

MKF-JS28

Mate Industrial Joystick, Hall effect, 2-axis, Panel Mounted



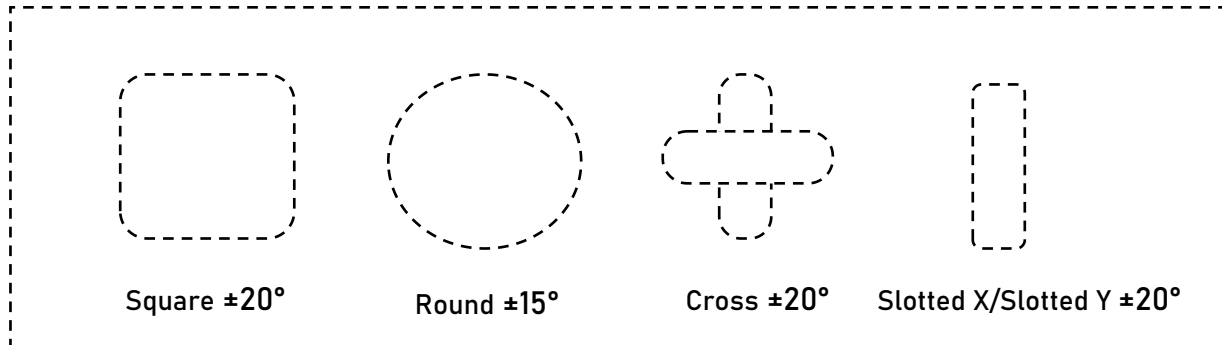
FEATURES

- Principle: Hall sensor from Germany Hall sensor, linear correction in the whole temperature range, linear correction of the magnetic curve, to ensure the linearity of the output
- 2 axis (XY), 14-bit resolution
- Working voltage: 3.2V-5.5V, can work stably at 3.3V or 5.0V
- Signal output: USB, CAN, RS232, RS422, analog voltage
- Analog voltage: 5.0V power supply 0.3~2.5~4.7V or 6%Vdd~50Vdd~94%Vdd, other parameters can be customized.
- Repetitive positioning accuracy: less than 1.5%
- Materials: aluminum alloy and ABS + stainless steel, precision structure craftsmanship
- Protection level: IP67 above the panel
- Built-in operation wake-up switch (specify when ordering):
- The mechanical switch is also effective when the power is not supplied; when the joystick is in motion, the switch is closed, and it is disconnected when it returns to the neutral position; it is mainly used for battery power to wake up the CPU to reduce power consumption

