

FBG Anchor (Bolt) Dynamometer AD-01

The FBG Anchor (Bolt) Dynamometer AD-01 is made of constant elastic, high-strength, and corrosion-resistant materials. Two FBG strain gauges are installed on the annular elastic base to accurately measure the total amount of various load from bearing cables, anchors and bolts. The product has a built-in temperature compensation FBG, and the temperature compensation can realize temperature measurement at the same time. It is generally used in coal mines, tunnels, foundation pits and other civil environments that require protection and support. As a bolt force measuring gasket, it can be used for monitoring the fixing of wind turbine blades, real-time monitoring of the locking status of shield segments, and other environments for monitoring the fastening status of bolts.

Key Features

- Rugged, reliable, easy to install
- Long-term stability, high sensitivity
- Long-term zero point stability
- Small temperature drift
- Easy welding operation
- Good dynamic characteristics

Applications

- Anchor cables
- Rock anchors
- Anchor bolts
- Suspension bridges
- Stay cable bridges



Specifications

Parameter	Unit	Value
Center Wavelength	nm	1460 ~ 1610
Range	kN	100, 200, 300, or customize
Resolution	kN	0.1% F.S.
Accuracy	kN	1% F.S.
Temperature Compensation	--	Built-in
Material	--	Stainless steel
Dimension	mm	Φ62 x 20, varies by range
Installation	--	Through-center installation
Pigtail Length	m	Φ3mm armored cable, 1m at single end, or customize
Optical Connector	--	FC/APC, or customize
Operating Temperature	°C	-20 ~ +80