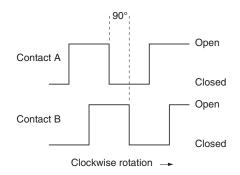
## Description

The BA490 encoder is a robust panel mounting rotary control knob with a three wire quadrature switch contact output, suitable for installation in hazardous or safe process areas.

If contact 'A' leads contact 'B', the knob is rotating in a clockwise direction, if 'B' leads 'A', the knob is rotating in a counter-clockwise direction.



Output waveforms

## Use in hazardous areas

The BA490 encoder contacts have 500V insulation to earth, and comply with the requirements for Simple Apparatus specified in Clause 5.5 of international intrinsic safety standard IEC 60079-11:2023. This allows the BA490 encoder to be installed in Zones 1, 2, 21 and 22 and to be directly connected to intrinsically safe apparatus located in the same hazardous area.

#### **CAUTION**

The BA490 Rotary encoder includes more than 10% of aluminium, therefore it should not be installed in Zone 0.

If exposed to a Group IIIC conductive dust, the BA490 must be fitted with a BA599 rear protection assembly.

## Repair

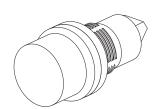
No attempt should be made to repair a faulty encoder. Suspect encoders should be returned to BEKA associates or your local agent.

#### Disposal

Encoders should be correctly disposed of, not in household rubbish

Essential Health & Safety Requirements for BA490 Rotary encoder

UK

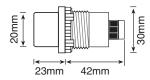


Issue 1 10th June 2024

BEKA associates Ltd. Old Charlton Rd, Hitchin, Hertfordshire, SG5 2DA, UK Tel: +44(0)1462 438301 e-mail: sales@beka.co.uk web: www.beka.co.uk

## **Dimensions and terminals**

The BA490 Rotary encoder has IP65 front of panel protection and a gasket is provided to seal the joint between the panel and the encoder body. The rear of the encoder has IP20 protection which can be increased to IP65 by fitting a BA599 rear sealing assembly.







Securing nut should be tightened between 120 & 140 cNm (10.6 & 12.4inlb)

## EU Declaration of Conformity

This declaration of conformity for electrical apparatus BA490 is issued under the sole responsibility of the manufacturer.

## Description

The BA490 encoder is a robust panel mounting rotary control knob with a quadrature switch contact output which complies with *Simple Apparatus* requirements specified by IEC 60079-11:2023.

#### Manufactured by

BEKA associates Ltd, Old Charlton Road, Hitchin, Herts, UK, SG5 2DA

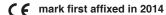
# Complies with:

#### 2014/30/EU EMC Directive

Benign apparatus - no active electrical components

**2011/65/EU (RoHS Directive)** relating to hazardous substances in electronic and electrical equipment.

**2015/863/EU** additional substances added by amending Annex II to Directive 2011/65/EU as regards the list of restricted substances.



Authorised Signatory: Issue 10 7th Nov 2023

Stehre for

Olivier Lebreton CEng MIET Managing Director



Manuals, certificates and datasheets can be downloaded from https://www.beka.co.uk/ba490