

JS73 系列电控手柄 JS73 Series of Joystick



➤ 产品介绍 Product Description

JS73是一款基于霍尔传感原理的单轴手柄。丰富的机械功能底座，搭配多款上端，可以满足大多数的应用要求。

JS73 is a single-axis joystick based on hall-effect sensing. Multiple mechanical functional base compatible with various of handles and grips, makes it meet most application requirements.

JS73有弹簧复中和摩擦定位两种基本功能，中位反馈是标配。附加的端位反馈、端位定位、机械中位锁止功能使得JS73可以提供良好的人机互动及灵活应用。

JS73 has two basic models of Spring Return and Friction Brake, both comes with detent in the centre as standard. Additional detents, latching and centre mechanical lock options makes JS73 capable to provide good human-machine interaction and flexible applications.

➤ 产品特点 Product Features

- 单轴控制
Single axis control
- 非接触式霍尔效应技术
Contactless – Hall effect technology
- 弹簧复中和摩擦定位两种基本功能
two basic models of Spring Return and Friction Brake
- 端位反馈、端位锁止、机械中位锁止功能可选
detents, latching and centre mechanical lock options
- 面板下深度小于50mm
Less than 50mm under-panel depth
- 5Vdc或9-32Vdc供电
5Vdc or 9-32Vdc power supply
- 模拟量电压和PWM输出信号
Analogue (Vdc) or Digital (PWM) outputs

