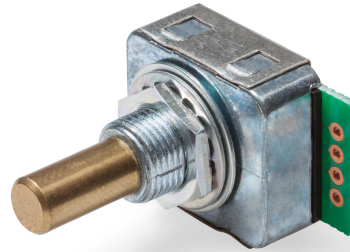


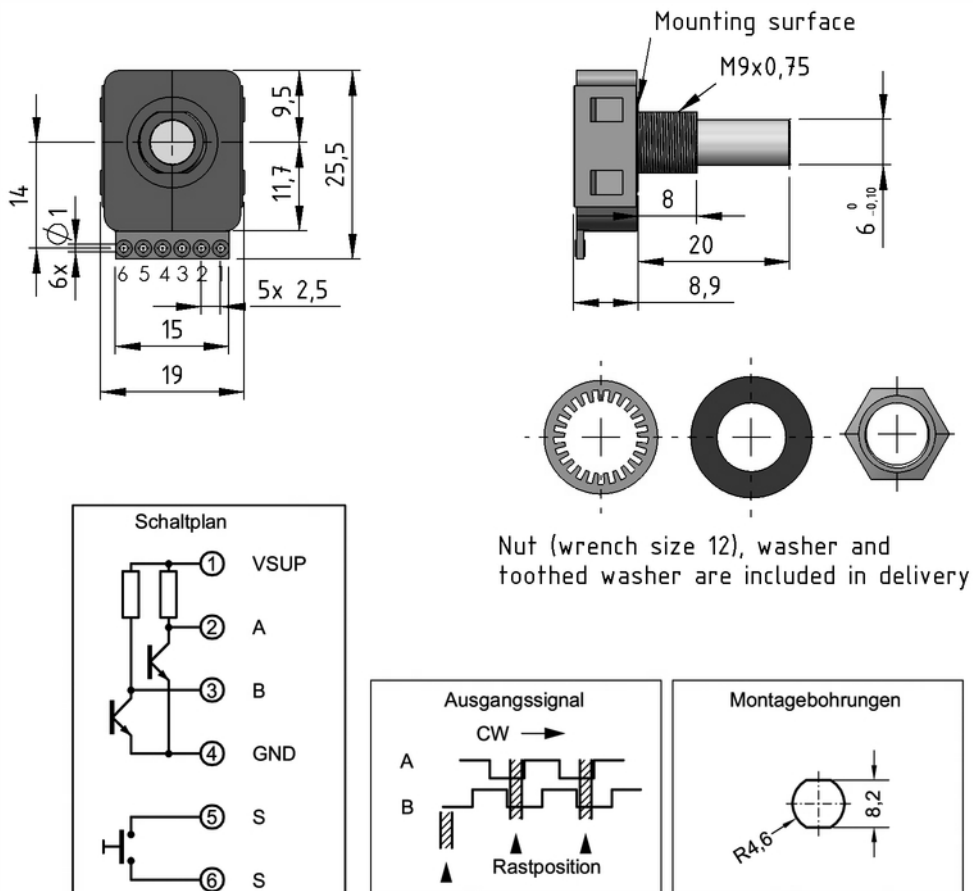
Series MRBT25, MRBCT25 - Optoelectronic Manual Encoder

- Resolution 25 ppr (16 ppr on request)
- MRBT = without click, MRBCT = with click
- With integrated button
- Low power requirement $\leq 10\text{mA}$ @ 5V, $\leq 20\text{mA}$ @ 3,3V,
- Supply voltage 3,3V or 5,5V
- Compact design 20 x 22, shaft $\varnothing 6$ mm
- Option PCB mounting

The space-saving and well-priced encoder is used as a manual setpoint device. Because of its low power requirement and the optional operating voltage of 3.3V the MRBT is suitable for battery operation.



