

Data Sheet for Joysticks

Hand Joystick

Series 870



- 2 to 3 Axes
- Handles with Pushbutton, Rocker, or third Axis
- Up to 5 millionen cycles
- 12-pole female connector

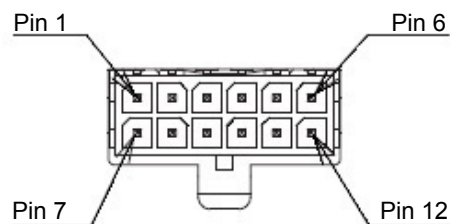
The 870 series provides a robust structure for toughest use and environments. The joysticks forgive vibrations as well as occasional „misuse“ as handhold. Ideally suited for Heavy-Duty applications in mobile work and special machines.

Technical Data

Sensor	Hall Effect
Supply Voltage	5 VDC $\pm 0,5$ VDC transient free
Output Voltage	0,5..4,5 V (Dual Output available)
Independent Linearity Tolerance	$\pm 3\%$ full scale
Load Resistance	> 10 kOhm
Insulation Resistance	Over 1000 MOhm at 500 VDC
Dielectric Strength	1 Minute at 500 VAC
EMC Durability	100 V/m 80 MHz ~ 1 GHz
ESD Durability	± 8 kV Contact / ± 15 kV Air
Expected Life	5 Million cycles
Mechanical Angle of Movement	$\pm 20^\circ$ ($\pm 2,5^\circ$) from center
Operating Force	3 - 4,5 N
Operating Temperature	-20°C..+60°C

Connection

Function	Pin
Ground	1
Signal X-Axis	2
Signal Y-Axis	3
Signal Z-Axis	4
Pushbutton, Rocker Pos. 1	5
Rocker Pos. 2	6
Supply Voltage	7
Signal X-Axis Dual Output	8
Signal Y-Axis Dual Output	9
Signal Z-Axis Dual Output	10
not used	11
COM	12



Connection with 12-pole female connector (AMP 43045-1201). Please contact us for projectspecific wiring and connectors.

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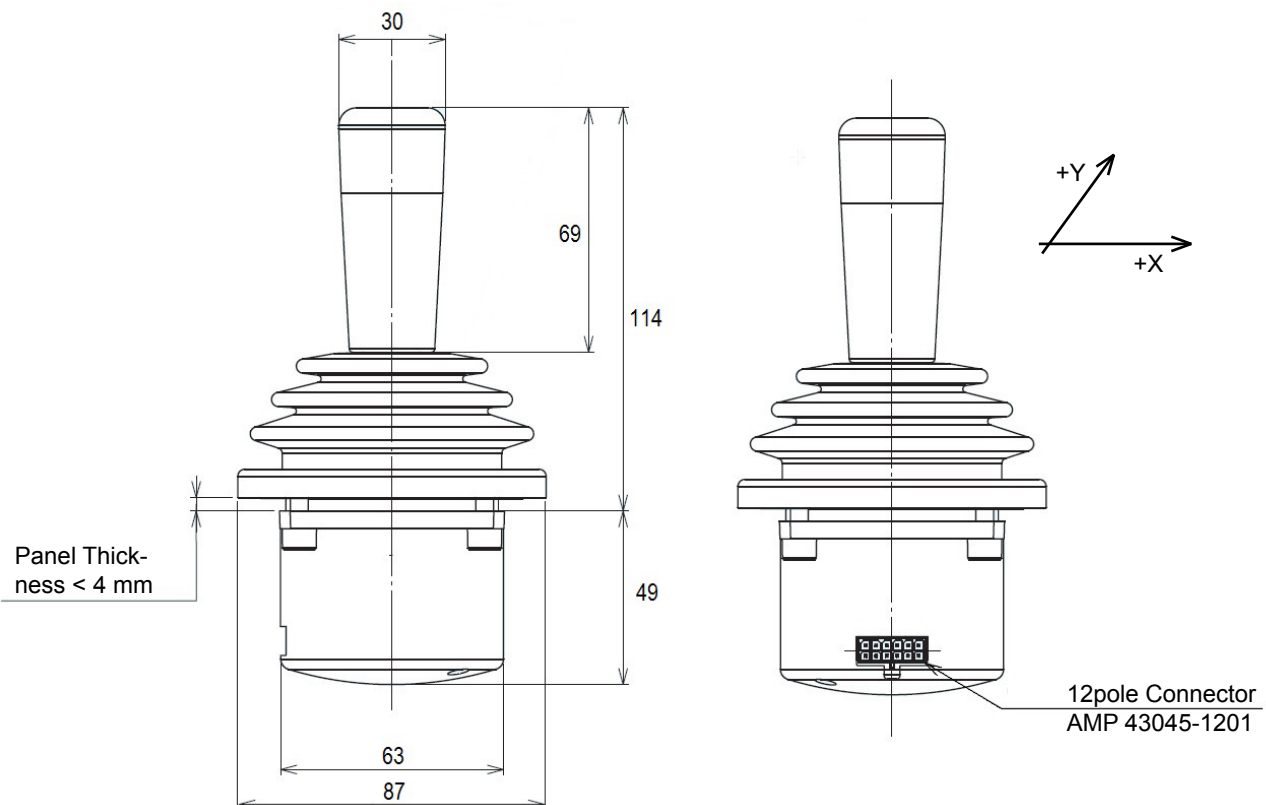
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Order Code