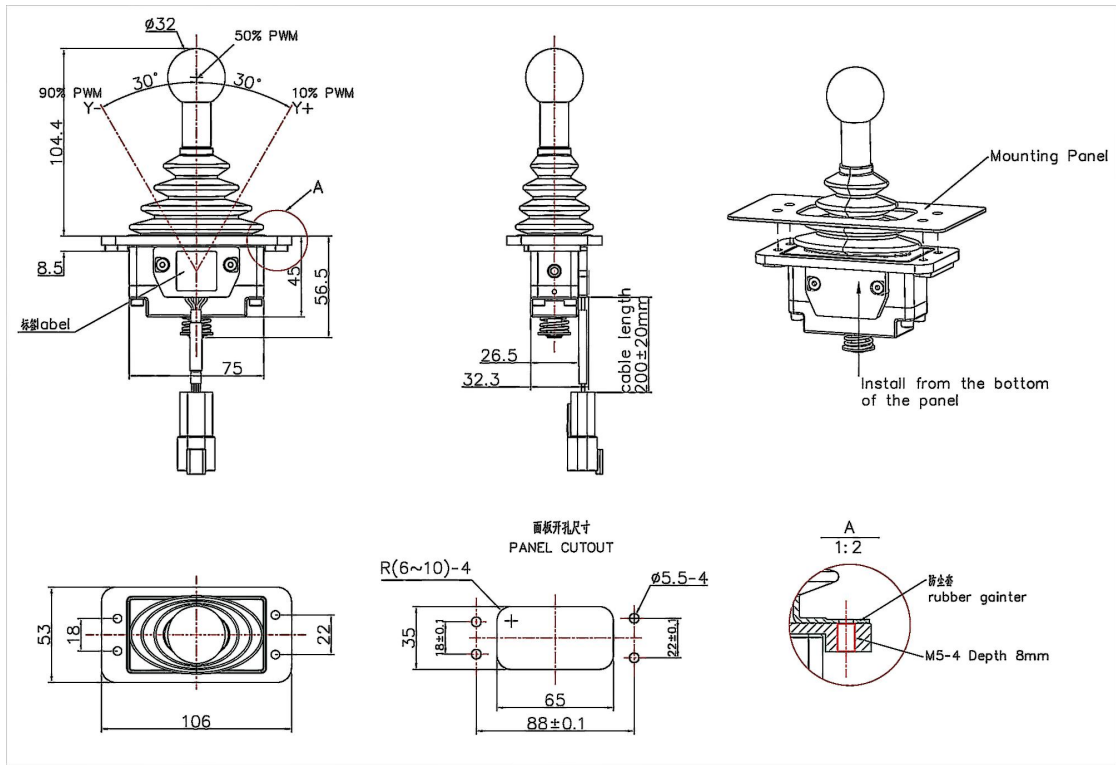
➤ **技术参数 Technical Specifications**

机械性能 Mechanical specifications		
功能	Functions	弹簧复中 Spring return-to-centre 摩擦定位 Friction brake (档位)锁定 Latching (details refer to "Appendix 附件 1 ")
旋转角度	Mechanical operating angle	Y axis: $\pm 30^\circ$
操作力	Operating force	弹簧复中 1.25Nm or 1.85Nm for spring return version 摩擦定位 1.5Nm for Friction brake version 仅弹簧复位, 500 万次 5 million cycles for Spring-return model
使用寿命	Life expectancy	弹簧复位带位置反馈、端位锁定, 摩擦定位款, 100 万次 1 million cycles for detent,latching and friction brake models
重量	Weight	560g
电气性能 Electrical specifications		
传感类型	Sensor type	Hall-effect 霍尔
供电电压	Applied voltage	$5\pm 10\%$ Vdc or 9-32 VDC
输出信号	Effective output	Analog or Digital PWM
解析率	Resolution	12 bit
中位精度	Neutral position accuracy	$\pm 1.5^\circ$
环境测试 Environmental specifications		
工作温度	Operating temp. range	$-40^\circ\text{C}\sim 85^\circ\text{C}$
储存温度	Storage temp. range	$-40^\circ\text{C}\sim 85^\circ\text{C}$
防护等级	Ingress Protection (IP) rating	安装法兰面以上 IP67 Sealing above the flange 电路部分 IP67 electronics IP67
EMC	EMC	100V/m
ESD	ESD	$\pm 8\text{kV}$ (contact discharge) $\pm 15\text{kV}$ (air discharge)

➤ 外形&安装尺寸 Mechanical Dimensions(mm)

