LT200 Series Single-axis industrial joystick

Product Features

1.All metal structure, fully sealed design,Single axis control;
2.Potentiometer or Hall effect sensor,standard voltage
3.Available with various shape multi function grips;
4.Mechanical spring-return to center or Friction-hold operation;
5.Excellent analog proportional control or switch signal output;

Application

LT200 series industrial single-axis joystick controller is mainly used in hydraulic proportional control,variable frequency motor control, remote control or electro-hydraulic applications such as Rotary table(drilling rig), Crane, Aerial work platforms, Forklift trucks, Mobile hydraulics, Shield tunneling machine,Hoist,Marine,Construction machinery, Civil engineering, Military vehicles, Cabin vehicles, Military robotics,Precision machine tools, Material handling equipment, etc

Technical Specifications

Environment Specifications	
Storage temperature	-50℃～+80℃
Operating temperature	-40℃～+80℃
protection grade	IP64
Vibration	Amplitude of vibration ±3g, frequency 10HZ-200HZ
Shock	20g, 6ms, half sine type
EMC anti-interference grade	100V/m, 30MHZ-1GHZ, 80％Sine-wave modulation, satisfy EN 50082-2 (1995) standards
Transmit grade	150KHZ－30MHZ, grade B, satisfy EN 50081-2 (1993) standards
ESD anti-interference grade	Level 4, 8kv contact discharge, 15kv air discharge, satisfy IEC 61000-4-2 standards

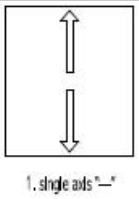
Mechanical Specifications

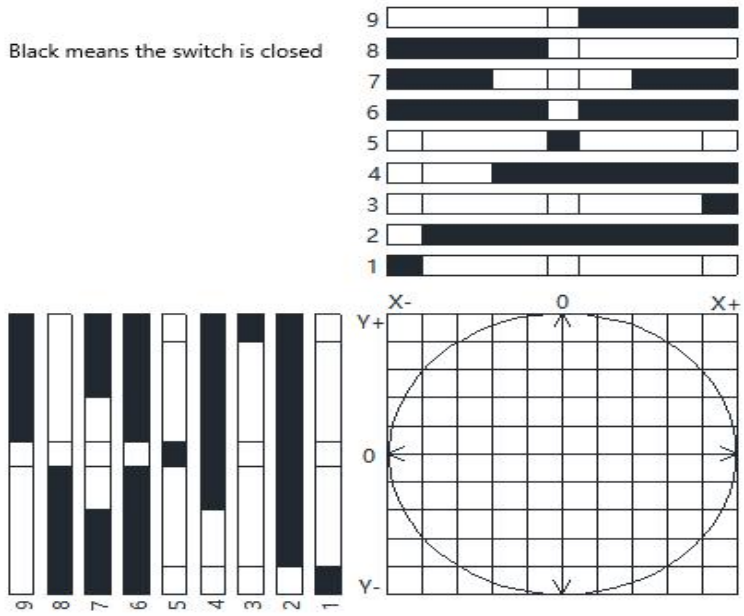
Mechanical rotation	±32° (potentiometer) ±20° (hall sensor)
Operating torque	5N（50Nmax）
Mechanical life	5,000,000 cycle
Mechanical tolerance	±0.5°

