

# Data Sheet for Joysticks

## Thumb Joystick

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## Series PW30



- 1 axis rocker
- Potentiometer or Hall sensors
- Spring return
- Ergonomic handle design

The PW30 series combines the advantages of joysticks for the control of analog parameters with the small space consumption of trackballs. The rocker can be integrated into panels as well as into bigger joysticks, e.g. our 891 series

### Technical Data Mechanics

Angle of Movement	$\pm 15.. \pm 19^\circ$
Operating Force	24..30 mNm
Max. Force	0,5 Nm
Vibration	10..55 Hz, 98 m/s <sup>2</sup> (10G) MIL -STD-202F-204
Shock	294 m/s <sup>2</sup> (30G) MIL-STD-202F-213
Weight	0,03 kg

### Technical Data Potentiometer

Resistance Value / Tolerance	10 kOhm $\pm$ 15%
Independent Linearity Tolerance	$\pm 3$ % full scale
Power Rating @40°C	0,1 W
Electrical Travel	30° $\pm 5^\circ$
Return to Center Accuracy	$\pm 3$ %
Max. Wiper Current	1 mA
Expected Life	ca. 2.000.000 cycles
Protection Grade	Standard IP40 (up to IP54)

Note: Max. Voltage < 50VAC resp. < 75VDC, additionally max. power rating must be considered.

### Technical Data Hall Sensor

Supply Voltage	5 VDC $\pm$ 10 %
Current Consumption	7 mA (14 mA with Dual Output)
Min. Impedance	10 kOhm (>100 kOhm recommended)
Output Voltage	0,5..4,5 VDC ratiometric
Independent Linearity Tolerance	$\pm 3$ % full scale
Return to Center Accuracy	$\pm 3$ %
Expected Life	ca. 5.000.000 cycles
Protection Grade	IP65

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## Order Code

<b>Series</b>	<b>PW30</b>						
<b>Axes</b> 1 Axis		<b>1</b>					
<b>Cover</b>			<b>1</b>				
<b>Spring Return to Center Position</b> Spring Return to End Stop (*)				<b>1</b> 2 (*)			
<b>Knobs</b> <b>Seesaw (standard)</b> Flat shaped Rocker (*)					<b>1</b> 2 (*)		
<b>Limiter</b>						<b>1</b>	
<b>Sensors / Signal Options</b> <b>Potentiometer Conductive Plastic R10k</b> <b>Hall Sensor Single Output</b> Hall Sensor Dual Output Parallel Hall Sensor Dual Output Inverse							<b>1</b> <b>H</b> <b>HP</b> <b>HX</b>

(\*) upon request

### For series demands these and further customer-specific solutions are available

For example:

