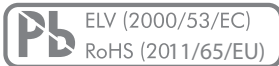


Product description

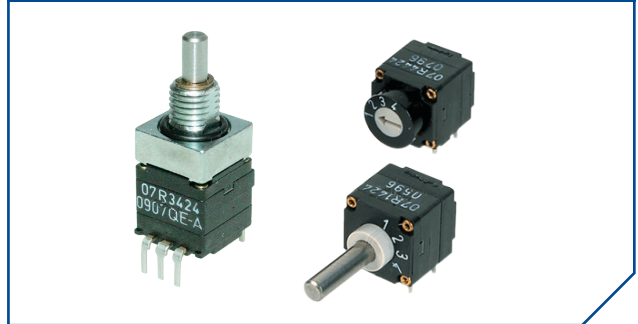
MAIN FEATURES

MINIATURE, UP TO 4 POSITIONS

- › PCB mounting (THT, reflow version on request)
- › Switching torque: Up to 3.5 Ncm
- › Gold plated contacts
- › Washable (sealed contact system)
- › IP68 front panel sealing
- › Operating temperature range: -40 to +85 °C
- › Various options and customizations



07R



PRODUCT VARIETY

- Vertical or horizontal mounting
- Shorting or non-shorting
- Switching torque 2.2 or 3.5 Ncm
- Front panel sealing IP60 or IP68
- Number of positions
- Bushing style
- Shaft style and length

POSSIBLE CUSTOMIZATIONS

- Shaft dimension and shape
- Bushing dimension
- Switching torque
- Others

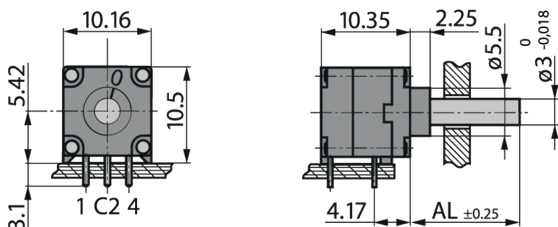
TYPICAL APPLICATIONS

- Industrial controls
- Avionics, test and measurement systems
- Medical and audio equipment
- Mobile equipment
- Transport and constructions machines

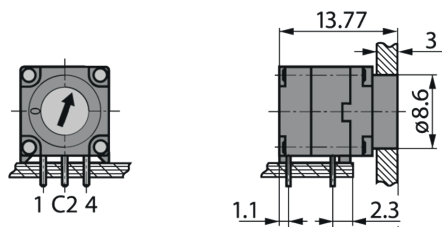
Dimensions and pin assignment

SWITCH DESIGN AND PIN ASSIGNMENT

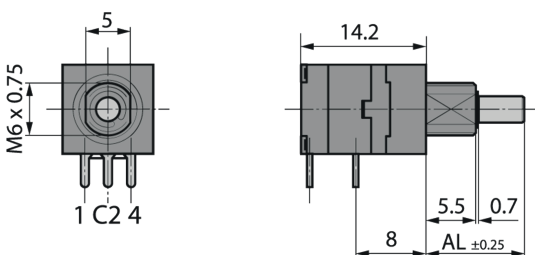
HORIZONTAL, WITH SHAFT, WITHOUT THREADED BUSHING



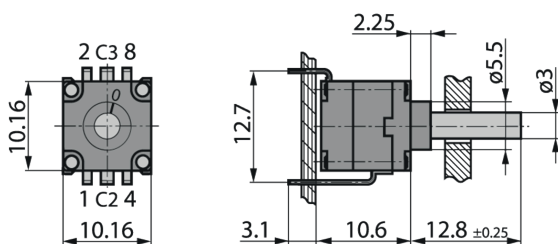
HORIZONTAL, SCREWDRIVER WITH BEZEL



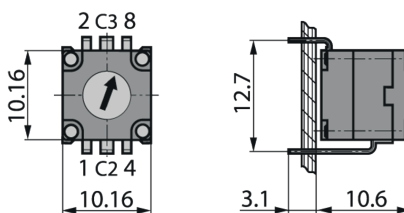
HORIZONTAL, WITH SHAFT, WITH THREADED BUSHING



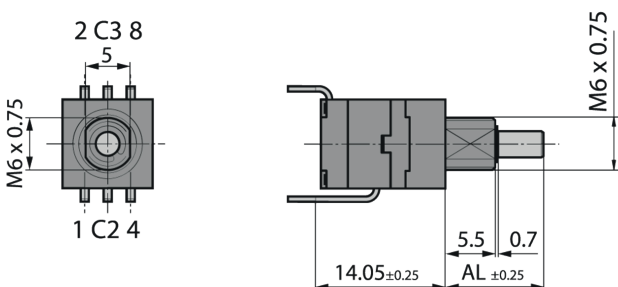
HORIZONTAL, WITH SHAFT, WITHOUT THREADED BUSHING



VERTICAL, SCREWDRIVER WITHOUT BEZEL



VERTICAL, WITH SHAFT, WITH THREADED BUSHING



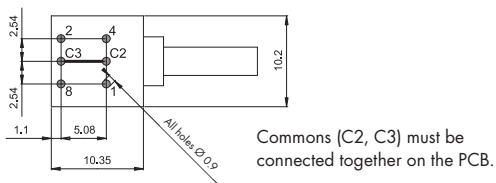
Dimensions in mm
Tolerances according to DIN ISO 2768-1 (m), unless otherwise specified

