

AJS 600 Series

“Dual Axis, Non-Contact Hall-effect Technology”



- Non contact – Hall effect measurement technology
- Dual axis
- Special design for mobile machines
- Robust structure, long service life
- Configurable button and grip options
- Optional Dead man switch
- 5 million cycles mechanical life
- Resistant to electromagnetic field
- 0-10V, 0-5V, 0.5-4.5V, 0-20mA, 4-20mA or CANopen output options
- IP67 protection class

AJS 600 series joysticks have a mechanical structure similar to hydraulic joysticks. However, it has more precise measurement, high performance and long operating life with non-contact hall-effect technology. With its robust structure, it is suitable for use in mobile vehicles operating in the field. Analog and CANopen interface options are available for easy integration.

AJS 600 series joysticks offer easy installation and use with its precise control and ergonomic structure. In addition, thanks to its maintenance-free structure and high protection class, it works perfectly in harsh ambient conditions.

MECHANICAL SPECIFICATIONS

Angle of movement	±20° (from center) ±1 tolerance
Operating force (X, Y axis)	6N±1N
Life	5 million life cycle
Material	Shaft: Stainless steel
	Boot: NBR
	Handle: Delrin® POM-C EN 10204
	Housing: Zamak

ENVIRONMENTAL SPECIFICATIONS

Protection Class	IP67
Operating Temperature	-40°C...+85°C
Storage Temperature	-40°C...+85°C
Relative Humidity	%10...%90 RH

ELECTRICAL SPECIFICATIONS

Analog Version

Sensor Type	Hall-effect, 2axis
Resolution	11 bit
Supply Voltage	15 ... 30 VDC
Supply Current	≤40 mA (per axis)
Reverse Polarity Protection	Yes (supply)
Short-Circuit Protection	Yes
Overvoltage Protection	Up to 33V
Electrical Interface	4-20 mA, 0-20 mA, 0-10V, 0-5V, 0.5-4.5V
Return to Center Accuracy	±%2
Load Resistance	For current output; min 250 Ω For voltage output; min 1 KΩ

CANopen Version

Sensor Type	Hall-effect, 2 axis
Resolution	11 bit
Supply Voltage	8 ... 30 VDC
Supply Current	≤40 mA (per axis)
Reverse Polarity Protection	Yes (supply)
Short-Circuit Protection	Yes
Overvoltage Protection	Up to 33V
Protocol	CANopen protocol: CiA DS-301 V4.02 Device profile: DS-401 V3.0
Node ID	Can be set from 1 to 127 with LSS or SDO Default Node ID:1
Baud Rate	10 kBit/s, 20 kBit/s, 50 kBit/s, 100 kBit/s, 125 kBit/s, 250 kBit/s, 500 kBit/s, 800 kBit/s, 1 Mbit/s
PDO Data Rate	100 ms
Error Check	Heartbeat, Emergency Message
PDO	3 Tx PDO
PDO Modes	Event/Time triggered, Synch/Asynch
SDO	1 server
Position Data	Object Dictionary 0x6020
Terminating Resistor	Optional

MECHANICAL DIMENSIONS (mm)

