

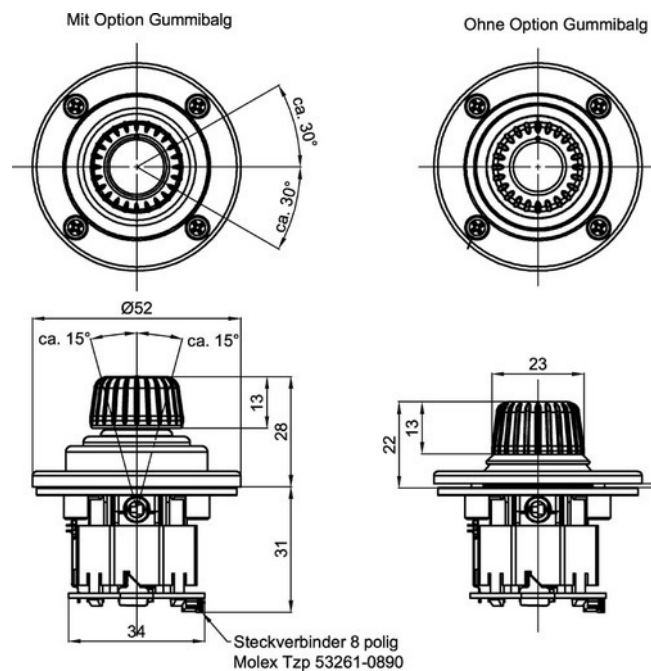
TRY20 - Miniature Finger Joystick

- 3 axes with hall sensor
- Protection class IP40 / IP 54 with gaiter
- Low installed depth
- Ideal for controlling of wheel chairs, electric vehicles and many other drives with servo motors

The new designed TRY20 with contactless sensor elements is characterised by its compact dimensions at a 3-axes version. The sensor elements are optional available in a redundant version at each axis.

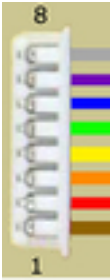


Drawing



TRY20 - Miniature Finger Joystick

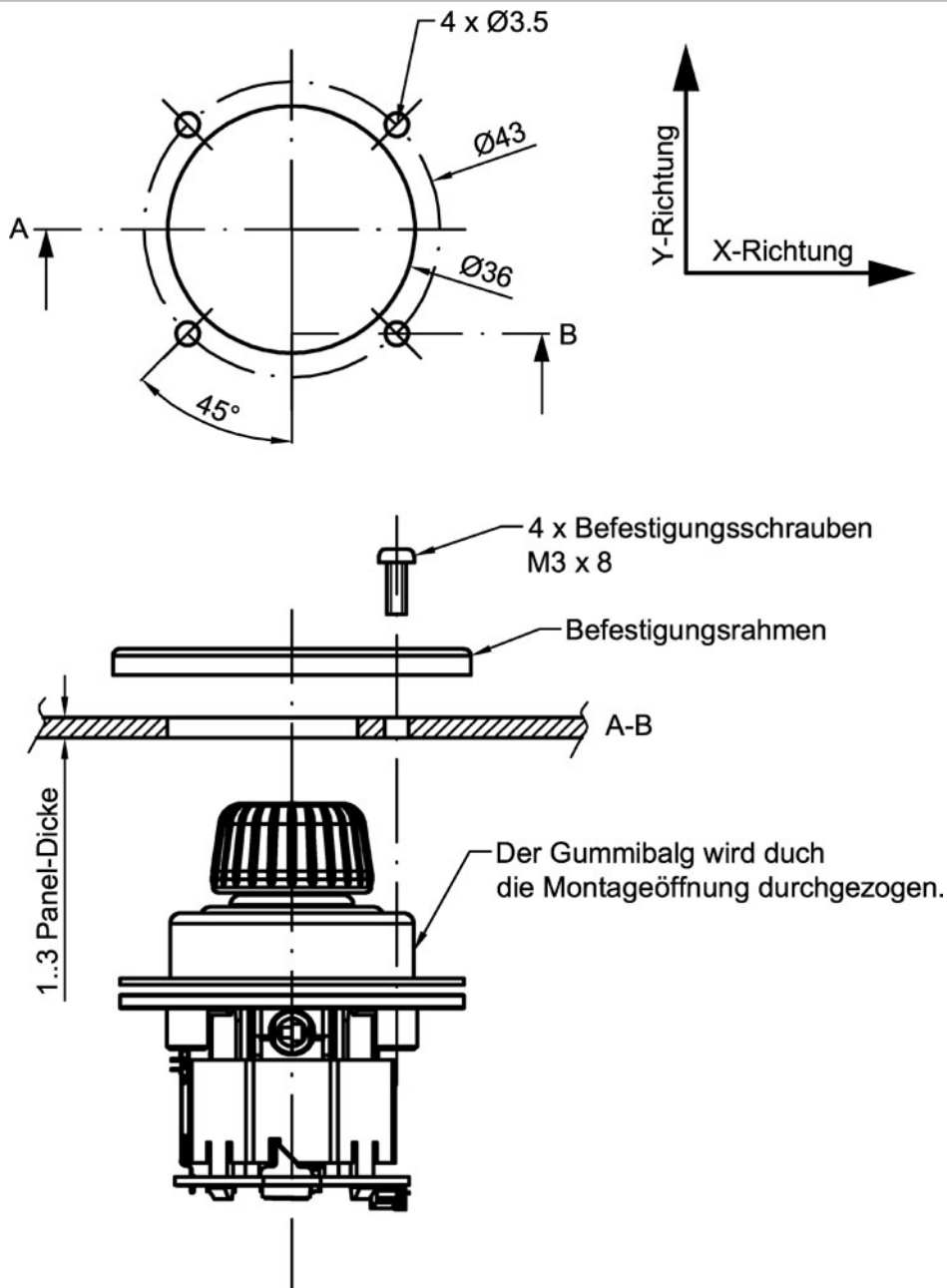
Cable



8: Gnd
7: Z-Axis Sig. B
6: Z-Axis Sig. A
5: Y-Axis Sig. B
4: Y-Axis Sig. A
3: X-Axis Sig. B
2: X-Axis Sig. A
1: + Supply

Wire (length approx. 300mm, 28 AWG) with connector (MOLEX 51021-0800/ Crimp 50058-8300) is included in delivery.