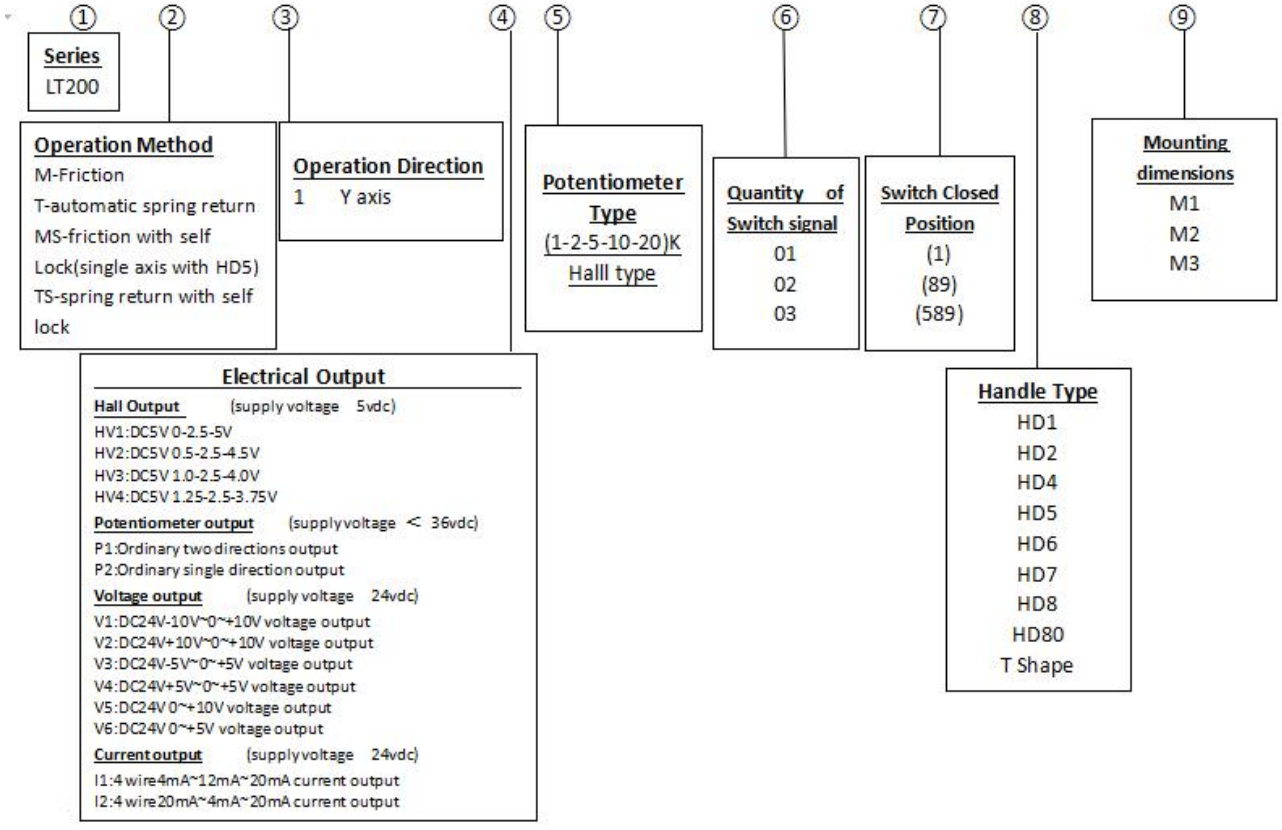
Electrical Parameters

Hall type	Power supply voltage	5±0.5VDC
	The power consumption of current	6.5 mA/each hall chip
	Resolution	Infinite
	Maximum voltage	15 VDC continuous
	Reverse polarity maximum voltage	14.5VDC
	Load resistance	5KΩ
	The median voltage (no-load)	48～52%Vs
Potentiometer	Power supply voltage	DC24V
	Power supply current	<20mA
	Resolution	Infinite
	Resistance (10%)	5KΩ, 10KΩ
	Electrical rotation	±32°
	Output voltage range (Relative voltage)	0～100%；10～90%
	Maximum voltage	48%～52%
	Potentiometer maximum load of voltage	32VDC
	Maximum power consumption (25 ℃)	0.25W
	The direction of the switch	Switch position ±3°