Dimensions and pin assignment

DRILLING DIAGRAM AND FOOTPRINT

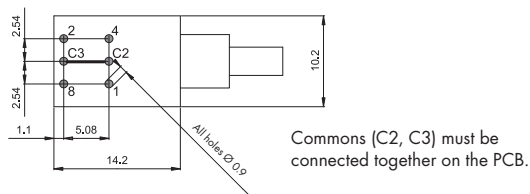
HORIZONTAL, WITH SHAFT,
WITHOUT THREADED BUSHING

View from component side of the PCB



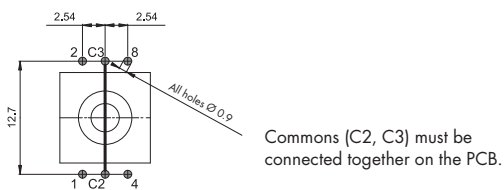
HORIZONTAL, WITH SHAFT,
WITH THREADED BUSHING

View from component side of the PCB



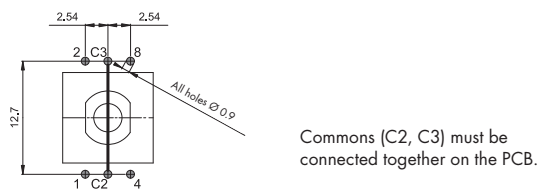
VERTICAL, WITH SHAFT,
WITHOUT THREADED BUSHING

View from component side of the PCB

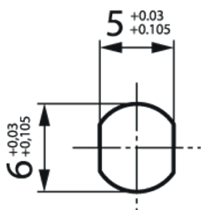


VERTICAL, WITH SHAFT,
WITH THREADED BUSHING

View from component side of the PCB

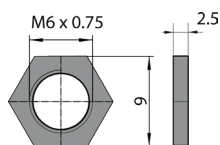


FRONT PANEL CUT OUT

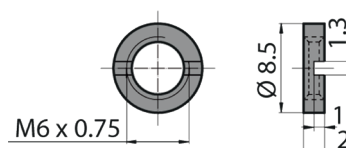


NUT

HEX NUT (SUPPLIED)



SLOTTED NUT



Dimensions in mm
Tolerances according to DIN ISO 2768-1 (m), unless otherwise specified

Output signal

PIN TO POSITION DIAGRAM

PIN		8	4	2	1
Position	0				
	1				
	2				
	3				
	4				

On
 Off

Ordering information

ORDERING CODE

07R	-	-	-	-	-	-	-	-	-
-----	---	---	---	---	---	---	---	---	---

TYPE

0	Horizontal	screwdriver without bezel
1	Horizontal	with shaft
2	Vertical	screwdriver without bezel
3	Vertical	with shaft
4	Horizontal	screwdriver with bezel
5	Vertical	screwdriver with bezel

NUMBER OF POSITIONS AND CONTACTS

2	2 positions (1 - 2)
3	3 positions (1 - 3)
4	4 positions (1 - 4)
5	5 positions (0 - 4, 0 has no connection)

1 TO 4 | 5 POSITIONS

1	5 positions (factory set for 5 positions)
2	1 to 4 positions (factory set for 2, 3 and 4 positions)

SWITCHING MODE

3	Shorting
4	Non-shorting

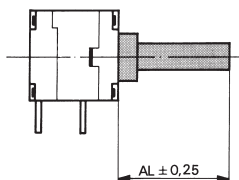
SHAFT LENGTH (AL)

000 Basic style: 12.8 mm
Threaded bushing: 11.5 mm

xxx¹ Customized
(shaft length rounded to next 0.5 mm, e.g. 10.3 mm = 10.5 mm or 10 mm)

¹ Customized shaft length (AL)
AL measured from mounting face (see picture below)

Max. shaft length (AL):
Bushing basic style = 30 mm
Bushing threaded = 26 mm



BUSHING | IP-SEALING

00	None
20	Threaded (nut supplied)
30	Threaded IP68 (nut supplied)

SWITCHING TORQUE | PACKAGING

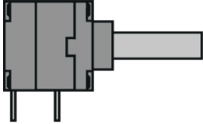
-	2.2 Ncm	tray (50 / 200 pieces)
V	2.2 Ncm	antistatic tray (100 pieces)
T	3.5 Ncm	tray (50 / 200 pieces)
S	3.5 Ncm	antistatic tray (100 pieces)

