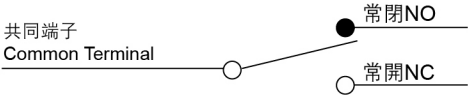


HL-7 卧式限位開關
Horizontal Limit Switch

特點 Features

- 引動器種類廣泛，其中包含動作位置可調整的款式 (如 HL-7121)
- 外殼包覆強化塑膠、防水、防油，較HM型卧式限位開關有更高的機械強度，耐衝擊
- Various actuators and some with adjustable operating position (such as HL-7121)
- Shell covered with intensive plastic for water-proof and oil-proof. The mechanical strength is better than HM series of horizontal limit switch

接點型式 Contact Form



額定值 Ratings

額定電壓 Rated Voltage	非電感性負載 Noninductive Load (A)				電感性負載 Inductive Load (A)				突入電流 (A) Inrush Current	
	電阻性負載 Resistance Load	燈泡負載 Lamp Load			電感性負載 Inductive Load	馬達負載 Motor Load				
	NC	NO	NC	NO	NC	NO	NC	NO	NC	NO
125VAC	15	3	1.5		15	5	2.5		30 以下 max.	15 以下 max.
250VAC	15	2.5	1.25		15	3	1.5			
500VAC	3	1.5	0.75		2.5	1.5	0.75			
8VDC	15	3	1.5		15	5	2.5			
14VDC	15	3	1.5		10	5	2.5			
30VDC	6(2)	3	1.5		5	5	2.5			
125VDC	0.4	0.4	0.4		0.05	0.05	0.05			
250VDC	0.2	0.2	0.2		0.03	0.03	0.03			

注: 1、電感性負載: 功率因素=0.4:時間常數=7msec。
2、燈泡負載之突入電流為穩定狀態電流之10倍。
馬達負載之突入電流為穩定狀態電流之6倍。
3、帶彈簧系列產品，操作體的使用範圍為從彈簧的前端到彈簧全長的1/3以內。
NOTES: 1.Inductive load has a power factor of 0.4 min.(AC) and a time constant of 7 msec. max.(DC).
2.Lamp load has an inrush current of 10 times the steady-state current,while motor load has an inrush current of 6 times the steady-state current.
3.Product with spring, its usable range of operating part is within one third of the whole spring length from the front end of spring.

動作特性 Operating Characteristics

型號	Model	HL-7	HL-7100	HL-7110	HL-7310	HL-7311	HL-7312	HL-7120	HL-7140	HL-7121	HL-7141	HL-7124	HL-7144	HL-7166
操作力	Operating force	OF最大(Max.)	600g	600g	600g	600g	600g	150g	220g	180g	240g	200g	280g	120g
回彈力	Release force	RF最小(Min.)	100g	100g	100g	100g	100g	40g	60g	50g	80g	60g	100g	
預行程	Pre-travel	PT最大(Max.)	2.0mm	2.0mm	2.0mm	2.0mm	2.0mm	13.5mm	8.5mm	11.0mm	6.5mm	11mm	6.5mm	250mm
過行程	Over travel	OT最小(Min.)	0.8mm	5.0mm	6.0mm	6.0mm	6.0mm	4.0mm	2.5mm	3.0mm	2.0mm	3.0mm	2.0mm	11mm
行程移動分辨率	Movement differential	MD最大(Max.)	0.8mm	0.8mm	0.8mm	0.8mm	0.8mm	3.2mm	2.0mm	2.4mm	1.5mm	2.4mm	1.5mm	
動作位置	Operating position	OP(mm.)	30.5±0.8mm	44±1.2mm	21.8±1.2mm	33.3±1.2mm	33.3±1.2mm	25±1mm	25±1mm	40±1mm	40±1mm	50±1.2mm	50±1.2mm	
自由位置	Free Position	FP						35mm	32mm			46mm		56mm

規格 Specifications

操作速度 Operation speed	0.05mm 至 0.5m/s 0.05mm-0.5m/s
動作頻率 Operating frequency	電氣 :20 次 / 分 Electrical: 20 operations/min.
接點電阻 Contact resistance	25mΩ 以下 (初期) 25mΩ max. (initial value)
絕緣電阻 Insulation resistance	100mΩ 以上 (在 500VDC 以下) 100mΩ min. (at 500VDC)
電介強度 Dielectric Strength	非連續端子間:1,000VAC, 50/60Hz持續1分鐘 1000VAC, 50/60 Hz for 1 minute between terminals of the same polarity 載電流與無載電流零件間:1,500VAC, 50/60Hz持續1分鐘 1500VAC, 50/60 HZ for 1 minute between current-carrying and non-current-carrying metal parts 端子和接地之間:1,500VAC, 50/60Hz持續1分鐘 1500VAC, 50/60 HZ for 1 minute between each terminal and ground
振動 Vibration	誤動作耐久:10至55Hz, 1.5mm雙振幅 Malfunction Duration: 10-55Hz, 1.5mm double amplitude
衝擊 Shock	機械耐久 :1,000m/Sec²(約 100G' S) 誤動作耐久 :300m/Sec²(約 30G' S) Mechanical durable: 1, 000m/Sec² (about 100G' S) Malfunction: 300m/Sec² (about 30G' S)
周圍溫度 Ambient temperature	使用時:-20~+70℃ (沒有結冰) Using: -20~+70℃ (With no icing)
濕度 Humidity	< 95% RH
電氣壽命 Electrical life	500,000次以上 500,000 operations above
重量 Weight	約60g About 60g

HL-7 卧式限位開關

Horizontal Limit Switch

外觀和尺寸 Appearance and Dimension

HL-7121

HL-7141

HL-7120

HL-7140

HL-7124

HL-7144

HL-7100

HL-7110

HL-7310

HL-7311

HL-7312

HL-7166