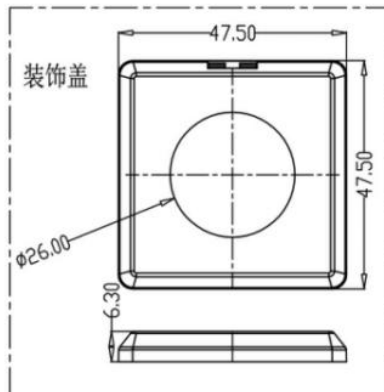
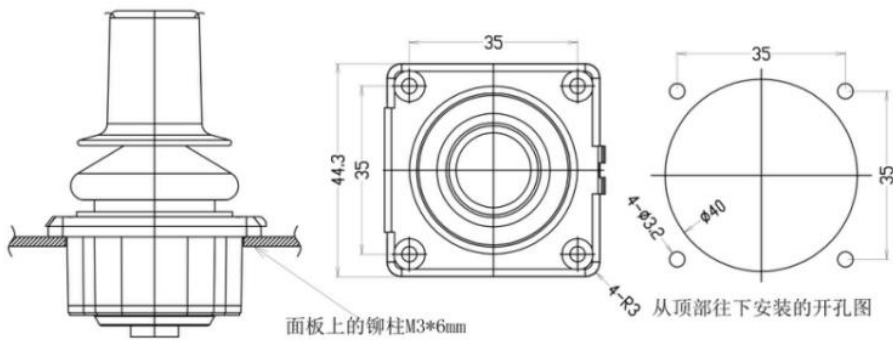
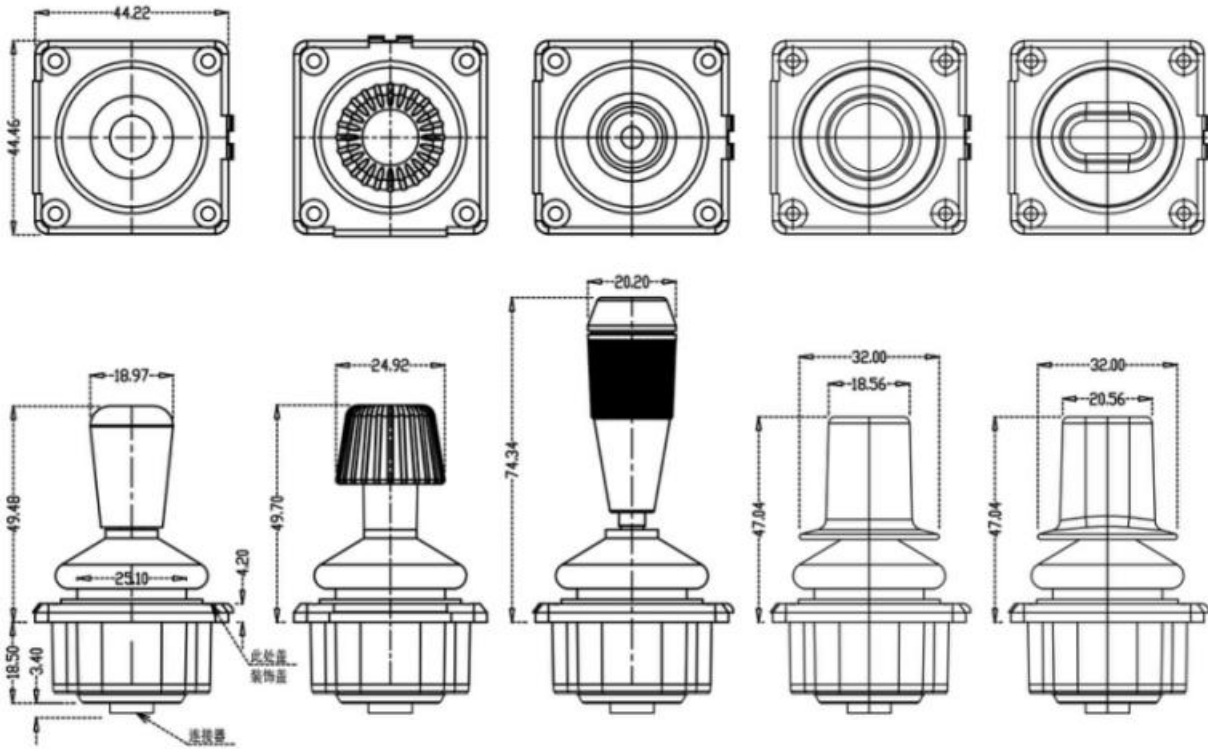
SPECIFICATION

Sensor	Hall sensor, full-scale multi-point linear correction
Signal output	linear analog voltage 4%Vdd-96%Vdd, center 50%Vdd (communication mode can be selected)
Rotation angle	±20°, diagonal angle: ±28°
Operation strength	a variety of options (or customized)
Center return accuracy	less than 1%
Supply voltage	DC3.3V or 5V
Working current	<15MA
Wake-up switch	Mechanical type, the center is disconnected, the switch is closed by turning 5-10°, and the function is optional
Operating temperature	-40°C ~ +70°C
Storage temperature	-50°C ~ +80°C
Protection level	part of the panel is IP67
Dimensions	Outline size 76.04(H)X47(L)X47(W), installation size: 35.0 x 35.0

