

LT50 Series Single Axis Joystick

Product Features

- Rugged components designed for the construction environment
- Potentiometer tracks for angular-detecting
- Friction held and spring return
- Center-lock is a mechanical option
- Providing optional grips with different shapes
- The number and position of the switches are customized designed
- PWM output drives proportional solenoid valve
- Depending on the proportional solenoid valve to set starting current, maximum current and PWM frequency
- CAN output is an option



Application

Typically used in cranes, loaders, excavators, forklifts, tractors, harvesters and aerial work platforms.

Technical Information

Electrical Data

Potentiometric sensors

supply voltage	<36Vdc
Total resistance value	200Ω, 1KΩ
Potentiometer loading maximum voltage	32Vdc
Potentiometer allows maximum power consumption	2W (200Ω), 0.5W(1KΩ)

Direction switch

Load capacity	10A at 30Vdc (resistive load)
Initial angle	±5°
Contact resistance	<200Ω

Micro Switch

Load capacity	10A at 30Vdc (resistive load)
Service life	Over 30 million times (mechanical) Over 200,000 times (electrical)
Insulation resistance	>100M Ω(500Vdc Insulation Resistance Meter)
Initial angle	±3°~±5°

Digital scaling drive

Supply voltage	9~36Vdc
Output driving	The maximum current of two PWM channels is 3A
PWM frequency	100HZ~1000HZ
Minimum Current	0~0.4A
Maximum Current	0.4~3A

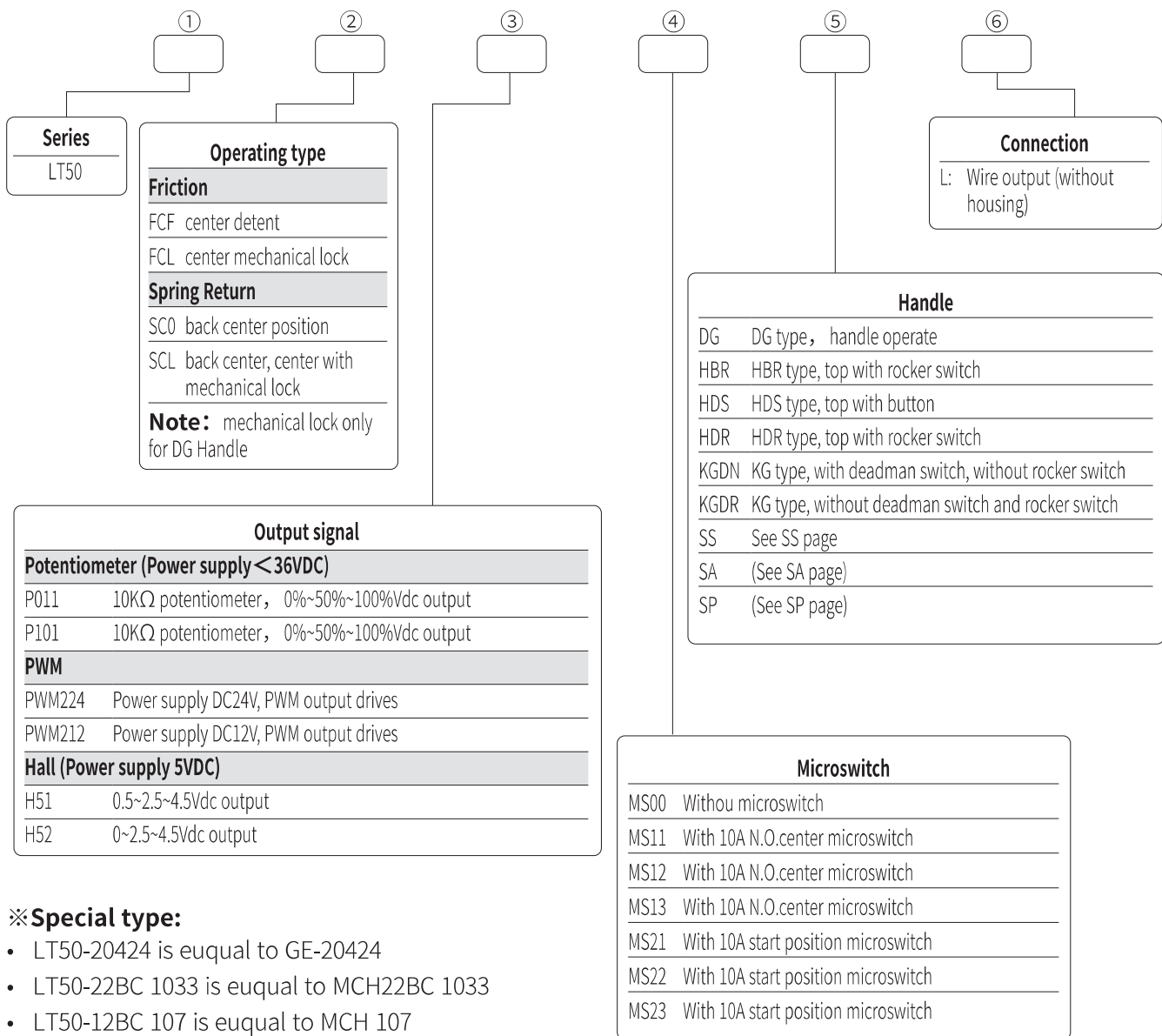
Mechanical features

Travel angle	±20°
Operating type	Spring return, Friction Held
Breakout force	5N
Operating force(max)	11N
Maximum allowable force	>300N
Expecting life	>2 Million Cycles (Potentiometer)
Weight	470g (Without handle)