Mounting cut-out and installation



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Mechanical Data

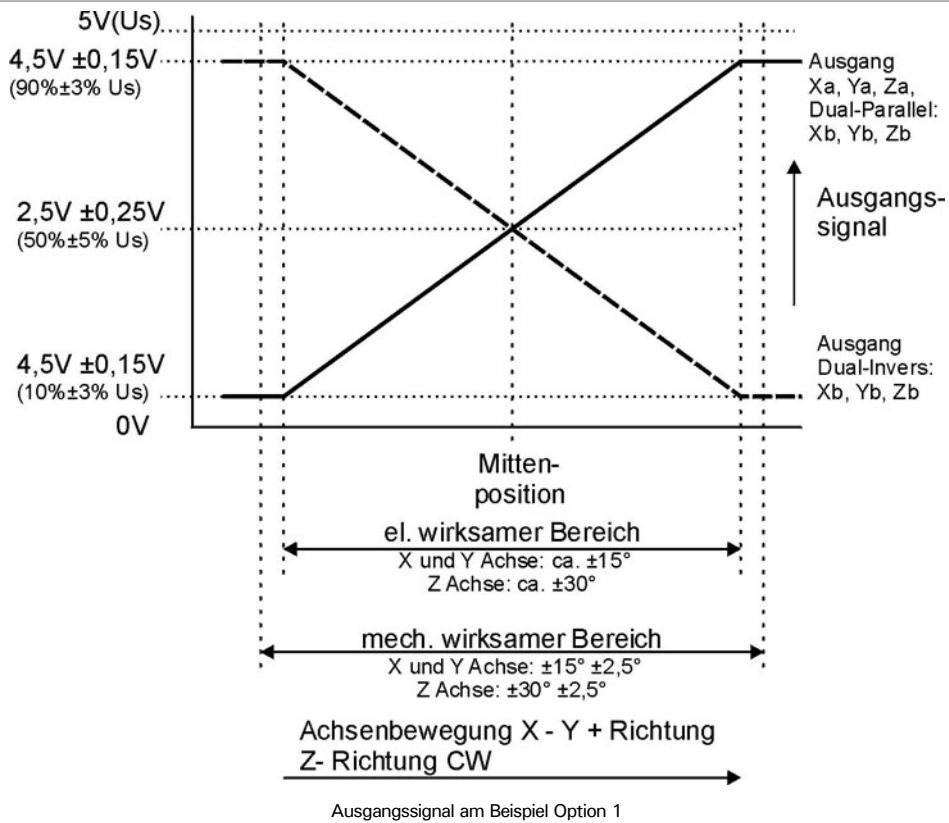
Deflection X-Y-Axis	1,5 N (from center) 3 N (at deflection)
Deflection Z-Axis	15 mN (from center) 30 mN (at deflection)
Max. X-Y handle load	50 N
Max. Z handle load	0,5 N (limit stop)
Deflection X-Y / Z	$\pm 15^\circ$ / ca. $\pm 30^\circ$ ($\pm 2,5$ für X-Y-Z)
Life cycles	ca. 1Mio.#1
Vibration	10 ... 55Hz, 98m/s ² (10G)#2
Shock	294m/s ² (30G)#3
Housing	high strength glas-fiber reinforced nylon
Protection class	IP40 (IP54 with gaiter) above
Weight	approx. 42 g (with cable and gaiter)

Electricla Data

Supply voltage	5V \pm 10%
Output	10 ... 90% U _{supply} (Output Option 1) 5 ... 95% U _{supply} (Output Option 2) 0 ... 100% U _{supply} (Output Option 3)
Center voltage	2,5V \pm 0,25V (50% U _{supply} \pm 5%)
Output linearity	3% (independ. linearity relating to max. output signal)
Power consumption	approx. 6 mA (per axis and signal)
Load	> 10 kOhm (> 100 kOhm recommended)
Resolution	infinite
Temperature drift max. signal	< 2,5%
Temperature drift center pos.	< 1,0%
Insulation resistance	> 100 MOhm at 250 VAC
Dielectric strength	1 minute at 250 VAC
EMC	50V/m (80MHz ... 1GHz 1kHz 80% AM, IEC/EN61000-4-3)
ESD	IEC/EN61000-4-2, 5 kV
Operating temperature	-20 ... +60° C
Operating temperature	-20 ... +65° C

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Signal



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Options and Order Description

	Series	Axes	Bezel	Reset Device	Handles	Limiter Plates	Output	Output Options
Joystick with hall effect sensors	TRY20							
2 Axes		2						
3 Axes		3						
without Gaiter			0					
Gaiter			5					
with Spring Return				1				
Handle conical					1			
Limiter Plate round						3		
Output 10..90% U _{supply}							1	
Output 5..95% U _{supply}							2	
Output 0..100% U _{supply}							3	
Output single								0
Output dual-parallel								1
Output single & inverse								2

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.

April 2008. All specifications are subject to change without notice.