EAO – Your Expert Partner for
Human Machine Interfaces

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EAO, the pioneer of illuminated pushbuttons and expert for innovative, reliable and intuitive human machine interfaces (HMIs) sets a new standard with the new Series 57, the door opening pushbuttons for public transportation.

Especially user friendly are the extra large operating area of Ø 74 mm and the two independently illuminated feedback rings, fully complying with EN 14752. The additional user benefits of the raised, illuminated symbols (conform to TSI PRM & ADA) and the optional finding tone make this unique "all-in-one" door opening pushbutton the best in class. The optical, tactile and acoustic feedback is unbeatable.

The tool-less final mounting saves time and money. The Series 57 is the perfect choice for all train and tram manufacturers and operators.

Materials
The materials used meet EAO's stringent standards of quality, functional reliability, service life and design. They are resistant against aggressive cleaning chemicals and against UV exposure.

Mechanical properties
- 4-strand cable with core end-sleeves (wire cross-section 0.5 mm^2 or 0.24 mm^2) for the standard version
- 6-strand cable with core end-sleeves (wire cross-section 0.5 mm^2 or 0.24 mm^2) for the version with finding tone
- Cable length: 200 mm; 1000 mm; 2000 mm (other lengths on request)
- Mechanical lifetime: 2 Million operations
- Resists shock and vibration
- Plug-in connector on request
- Actuating force: <15 N

Electrical properties
Operating voltage:
- 16 ... 63 VDC (min. / max.)
- 50 ... 143 VDC (min. / max.)

Switching element
- Electronical high side switch

Finding tone (optional)
- 65 dB at 10 cm at 1 kHz (other sound levels on request)
- Sound frequencies according to BöV / SöV

Typical applications
- Public transport – train, tram
- Building access / electrical doors
- Lifts
- Toilets (WCs)

Environmental conditions
Temperature
- Storage temperature – 45 to + 90 °C
- Operating temperature – 40 to + 85 °C

Degree of protection
- IP69K front

Symbols conform to TSI PRM & ADA

(Illuminated symbols optional)

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Feedback ring illumination
- Outer ring: green LEDs
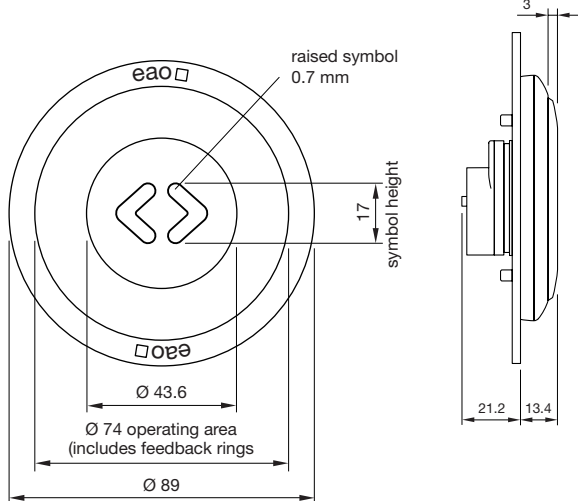- Inner ring: red LEDs

Colour of bezels and symbol inserts
- Plastic: Green RAL 6032, Red RAL 3000, Blue RAL 5015, Yellow RAL 1023, Grey RAL 7040, Black RAL 9017
- Metal: Aluminium natural anodized

Colour of symbols
- Plastic and metal: Black RAL 9017

Sizes

raised symbol 0.7 mm

symbol height 17

3

21.2 13.4

Ø 43.6

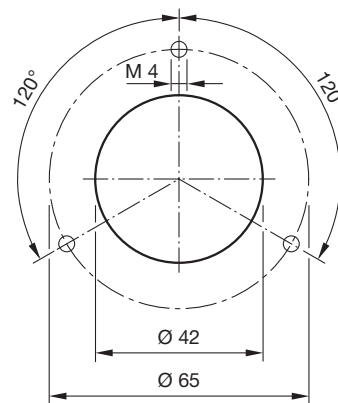Ø 74 operating area (includes feedback rings

Ø 89

Standards and guidelines
- Units compliant to
  - EN 60947-5-1
  - EN 50155, Teil EMV
  - EN 14752
- Fire protection norms
  - NFF 16-101 / NFF 16-102 / NFF 31-054
  - DIN 5510-2 / DIN 5510-5
- Cables according to
  - DIN EN 50306-2; VDE 0260-306-2
  - DIN EN 50306-4; VDE 0260-306-4
  - NFF 63808 / NFF 61030
- Symbols
  - TSI PRM & ADA

Visit the EAO website to configure your individual door opening pushbutton.
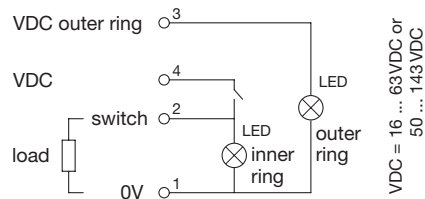
Mounting/exchange
The mounting dimensions of the Series 57 are identical to the dimensions of other manufacturers. This is why a one to one upgrade to Series 57 is easily performed at any time.

120° M 4 120°

Ø 42

Ø 65

Wiring diagrams
- Dual ring illumination (standard version)

VDC outer ring 3

VDC 4

switch 2

load

0V 1

LED

LED inner ring

outer ring

VDC = 16 ... 63 VDC or 50 ... 143 VDC

- Dual ring illumination with additional finding tone (optional)

VDC tone 5

VDC outer ring 3

VDC inner ring 6

VDC 4

switch 2

load

0V 1

LED

LED

inner ring

outer ring

VDC = 16 ... 63 VDC or 50 ... 143 VDC