- Customer-specific cables and connectors

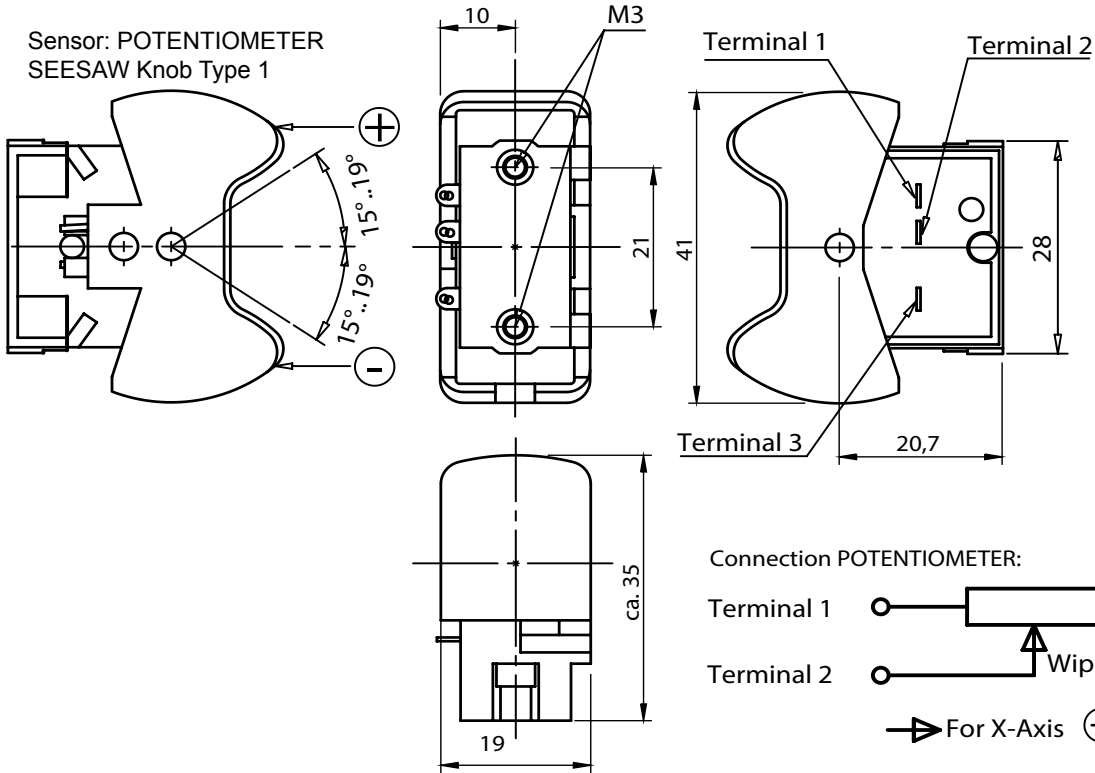
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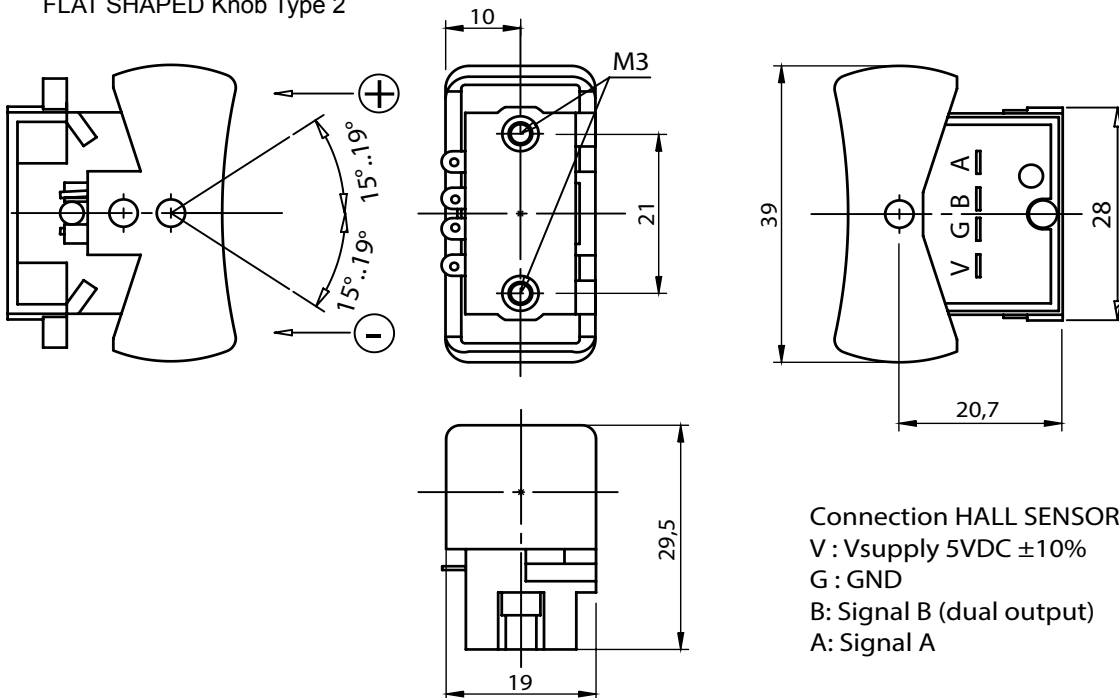
Series PW30

## Technical Drawing and Connections

Sensor: POTENTIOMETER  
SEESAW Knob Type 1



Sensor: HALL SENSOR  
FLAT SHAPED Knob Type 2



All Dimensions in mm