



2MCA

CE

Introduction

Micro shaft encoder
Std. IP 64 (with IDC; IP 50)
Ø16 - up to 5000 ppr.
up to 20000 Counts
Strong compact electronics

MECHANICAL SPECIFICATIONS

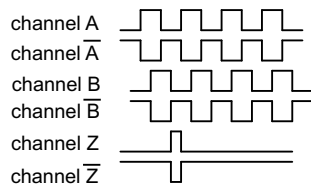
Weight, excl. Cable	About 15g
Material	Housing - Brass / Aluminum Shaft - Brass or Stainless Steel Bearings - Lifetime lubricated ball bearings
Shaft Loads	axial maximum = 10 N radial maximum = 10 N
Max. rev.	12,000 rev./min.
IP-rating	IP 64 (with IDC; IP 50)
Start Torque	< 0,005 Nm at 25° C
Mass Moment of Inertia	0,2 gcm ²
Shock	maximum 100G / 11 ms
Bump	10G - 16 ms (1000 X 3 axis)
Vibration	(10-2000Hz)/ 10G

ELECTRICAL SPECIFICATIONS

Output Waveform	Incremental (A, B)
Output Signals	Differential (RS-422A compatible)
Current No Load	35 mA
Maximum Load per Output	20 mA (Short circuit protected)
Supply Voltage	5 to 12 V(on request up to 24 Volts)
V _{out} low	maximum 500 mV @ I = 10 mA
V _{out} high	minimum (V _{in} -0.6) @ I = -10 mA minimum (V _{in} -1.3) @ I = -25 mA
Operating Temp.	- 20°C to +70°C (at 5000ppr -20°C to + 50°C only)
Storage Temp.	- 20°C to +85°C

OUTPUT WAVEFORM

Rotation: Clockwise (cw) from shaftside



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

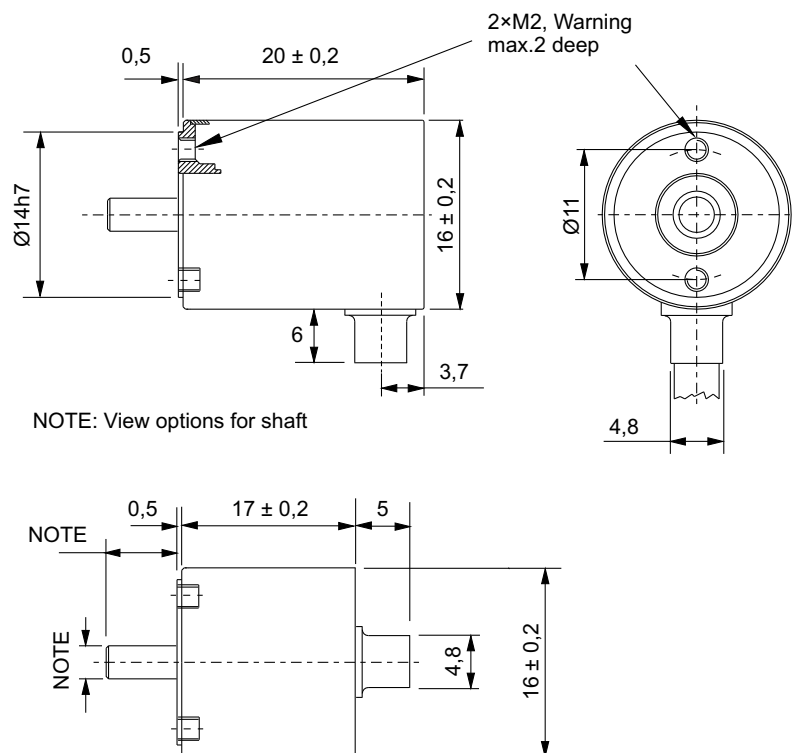
Options: Open Collector NPN or PNP
Gated Z-puls or none-gated Z-puls.
View more Output options in section 15 - page 1 to 2

