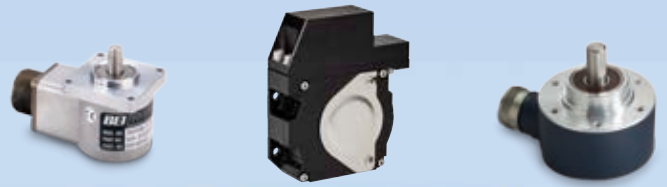


BEI SENSORS



POSITION SENSING SOLUTIONS FOR THE OIL AND GAS INDUSTRY





BEI SENSORS

- Drawworks
- Topdrives
- Downhole Tools
- Wireline
- Coiled Tubing
- Mud Pumps
- Iron Roughnecks

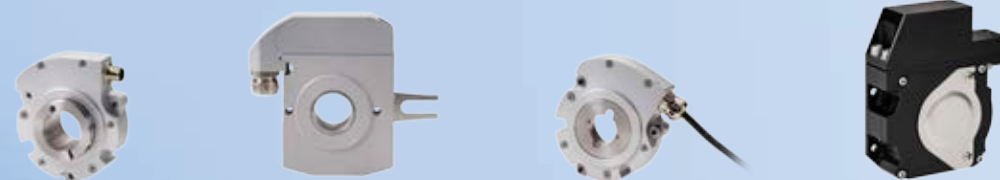
POSITION SENSING SOLUTIONS FOR THE OIL AND GAS INDUSTRY

Performance, Reliability, and Adaptability

Few applications present a tougher challenge for sensors than those in the oil and gas industry. High temperature and pressure, potentially explosive environments, extreme vibration, shock, dirt and moisture are all part of the daily working environment. Position sensors are crucial components in oil and gas equipment and must operate reliably day in and day out. BEI Sensors is well aware of the unique requirements of the oil and gas industry and has designed products of uncompromising quality and performance. They are, in short, the most reliable position sensing solutions to be found anywhere.

NEW PRODUCT RANGE

LP SERIES Low Profile Encoders



Triple Certified Intrinsically Safe, Nonincendive & Explosion Proof

The new LP Series low profile encoder range offers intrinsically safe, nonincendive and explosion proof designs for use in a wide range of hazardous areas commonly found in oil and gas applications. This compact, vibration and shock resistant series is a perfect fit for tight installations, like top drives and mud pumps. The removable terminal box model simplifies field installation and an IP66 ingress protection rating and hard anodized enclosure shields the internal components from exposure to the elements.



FEATURED PRODUCTS



Triple Certified Hazardous Area Encoders

A full line of UL-certified nonincendive Division 2 encoders are also compliant to CENELEC/ATEX and IECEx non-sparking Zone 2 hazardous area standards.

This triple certification is provided on six popular heavy-duty encoder models sized 2 to 4.5 inches in both hollow shaft and shafted versions. These models include the H20, H25, HS20, HS25, HS35, and HS45.



700 and 6300 Series Downhole Linear Position Sensors

Designed to operate reliably in extreme environments, these rugged linear potentiometers will withstand temperatures between -40° and +200°C, and pressures of up to 35,000 psi.



HS35 Drawworks Encoder

This heavy-duty rotary encoder features a unique through-shaft style for use as a winch-turns counter in the drawworks systems of oil rigs.







Intrinsic Safety Barrier

This unique electronic module provides power and signal isolation for an incremental encoder with differential quadrature outputs and an index.





Contact BEI Sensors at **800-350-2727**
or visit www.beisensors.com to see how we can provide
a solution for your unique position sensing requirements.

Hazardous Area Products

North American "Explosion-Proof" & European "Flameproof" Approvals

Encoder Type	 ATEX	 U.S./Canada Class I, Div 1, Group:	 U.S./Canada Class II, Div 1, Group:	 IECEx
H38 (Standard)		D		
H38 (w/ Labyrinth Seal)	II 2 G Ex d IIB T4	C, D	E, F, G	Ex d IIB T4
H40		D		
HH_X*, AH_X*	II 2 G Ex d IIB T4 Gb IP66	C, D		Ex d IIB T4 Gb IP66
CAMX, CAUX, CEMX, CEUX, GAMX, GAUX, GEMX, GEUX, PAUX, PEUX, NAUX, NEUX, PAMX, PEMX, SAUX, SEUX	II 2 Ex d IIC T6 Gb Ex tb IIIC T80°C Db IP 6x			Ex d IIC T(*) Gb Ex tb IIIC T(*)°C Db
CEUX, GEUX, NEUX, PEUX	I M2 Ex d I Mb			Ex tb IIIC T(*)°C Ex d I Mb

North American and European "Intrinsic Safety" Approvals

Encoder Type	 ATEX	 Class I, Group:	 Class II, Group:	 IECEx
H20, H25, H38, H40, HS20, HS25, HS35, HS45, HH_9, HH_B	II 1 G Ex ia IIB/IIC T4	A, B, C, D	E, F, G	Ex ia IIB/IIC T4
IBM5, IHM5, IH05, IBO5, IHK5, IBK5, IHM9, IBM9	II 1 G Ex ia IIC T4 Ga or EX ia IIB T4 Ga			Ex ia IIC T4 Ga Ex ia IIB T4 Ga
Approved Associated Apparatus				
Intrinsic Safety Barrier	II 3 (1) G Ex nA [ia Ga] IIC T4 Gc	A, B, C, D	E, F, G	Ex nA [ia Ga] IIC T4 Gc




* Certifications Pending

BEI Sensors offers one of the largest selections of UL, ATEX and IECEx certified position sensing products available. Certifications include UL Class I Division 1 and 2, and Class II Division 1 and 2, as well as ATEX and IECEx Zone 1 and Zone 2. These selection tables provide the details of BEI Sensors product offerings by certification.

Hazardous Environment Groups

Gas Groups		Dust Groups	
Class I		Class II	
Division 1 & 2	Zone 0, 1, 2	Division 1 & 2	Zone 20, 21, 22
A (acetylene)	IIC (acetylene & hydrogen)	E (metals) (Div 1 only)	metals, coal, grain
B (hydrogen)		F (coal)	
C (ethylene)	IIB (ethylene)	G (grain)	
D (propane)	IIA (propane)		

North American & European "Nonincendive & Non-Sparking" Approvals

Encoder Type	 Division 2, Groups:	 ATEX Zone 2/22	 IECEx
H20, H25, HS25, HS20, HS35, HS45, HH_9, HH_B, AH_9, AH_B	A, B, C, D, F & G	II 3 G Ex nA IIB T3 Gc	Ex nA IIB T3 Gc Ex nA IIB T4 Gc
PHU9, PBU9		II 3 G Ex nA IIC T6 Gc	
DHM5, DHK5, DH05, KHM5, KH05, KHK5		II 3 G D Ex nA IIC T6...T4 Gc Ex tc IIIC T120°C... T80°C Dc	Ex nA IIC T6...T4 Gc Ex tc IIIC T120°C... T80°C Dc

Backed by Extensive International Resources

BEI Sensors is a brand of Sensata Technologies. Sensata Technologies is one of the world's leading suppliers of sensing, electrical protection, control and power management solutions with operations and business centers in 16 countries. Sensata's products improve safety, efficiency and comfort for millions of people every day in automotive, appliance, aircraft, industrial, military, heavy vehicle, heating, air-conditioning and ventilation, data, telecommunications, recreational vehicle and marine applications. For more information please visit Sensata's website at www.sensata.com.



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