FINGER TYPE JOYSTICK

AJS 120 Series

"Single Axis, Small Design,
Hall-effect Measurement Technology"

- Non-contact hall-effect measurement technology
- Single-axis, forward and backward finger operated
- Special design for mobile machines
- Small design and easy installation
- Long operating life up to 5 million cycles thanks to non-contact measurement technology
- 0-5 VDC analog output
- IP66 protection

The AJS 120 series are joysticks with a small size and ergonomic structure that provide soft and precise fingertip control in a single axis. They have long operating life up to 5 million cycles thanks to non-contact measurement technology.

Their compact dimensions make them ideal for mounting in low profile panels. With IP66 protection class, they can work comfortably in harsh environments.

MECHANICAL SPECIFICATIONS

Movement angle	±30° ±1
Operating type	Automatic spring return
Operating force	3N max
Life	5 million cycles
Material	Delrin® POM-C EN 10204
Weight	~40gr

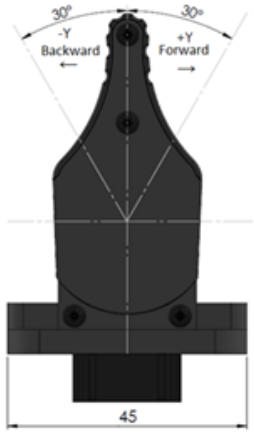
ENVIRONMENTAL SPECIFICATIONS

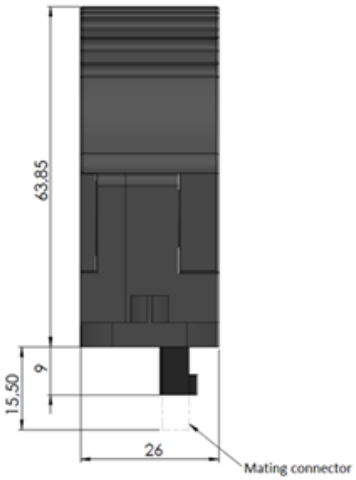
Protection Class	IP66
Operating Temperature	-20°C…+70°C
Storage Temperature	-40°C…+85°C
Relative Humidity	%10…%90 RH

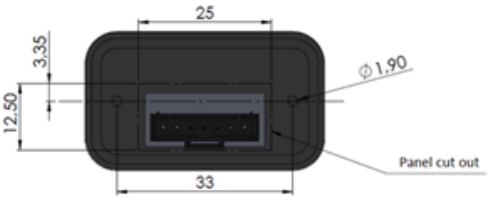
ELECTRICAL SPECIFICATIONS

Sensor type	Hall-effect, 1 axis	
Electrical angle	±28°	
Resolution	12 bit	
Response frequency	250 Hz	
Electrical interface	**0…5VDC**	
	Supply	5 VDC ±%5
	Load	≥ 1KΩ
Supply Current	≤30 mA	
Reverse Polarity Protection	Yes (supply)	
Short-Circuit Protection	Yes	
Overvoltage Protection	Up to 5.2V	
Center tap output voltage	2.5±0.1V	
Output linearity tolerance	<±0.2V	

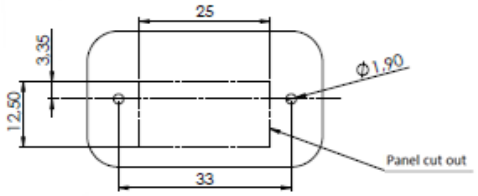
MECHANICAL DIMENSIONS (mm)



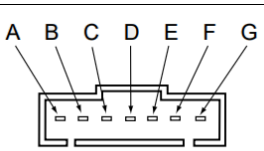




MOUNTING DIMENSIONS (mm)



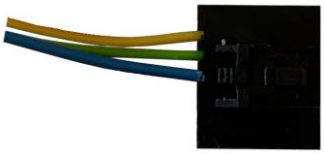
ELECTRICAL CONNECTIONS

Signal	 **7 pin Molex Series Latching Male Connector (70553-0006) (S151M)** **PIN NO**	 **7 pin Molex series latching female mating connector, with 0.5m cable (S151F)** **CABLE COLOR**
V+ (5 VDC)	B	Yellow
Analog Output	C	Green
GND	D	Blue

ORDER CODE

Model	Serie	Output signal	Output signal range	Electrical connection
AJS	**120:** Hall effect	**V9**: 0-5 VDC	**1:** 0%-100%Vdc output (0 - 5 VDC) **2:** 10%-90%Vdc output (0,5 - 4,5 VDC) **3:** 15%-85%Vdc output (0,75 - 4,25 VDC) **4:** 25%-75%Vdc output (1,25 - 3,75 VDC)	**S151M**: 7 pin Molex Series Latching Male Connector (70553-0006)

OPTIONAL PRODUCTS

Product	Code	Description
	**S151F**	7 pin Molex series latching female mating connector, with 0.5m cable