

Absolute encoders - SinCos

Integral bearing for integration in motors



FNC SC2048 Series, SinCos motor feedback



Features

- Compact robust motor integration design
- 1Vpp / 1PPR accurate position information
- 2048 PPR sin cosine accurate speed information
- Installation diameter 65mm
- 1:10 taper shaft
- IP67 protection class

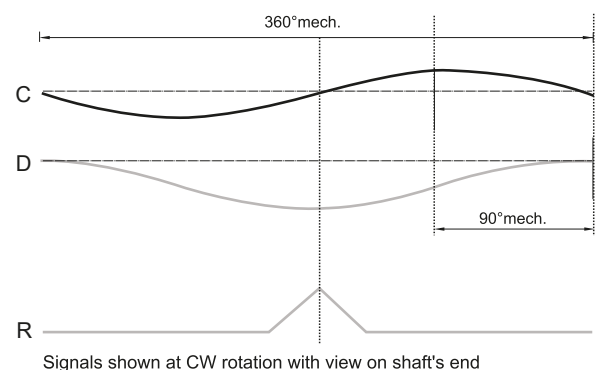
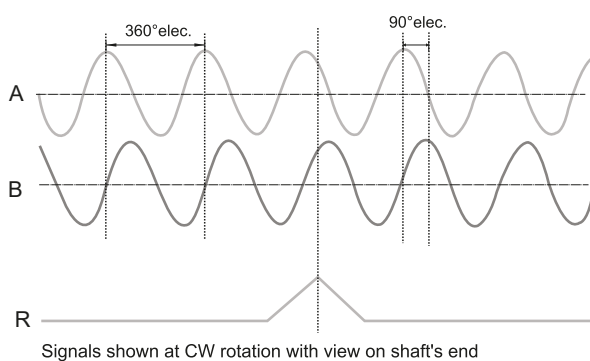
Technical data - electrical ratings

Voltage supply	4.75VDC to 5.5VDC
Protection:	Output short circuit protection. Reverse polarity protection
Consumption w/o load	≤120 mA (5 VDC)
Interface, Output	Sine cosine / 1 Vpp
Resolution (steps/turn)	2048
Absolute accuracy	±0.17°
Absolute angle error	0.087°
Output frequency	500 kHz (max.)
Output circuit	1 Vpp incremental Sin/Cos differential driver

Technical data - mechanical design

Dimensions (flange)	ø56 mm
Clamp mounting diameter	65 mm
Protection DIN EN 60529	IP 67
Operating speed	≤10000 rpm
Starting torque	≤0.03 Nm (IP 67)
Materials	Housing : Aluminium Flange : Aluminium Shaft : Stainless steel
Shaft specs	Taper shaft Ø 9.25 Taper 1:10
Operating temperature	-40...+110 °C
Storage temperature	-40 °C up to +120 °C
Weight approx.	250 g
Approval	CE

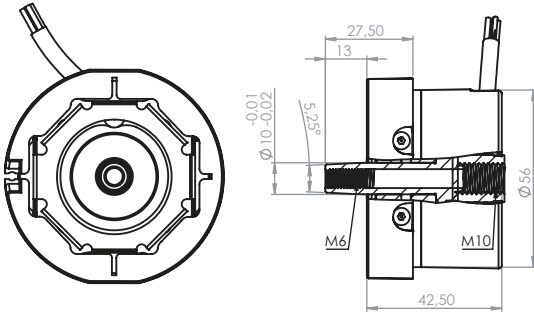
Pulse Diagram



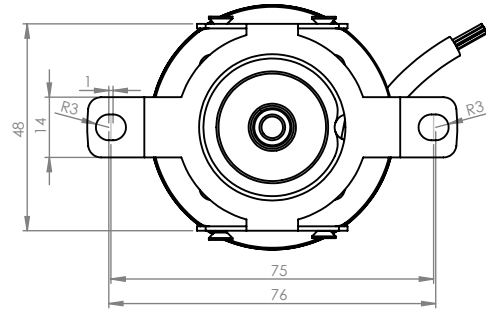
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Mechanical Dimensions

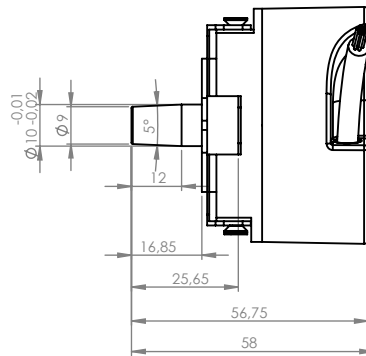
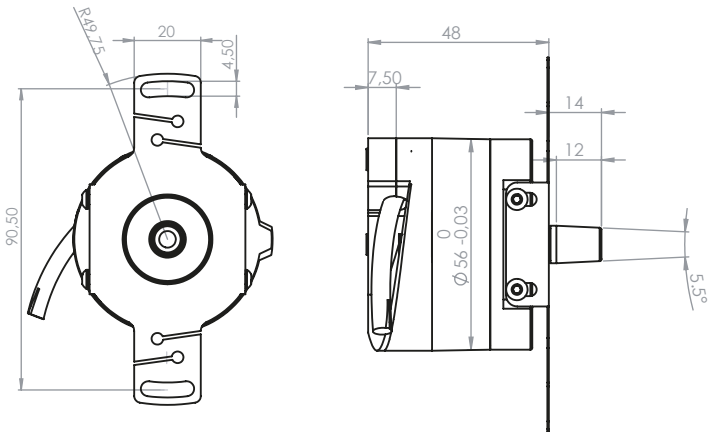
CR spring version



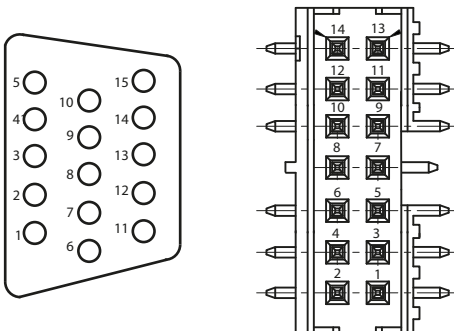
S8 spring version



SF spring version

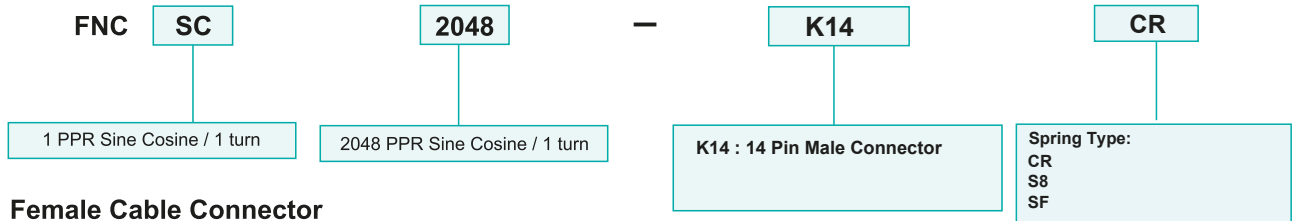


Cable / Connector Wiring



2*7 socket	3	12	9	6	7	8	1
DB15 socket	5	6	8	1	3	4	11
Function	A+	A-	B+	B-	Z+	Z-	C
2*7 socket	14	11	4	2/13	5/10	Housing	-
DB15 socket	10	12	13	9	7	Housing	-
Function	C-	D	D-	+5V	0V	Shield	-

Encoder Part Number



Female Cable Connector

