

The CS15 is Celesco's compact industry standard size 15, servo-mount incremental encoder. With a low profile of less than an inch in height and a diameter of only 1.5 inches, the economically priced CS15 is perfect for both the OEM and single-piece user alike. Precision ball bearings support a durable stainless steel shaft for reliable, long life operation.

Standard features include 100, 1000, 2000 or 2500 pulses per turn option, a push pull driver and complementary output channels for single-ended or differential output connection. Every encoder ships with state of the art opto-asic circuitry designed to provide a clean, reliable output signal to just about any PLC or electrical interface.

Ordering Information

Order Number	pulses per turn
CS15-100	100
CS15-1000	1000
CS15-2000	2000
CS15-2500	2500

CS15

Rotary Incremental Encoder

100 to 2500 Pulses per Revolution

Size 15, Low Profile Design • 5..28 VDC, Push-Pull Driver

OEM or Industrial Applications

In Stock for Quick Delivery

General

Pulses Per Revolution Options	100, 1000, 2000, 2500
Output Driver	push-pull (Vout = Vin)
Input Voltage (Vin)	5...28 VDC
Input Current	100 mA max.
Load	20 mA max.
Maximum Shaft Speed	8000 RPM
Maximum Frequency	200 kHz
Electrical Connection	18-inch, 26 AWG multi-conductor cable

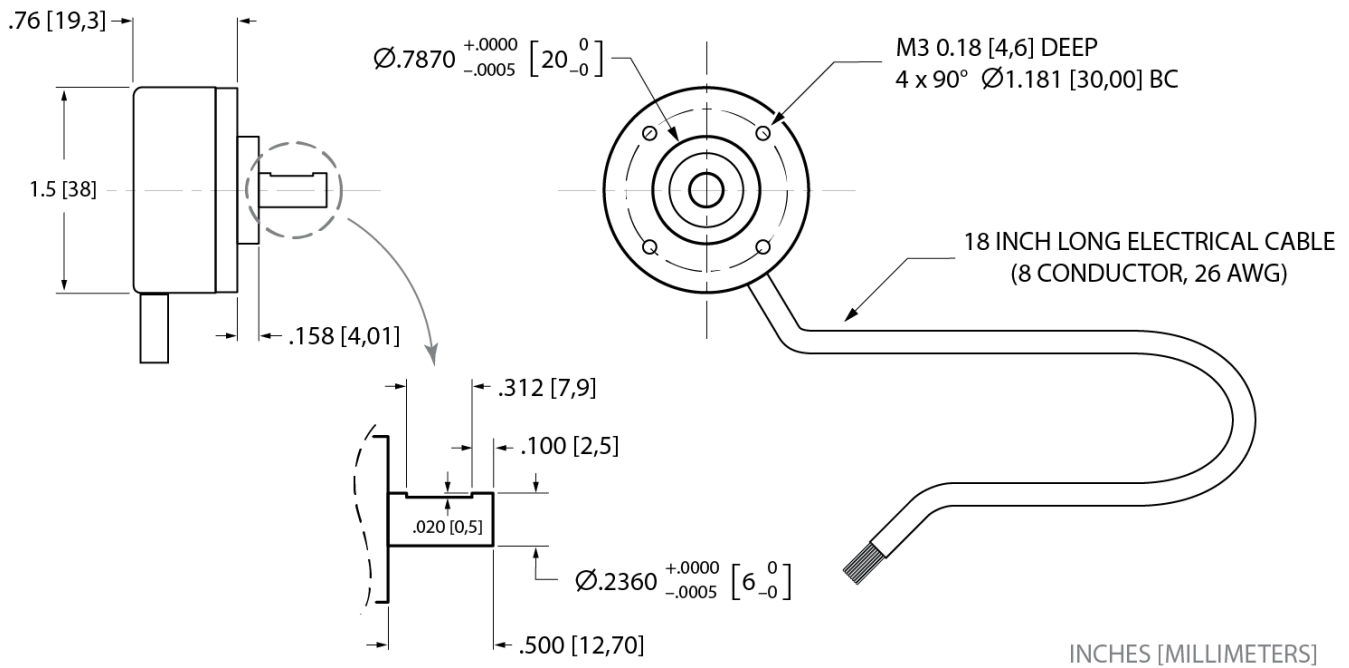
Mechanical

Flange	aluminum
Shaft	stainless steel
Shaft Loading, Radial	5 lbs (22 N) max.
Shaft Loading, Axial	5 lbs (22 N) max.
Starting Torque	approx. .05 oz-in. (.35 N-mm) @ ambient temperature
Bearing Type	precision ball bearings
Bearing Life, @60% of full rated load	1.2 x 10 ¹⁰ revolutions
Moment of Inertia	6.7 x 10 ⁻⁵ oz-in-sec ² (4.8 gm-cm ²)
Maximum Acceleration	1 x 10 ⁵ rad/sec ²
Weight (approx)	3 oz.

Environmental

Environmental Suitability	IP50
Operating Temperature	0–185° F (-20–85° C)
Storage Temperature	-13°–185° F (-25°–85°C)
Humidity	98% RH non-condensing
Vibration	10 g @ 58 to 500 Hz
Shock	80 g @ 11 ms duration

Outline Drawing

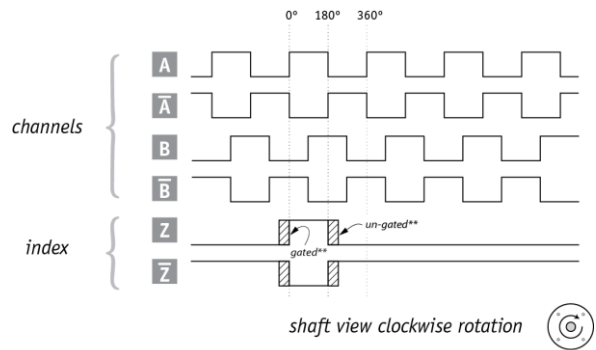


Signal Connections

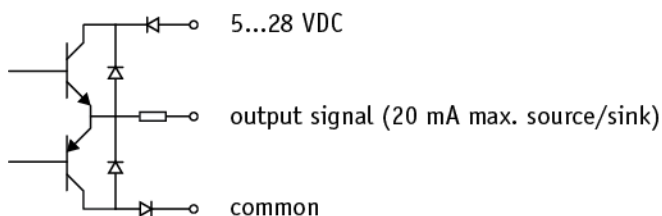
color	signal
red	5...28 VDC
black	common
green	channel A
blue	channel A'

color	signal
white	channel B
gray	channel B'
yellow	Z
orange	Z'

Output Waveforms



Output Driver (1 of 4)



**note: - 1000, 2000, 2500 pulses-per-turn options — gated to A, index pulse = 180°
 - 100 pulses-per-turn option — ungated, index pulse = approx 270°

