

# | AJ22 SINGLE AND DUAL AXIS JOYSTICK

## Introduction

The AJ22 is a modular single & dual axis joystick that combines high performances and reliability in a compact and easily customizable solution. AJ22 inherit high reliability, long life cycle and strong robustness from Sensata's proven technology adopted today in demanding application such as construction and off-road vehicles. Small and light design applies for versatile material handling applications, like scissor lift, boom lift and lift truck and comply with EN1175 to satisfies lift truck mandatory regulation. Modular design allows the accommodation with standard and custom designed grips.



## Main Features

- Economic single and dual axis joystick
- Hall effect, non-contact sensor technology
- Two gate sizes to adapt various mounting requirements
- Comply with EN1175
- Modular designs
- Wide working temperature range 40°C to 85°C

## **Custom Modifications**

- Output characteristics
- · Operating force
- Gate pattern
- Over travel function
- Grips





Electrical Variant

	System voltage	5V±0.1V					
Supply Ratings	Supply Current	<15mA @5V DC					
	Overvoltage @5V DC	+15V, -14V					
Output Type		Analog 0.5 4.5V DC, center 2.5 ± 0.15V					
Other Electrical		EMI 100V/m					
EMC		EN 12895:2015+A1:2019*					
		EN ISO 13766-1:2018					
Functional Safety		ISO 13849-1:2015 PLc*					

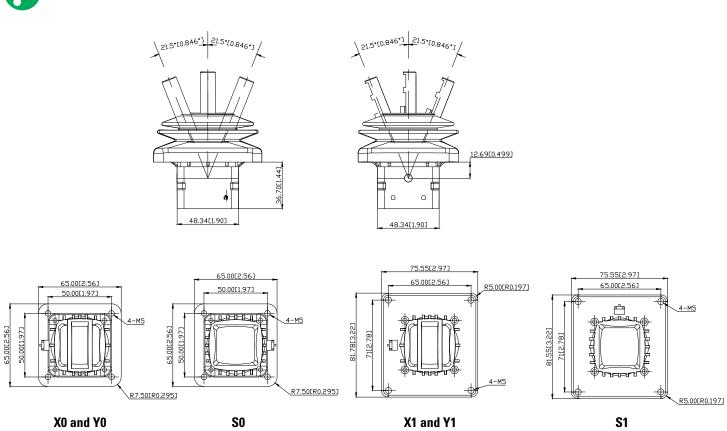
<sup>\*</sup>Design complies with EN1175-2020

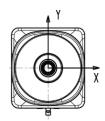
## Mechanical

Life	> 5 million cycles				
Operating temperature	-40°C to 85°C				
Storage temperature	-50°C to 90°C				
Horizontal maximum load	600 N @ 70mm				
Vertical load maximum	900 N (250lbs)				
Max Torque (Z-axis)	20 Nm				
Protection Level	IP 65				
Gate Option <sup>(A)</sup>	Single axis (vertical or horizontal), Dual axis (square)				
Gate Size <sup>(A)</sup>	71x65 mm (2.80x2.56 inch) 50x50 mm (1.97x1.97 inch)				
Electronics Protection	Fully potted				
Lever deflection X/Y max	± 21.5°				
Center null zone	± 1.5°				
Housing	Plastic				
Boot	EPDM (black)				

## (A) Others available on request



















50x50 mm

Single axis gate Dual axis gate 50x50 mm

Single axis gate 71x65 mm

Dual axis gate 71x65 mm

	AJ22	- <u>S</u>	0	X0.96	Y0.96	V08	0_	S2
Model —								
AJ22								
<b>Gate Type</b>								
S: Square X: X-axis single Y: Y-axis single								
Gate Size –								
<b>0</b> : 50x50 mm <b>1</b> : 71x65 mm								
X-Axis Ope	ration To	orque —						
<b>X0.96:</b> 0.96 Nm	ì							
Y-Axis Ope	ration To	rque _						
<b>Y0.96:</b> 0.96Nm								
Output Sign	nals —							
<b>V08:</b> 0.5 4.5	V							
Travel -								
<b>0:</b> ± 21.5°								
Grip —								
<b>S0</b> : MFG S0 <b>S2</b> : MFG S2								

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...: others available on request