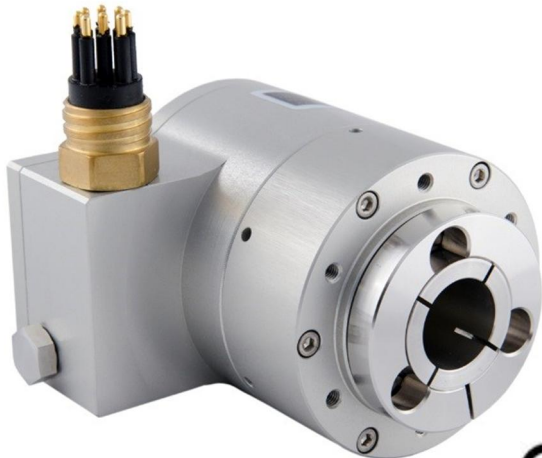


Type SCH68SUB



- 68 mm (2.68") Servo mount
- Hollow Shaft
- Hollow bore Ø 10 mm to Ø 1 inch
- Shaft Loads to 100 N (22.5 lbs)
- IP 68 (permanent 6000m)

Electrical Specifications

Code:	Incremental (magnetic)
Resolution:	32 to 2048 ppr (pulses per revolution)
Supply Voltage:	5 Vdc or 10-30 Vdc max. ** (35 mA max. - no load)
Output Voltage:	Low: 500 mV max. at 10 mA High: (V _{in} - 0,6) at -10 mA (V _{in} - 1,3) at -25 mA
Output Current:	30 mA max. load per output channel **
Frequency Response:	200 kHz max. **
Output Format:	Two channel (A, B) quadrature with Index (Z) and optional complementary (A-, B-, Z-) outputs
Phase Sense:	A leads B clockwise (CW) from the mounting end of the encoder
Index:	Gated with Channels A and B high
Accuracy:	0,35 °
Outputs:	iC-DL Standard or Differential
Electrical Protection:	Output short circuit protected
Noise Immunity:	Tested to EN61000-6-2 : 2005 (industrial environments) Electromagnetic compatibility (EMC) and EN 61000-6-3 : 2007 (residential, commercial, and light-industrial environments) for Electromagnetic compatibility (EMC)

**= It is recommended user not to combine max. Value for all 3 parameters

Mechanical Specifications

Material:	Housing: Seawaterproof Aluminum Cap: Seawaterproof Aluminum Hollow Shaft: Aisi316
Weight:	Encoder: Approx. 1300 gr (45.856 oz)
Bearing Life:	> 1.9 x 10 ¹⁰ revolutions at rated load
Shaft Speed:	2000 rpm max.
Starting Torque:	< 0.05 Nm (7.08 oz-in) at 25° C IP 68
Mass Moment of Inertia:	1400 gcm ² (19,82 x 10 ⁻⁸ oz-in-sec ²)
Shaft Loads:	Axial 100 N (22.50 lbs) max. Radial 100 N (22.50 lbs) max.

Environmental Specifications

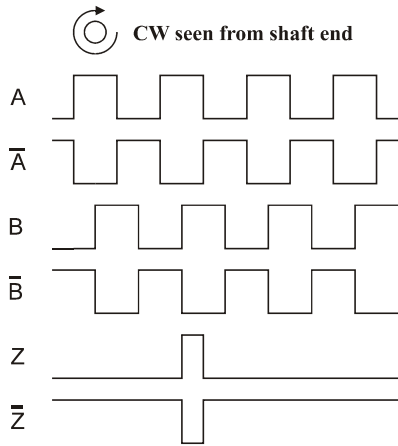
Operating Temperature:	-10° to +70° C
Storage Temperature:	-40° to +85° C
Shock:	100 G @ 11 ms
Vibration:	10 G @ 10-2000 Hz
Bump:	10 G @ 16 ms (1000 x 3 axis)
Enclosure Rating:	IP 68 / Permanent submersion to 6000 m

Connection Options

Connectors:	SUBCON 4pin male MCBH4M Mating part + 4pin female with locking sleeve SUBCON 8pin male MCBH8M Mating part + 8pin female with locking sleeve
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Output waveform