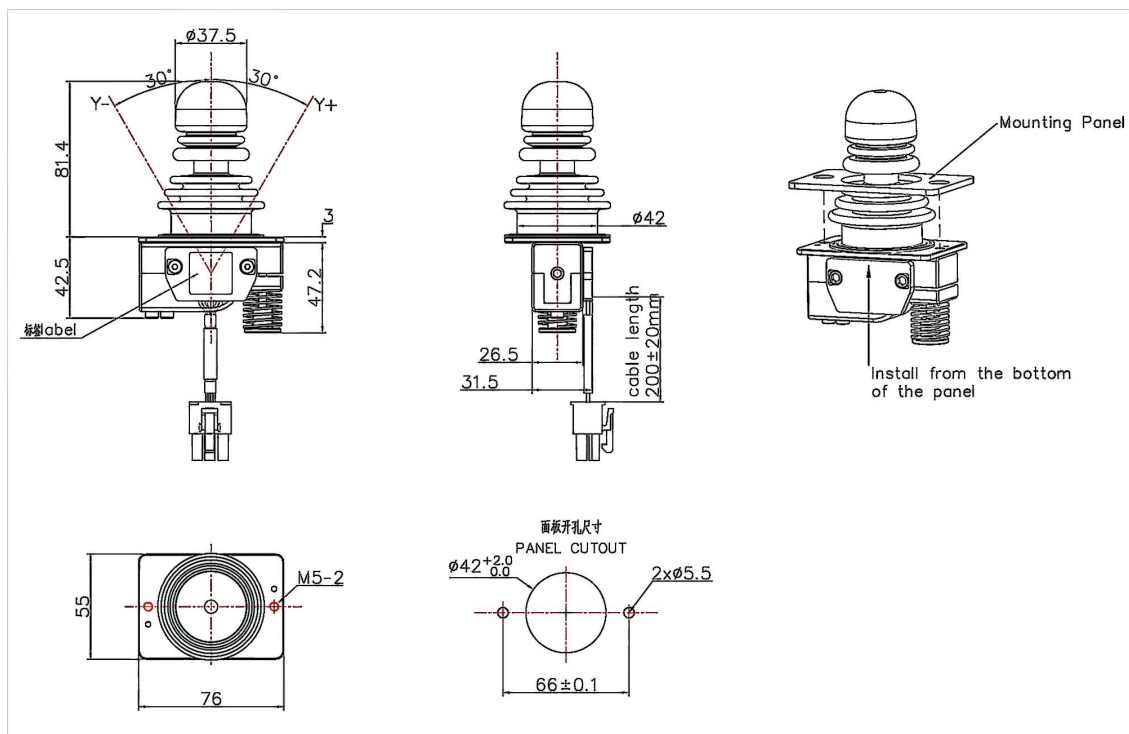
弹簧复中+G202 上端

Spring Return Model with G202 Grip

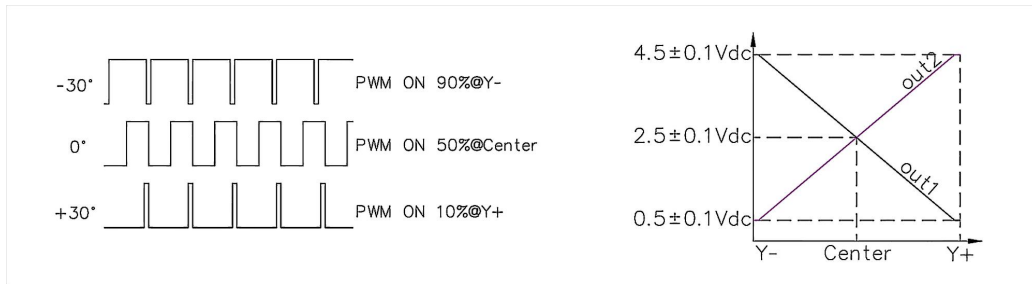


摩擦定位+中位锁止+G205 上端

Friction Model with neutral position mechanical lock, with G205 Grip



典型输出信号示意图
Typical Output Characteristics



➤ **编号规则 Product Code Reference**

JS73	S	11	N	HV
底座系列 Base Family Name	基本功能 Primary functions	反馈&锁定代码 Feedback & latching codes	中位 neutral position	供电电压 Supply Voltage
JS73	S- Spring return 弹簧复位 F- Friction brake 摩擦定位 L- Latching 锁止	Blank- friction brake models 00- 0-0-0 01- 0-0-D 10- D-0-0 11- D-0-D 001- 0-0-L 100- L-0-0 101- L-0-L 111- L-L-L	N- with detent as standard L- Latching P- mechanical lock	LV- $5 \pm 10\%$ V dc HV- 12/24V dc
	63	G202	00	
	信号输出 Output	上端系列 Grip Type	其它订制信息: 线缆直径, 长度, 连接器等 Other Customized Details eg. cable length, connectors etc	
	01- 0.25~4.75V dc 02- 4.75~0.25V dc 03- 0.5~4.5V dc 04- 4.5~0.5V dc 16- 1-5V 17- 3-5V 18- 1-9V 19- 0.1-10V 20- 0-5V dc	G202 G205 G100* G101* G102* G103* G104*	00- 0.5mm ² , 300mm flying leads 01- 0.5mm ² , 200mm wires , DT04-4P-C015 connector 02- 0.5mm ² , 200mm wires , Mini-Fit 6P connector	

- 31- 0.25~4.75V dc,0.25~4.75V dc
- 32- 4.75~0.25V dc,4.75~0.25V dc
- 33- 0.5~4.5V dc,0.5~4.5V dc
- 34- 4.5~0.5V dc,4.5~0.5V dc
- 46- 0.25~4.75V dc,4.75~0.25V dc
- 47- 4.75~0.25V dc,0.25~4.75V dc
- 48- 0.5~4.5V dc,4.5~0.5V dc
- 49- 4.5~0.5V dc,0.5~4.5V dc
- 61- PWM 5~95%,500HZ
- 62- PWM 95~5%,500HZ
- 63- PWM 10~90%,500HZ
- 64- PWM 90~10%,500HZ
- 70- 4-20 mA
- 71- 4-20 mA,4-20 mA
- 72- 4-20 mA,20-4mA

** refer to JS25 catalog*

➤ **应用Applications**

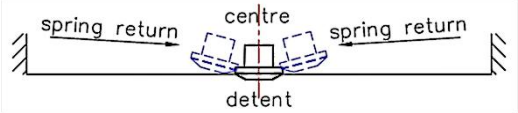
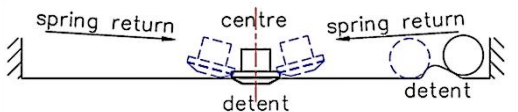
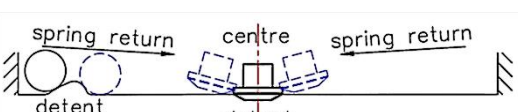
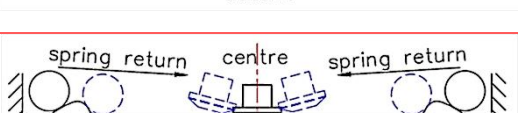
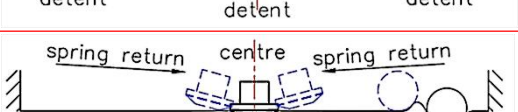
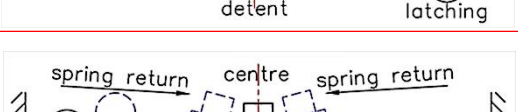

应用于挖机、装载机、摊铺机等机型。

Applied to excavators, wheel loaders, road pavers etc.



JS73 机械功能原理图
JS73 MECHANICAL FUNCTIONS DIAGRAM

Version 01_Feb. 2026

基本功能 Primary Functions	基本功能代码 Primary Functions Code	附加功能 Additional functions	附加功能 Additional functions Code	反馈&锁定代码 Feedback & latching codes	反馈&锁定字母符号 Feedback & latching letter symbols	功能原理符号 Functions schemic symbols
弹簧复中 Spring return to centre	S	-	-	00	0-0-0	
		反馈 Feedback	D	01	0-0-D	
				10	D-0-0	
				11	D-0-D	
				001	0-0-L	
		锁定 Latching	L	100	L-0-0	
				101	L-0-L	

		机械中位锁止 Centre mechanical lock	P	-	-	
档位 Latching	L	-	-	111	L-L-L	
摩擦定位 Friction brake	F	-	-	-	-	
		锁定 Latching	L	-	-	
		机械中位锁止 Centre mechanical lock	P	-	-	