

# Data Sheet for Joysticks

Finger Joystick

Series TRY22



- Contactless Hall sensors
- Redundant signal output available
- IP classes up to 65

The TRY22 series was developed strictly following criteria such as cost efficiency, high quality level, high IP classes and easy installation.

## Electrical Data Joystick

Sensors	Hall-Effect
Supply Voltage	5 VDC $\pm 0,5$ VDC transient free
Output Voltage	0,5..4,5 VDC, redundant signal output available
Supply Current	typ. 15mA per sensor
Signal at center position	50% $\pm 3\%$ $V_{Supply}$
Output Impedance	10 kOhm
Max. output current allowed	2 mA / Axis
Resolution	Indefinite
Expected Electrical Life	typ. 1.000.000 h
Independent Linearity Tolerance	ca. $\pm 3\%$ full scale

## Mechanical and Environmental Data Joystick

Expected Life	5.000.000 (X-/Y-Axis), 3.000.000 (Z-Axis) cycles
Mechanical Angle of Movement	40° ( $\pm 20^\circ$ from center)
Break Out Force	5,6 N
Operating Force X-Y-Axis	1..4 N
Operating Momentum Z-Axis	40..80 mNm
Return-to-center Tolerance	$\pm 5\%$ (center)
Maximum Applied Force X-Y-Axis	200 N
Maximum Applied Force Z-Axis	0,5 Nm
Mounting	Rear Mount
Operating Temperature	-20°C..+60°C
EMC Immunity Level	100 V/m (80 MHz..1 GHz)
ESD	$\pm 8$ kV contact discharge / $\pm 15$ kV air discharge
Vibration	10..55 Hz, 98 m/s <sup>2</sup>
Shock	294 m/s <sup>2</sup>

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## Order Description

<b>Series</b>	<b>TRY22</b>							
<b>3 Axes</b>		<b>3</b>						
<b>Rubber Boot</b>			<b>5</b>					
<b>Spring Return</b>				<b>1</b>				
<b>Rotary Handle</b>					<b>1</b>			
<b>Square Limiter</b>						<b>3</b>		
<b>Output Signals</b>								
<b>0..5,0 V (rail to rail)</b>							<b>1</b>	
0,5..4,5 V							2 (*)	
0,25..4,25 V							3 (*)	
<b>Output Options</b>								
<b>Single Output</b>								<b>0</b>
Dual Output parallel								1 (*)
Dual Output inverse								2 (*)

For joysticks available from stock please see our stock types list: <http://www.megatron.de/en/stocklists/joysticks/lagerliste.html>

Bold print = Standard options

(\*) upon request

## For higher quantities or on-going demand, additional options are available

For example:

- Customer-specific cable

Available options for small quantity orders can be found on our stock types list on

<http://www.megatron.de/en/stocklists/joysticks/lagerliste.html>

In addition, we have an extensive stock of samples for project needs.

For technical advice, projects, samples, questions about pricing, delivery times and availability please contact us