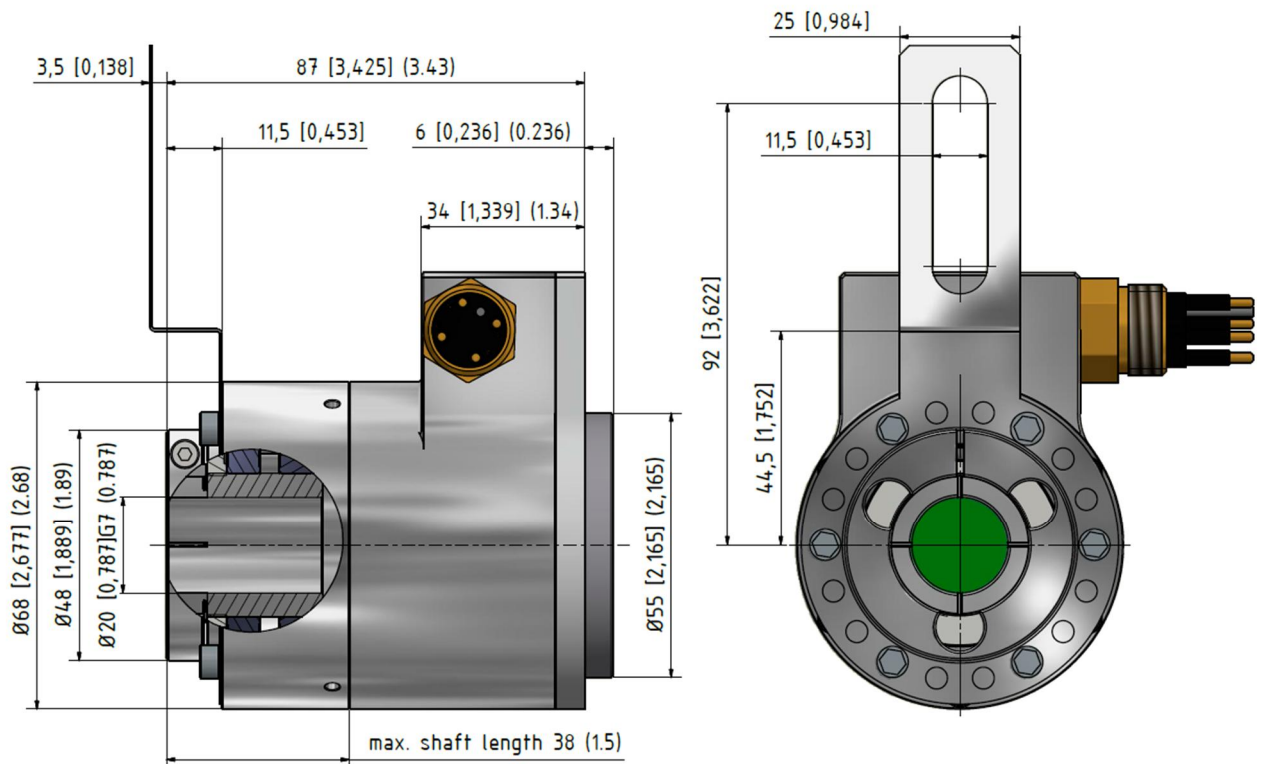
Disk Resolutions (pulses per revolution)



32
64
128
256
512
1024
2048

Channel tolerance $180^\circ \pm 36^\circ$
Phase difference tolerance $90^\circ \pm 18^\circ$
Z channel tolerance $180^\circ \pm 36^\circ$

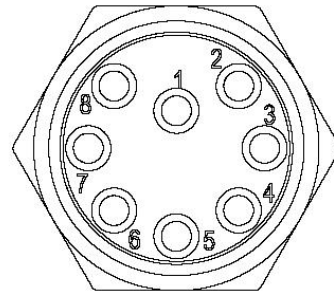
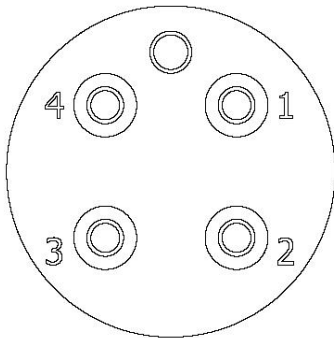
Mechanical Dimensions



Other hollow shaft dimensions on request.