Drawing and Interfaces



Series MRBT25, MRBCT25 - Optoelectronic Manual Encoder

Electrical Data

Resolution	25 ppr, (16 ppr on request)	
Output signal	A, B	
Limit frequency	200 Hz	
Initial response time	< 15 ms	
Output	HCMOS	
Supply voltage	5 V \pm 10%	3,3 V \pm 10%
Power consumption (no load)	max. 10 mA / typical 7 mA	max. 20 mA / typical 10 mA

Mechanical Data

	MRBT	MRBCT
Life time	1 Mio. revolutions	
Maximum speed	200 rpm (limit frequency)	100 rpm (limit frequency)
Operational torque	1...4 Nmm	6 \pm 2 Nmm
Max. radial load on shaft	1 N	
Max. axial load on shaft	1 N	
Fastening torque mounting nut	< 1 Nm	

Mechanical Data Button

Life time	0,5 Mio. operations
Contact travel	0,2 \pm 0,1 mm
Contact force	3,2 \pm 1 N
Maximum voltage	12 VDC
Maximum current	10 mA

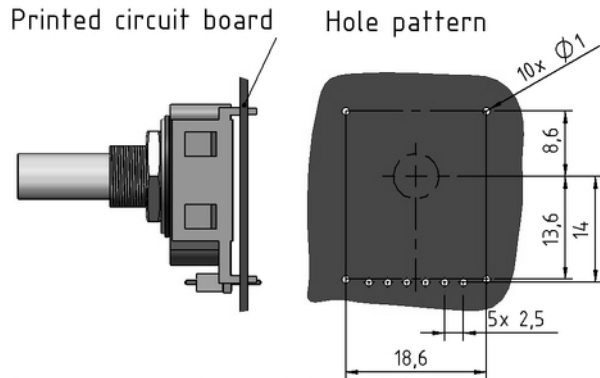
Other Data

Protection class	IP40, optional IP54, IP55S (shaft)
Operating temperature	-0 ... +60 °C
Storage temperature	-40 ... +85 °C
Housing material	zinc-plated
Shaft material	Brass
Disc material	Thermoplastic
Weight	16 g

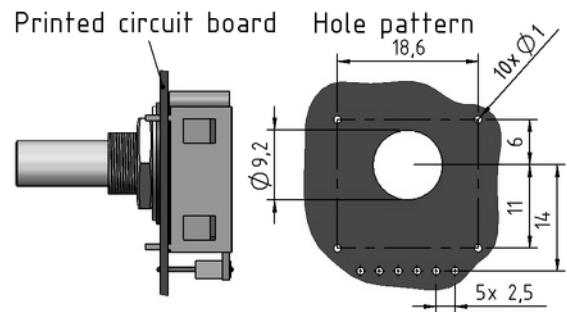
Series MRBT25, MRBCT25 - Optoelectronic Manual Encoder

Options

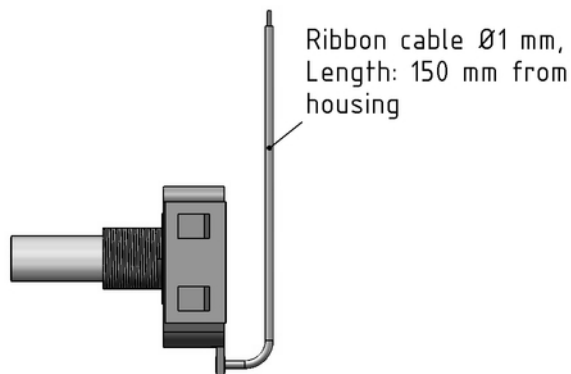
Option V2: with rear pins for PCB-mounting



Option V5: with pins on the front for PCB-mounting



Option V6: with ribbon cable:



Options and Order Description

Series	MRB							
Without detent		-						
With detent		C						
Without push button switch			-					
With push button switch			T					
25 ppr.				25				
Supply voltage								
5 V					5			
3,3 V					3,3			
Output Signal A+B						B		
Without sealing ring in the bearing							-	
Sealing ring in the bearing							D	
Design Options								
Standard with solder pads								-
Solder pins to the rear side								V2
Solder pins to the front side								V5 (*)
With flat ribbon cable 150 mm								V6 (*)

Series MRBT25, MRBCT25 - Optoelectronic Manual Encoder

Our speciality are custom solutions for reasonable prices, even for small quantities

Examples: Special shafts and housings. Mounting of gear wheels and other mechanical parts, assembling of cables, connectors and more. Please ask us.

The specifications and information in this datasheet cannot consider all special demands that are caused by the application. Because of this, they are no general description of the properties of the product.

11.02.2015 . All specifications are subject to change without notice.