

HMS/HLS/HNS 系列重载限位开关

特点

- 结实的锌合金外壳，或耐腐蚀的全不锈钢壳体，适用于恶劣环境
- 符合EN 60947-5-1, IEC 60947-5-1, UL508, NEMA250, CSA22.2 标准
- 多种可选的执行机构
- 重复精度高 (0.03mm 线性)
- 三种可选外壳：紧凑型、标准型、非插入式

参数

IEC 60947-5-1 / EN 90947-5-1						
电气额定值和使用类别	不同额定工作电压下的额定工作电流					控制容量 接通 分断
AC15 A600	120V	240V	380V	480V	600V	7200 720
	6A	3A	1.9A	1.5A	1.2A	
DC13 Q300	125VDC	250VDC				69 69
	0.55A	0.27A				

规格

操作速度	0.05mm-2m/s
额定电压/电流	10A/600V AC (EN60947-5-1) AC15 A600 / DC13 Q300
寿命	机械 1000万次 (最少) 电气 100万次 (最少)
环境温度	普通款 -28.9~+85°C (-20~185°F) 高温款 -28.9~+121°C (-20~250°F) 低温款 -40~+121°C (-40~250°F)
耐振动	25gn (10..150 Hz, 11ms) per IEC60068-2-6
耐冲击	60gn (9ms) per IEC 60068-2-27
绝缘强度	2200VAC for 1 分钟
短路保护	10A fuse
终端线	12-22AWG (2.05-0.644mm ²)
保护等级	IP 67 conforming to IEC 60529, NEMA Types 2, 4, 6, 6P, 12, 13

HMS
紧凑型



HLS
标准型



HNS
非插入式



HNS
不锈钢壳体



选型指南

HLS	-	1	A	-	04	A	-	F	-	UR	-	SS	
本体样式		接点形式	1/2NPT 螺纹孔 (其它类型请联系我们)		执行机构	杆臂形式		温度选项		全不锈钢壳体 (HNS可选)		转杆轴直径	
HLS: 标准型		1: SPDT (1NO/1NC) 快动			两位数字 或两位数字 加一个字母	B: 标准		空白: 标准		空白: 无指示灯		空白: 11.0mm	
HMS: 紧凑型		2: DPDT (2NO/2NC) 快动				A: 高精度		F: 高温款		UR: 红色指示灯 宽电压 (12V-270V)		(AB): 8.0mm	
HNS: 非插入式		3: DPDT (2NO/2NC) 两级动作				N: 轻动作力		FS: 低温款				(CH): 7.0mm	
		4: DPDT (2NO/2NC) 左右分别动作				D: 高精度轻动作力						(HW): 7.3mm	
		5: 4NO 慢动 (只适用于HNS)				C: 保持式							
		6: 3NO/1NC 慢动 (只适用于HNS)				TB: 左右分别动作							
		7: 2NO/2NC 慢动 (只适用于HNS)				TA: 左右分别动作 (高精度)							
		8: 1NO/3NC 慢动 (只适用于HNS)				E: 360度旋转							
		9: 4NC 慢动 (只适用于HNS)											

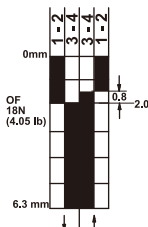
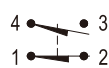
HMS/HLS/HNS 系列重载限位开关

柱塞式



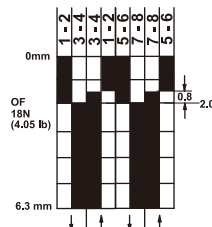
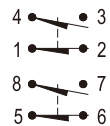
HLS/HMS/HNS-1

1NO/1NC



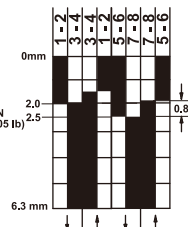
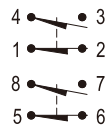
HLS/HMS/HNS-2

2NO/2NC



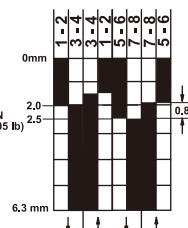
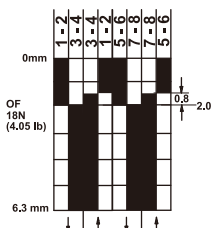
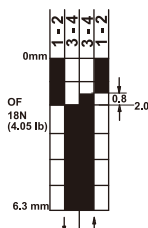
HLS/HMS/HNS-3

2NO/2NC (两级动作)



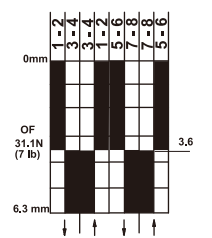
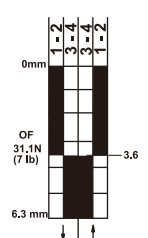
* 注: 01款的动作力是 31.7N (7 lb)

侧柱塞式

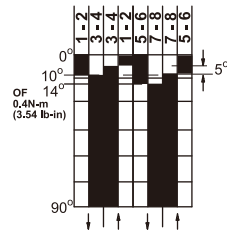
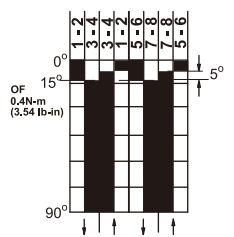
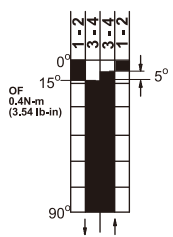


侧柱塞式 (保持式)

