

Push buttons

Aesthetic, ergonomic, adaptable and robust products. Specially designed for transport, they are also distinguished in other industrial sectors of activities (Toilets, Highway call boxes, doors, lock chambers...)



- **Actuator area Ø 40mm**
- **Backlit single or dual color LED**
- **Pictograms on request**
- **Haptic feedback**
- **Metal versions**
- **Braille (according to versions)**



Standards:

- | | |
|------------------|-------------------------------|
| • Conception | EN 14752, TSI PRM |
| • Application | EN 50155 |
| • Reinforced EMC | EN 50121-3-2 |
| • Environment | EN 60068, EN 60529 |
| • Fire / smoke | NF F 16 101 / 102, EN 45545-2 |
| • Cable | EN 50306-4 |
| • REACH, RoHs | |

Characteristics:

- Anti-vandal design
- Modularity for button & bezel
- Operating temperature -40°C +85°C (depending on the cable)
- Protection IP 65/67 IK07
- Customisation : Mafelelec know-how expertise
- Ring & center area backlit
- High luminosity (8 LED on request)
- High service life
- Rear (without front bezel) or front mounting
- Pole mount for slim version with adaptor

- European instruction 2001 / 85 / CE (according to model)
- (conversion public transport for PRM)
- RVAR (metal versions)
- European instruction 2008 / 164 / CE (TSI PRM)

M-Door range Help request button

Help request button for the disabled

- **Designed to avoid accidental operations**
- **Little space required on front**
- **Active surface Ø 40mm**
- **Text in 4 languages**

Standards

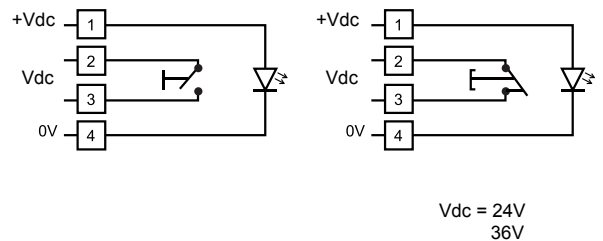
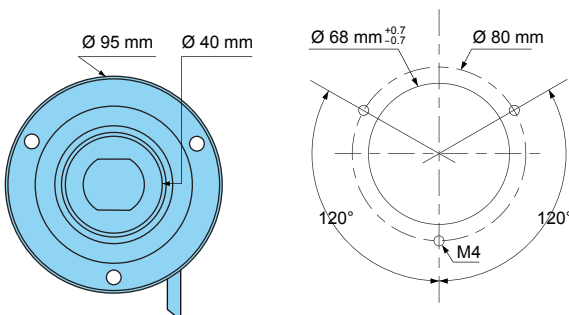
- **Conception** EN 14752, 2008 / 164 / CE, 2001 / 85 / CE (depending on modele)
- **Application** EN 50155
- **CEM** EN 50121-2-3
- **Environment** EN 60068, EN 60529, EN 61 373
- **Fire / smoke** NF F 16 101 / 102, UL V0

Mechanical characteristics

- Operating temperature : - 40°C / + 85°C (depending on cable)
- Service life : >3 000 000 operations
- Protection : IP67/65, IK07
- Actuator : Force <12N. Stroke = 1.5 mm
Surface = Ø40 mm. Tactile effect
- Raised pictogram
- Label on actuator

Electrical characteristics

- Operating voltage:
Contact: 137V - 200 mA max.
LED: white 24 to 36V (72V, 110V on request)
- Protection against reversal polarity and overvoltage
- Long service life



Lighting characteristics

- Backlit pictogram unlimited choice, with color change
- Center illuminated and / or illuminated ring



Illuminated door opening pushbutton with integrated finding signal

- **Active surface Ø 40mm**
- **Railway standards**
- **Customised electronics and design**
- **Integrated sound module**

Standards:

- | | |
|-----------------------|-----------------------------|
| • Conception | EN 14752, TSI PRM |
| • Application | EN 50155 |
| • EMC | EN 50121-2-3 |
| • Environment | EN 60068, EN 60529 |
| • Product | EN 61373, EN 61000 |
| • Fire / smoke | NF F 16 101 / 102 |
| • Sounds | DIN 32981, DIN 32974 |

Mechanical characteristics:

