

Absolute encoders - SinCos

Integral bearing for integration in motors



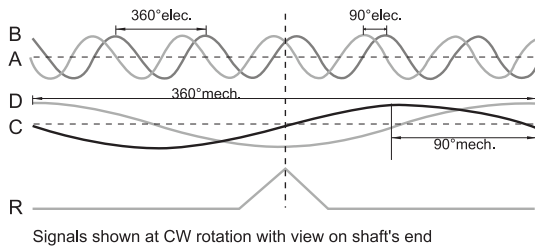
FNC SC2048 Series, SinCos motorfeedback



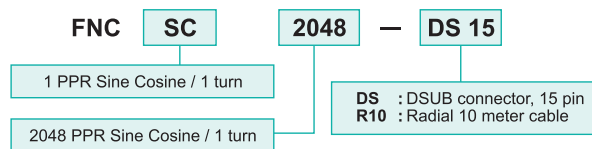
Technical data - electrical ratings

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

Pulse Diagram



Encoder Part Number



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 - 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

Cable / Connector Wiring

Function	Connector	Color	Renk
+VB	pin 1	Brown-Green	Kahve-Yeşil
GND	pin 2	White-Green	Beyaz-Yeşil
A	pin 3	Green-Black	Yeşil-Siyah
A'	pin 4	Yellow-Black	Sarı-Siyah
B	pin 5	Blue-Black	Mavi-Siyah
B'	pin 6	Red-Black	Kırmızı-Siyah
C	pin 7	Gray	Gri
C'	pin 8	Pink	Pembe
D	pin 9	Yellow	Sarı
D'	pin 10	Purple	Mor
Z	pin 11	Red	Kırmızı
Z'	pin 12	Black	Siyah
Shield	Connected to housing		