Tel.: +49 89 46094-500

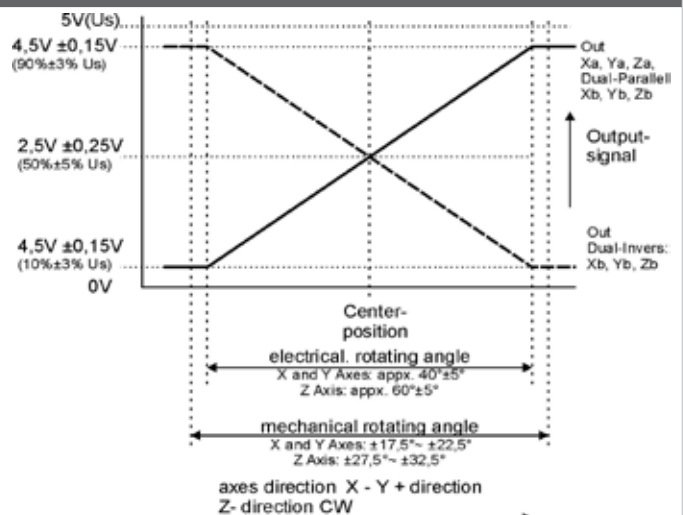
export@megatron.de

## Wiring

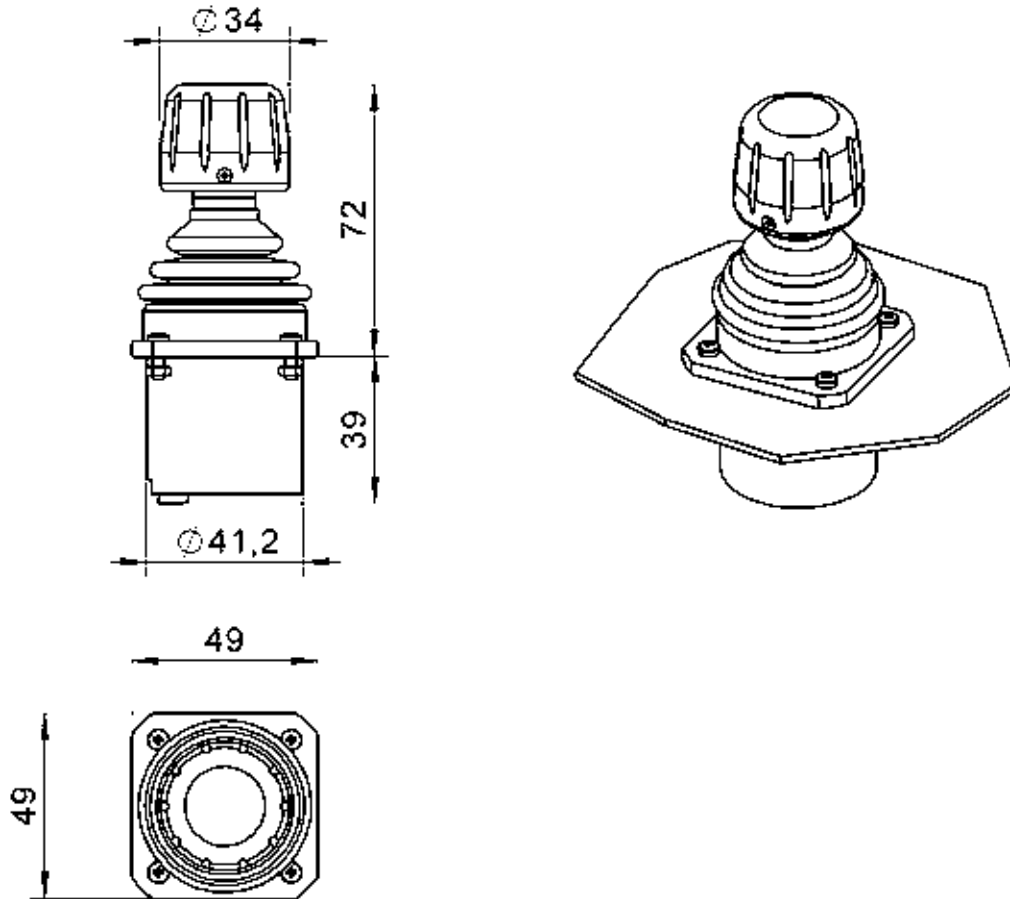
Pin	Function	Color
1	n.c.	black
2	n.c.	white
3	GND	grey
4	Z-Axis Dual Output	violet
5	Z-Axis	blue
6	Y-Axis Dual Output	green
7	Y-Axis	yellow
8	X-Axis Dual Output	orange
9	X-Axis	red
10	+5 VDC	brown

Leads AWG24, length ca. 300 mm

Mating connector LY20-10P-DLT1-P1E



## Technical Drawing



All dimensions in mm

## Mounting

