

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或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 (details refer to "功能 Functions ")
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°C~85°C
储存温度	Storage temp. range	-40°C~85°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	± 8 kV (contact discharge) ± 15 kV (air discharge)

➤ 功能 Functions

弹簧复中位

- 带 Y+/Y-位置反馈(标配)
- 不带两端位置反馈
- 带 Y+端机械锁止
- 带 Y+/Y-机械锁止

摩擦定位

- 带中位反馈(标配)
- 无中位反馈

机械中位锁止

- 可选

* 释义 paraphrase

Detent- feeling points 位置反馈

Latching- fixation points/locking 锁止

Y-, the operator side 操作者侧

Y+, the opposite side of the operator 操作者反方向侧

Spring return-to-centre

- with Y+/Y- ends detents(standard)
- With no detents
- with Y+ end latching
- with Y+/Y- ends latching

Friction

- with centre detent(standard)
- With no centre detent

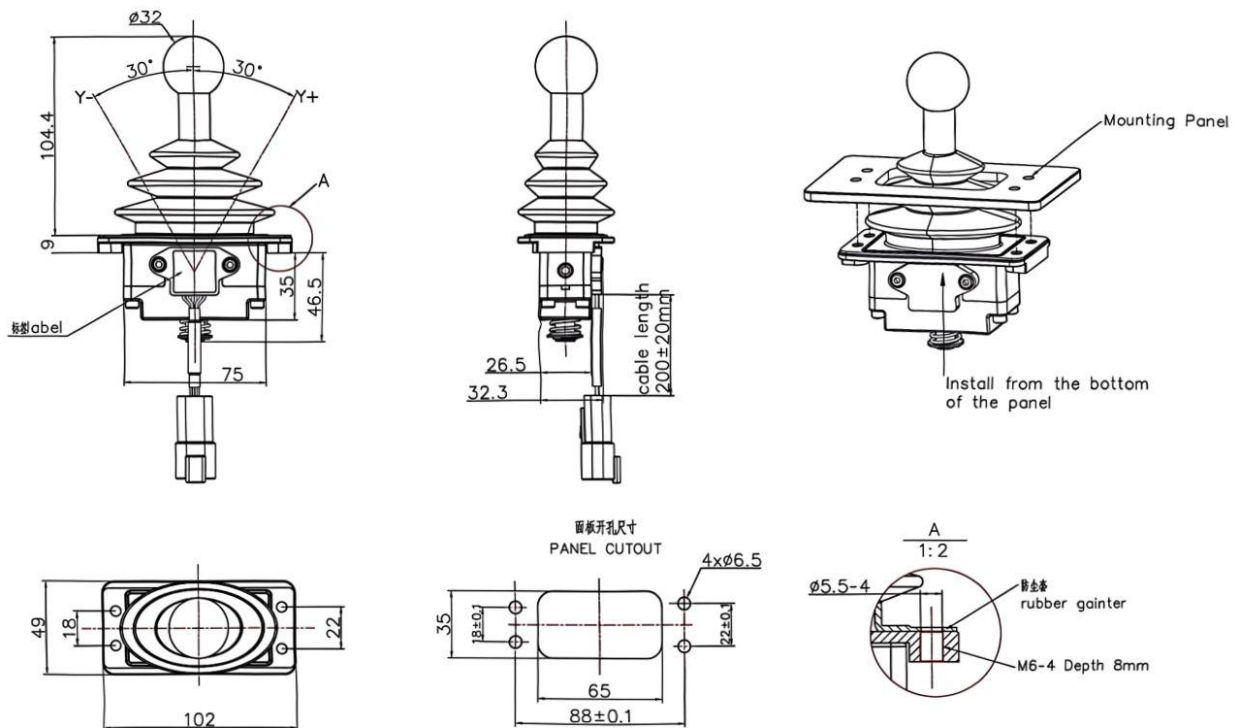
Neutral Position Mechanical Lock

- Optional

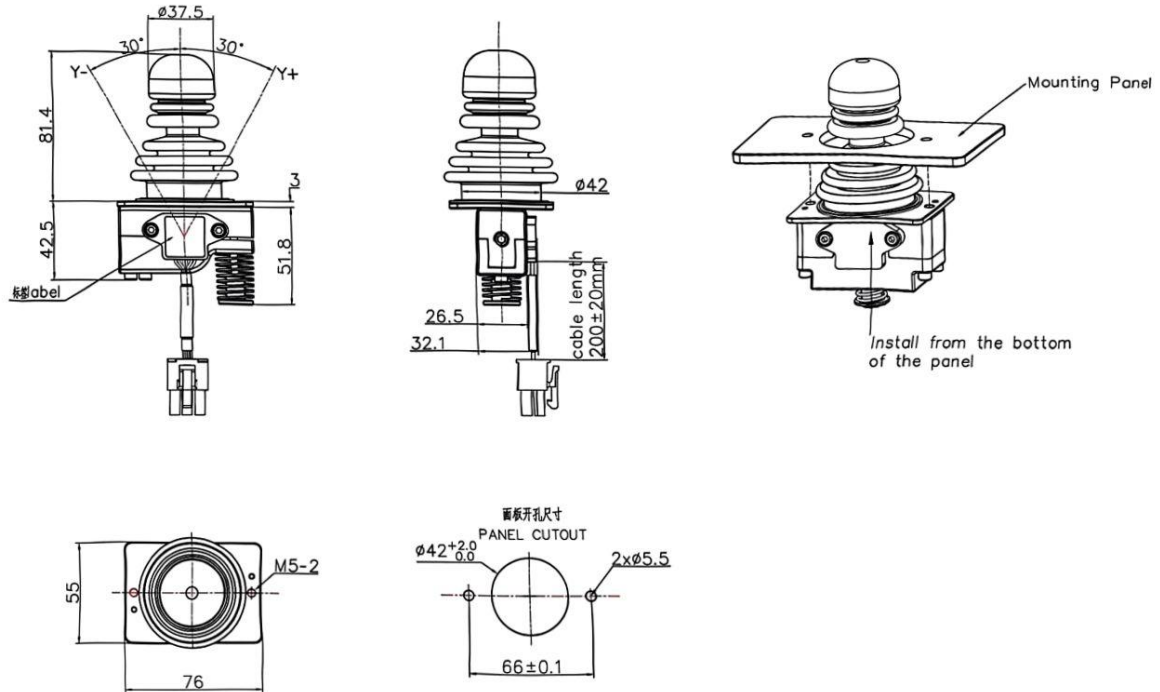
➤ 外形&安装尺寸 Mechanical Dimensions(mm)

弹簧复中+G202 上端

Spring Return Model with G202 Grip

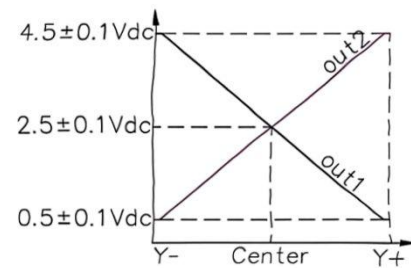
