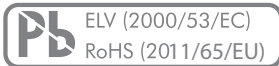
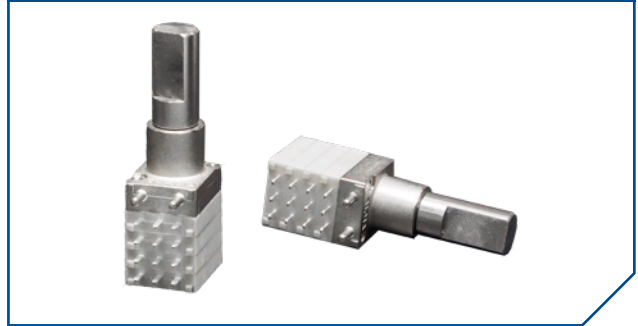


## Product description

### MAIN FEATURES

COSTEFFECTIVE AND MINIATURE DESIGN

- › Gray coding 16 positions
- › Switching mode: Shorting
- › Switching torque: Up to 3 Ncm
- › Body size: 7.7 x 9.35 x 11.1 mm
- › THT horizontal
- › Switching cycles: 15'000
- › Operating temperature range: -30 to +60 °C

**C15**

### PRODUCT VARIETY

- Detent angle 20°, 16 positions, with end stop
- Detent angle 22.5°, 16 positions, endless rotating

### POSSIBLE CUSTOMIZATIONS

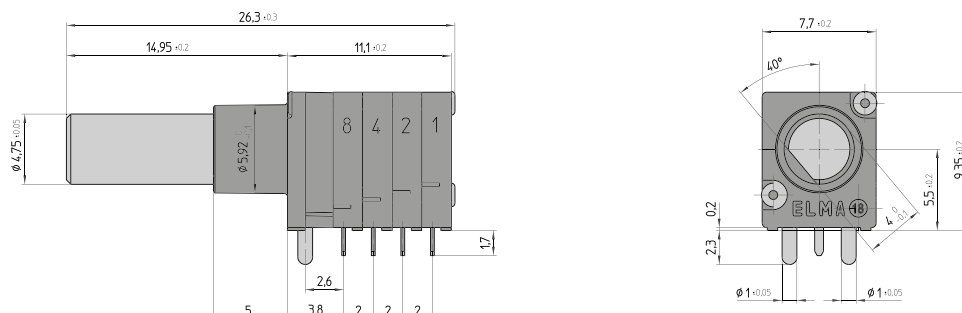
- Shaft dimension and shape

### TYPICAL APPLICATIONS

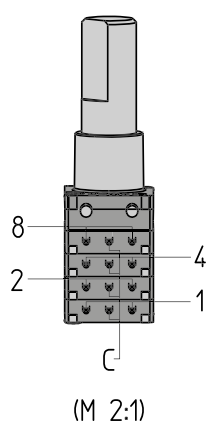
- Frequency and channel selection for two way radios
- Other miniaturized mobile applications

## Dimensions and pin assignment

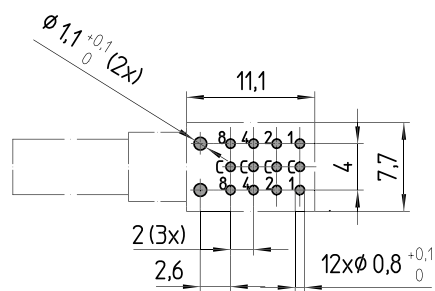
### SWITCH DESIGN



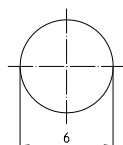
### PIN ASSIGNMENT



### DRILLING DIAGRAM AND FOOTPRINT



### FRONT PANEL CUT OUT



## Specifications

### MECHANICAL DATA

Detent angle   positions:	20° detent angle   16 positions
Rotary limitation   end stop:	Between first and last position
Switching torque:	3 Ncm ( $\pm 25$ % in new condition)
Rotational life:	> 15'000 cycles (tested at room temperature)
Allowed shaft load:	300 N push and 300 N pull (max. during 60 s)
Rotational stop strength:	> 65 Ncm

### ELECTRICAL DATA

Electrical connection:	Pins 0.25 x 0.6 mm
Switching voltage:	< 15 VDC (resistive load)
Switching current:	< 10 mA (resistive load)
Contact resistance:	< 50 m $\Omega$ (in new condition) < 1 $\Omega$ (after 15'000 cycles)
Signal   coding:	Gray
Switching mode:	Shorting
Dielectric strength:	500 VDC during 60 s (pin-to-pin, pin-to-housing)
Insulation resistance:	> 100 M $\Omega$ at 500 VDC (pin-to-pin, pin-to-housing, in new condition)

### MATERIALS

Shaft:	Stainless steel 1.4305
Bushing   housing:	Zinc die casting (nickel plated)

### ENVIRONMENTAL DATA

Operating temperature:	-30 to +60 °C (IEC 60068-2-14)
Storage temperature:	-55 to +85 °C (IEC 60068-2-14)
Humidity:	< 80 % relative humidity (at 25 $\pm 2$ °C)
IP sealing against front panel:	IP60 without sealing IP68 with shaft and front panel sealing (2 bar, 1 h)
Vibration:	Frequency: 10 to 60 Hz within 1 min Travel: 1.524 mm Testing time: 30 min per axis

### SOLDERING CONDITIONS

Hand soldering:	< 350 °C during 3 s
Reflow soldering:	IPC / JEDEC J-STD-020C
Wave soldering:	< 280 °C during 2 s

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