

# COE – CRYOGENIC OPTICAL ENCODER



## Features

- Incremental optical angular encoder
- 360 angular degrees measuring range, endless
- Optical fiber based
- Contactless
- MicroWatts dissipation when measuring
- Encoder can be switched "off" for zero dissipation
- Material: aluminium, glass
- Readout module: OEM
- Only purchasable as option on a positioner

## Description / Applications

The Cryo Optical Encoder (COE) is an incremental non-contact angular encoder. It offers a full 360 degrees measuring range without blind spots. when used in combination with a CLA positioners submicron translational resolution is achieved. It is optical fiber based and all electronics are placed in ambient. Only the encoder head with a 200mm fiber pigtail is placed in the cryostat, dissipating no more than a few microWatts when measuring.

## Specifications

General info	
Wavelength	1310nm
Fiber type	G652/SMF28e, Single Mode, Simplex, 9/125
Encoder head pigtail	Bare fiber (only coating), 200mm long ( <i>excl. connector</i> )
Pigtail connector type/polish	FC/APC narrow key, male
Encoder Grid resolution	( <i>See product pages</i> )
Operational environmental conditions	20 mK to 375 K, ambient to UHV
Weight	5 g
Main construction materials	Aluminium, glass
Dissipation	≤ 5 μW
Electronics CPSC	
Position readout	OEM

## Ordering Information

### Available models

-COE Only purchasable as part of compatible JPE positioners by selecting the "-COE" option.

### Available Options

None

### Accessories

None

### Mechanical and electrical information

Download 3D step files and manuals from:  
<https://www.jpe-innovations.com/cryo-nano-products/>

### Contact

For quotations, specials, or engineering services, please contact us at:  
<https://www.jpe-innovations.com/contact/>