- Material : Plastic bezel and actuator
- Operating temperature : - 20°C / + 70°C
- Mechanical service life : 3 000 000 operations
- Protection : IP 67/65 front and back. IK 07
- Force : 6 to 12 N.
- Tactile effect
- Stroke : 1.5 mm

Options:

- Metal version (bezel)
- Raised pictogram
- Braille (bezel)
- Colors and pictograms on request

Illuminated characteristics:

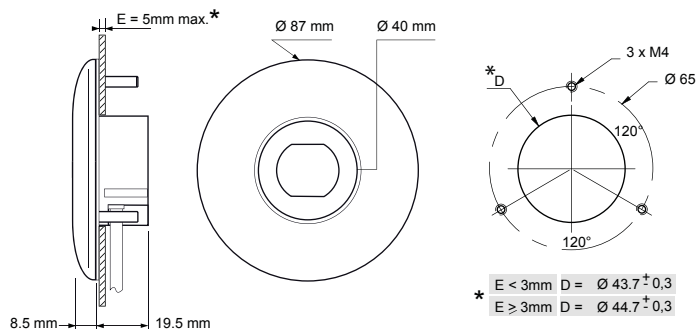
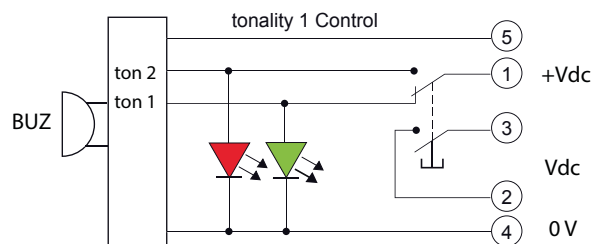
- Unlimited choice of lights pictograms with changing color
- Change of color can be automatically or remotely controlled
- Illuminated feedback ring and center of actuator

Sound characteristics:

- Intermitent mode, Frequency = 3.6 Hz (DIN3974) and permanent mode
- Frequency level 3.4 kHz or 880 Hz (DIN 32981) according to model

Electrical characteristics (depending on button model):

- Operating voltage : 24 V +25%, -30%
- Contact : 5 to 137 VDC / VAC 200 mA max.
- Operating current : 5 mA +/- 10%
- Reverse polarity protection
- Connector and cable on request





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Creating control and signalling solutions for harsh environments

M-Door range

Double sided pushbutton or indicator



Double sided pushbutton or indicator for drilled glass mounting

- **Active surface Ø 40mm**
- **Railway standards**
- **Unlimited choice of back lighted pictograms and colors**
- **Standard or customised electronics**
- **Easy and fast mounting (tool-free)**
- **Automatic thickness adaptation**

Standards

- | | |
|----------------|-------------------------------|
| • Conception | EN 14752, TSI PRM 2015 |
| • Application | EN 50155 |
| • EMC | EN 50121-3-2 |
| • Environment | EN 60068, EN 60529 |
| • Fire / smoke | NF F 16 101 / 102, EN 45545-2 |
| • REACH, RoHS | |

Mechanical characteristics

- Operating temperature: - 40°C / + 70°C (depending on cable)
- Mechanical service life: 3 000 000 operations
- Protection : IP 67/65
- Haptic feel

Mounting system

- Automatic tool-free mounting (spring effect)
- 4 to 6 mm glass thickness
- Vandalproof system
- Other operating voltages on request

Options

- Metal version
- Pictogram in relief
- Braille
- Double sided pushbutton, indicator or mixed

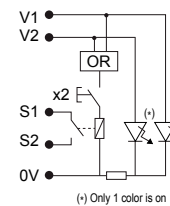
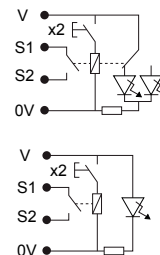
Lighting characteristics

- Unlimited choice of back lighted pictograms with changing color
- This change of color can be automatic or remotely controlled
- Illuminated feedback or black ring available

