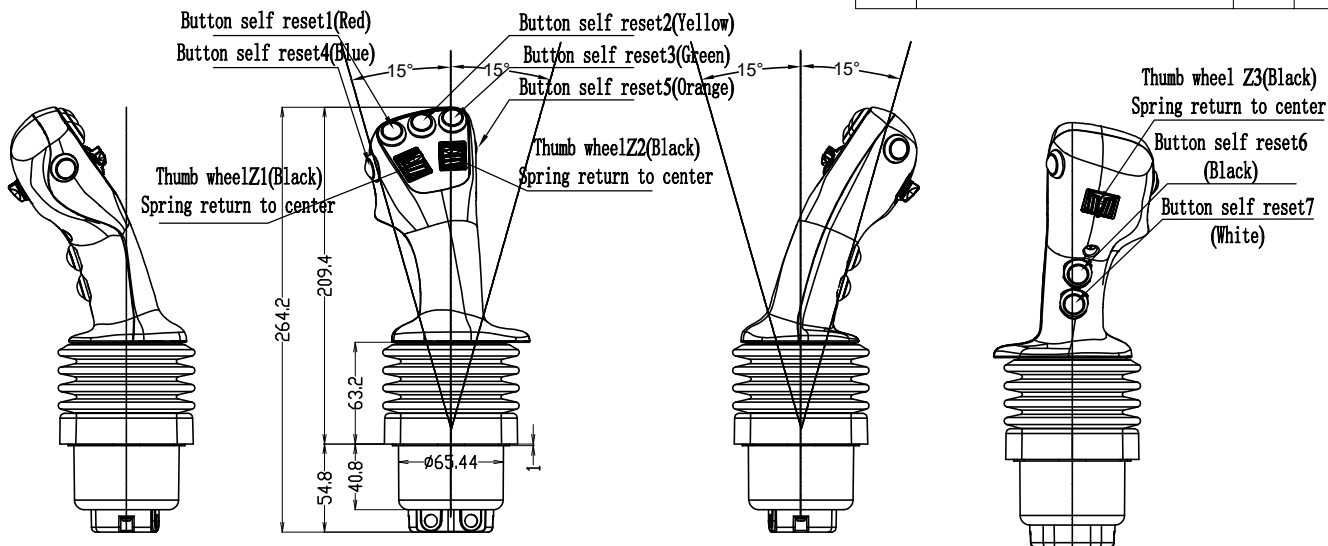
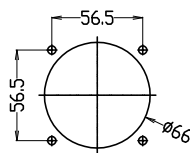
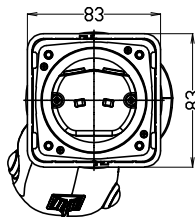


Square operation limited



Install from top to bottom cut out size



Pin	Description
1	CAN - Cnd
2	Power+(DC12/24V)
3	GND
4	CAN - H
5	CAN - L

CAN J1939 communication protocol:

CAN baud rate 250K, ID=0x0CFDD600+address, 20ms timed transmission

Byte	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0	Description
Byte0	LSB**X-axis position		X-axis control stick right positive position		Left negative position of the X-axis control stick		X-axis median state		Direction description
Byte1	MSB**X-axis position								Axial(x)Angle value:0-1000,center = 0
Byte2	LSB**Y-axis position		Y-axis front positive position		Y-axis back negative position		Y-axis median state		Direction description
Byte3	MSB**Y-axis position								Axial(y)Angle value:0-1000,center = 0
Byte4	0xFF								
Byte5	Button1		Button2		Button3		Button4		
Byte6	Button5		Button6		Button7		0x03		
Byte7	0xFF								

Direction description: XY: left X-, right X+, forward Y+, backward Y-;

1=effective, 0=Invalid;

CAN J1939 communication protocol:

CAN baud rate 250K, ID=0x0CFDD700+address, 20ms timed transmission

Byte	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0	Description
Byte0	LSB**Thumb wheel Z2 position		Thumb wheel Z2 down negative position		Thumb wheel Z2 to the up positive position		Thumb wheel Z2 mid-position state		Direction description
Byte1	MSB**Thumb wheel Z2 position								Thumb wheel Z2 Angel value:0-1000, center = 0
Byte2	LSB**Thumb wheel Z1 position		Thumb wheel Z1 the up positive position		Thumb wheel Z1 down negative position		Thumb wheel Z1 mid-position state		Direction description
Byte3	MSB**Thumb wheel Z1 position								Thumb wheel Z1 Angel value:0-1000, center = 0
Byte4	LSB**Thumb wheel Z3 position		Thumb wheel Z3 left negative position		Thumb wheel Z3 right positive position		Thumb wheel Z3 mid-position state		Direction description
Byte5	MSB**Thumb wheel Z3 position								Thumb wheel Z3 Angel value:0-1000, center = 0
Byte6	0xFF								
Byte7	0xFF								

Direction indication: Thumb wheel Z1 Z2: Up+; Down -; Thumb wheel Z3: left -, right+

1=effective, 0=Invalid;

Structure: Dual axis, spring reset, square limited,
Operation angle: $\pm 15^\circ$
Handle: JS12
Signal output: CAN J1939 output
Output method: M12 connector type A 5-pin male, lead 50cm

Model:H56-MKF-JS12-CAN-S-2Q-MS00-24W

Mate Technology Shenzhen Limited

www.matend.com

Draw:	4	2026-09-11			View:	
Design:	1	2026-09-11	Stage		Unit:	mm
Audit:	2	2026-09-11				
Approve:	1	2026-09-11				