Series	870						
Axes							
2 Axes		2					
2 Axes with Pushbutton		3					
2 Axes with Rocker		4					
3 Axes		6					
Rubber Boot			5				
Return Mechanism				1			
Spring Return							
Handles							
Stock Grip					1		
Stock Grip with Pushbutton					6		
Stock Grip with Rocker					A		
Stock Grip with 3. Axis					8		
Limiter							
Square						Q	
Output Signal							
0,5..4,5 V, Single Output							2
0,5..4,5 V, Dual Output parallel							P
0,5..4,5 V, Dual Output inverse							X

Technical Drawing



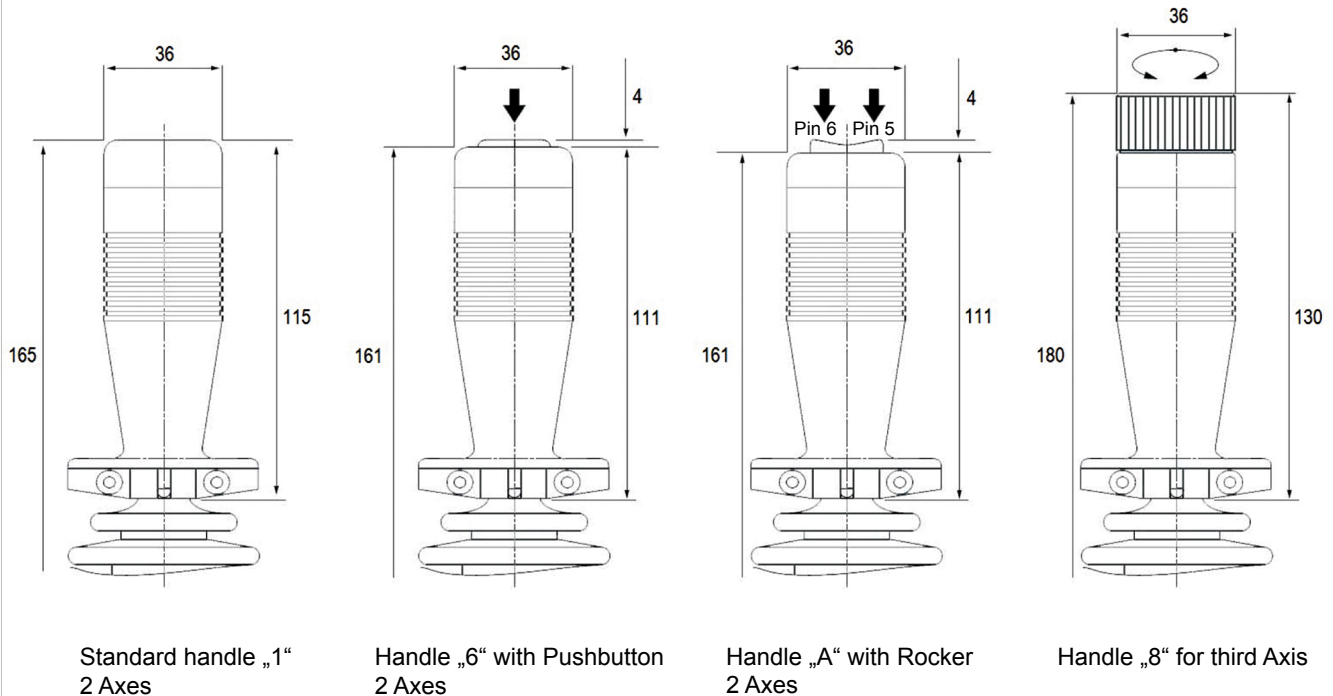
All dimensions in mm.

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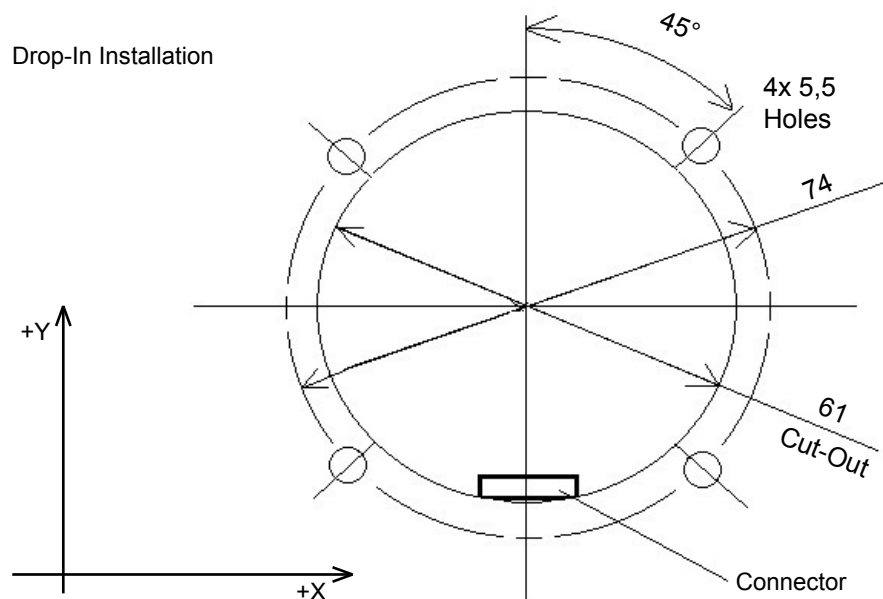
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Technical Drawing Handles



Panel Cut-Outs



All dimensions in mm.