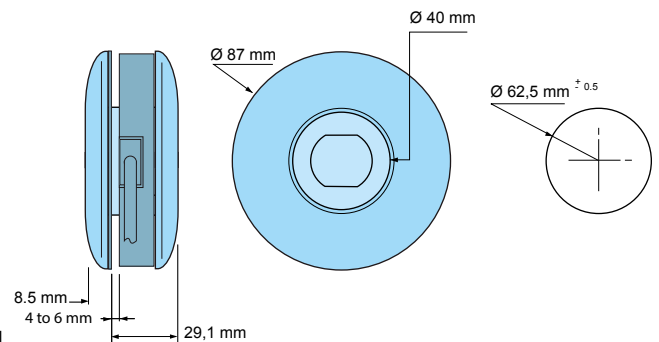
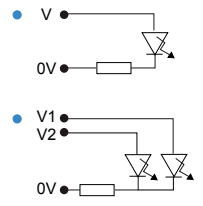
Electrical characteristics

- Operating voltage:
Contact : 5 to 45 VDC/VAC 100 mA (*other on request*)
- LED (*colors on request*)
- Indicator : 12 - 137 VDC
- Pushbutton: 12 - 36 VDC
- Reverse polarity protection
- Important service life

Pushbutton



Indicator



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Textes et images non contractuels

(update 2017/06)

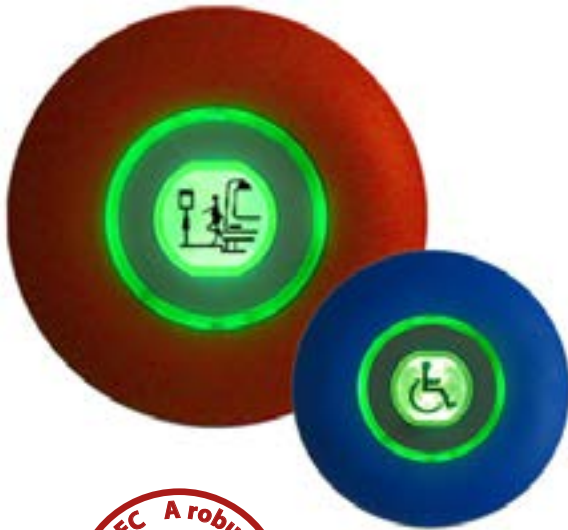


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Creating control and signalling solutions for harsh environments

M-Door range Illuminated push button

Illuminated push button



- **Active surface Ø 40mm**
- **Railway standards**
- **Unlimited choice of back lighted pictograms and colors**
- **PRM application**

Standards:

- | | |
|---------------|--------------------|
| • Conception | EN 14752, STI PRM |
| • Application | EN 50155 |
| • EMC | EN 50121-2-3 |
| • Environment | EN 60068, EN 60529 |
| • Fire/smoke | NF F 16 101 / 102 |

Mechanical characteristics:

- Operating temperature: - 40°C / + 85°C (depending on cable)
- Mechanical service life: 3 000 000 operations
- Protection : IP67/65, IK07
- Tactile effect

Electrical characteristics:

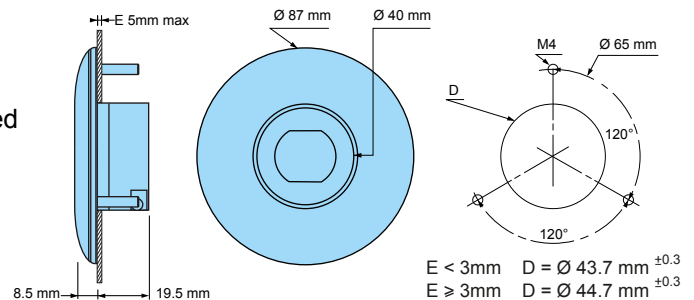
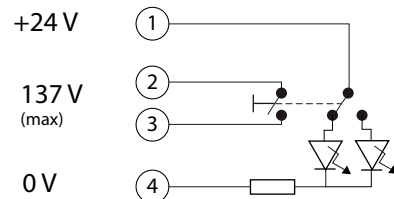
- Operating voltage:
Contact: 5 to 137 VDC / VAC 200 mA
LED: 24 V (colors on request)
- Reverse polarity protection
- Important service life

Options:

- Metal version
- Pictogram in relief
- Braille
- Standard or customised electronics diagram

Lighting characteristics:

- Unlimited choice of back lighted pictograms with changing color
- This change of color can be automatic or remotely controlled
- Illuminated feedback or black ring available



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