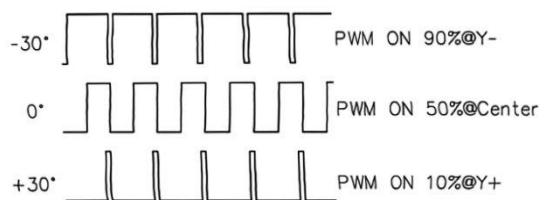


摩擦定位+中位锁止+G205 上端

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	DD	N	HV
底座系列	机械功能	位置反馈	机械中位锁止	供电电压
Base Family Name	Mechanical Functions	position feedback	neutral position mechanical lock	Supply Voltage
JS73	S- spring return to the NEUTRAL(zero) position 弹簧复中位	00- S-0-S	P- with mechanical lock	LV- 5±10% V dc

F- Friction brake 摩擦定位

DD- D-(S)-0-(S)-D

N- w/o
mechanical lock

HV- 12/24V dc

ND- S-0-(S)-D

DN- D-(S)-0-S

LL- L-(S)-0-(S)-L

LN- S-0-(S)-L

NL- L-(S)-0-S

64	G202	01
信号输出	上端系列	其它订制信息: 线缆直径, 长度, 连接器等
Output	Grip Type	Other Customized Details eg. cable length, connectors etc
01- 0.25~4.75V dc	G202	00- 0.5mm ² , 300mm flying leads
02- 4.75~0.25V dc	G205	01- 0.5mm ² , 200mm wires, DT04-6P-CE02 connector
03- 0.5~4.5V dc		02- 0.5mm ² , 200mm wires, Mini-Fit 6P connector
04- 4.5~0.5V dc		
16- 1-5V		
17- 3-5V		
18- 1-9V		
19- 0.1-10V		
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		
71- 4-20 mA		
72- 4-20 mA, 4-20 mA		

➤ **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.

