



**EOZ**  
SOLUTIONS & COMPONENTS

## ECO.series

The EOZ ECO keypads are suited to all indoor applications including data-entry systems, remote controls, telephone, point of sales terminals or alarm systems.

The ECO range of low-cost, flush-mount keypads are rugged, economical devices available in 12-key telephone style and 16-key hexadecimal II layouts.

### MOUNTING

Mounting is from the back of a panel using fixed studs. Protection degree of the keypad is IP 40 (front side).

### CONTACTS

To ensure integrity of contacts and lower switch ratings, the contacts are gilded and external connection to the keypad is by means of a pin header on the back.

The electrical keypad circuit can be supplied in a choice of either matrix or common point configuration.

### KEYS

The keys are made of polycarbonate.

### MARKING

Standard markings are hot stamped. On request, customized symbols and markings are available.

### ELECTRICAL CHARACTERISTICS

#### Operating voltage / current

- Nominal 24V, 20 mA
- Maximum voltage 24 V
- Minimum voltage 500 mV
- Minimum current 10 mA

#### Isolation resistance $\geq 1000 \text{ M}\Omega$ at 100 VDC

#### Contact resistance $\leq 200 \Omega$

#### Electrical life 1 Million cycles of operation per key

#### Electrostatic breakdown value 5 kV

#### Switch rating 0.5 W

### MECHANICAL CHARACTERISTICS

#### Actuating force 1.2N $\pm 35\%$

#### Actuating travel 1.4 MM $\pm 0.1\text{N}$

#### Rebound time $\leq 2 \text{ ms}$

### ENVIRONNEMENTAL CONDITIONS

#### Storage temperature $-40^\circ\text{C} \dots +65^\circ\text{C}$

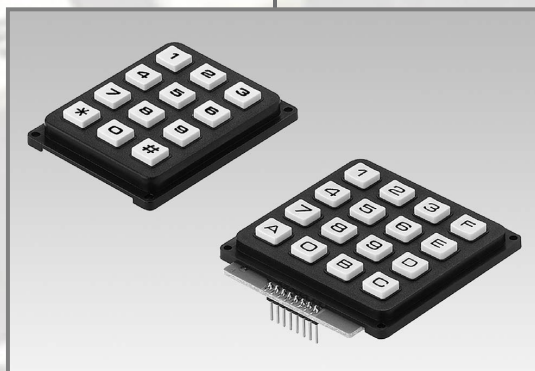
#### Operating temperature $-20^\circ\text{C} \dots +60^\circ\text{C}$

### MATERIAL

- **Keys** Polycarbonate (PC)
- **Housing** Polycarbonate (PC)
- **Contacts** Carbon / Gold

### APPROVALS

- **Declaration of conformity**
  - CE
  - RoHS





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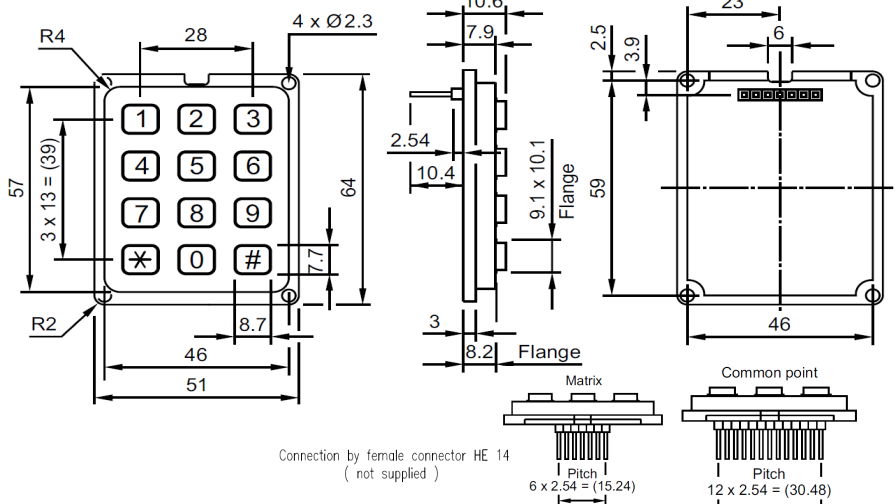
## STANDARD PART NUMBERS

	Numbers of the keys	Marking	Circuit	Référence
Keypad Keys for indoor use Front protection IP40 Key cap = plastic white Terminal = Pin header	12	Telephone	PC	ECO.12100.06
			M	ECO.12150.06
	16	Hexadecimal II	PC	ECO.16200.06
			M	ECO.16250.06

Circuit PC = Common Point, M = Matrix  
Packaging of 10 pcs



## DIMENSIONS 12 keys

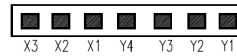


## CONNECTION for 12 keys

	X1	X2	X3
Y1	1	2	3
Y2	4	5	6
Y3	7	8	9
Y4	*	0	#

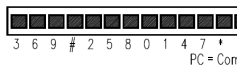
Matrix XY

CONTACTS



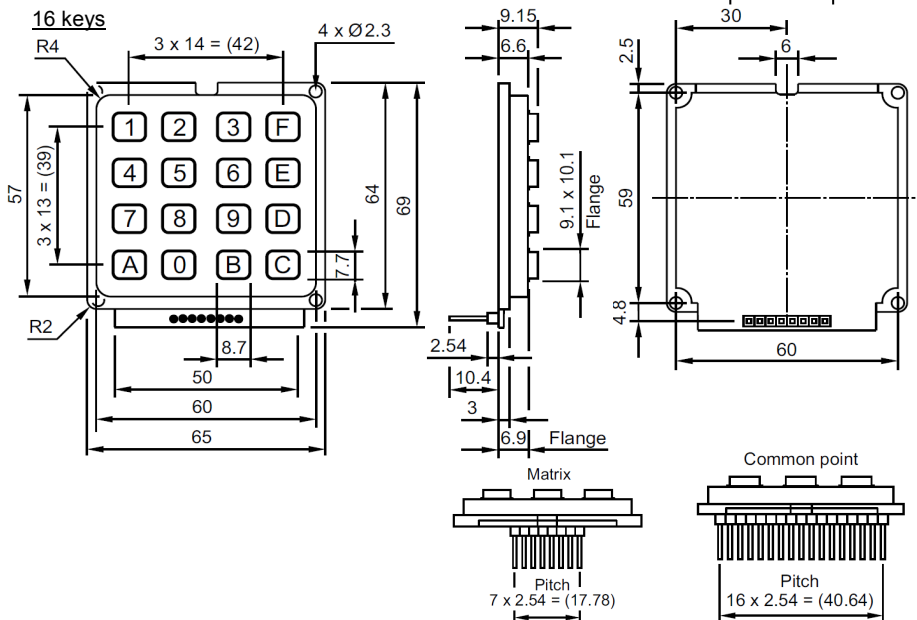
Common point

CONTACTS



PC = Common point

## 16 keys



## CONNECTION for 16 keys

	X1	X2	X3	X4
Y1	1	2	3	F
Y2	4	5	6	E
Y3	7	8	9	D
Y4	A	0	B	C

Matrix XY

CONTACTS



Common point

CONTACTS



Contact us at :

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We reserve the right to modify technical data