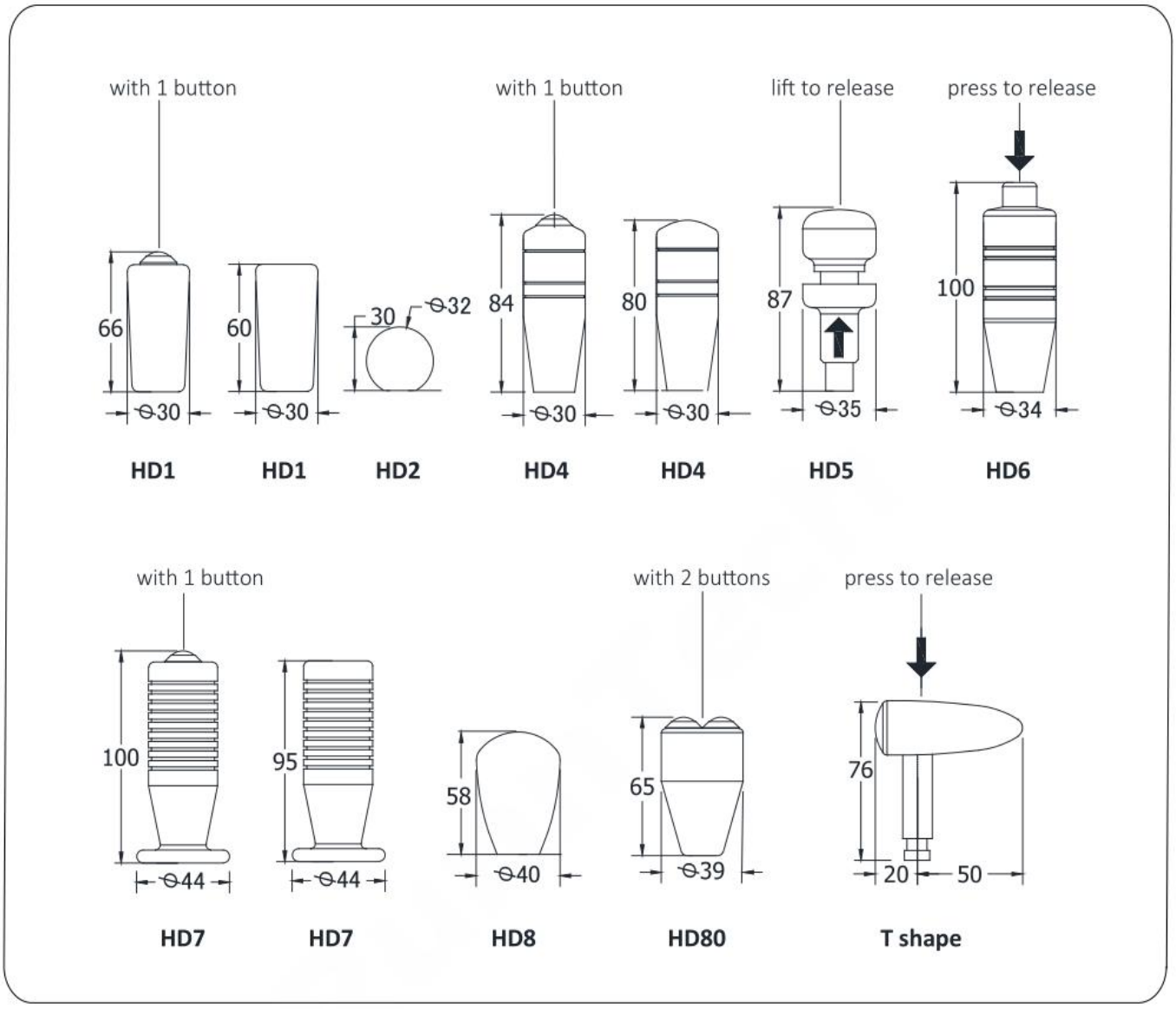
Product Configuration

No.	Project	Content	
1	Series	LT200 Industrial Joystick	
2	Operation Method	M-friction T-automatic spring return	MS-friction with self lock (HD5) TS-spring return with self lock
3	Operation Direction	 1. single axis "—"	
4	Electrical Output Form Table LT200-1	Hall Output	HV1:DC5V 0-2.5-5V
			HV2:DC5V 0.5-2.5-4.5V
			HV3:DC5V 1.0-2.5-4.0V
			HV4:DC5V 1.25-2.5-3.75V
		Potentiometer Output	P1:Ordinary two directions output
			P2:Ordinary single direction output
			V1:DC24V-10V~0~+10V voltage output
			V2:DC24V+10V~0~+10V voltage output
			V3:DC24V-5V~0~+5V voltage output
			V4:DC24V+5V~0~+5V voltage output
			V5:DC24V 0~+10V voltage output
			V6:DC24V 0~+5V voltage output
			I1:4 wire4mA~12mA~20mA current output
			I2:4 wire20mA~4mA~20mA current output
5	Potentiometer Type	1K,2K,5K,10K,20K,H-Hall	
6	Quantity of Switch signal	01,02,03,	
7	Common Closed Position		

