

An extensive product family

HIGH ACCURACY ENCODERS FOR INDUSTRIAL APPLICATIONS

Rotary encoders from Balluff are used wherever lengths, positions, speeds/rotary movements, or angles/angular velocities need to be recorded. They convert mechanical movements into digital electrical signals.

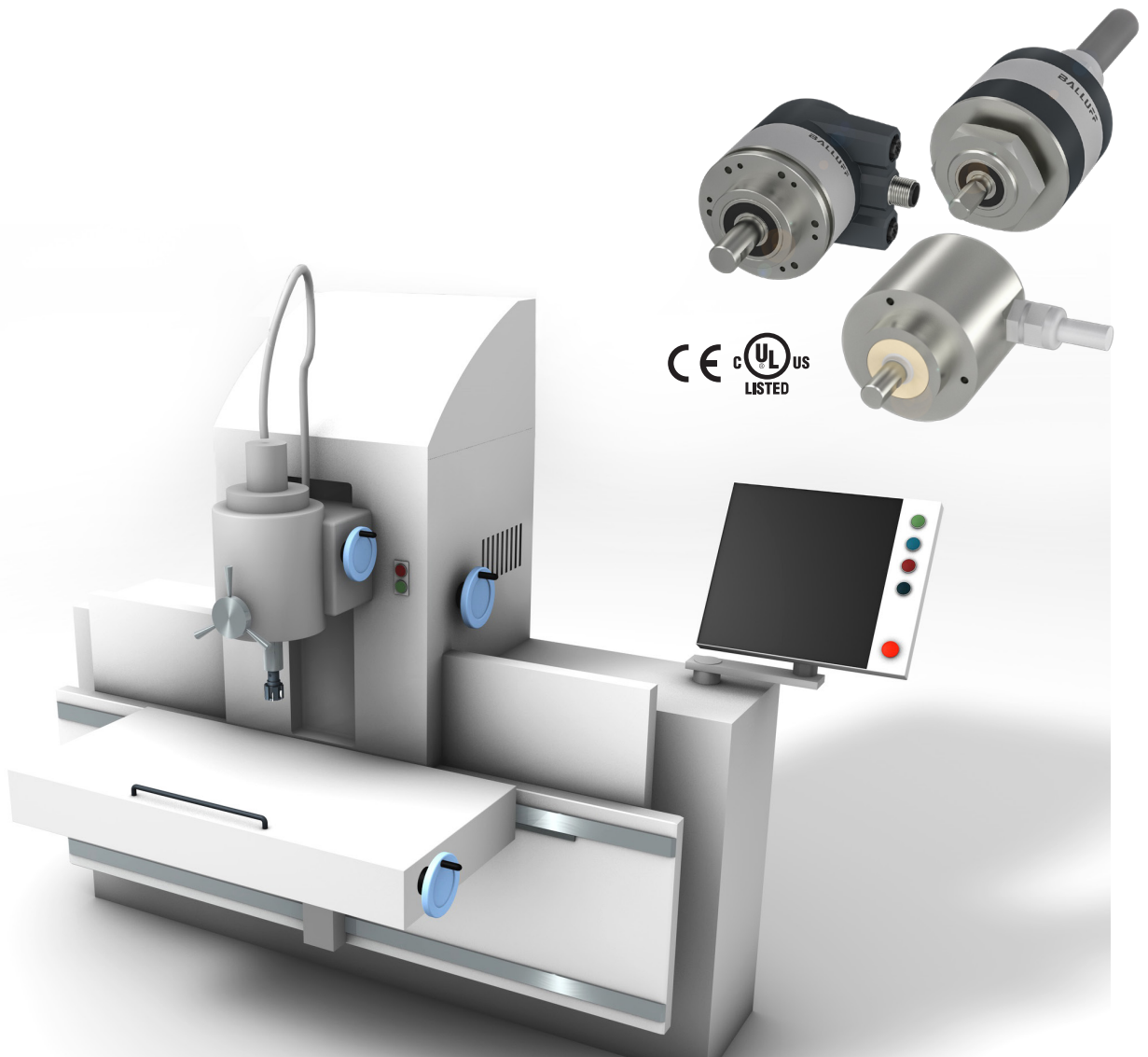
Balluff offers a variety of measuring principles to best meet the needs of the application. For example, if a high resolution is required, optical encoders are often used, while magnetic

encoders are preferred for applications in harsh environmental conditions. In addition, these encoders are available in a corrosion-resistant stainless-steel version with IP69K protection.

With a variety of designs, from miniature encoders to multi-turn hollow shaft encoders, our encoder family offers solutions for a wide range of requirements in mechanical engineering.

Features

- Wear-free
- Incremental or absolute interface
- High resolution up to 16 bit/revolution
- Single and multi-turn variants available
- Multi-turn up to 2^{43} revolutions
- Variants for blind hollow, hollow and solid shafts available
- Robust design for harsh environmental conditions



ROTARY ENCODERS



Ordering example	BDG abbcc-ddee-fghhi-jkk-llmm-nnoo
Principle	Incremental, absolute
Design	24 mm, 36 mm, 40 mm, 50 mm, 58 mm, 80 mm, axial/radial connector, axial/radial cable
Size of flange	24 mm, 30 mm, 36 mm, 40 mm, 50 mm, 58 mm, 63 mm, 63,5 mm, 67.3 mm, 70 mm, 80 mm
Shape of shaft	Blind hollow shaft, hollow shaft, solid shaft
Shape of flange	Screw flange, clamp flange, synchro flange, square flange
Diameter of shaft	6...27mm, 1/4", 3/8", 1/2"
Interface	HTL, TTL, Sin/Cos, SSI, RS485, CANopen, SAE J1939
Supply voltage	5 V DC, 10...30 V DC, 5...30 V DC, 4.75...32 V DC
Resolution	1...25.000 increments, single-turn optical \leq 16 bit, single-turn magnetic \leq 12 bit, multi-turn \leq 243 revolutions
Connection	PVC cable, M8 connector, M12 connector

BDG abbcc-ddee-fghhi-jkk-llmm-nnoo

a	Principle	i	Supply voltage
bb	Design	jkk	Resolution (pulses per turn), resolution single-turn, resolution multi-turn
cc	Size of flange	ll	Shielded cable
dd	Shape of shaft, flange	mm	Cable length
ee	Diameter of shaft	nn	Connector
f	Interface category	oo	Pinout (cable/connector)
g	Interface		
hh	Interface details		

Configure your encoders using the online configurator in the product finder at www.balluff.de/go/bdg-configurator

ACCESSORIES



	BAM03PY	BAM03RE	BAM03RM
Description	Bellows coupling from \varnothing 6 mm to \varnothing 6 mm	Double loop coupling from \varnothing 6 mm to \varnothing 10 mm	Mounting bracket \varnothing 20.1 mm
	More bellows couplings can be found at www.balluff.com	More double loop couplings can be found at www.balluff.com	More mounting accessories can be found at www.balluff.com

Connection cables can be found at www.balluff.com