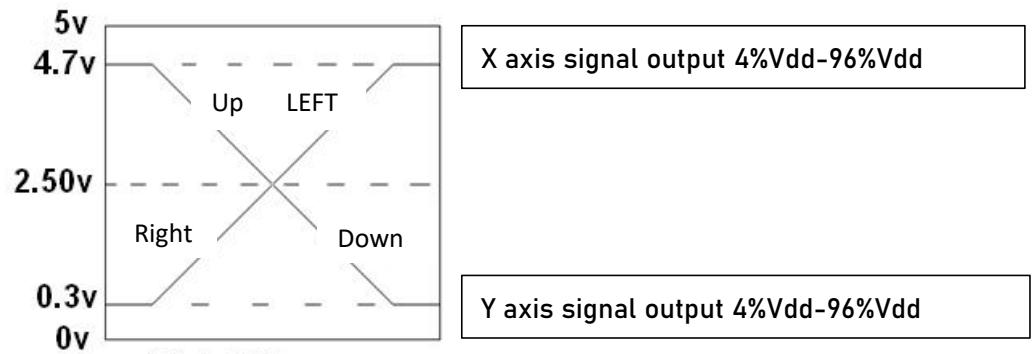
OPERATING DIRECTION



TECHNICAL DRAWINGS



Output Curve

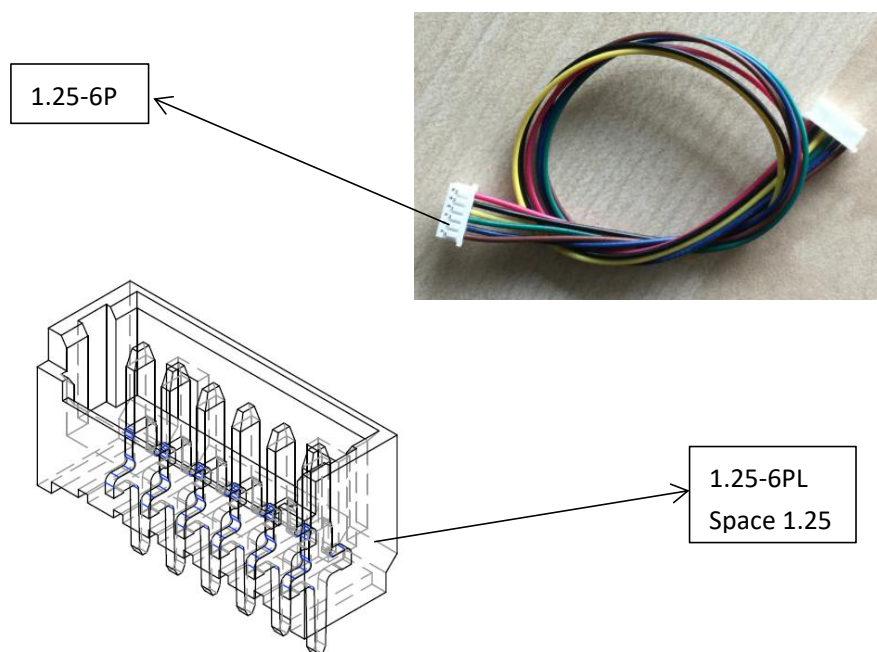


CAN+RS485 Pin Define

Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6
+5V	GND	CAN-H	CAN-L	485A+	485B-
RED	BLACK	YELLOW	GREEN	BLUE	BROWN
+5V	GND	CAN-H	CAN-L	A+	B-

CAN+RS232 Pin Define

Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6
+5V	GND	CAN-H	CAN-L	RS232TXD	RS232RXD
RED	BLACK	YELLOW	GREEN	BLUE	BROWN
+5V	GND	CAN-H	CAN-L	TXD RS232 SEND	RXD RS232 RECEIVE

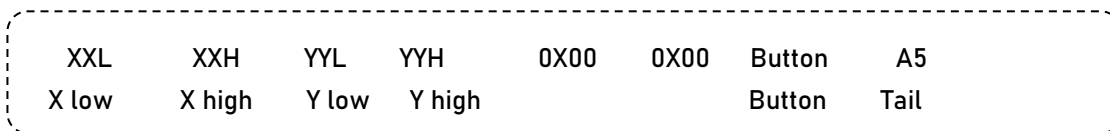


CAN Bus Communication Mode

- CAN2.0B
- CAN ID: standard frame or extended frame factory preset, default ID=0X0101 (can be modified through RS232)
- Baud rate: 125K/250K/500K/1000K by default 250K
- Interval 5-100ms continuously sending, 23ms by default

Data message format (HEX):

BYTE0	XXL X axis low	X axis data 0X0020~0X0200~0X03E0
BYTE1	XXH X axis high	
BYTE2	YYL Y axis low	Y axis data 0X0020~0X0200~0X03E0
BYTE3	YYH Y axis high	
BYTE4	0X00	
BYTE5	0X00	
BYTE6	Button	Button
BYTE7	0XA5	Tail



YYYY Y axis angle
 XXXX X axis angle
 Button Button

X axis data

MAX	Left	MIN	Stop	MIN	Right	MAX
0X0020-	-- --	0X01ff	0200	0X0201-	-- --	0X03E0

Y axis data

MAX	Lower	MIN	Stop	MIN	Upper	MAX
0X0020-	-- --	0X01ff	0200	0X0201-	-- --	0X03E0

Button data

Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
IN1 External button 1	Button 7	Button 6 IN2 External button 2	Button 5	Button 4	Button 3	Button 2	Button 1

1 = button is pressed; 0 = no button is pressed. E.g. 00 02 00 02 00 00 00 A5