

# 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

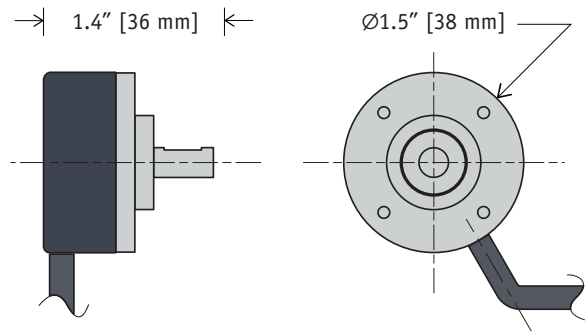
**In Stock for Quick Delivery**



GENERAL	
Pulses Per Revolution Options	100, 1000, 2000, 2500
Output Driver	push-pull ( $V_{out} = V_{in}$ )
Input Voltage ( $V_{in}$ )	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	$1.2 \times 10^{10}$ revolutions
Moment of Inertia	$6.7 \times 10^{-5}$ oz-in-sec <sup>2</sup> (4.8 gm-cm <sup>2</sup> )
Maximum Acceleration	$1 \times 10^5$ rad/sec <sup>2</sup>
Weight	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



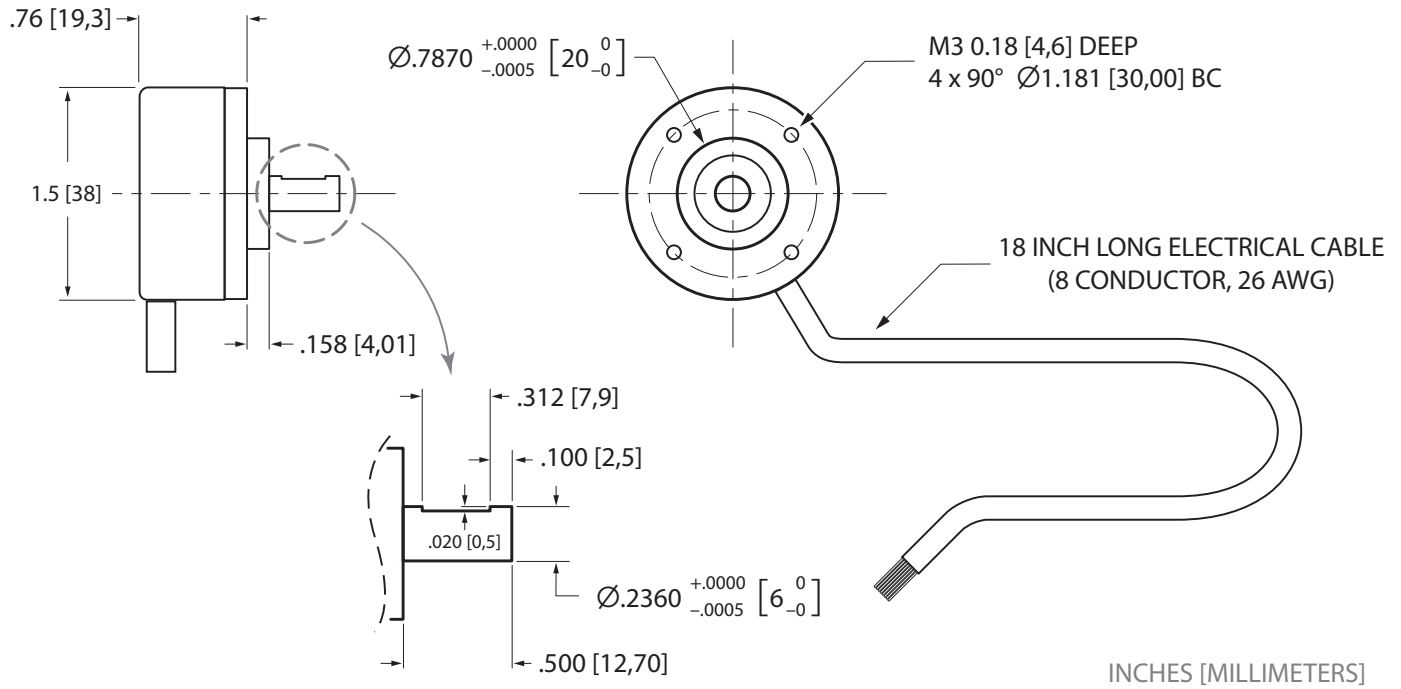
The CS15 is Celesco's compact industry standard size 15, servo-mount incremental encoder. With a low profile of less than an inch in height and a diameter of only 1.5 inches, the economically priced CS15 is perfect for both the OEM and single-piece user alike. Precision ball bearings support a durable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

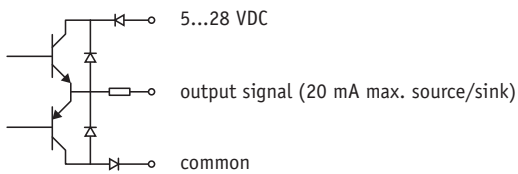
Outline Drawing:



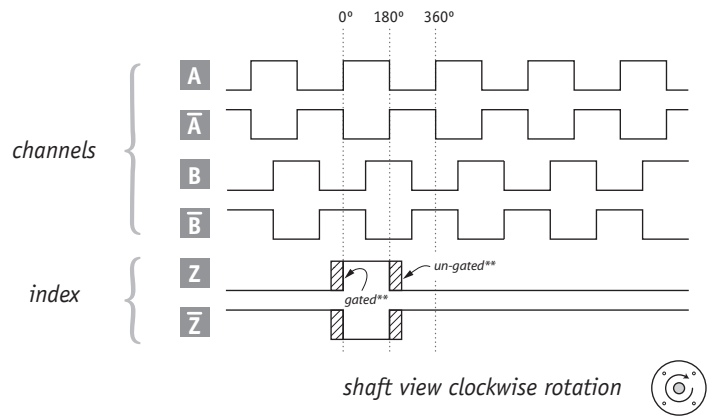
Signal Connections

color	signal	color	signal
red	5...28 VDC	white	channel B
black	common	gray	channel B'
green	channel A	yellow	Z
blue	channel A'	orange	Z'

Output Driver (1 of 4):



Output Waveforms



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

version: 2.1 last updated: August 4, 2014