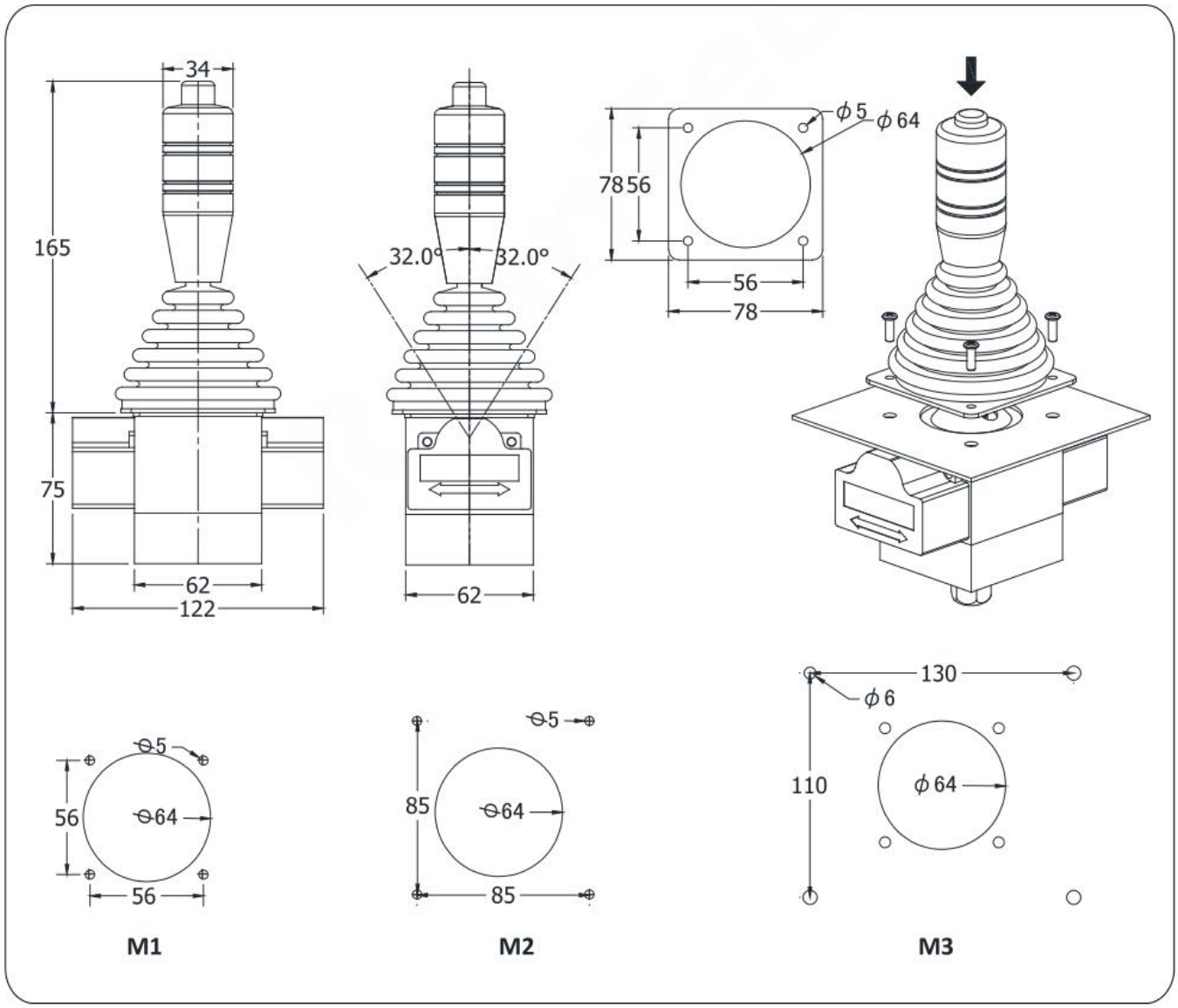
		
8	Handle Type	HD1, HD2, HD4, HD5, HD6, HD7, HD8, HD80 and T Shape
9	Mounting dimensions	M1：56×56, central hole 63 M2：85×85, central hole 63 M3：130×110, central hole 63
10	Remark	Line with, special instructions, do not need not.

