

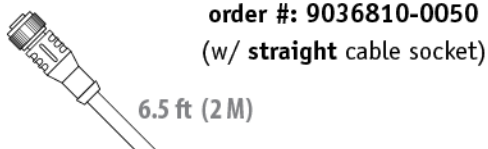
Introducing Celesco's CH25 Incremental Encoder. This encoder comes with a 2.5-inch square flange, 3/8-inch shaft and a push-pull output driver. The CH25 also accepts a wide input voltage from 5 to 30 VDC and is available in resolutions from 100 to 5000 pulses per revolution.

This encoder is perfect for many applications including electric motors, packaging machines, conveyor systems and elevators.

Ordering Information

Order Number	Pulses Per Turn
CH25-100	100
CH25-360	360
CH25-500	500
CH25-1024	1024
CH25-2048	2048
CH25-4096	4096
CH25-5000	5000

Shielded Cord-Set



CH25 Rotary Incremental Encoder

100 to 5000 Pulses per Revolution

5...30 VDC • Push-Pull Driver

M12 Connector • IP67

In Stock for Quick Delivery

General

Pulses Per Revolution Options	100, 360, 500, 1024, 2048, 4096, 5000
Output Driver	push-pull ($V_{out} = V_{in}$)
Input Voltage (V_{in})	5...30 VDC
Input Current	70 mA max.
Load	40 mA max.
Output Level (@ 20 mA load), High	$> V_{in} - 10\%$
Output Level (@ 20 mA load), Low	< 2.5 VDC
Pulse Frequency	200 kHz
Circuit Protection	inverse-polarity protection
Electrical Connection	M12 (8-pin) connector (mating plug not included)

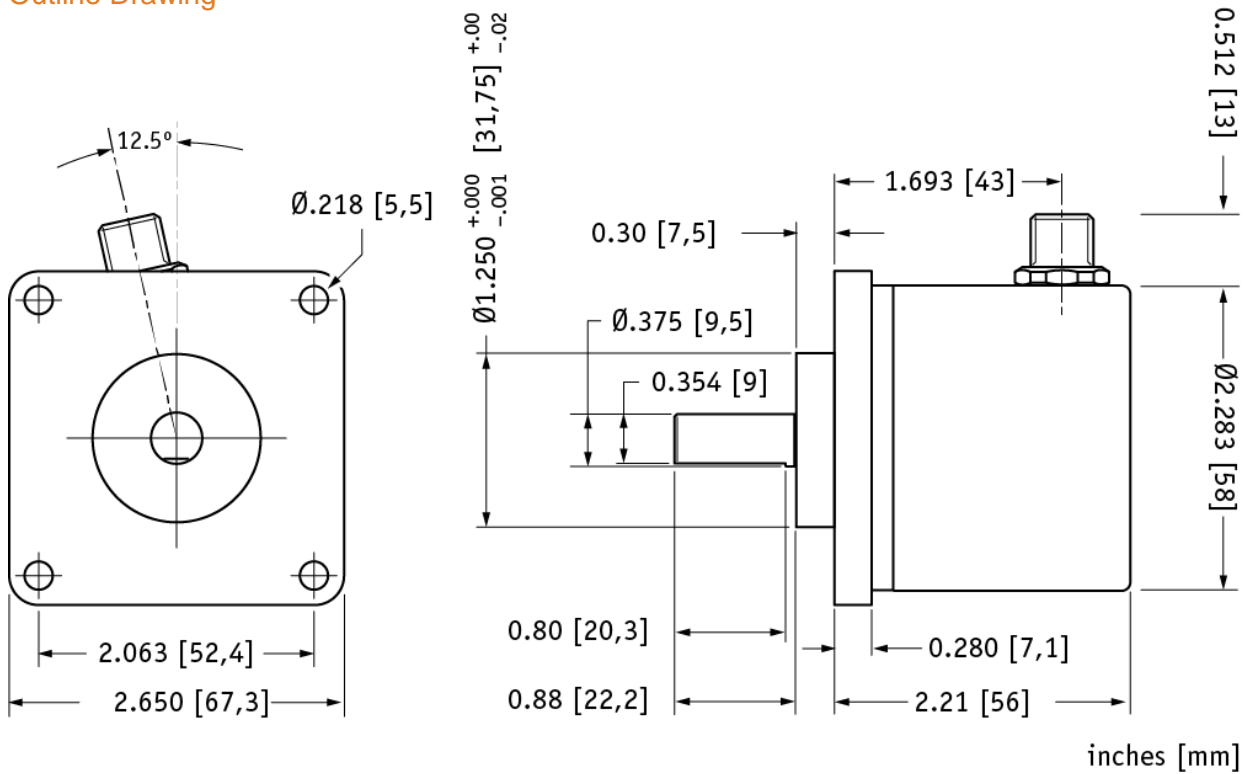
Mechanical

Housing	aluminum, powder-coated
Flange	aluminum
Shaft	stainless steel
Shaft Loading, Radial	49.5 lbs (220 N) max.
Shaft Loading, Axial	27 lbs (120 N) max.
Starting Torque	approx. 1.4 oz-in. (1 N-cm) @ ambient temperature
Bearing Type	precision ball bearings
Bearing Life @ 100% of full rated load	10^9 shaft revolutions
Bearing Life @ 40% of full rated load	10_{10} shaft revolutions
Bearing Life @ 20% of full rated load	10_{11} shaft revolutions
Maximum Operating Speed	8000 RPM
Weight (approx)	10.5 oz (300g)

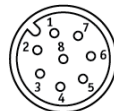
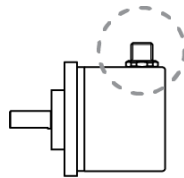
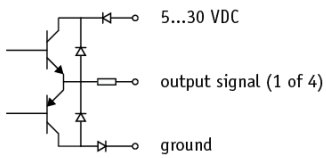
Environmental

Enclosure Design	IP67
Shaft Seals	IP65
Operating Temperature	-4° to 176°F (-20° to 80°C)
Storage Temperature	-22° to 176°F (-30° to 80°C)

Outline Drawing



Output Driver



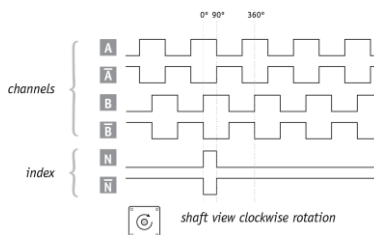
M12 Connector

Output Signal Connections

Encoder Pin Connections

pin	signal	pin	signal
1	ground	5	N
2	5...30 VDC	6	channel A'
3	channel A	7	channel B'
4	channel B	8	N'

Output Waveforms



part # 9036810-0050

Cord Set Connections

pin	conductor	signal	pin	conductor	signal
(1)	white	ground	(5)	gray	N
(2)	brown	5...30 VDC	(6)	pink	channel A'
(3)	green	channel A	(7)	blue	channel B'
(4)	yellow	channel B	(8)	red	N'

cable specifications

length:	6.5 ft. (2m)
wire size:	24 AWG (.25mm ²)
shield:	yes
cable material:	PVC
cable color:	gray

