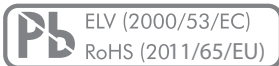


Product description

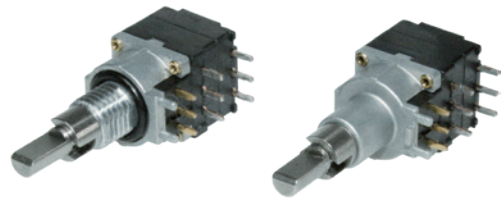
MAIN FEATURES

CONCENTRIC FUNCTION

- › 16 positions Hex or Gray coding outer shaft
- › Switching mode: Shorting
- › For rugged environments
- › Switching torque: 3.5 Ncm
- › Gold plated contacts
- › THT horizontal
- › IP68 front panel sealing (up to 5 bar)
- › Operating temperature range: -40 to +85 °C
- › Tape & reel packaging
- › Various options and customizations



C07 CONCENTRIC



PRODUCT VARIETY

- Threaded or non-threaded bushing
- Hex or Gray coding
- Selector switch with 2 or 3 positions outer shaft
- Front panel sealing IP60 or IP68
- Tray or tape & reel packaging

POSSIBLE CUSTOMIZATIONS

- Shaft dimension and shape
- Bushing, mounting
- Number of positions
- Switching torque
- Others

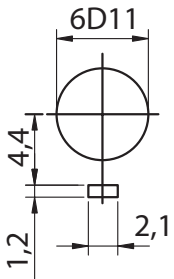
TYPICAL APPLICATIONS

- Channel selection for portable radios
- Cockpit controls

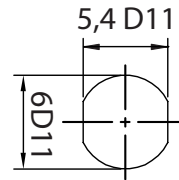
Dimensions and pin assignment

FRONT PANEL CUT OUT

NON-THREADED BUSHING

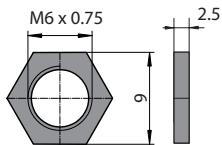


THREADED BUSHING, IP68

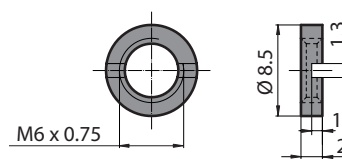


NUT

HEX NUT (SUPPLIED)



SLOTTED NUT



Output signal

CODING

Inner shaft: Hex

	8	4	2	1
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Inner shaft: Gray

	8	4	2	1
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Outer shaft: 3 positions

	A	B
1		
2		
3		

Outer shaft: 2 positions

	A	B
1		
2		

On
 Off

Ordering information

ORDERING CODE

C07	-	1	1	-	3	-	-	-	-	-	-
-----	---	---	---	---	---	---	---	---	---	---	---

CODING	
5 Hex (inner shaft)	3 positions (outer shaft)
7 Gray (inner shaft)	3 positions (outer shaft)
8 Hex (inner shaft)	2 positions (outer shaft)
9 Gray (inner shaft)	2 positions (outer shaft)

BUSHING IP SEALING	
-	Non-threaded
300000	Threaded IP68 (nut supplied)

PACKAGING	
-	Tray (50 or 200 pieces / tray)
T	Tape & reel (250 pieces / tray)

PREFERENCE TYPES SELECTION CHART¹

NON-THREADED BUSHING

CODING	SWITCHING MODE	INDEXING ANGLE	POSITIONS		PART NUMBER	
			INNER SHAFT	OUTER SHAFT	TAPE & REEL	TRAY
Hex	Shorting	22.5°	16	3 (center «off»)	C07-1153T	C07-1153
Gray	Shorting	22.5°	16	3 (center «off»)	C07-1173T	C07-1173

THREADED BUSHING, IP68

CODING	SWITCHING MODE	INDEXING ANGLE	POSITIONS		PART NUMBER	
			INNER SHAFT	OUTER SHAFT	TAPE & REEL	TRAY
Hex	Shorting	22.5°	16	2 (on / off)	C07-1183T300000	C07-1183-300000
				3 (center «off»)	C07-1153T300000	C07-1153-300000
Gray	Shorting	22.5°	16	2 (on / off)	C07-1193T300000	C07-1193-300000
				3 (center «off»)	C07-1173T300000	C07-1173-300000

¹ For other Types | options see type key

Ordering information

PACKAGING

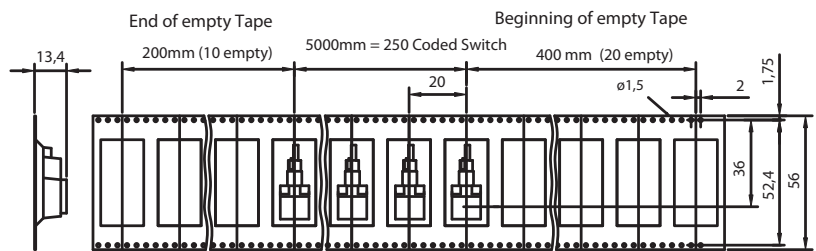
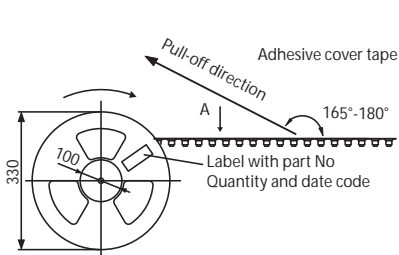
Foam polystyrene box:

50 or 200 pieces (depending on shipment quantity)

Tape & reel:

250 pieces

TAPE & REEL PACKAGING



Part conforms to EIA-481-B standards

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)

Specifications

MECHANICAL DATA

Detent angle positions:	Inner shaft: 22.5° detent angle 16 positions Outer shaft: 22.5° detent angle 2 or 3 positions
Rotary limitation end stop:	Between first and last positions
Switching torque:	Inner shaft: 3.5 Ncm (±25 % in new condition) Outer shaft: 5.0 Ncm (±25 % in new condition)
Rotational life:	Inner shaft: > 10'000 cycles (tested at room temperature) Outer shaft: > 7'500 cycles (tested at room temperature)
Rotational stop strength:	Inner shaft: > 40 Ncm Outer shaft: > 24 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:	< 15 VDC (resistive load)
Switching current:	< 10 mA (resistive load)
Contact resistance:	< 50 mΩ (in new condition)
Signal coding:	Inner shaft: Hex or Gray Outer shaft: On / Off / On (3 positions) or On / Off (2 positions)
Switching mode:	Shorting
Dielectric strength:	500 VDC during 60 s (pin-to-pin, pin-to-housing)
Insulation resistance:	> 1 GΩ 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 600068-2-14)
Storage temperature:	-40 to +85 °C (IEC 600068-2-14)
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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