Ordering information

STANDARD TYPES¹

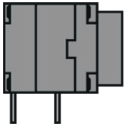
HORIZONTAL

With shaft, without threaded bushing



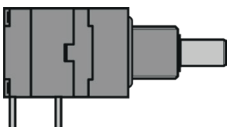
SWITCHING MODE	FUNCTION (POLES X POSITIONS)	PART NUMBER
Shorting	1 x 4	07R1423
Non-shorting	1 x 4	07R1424
Shorting	1 x 5 (4 electrical positions)	07R1513
Non-shorting	1 x 5 (4 electrical positions)	07R1514

Screwdriver with bezel | front panel operation



SWITCHING MODE	FUNCTION (POLES X POSITIONS)	PART NUMBER
Shorting	1 x 4	07R4423
Non-shorting	1 x 4	07R4424
Shorting	1 x 5 (4 electrical positions)	07R4513
Non-shorting	1 x 5 (4 electrical positions)	07R4514

With shaft, with threaded bushing, IP68



SWITCHING MODE	FUNCTION (POLES X POSITIONS)	PART NUMBER
Shorting	1 x 4	07R1423-30000
Non-shorting	1 x 4	07R1424-30000
Shorting	1 x 5 (4 electrical positions)	07R1513-30000
Non-shorting	1 x 5 (4 electrical positions)	07R1514-30000

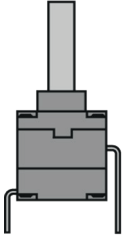
¹ For other types | options see ordering code

Ordering information

STANDARD TYPES¹

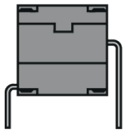
VERTICAL

With shaft, without threaded bushing



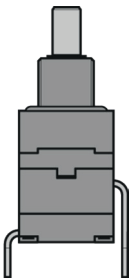
SWITCHING MODE	FUNCTION (POLES X POSITIONS)	PART NUMBER
Shorting	1 x 4	07R3423
Non-shorting	1 x 4	07R3424
Shorting	1 x 5 (4 electrical positions)	07R3513
Non-shorting	1 x 5 (4 electrical positions)	07R3514

Screwdriver with bezel | front panel operation



SWITCHING MODE	FUNCTION (POLES X POSITIONS)	PART NUMBER
Shorting	1 x 4	07R2423
Non-shorting	1 x 4	07R2424
Shorting	1 x 5 (4 electrical positions)	07R2513
Non-shorting	1 x 5 (4 electrical positions)	07R2514

With shaft, with threaded bushing, IP68



SWITCHING MODE	FUNCTION (POLES X POSITIONS)	PART NUMBER
Shorting	1 x 4	07R3423-30000
Non-shorting	1 x 4	07R3424-30000
Shorting	1 x 5 (4 electrical positions)	07R3513-30000
Non-shorting	1 x 5 (4 electrical positions)	07R3514-30000

PACKAGING

Foam polystyrene box:

50 or 200 pieces (depending on shipment quantity)

ACCESSORIES AND SPARE PARTS

Hex nut M6 x 0.75:

Part number 4424-22 (50 pieces / bag), brass

Slotted nut M6 x 0.75:

Part number 4424-28 (50 pieces / bag), brass

Part number 4424-31 (50 pieces / bag), stainless steel (cross slot)

¹ For other types | options see ordering code

Specifications

MECHANICAL DATA

Detent angle positions:	36° detent angle 5 positions
Rotary limitation end stop:	Configurable
Switching torque:	2.2 or 3.5 Ncm ($\pm 25\%$ in new condition)
Rotational life:	> 10'000 cycles (tested at room temperature)
Rotational stop strength:	> 45 Ncm
Fastening torque of nut (front panel mounting):	M6 x 0.75: < 100 Ncm

ELECTRICAL DATA

Electrical connection:	Pins 0.4 x 0.7 mm
Switching voltage:	< 42 VDC (resistive load)
Switching current:	< 2'000 mA (resistive load)
Contact resistance:	< 50 m Ω (in new condition)
Switching function:	1 pole, 2 to 5 positions
Switching mode:	Shorting or non-shorting
Dielectric strength:	500 VDC during 60 s (pin-to-pin, pin-to-housing)
Insulation resistance:	> 1 G Ω at 500 VDC (pin-to-pin, pin-to-housing, in new condition)

MATERIALS

Shaft:	Stainless steel 1.4305
Bushing housing:	Zinc die casting, fiberglass reinforced high performance plastic
Contact surface:	Cu alloy (Au plated)
Soldering leads:	Cu alloy (tin plated)
Hex nut:	Brass
Slotted nut:	Brass or stainless steel
O-rings:	NBR (nitrile rubber), 70 shore A

ENVIRONMENTAL DATA

Operating temperature:	-40 to +85 °C (IEC 60068-2-14)
Storage temperature:	-40 to +85 °C (IEC 60068-2-14)
IP sealing against front panel:	IP60 without sealing IP68 with shaft and front panel sealing (2 bar, 1 h)
Vibration:	10 G _{RMS} at 10 to 2'000 Hz
Flammability:	UL94-HB

SOLDERING CONDITIONS

Hand soldering:	< 280 °C during 2 s
Wave soldering:	< 280 °C during 2 s

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