SJ50 Series Single Axis Joystick

Product Features

- Rugged components designed for the construction environment
- Potentiometer tracks for angular-detecting
- Friction held and spring return
- Center-lock is a mechanical option
- Providing optional grips with different shapes
- The number and position of the switches are customized designed
- PWM output drives proportional solenoid valve
- Depending on the proportional solenoid valve to set starting current, maximum current and PWM frequency
- CAN output is an option



Application

Typically used in cranes, loaders, excavators, forklifts, tractors, harvesters and aerial work platforms.

Technical Information

Electrical Data

Electrical Data		
Potentiometer		
Power supply	<36Vdc	
Resistance	2000, 1ΚΩ	
Electrical Angle	± 18°	
Midian Voltage	48%~52% (of Power Supply)	
Center Tap Angle	± 2.5°	
On-Load Voltage	32Vdc	
Power Dissipation	2W (200 Ω), 0.5W(1KΩ)	
Directional Switch		
Load Capacity	10A@30Vdc (Resistance Load)	
Breakout Angle	± 5°	
Contact Resistance	<200 Ω	
Miroswitch		
Load Capacity	10A@30Vdc (Resistance load)	
F	30 Million Times (Mechanical)	
Expecting life	200 Thousand Times (Electrical)	
Insulation Resistance	>100M Ω	
Breakout Angle	±3° ~±5°	
Digital Proportional Amplifier Driver		
Power supply	9~36Vdc	
Output Driving Current	Current PWM Maximum Current 3A	
PWM Frequency	M Freqency 100HZ~1000HZ	

0~0.4A

0.4~3A

Mechanical features

Travel angle	± 20°	
Operating type	Spring return, Friction Held	
Breakout force	5N	
Operating force(max)	11N	
Maximum allowable force	>300N	
Expecting life	>2 Million Cycles (Potentiometer)	
Weight	475g (Without handle)	

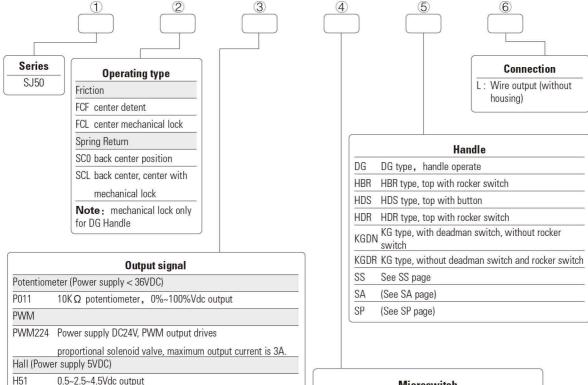
Environmental data

Operating Temperature	-30℃~+70℃	
Storage Temperature	-40°C~+85°C	
Protection level IP65	(Above the flange)	

Minimum Current

Maximum Current

Product Configuration



Special type:

H52

HJ50-20424 is eugual to GE-20424

0.5~2.5~4.5Vdc output

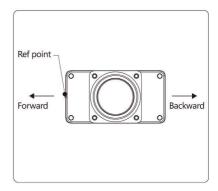
0~2.5~4.5Vdc output

- HJ 50-22BC 1033 is eugual to MCH22BC 1033
- HJ 50-12BC 107 is euqual to MCH 107
- HJ 50-12BC 1078 is eugual to MCH12BC 1078

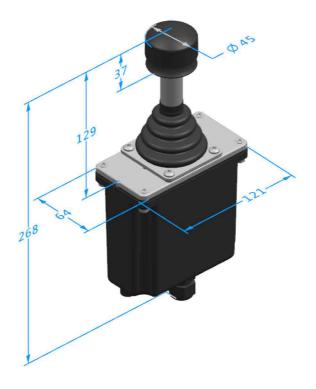
Microswitch				
MS00	MS00 Withou microswitch			
MS21	IS21 With 10A N.O.center microswitch			
MS22	With 10A start position microswitch			
MS13	3 (With 4A microswitch, center (N.C.), forward and backward)			
MS23	(With 10A microswitch, center (N.C.), forward and backward)			

Electrical Connections

Pin	PWM	Potentiometer
1	9-36V(VCC)	Forward Port
2	GND	Center Tap Port
3	Forward drive output	Backward Port
4	Backward drive output	Sliding End
5	Drive output common port	Center switch common port
6	switch common port	Center switch (N.O.) Forward
7	Center switch (N.O.)	switch (N.O.)
8	Forward switch (N.O.)	Backward switch (N.O.)
9	Backward switch (N.O.)	



Dimensions



Product Installation