CONNECTIONS

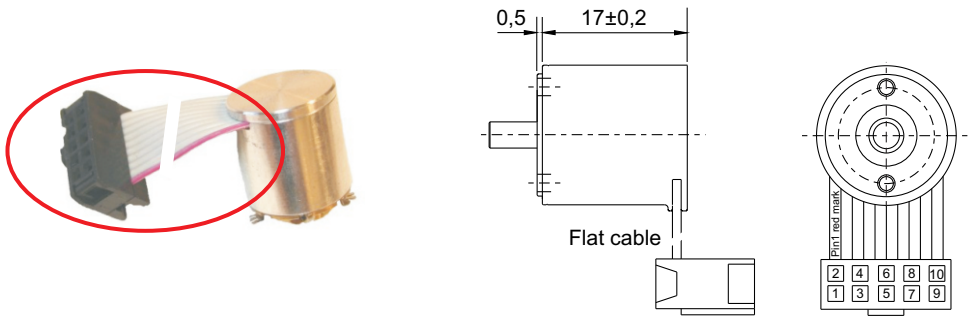
8 leads cable

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

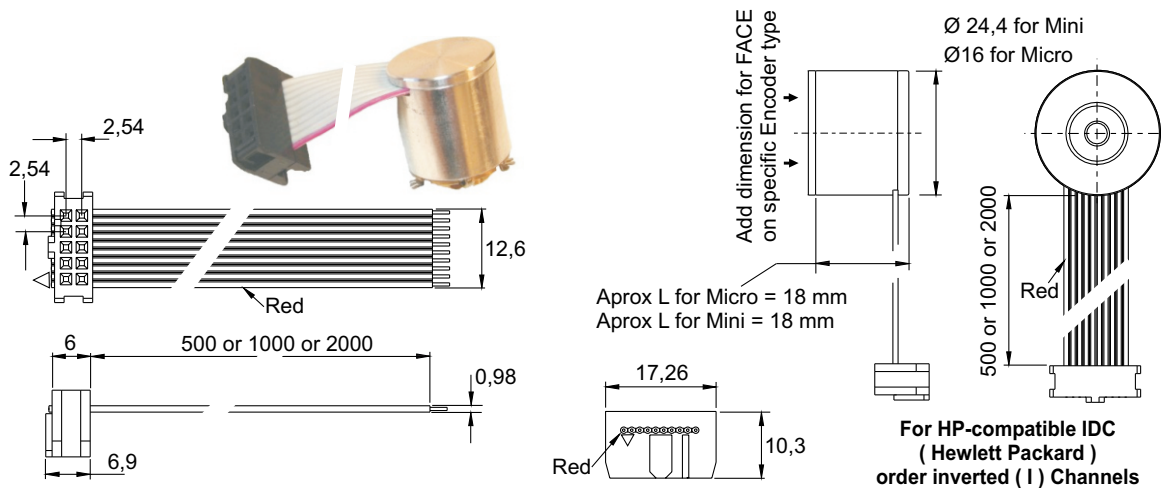
MECHANICAL DIMENSIONS



Flat Ribbon Cable and / or Connector



IDC CONNECTORS — MECHANICAL DIMENSIONS

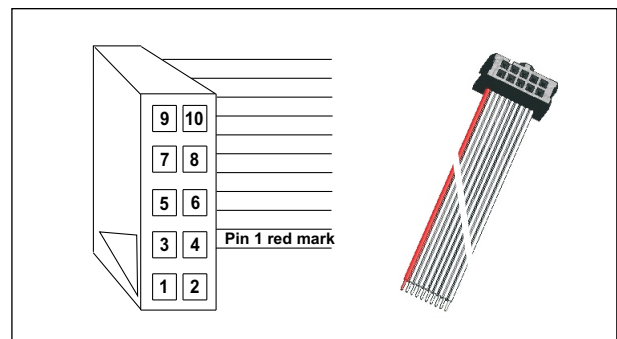


CONNECTIONS

IDC PIN NO.	Differential Output; D	Inverted Output; I (HP-compatible)
1	NC	A inv
2	Vcc	NC
3	0 volt (GND)	NC
4	NC	NC
5	A inV	NC
6	A	0-Volt
7	B inv	NC
8	B	B inv
9	Z inv	VCC
10	Z	Z

NOTE: Inverted also called HP-Standard (Hewlett Packard)

CABLE AND PIN OUT



CHARACTERISTICS

- IP-rating: IP-50
- CE-marking not available 
- Cable take out only side wise
- Only available with 0,5 meter, 1 meter and 2 meter
- Output signal Differential D or Inverted I only

ORDERING CODES

Ordering Codes System Incremental Shaft Encoder — 2MCA

Ordering Codes: 2MCA XXXX — X — XXXXX — XX — XX — X

Pulses pr. rev:	No. of pulses	XXXX							
	100 160 300 500 2000 3600								
	125 256 360 1024 2500								
	Special: 1520 PPR / 19 Z-pulses								
	5000ppr -20°C to + 50°C only								
Output signal:	TP-Differential, 6 channel A, B, Z and A-inv, B-inv, Z-inv		D						
Shaft dimensions:	Ø 1,5 mm × 6 mm Ø 2 mm × 6 mm Ø 3 mm × 6 mm Ø 3 mm × 9 mm Ø 3 mm × 19 mm Ø 4 mm × 6 mm Ø 4 mm × 18 mm			1,5 × 6,0 02 × 6,0 03 × 6,0 03 × 9,0 03 × 1 9 04 × 6,0 04 × 1 8					
IP-rating:	IP 64					64			
Cable Length:	Standard 1 meter No. of meters						01 XX		
Cable take out:	Side Back								S B
Flat Ribbon Cable +IDC: View Section 14 page 7 to 11									

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