



H6 Series

FEATURES

- Multi-axis operation, spring return ,overtravel function can be realized, double axis operation, friction lock, center detent
- Can realize limit operations in one shape, cross shape, Z shape, T shape, square shape or circular shape.
- Non-contacting Hall effect technology, high reliability, long lifetime
- The maximum operating angle: $\pm 25^\circ$
- The CAN bus can be configured
- Upper and lower can be wired separately
- Various types of handles option

APPLICATIONS

- Grader
- Rotary drilling rig
- Loader
- Electrohydraulic control system



SPECIFICATIONS

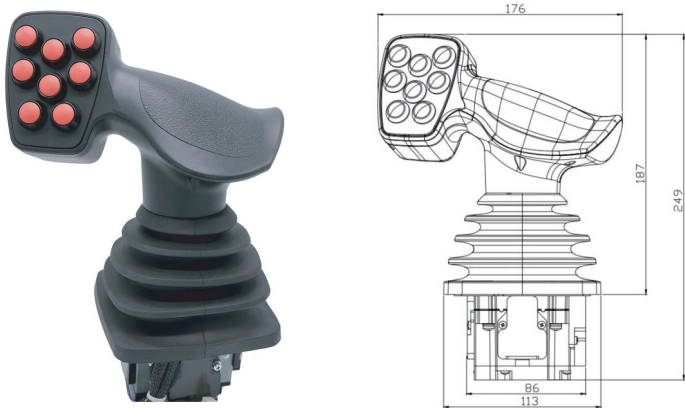
Mechanical data	
Travel angle	$\pm 25^\circ$
Operating force ¹	10~15N (spring return) 10~15N (friction brake)
Mechanical life	>2 million cycles
Product weight	Appr. 1700g
Electrical data	
Analog/Hall voltage output	
Supply voltage(Vs)	5V $\pm$ 0.5Vdc or 9-32Vdc
Power current consumption	<9mA(per channel)
Center voltage	2.5V $\pm$ 4%Vs
Output linearity voltage tolerance	$\pm 3\%$
CAN bus	
Supply voltage(Vs)	9-32Vdc
Power current consumption	<55mA
CAN version	CAN2.0b
CAN protocol	J1939 protocol or CANopen protocol
Baud rate	250Kbps (J1939 protocol) 10Kbps-1Mbps (CANopen protocol)

SPECIFICATIONS (CONTINUED)

Environmental data	
Operating temperature	-40°C~+85°C
Storage temperature	-40°C~+85°C
Protection class	IP ratings may vary from model to model for more information, please consult our sales staff
EMC	EN 61000-6-4:2007+A1:2011 EN IEC 61000-6-2:2019

¹ The measuring point is 165mm from the pivot center

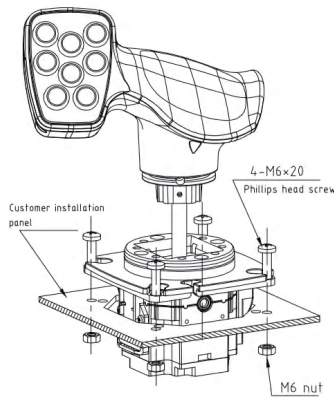
OUTLINE DIMENSIONS (UNIT:mm)



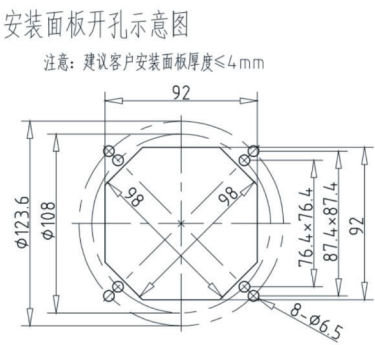
K15 handle

MECHANICAL INSTALLATIONS

Note: The thickness of the panel is ≤4mm



Mounting diagram

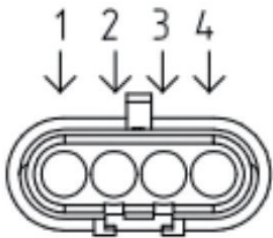


Panel cut-out dimensions

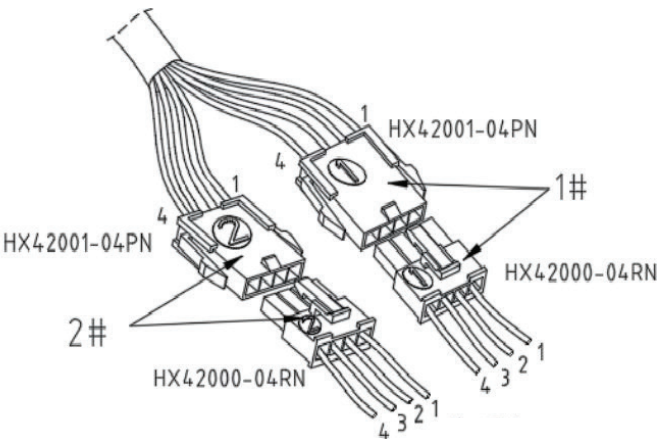
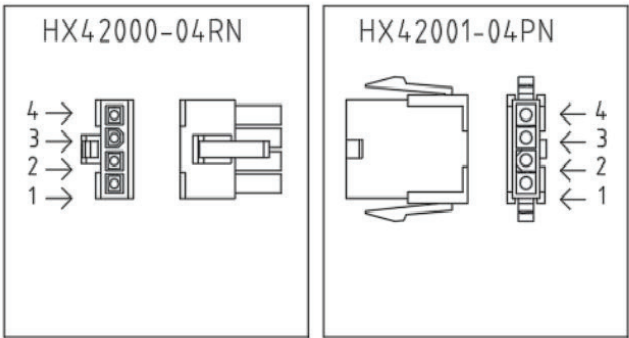
ELECTRICAL CONNECTIONS