SUBCON 4 Pin	
Standard Output	
Pin	Channel
1	Circuit ground
2	B
3	Vsup
4	A

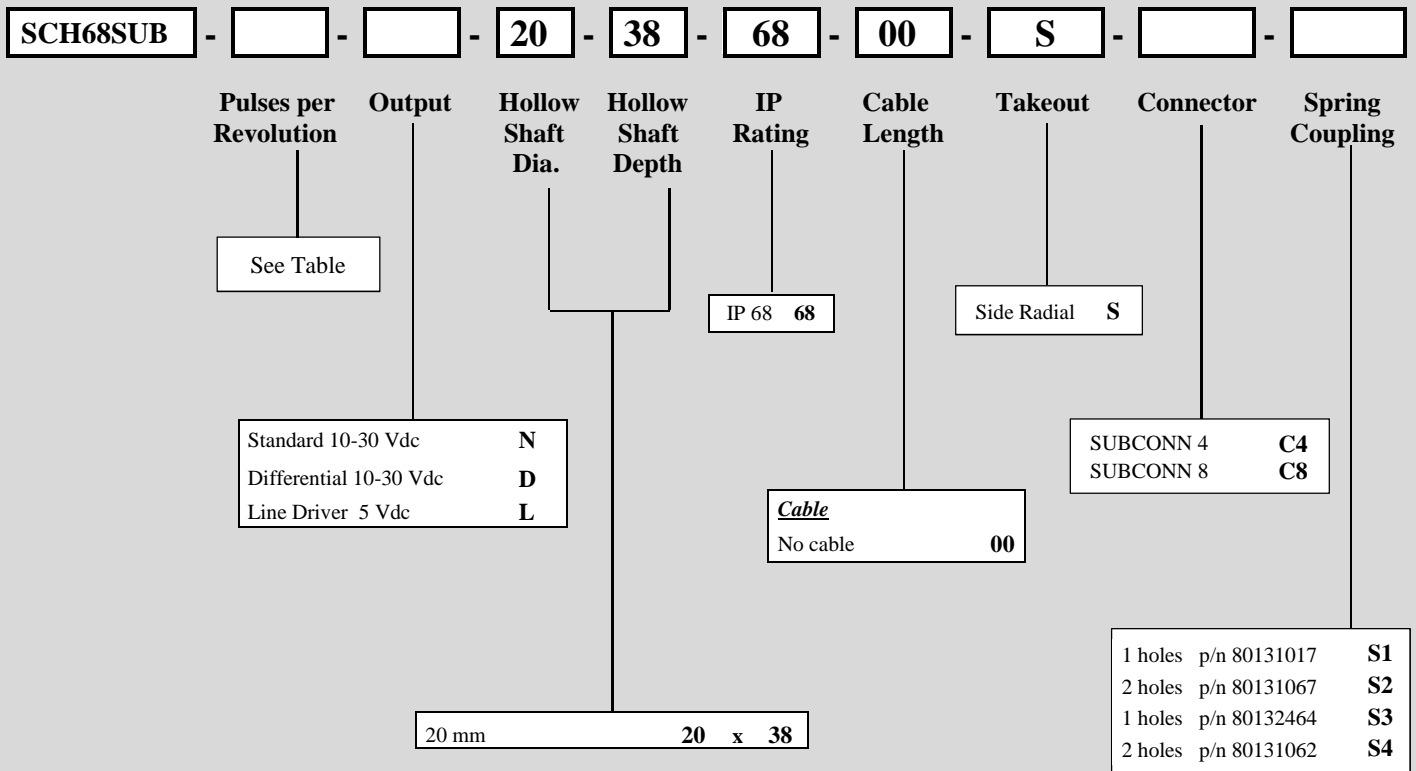
SUBCON 8 Pin	
Differential Output	
Pin	Channel
1	Z-
2	Z
3	B-
4	Vcc
5	B
6	A
7	A-
8	GND



Ordering code

Example: SCH68SUB – 1024 – D – 20 x 38 – 68 – 00 – S – C8 – S1

Type



See Accessories for drawings

Other options on request:
Please contact Scancon A/S