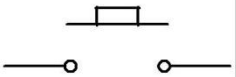
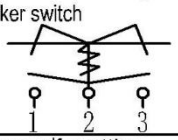
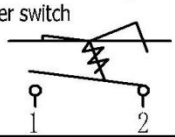
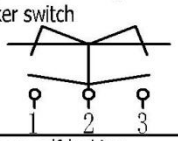
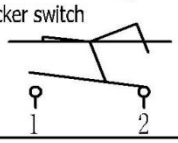


Optional Handle



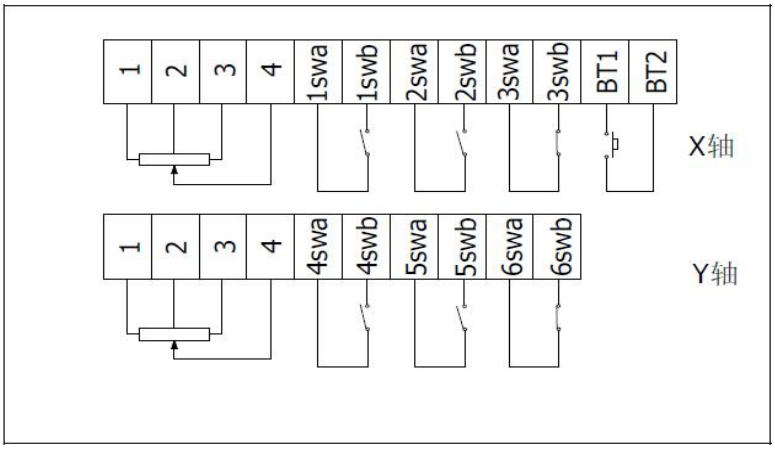
Optional Mounting dimensions



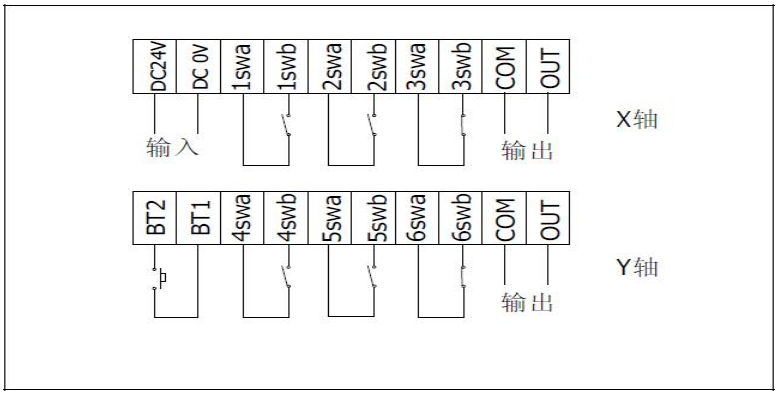
No.	Type	Description	Parameter	Additional
1	BT	Self-resetting button 	24V2A	Button color: Red–R Black–B Yellow–Y Green–G
2	BS	Self-locking button 	24V2A	Button color: Red–R Black–B Yellow–Y Green–G
3	QTOT	3 gears self-resetting rocker switch 	3 pins 250V15A	
4	QTO	2 gears self-resetting rocker switch 	2 pins 250V15A	
5	QSOS	3 gears self-locking rocker switch 	3 pins 250V15A	
6	QSO	2 gears self-locking rocker switch 	2 pins 250V15A	
7	QSOT	3 gears with one side self-resetting, another side self-locking	3 pins 250V15A	
8	YS100	Hall Finger dial wheel	input5V output0–2.5–5V	Warning: Do not bring magnetic objects close
9	YS100 (□)	Potentiometer	1KΩ 2KΩ 5KΩ 10KΩ 20KΩ	

Wiring instructions

Potentiometer output



DC24V Power,voltage,current output



Hall type voltage output