- 1. Hall
Cable wiring
- 2. CANbus type

NO.	Color	Function description
1	Red	VCC(9-32V)
2	Black	GND
3	Blue	CAN_H
4	Yellow	CAN_L



HX42000-04RN
HX42001-04PN



connector: HX42000-04RN				connector: HX42001-04PN			
1#input	No.	Color	Function description	1#input	No.	Color	Function description
	1	Red	VCC		1	Red	VCC
	2	Black	GND		2	Black	GND
	3	Blue	X_out1/Y_out1		3	Blue	X_out1
2#input	4	Yellow	X_out2(redundant)/Y_out2(redundant)	2#input	4	sky blue	X_out2(redundant)
	No.	Color	Function description		No.	Color	Function description
	1	Red	VCC		1	Red	VCC
	2	Black	GND		2	Black	GND
2#input	3	Blue	Y_out1/X_out1	2#input	3	Yellow	Y_out1
	4	Yellow	Y_out2(redundant)/X_out2(redundant)		4	Pink	Y_out2(redundant)

ORDER GUIDE

For instance:

Customer Requirements: H6 series handle, dual-axis operation in any direction with spring return, two-stage stroke force configured in all four directions; K15 upper front panel with 6 buttons, rear panel with 4 buttons, power supply voltage 9-32 VDC, CAN bus output, CANopen protocol, AMP connector (model 282106-1) for wiring.

Product Selection: H6-2AS-02-CA-K150604-A

H6		Multi-axis Joystick	
H6	2AS	Code	Operation mode
		1AX	Double axis operation in any direction, spring return
		1AE	Single axis operation, aligned X axis direction, friction hold, center detent
		1AY	Single axis operation, aligned Y axis direction, spring return
		1AF	Single axis operation, aligned Y axis direction, friction hold, center detent
		2AG	Dual-axis operation in arbitrary direction, aligned Y axis direction, friction hold, center detent, aligned X axis direction, spring return
		2AH	Dual-axis operation in arbitrary direction, aligned Y axis direction, spring return, center detent, aligned X axis direction, friction hold
		2AS	Dual-axis operation in arbitrary direction, spring return
		2AF	Dual-axis operation in arbitrary direction, friction hold, center detent
		2AP	Dual-axis operation in crossing direction, spring return
	02	Code	Stroke type
		01	Single-stage strokes are configured in all four directions
		02	Secondary strokes are configured in all four directions.
		03	X+ direction is configured a single-stage stroke, and the other directions with two-stage stroke
		04	Y- direction is configured a single-stage stroke, and the other directions with two-stage stroke
		05	Y+direction is configured a single-stage stroke, and the other directions with two-stage stroke
		06	Y- direction is configured a single-stage stroke, and the other directions with two-stage stroke
		07	X+&X-direction is configured a single-stage stroke, and Y+&Y-directions with two-stage stroke
		08	X+&Y+direction is configured a single-stage stroke, and X-&Y-directions with two-stage stroke
		09	X+&Y-direction is configured a single-stage stroke, and X-&Y+directions with two-stage stroke
		10	X-&Y+direction is configured a single-stage stroke, and X+&Y-directions with two-stage stroke
		11	X-&Y-direction is configured a single-stage stroke, and X+&Y+directions with two-stage stroke
		12	X+&Y-direction is configured a single-stage stroke, and X+&Y-directions with two-stage stroke
		13	X+X-&Y+direction is configured a single-stage stroke, and Y-directions with two-stage stroke
		14	X+X-&Y-direction is configured a single-stage stroke, and Y+directions with two-stage stroke
		15	X+Y+&Y-direction is configured a single-stage stroke, and X-directions with two-stage stroke
		16	X-Y+&Y-direction is configured a single-stage stroke, and X+directions with two-stage stroke
H6	2AS	02	

ORDER GUIDE (CONTINUED)

H6		Multi-axis Joystick			
		Code	Output signal		
		H11	Supply voltage 5Vdc, 10%~50%~90%Vs output		
		H21	Supply voltage 5Vdc, 10%~50%~90%Vs and 90%~50%~10%Vs redundant output		
		W11	Supply voltage 9~32Vdc, 0.5~2.5~4.5V ratiometric output		
		W21	Supply voltage 9~32Vdc, 0.5~2.5~4.5V and 4.5~2.5~0.5V redundant ratiometric output		
		CA	CANbus output, protocol CANopen		
		J33	CANbus output, protocol J1939, node address 33		
		J34	CANbus output, protocol J1939, node address 34		
		J35	CANbus output, protocol J1939, node address 35		
		J36	CANbus output, protocol J1939, node address 36		
		Code	Handle options		
		K15##	K15 handle		
		Code	Wiring		
		A	AMP connector (282106-1) (CAN bus output)		
		L	Cable wiring		
H6	CA	K150604	A	Complete Type Specification	