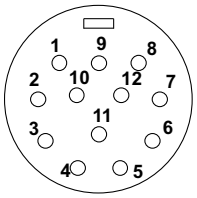


X = 180°e ± 36°e and Y = 90°e ± 18°e
Z puls: Gated with A and B (standard)

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

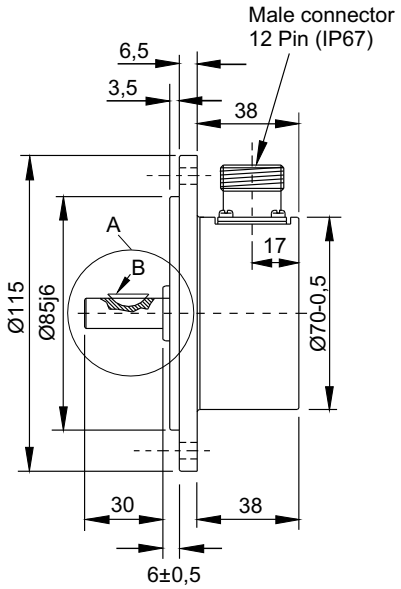
CONNECTIONS

Male connector on Encoder

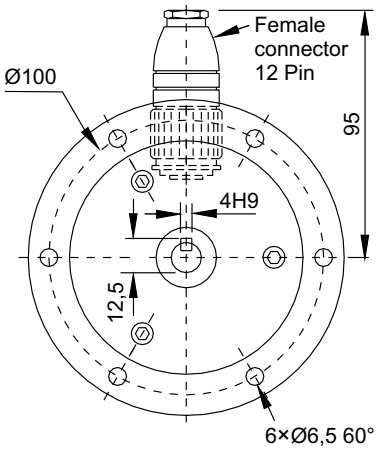


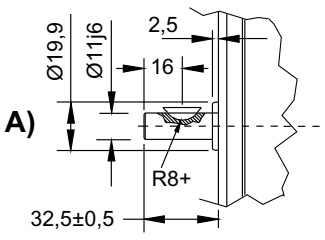
Differential PIN NR.:	COLOR On cable Female connector	Standard PIN NR.:
1 Channel B Inv.	Yellow	1 0-Volt
2 Not connected		2 Not connected
3 Channel Z	White	3 Channel Z
4 Channel Z Inv	Brown	4 0-Volt
5 Channel A	Pink	5 Channel A
6 Channel A Inv	Grey	6 0-Volt
7 Shield		7 Shield
8 Channel B	Green	8 Channel B
9 Not connected		9 Not connected
10 0-Volt	Blue	10 0-Volt
11 0-Volt		11 0-Volt
12 Supply voltage	Red	12 Supply voltage

MECHANICAL DIMENSIONS



B)
Key and Keyway
(Key can be removed)





A)

ORDERING CODES

Ordering Codes System
Incremental Shaft Encoder — 2RCI

Ordering Codes:	2RCI	XXXXX	—	XX	—	XXXXX	—	XX	—	X	—	XX XXX
Pulses pr. rev:	No. of pulses	XXXXX										
	1 25 80 300 800 2500 12500 2 30 90 360 1000 3000 5 32 100 400 1024 3600 6 36 125 455 1131 4000 8 40 150 500 1250 4096 10 50 180 512 1500 5000 15 60 200 600 2000 8192 16 64 250 635 2048 9000 20 75 256 720 2400 10000											
Output signal:	Normal (TP-Standard) 3 channel = A, B, Z			N								
	TP-Differential, 6 channel A, B, Z and A-inv, B-inv, Z-inv			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								
	Line Driver RS-422, Chip 26C31 Volt out 5 volt Volt in 5 to 30 (Differential)			5L								
Shaft dimensions:	Ø11 mm × 30 mm					11 × 30						
IP-rating:	IP 66							66				
Cable take out:	Side (Radial)									S		
Optionel: Female 12 Pin Coninvers connector	No need Yes,without cable Yes,with cable (Ad meter)											XXXXX FeCon XX

9 Pin connives connector on request - View Section 14 page 3 to 6

Standard cable take out, with cable gland on request

More accessories
Measuring wheel and couplings: View Section 14 page 1 to 2

WARRANTY

Scancon A/S warrants against manufacturing defects for a period of 12 months from the date of manufacture.Product dimensions, weights and all product illustrations are approximate and may be modified without prior notice.

This warranty does not cover problems or consequences due to common usage (wear and tear) for which the product was designed. Nor does it cover product failures caused by improper installation or use, overloading, incorrect maintenance, or operation outside the product's specifications.

Detailed warranty information can be found in Scancon's Terms & Conditions