Environmental data

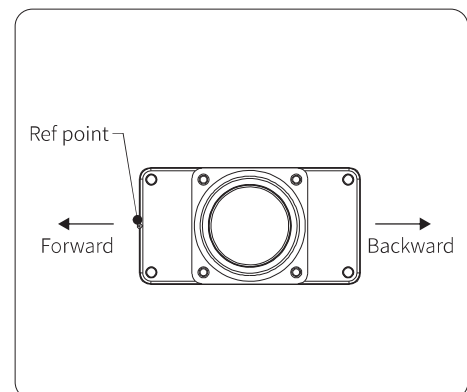
Operating Temperature	-30°C~+70°C
Storage Temperature	-40°C~+85°C
Protection level IP65	(Above the flange)

Product Configuration

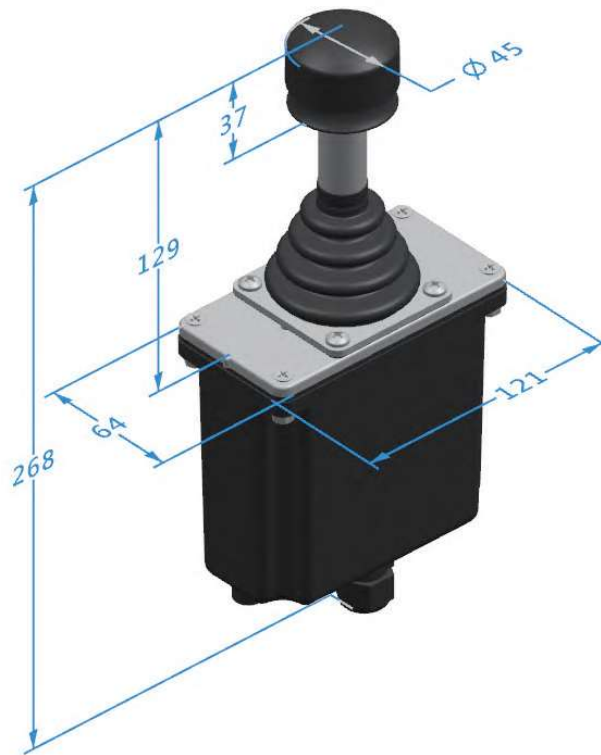


Electrical Connections

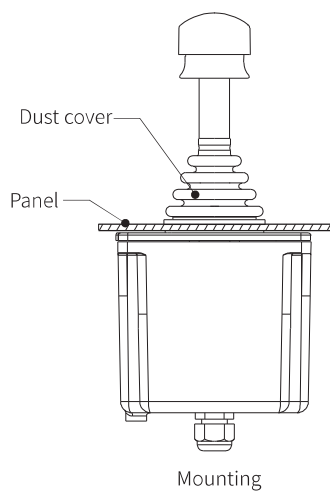
Pin	PWM	Potentiometer
1	9-36V(VCC)	GND
2	Power supply 0V	VIN
3	Forward direction PWM drive output	OUT
4	Backward direction PWM drive output	N/A
5	PWM output common end, power supply 0V	N/A
6	Medium micro switch COM	Medium micro switch COM
7	Medium micro switch NO	Medium micro switch NO
8	Forward switch COM (N.O.)	Forward micro switch COM
9	Backward switch (N.O.)	Forward micro switch NO
10	Backward switch COM (N.O.)	Backward micro switch COM (N.O.)
11	Backward switch NO (N.O.)	Backward micro switch NO(N.O.)



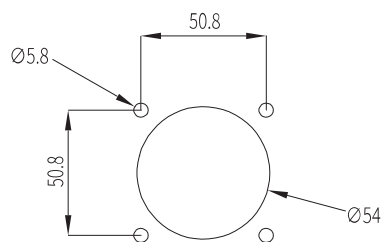
Dimensions



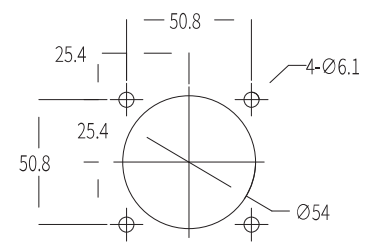
Product Installation



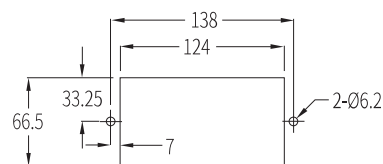
Mounting



Customer Panel Intallation Hol
(standard size, apply to DG & HB handle)



Standard installation diagram



SS handle installation diagram

Note: SS, KG Handles need special installation panel, the hole is 138-123X64mm.