10H 型

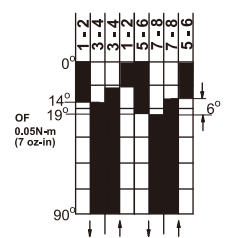
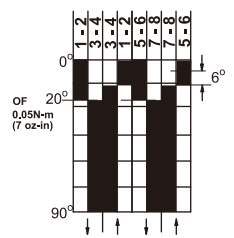
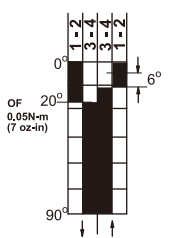


盘簧式



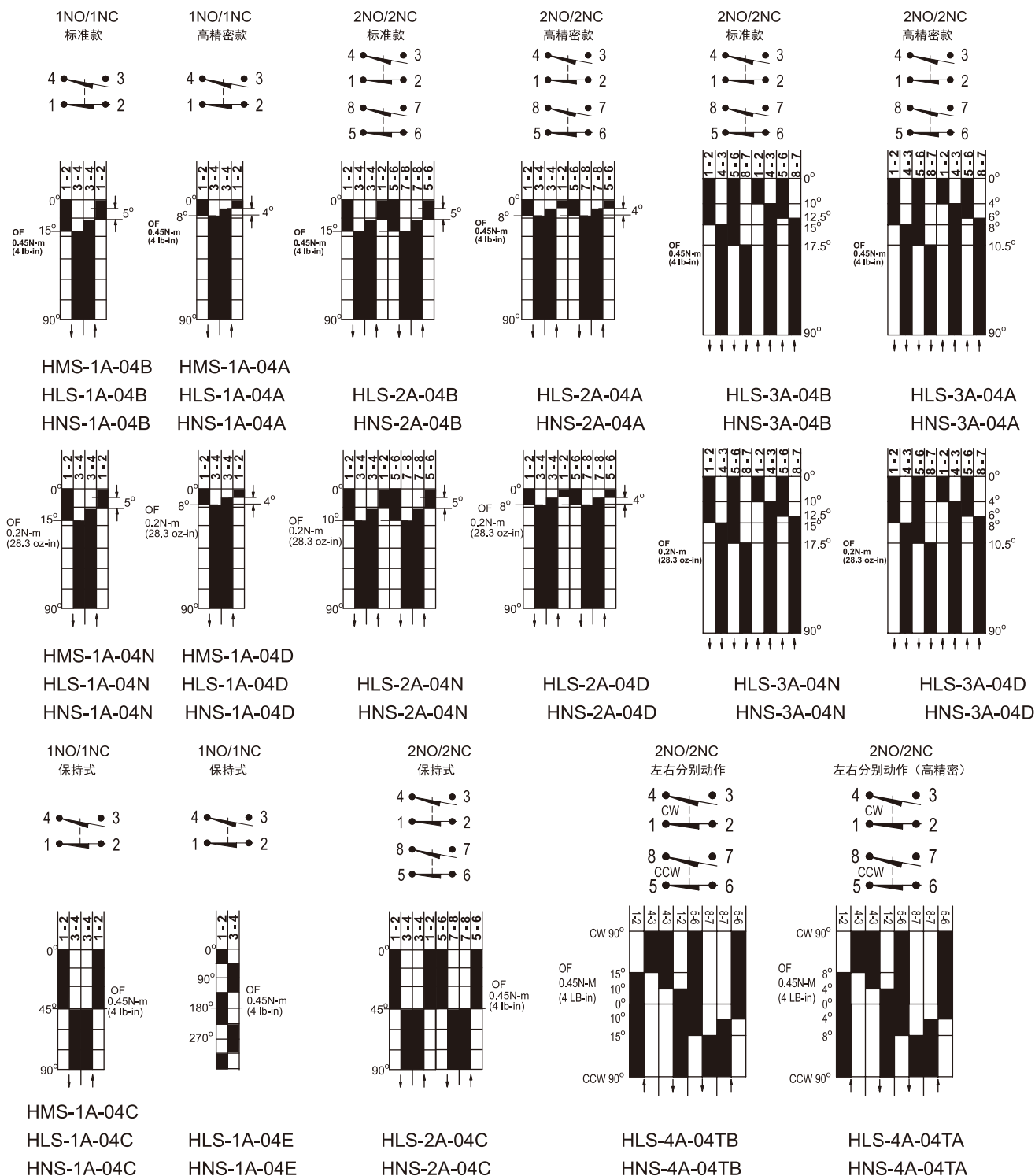
细盘簧式

68 型

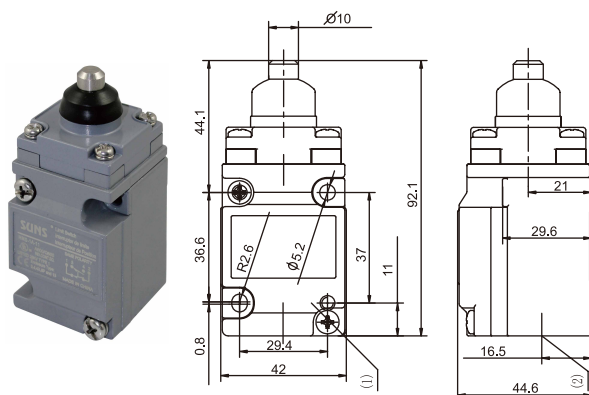


HMS/HLS/HNS 系列重载限位开关

转动式头部行程动作图:

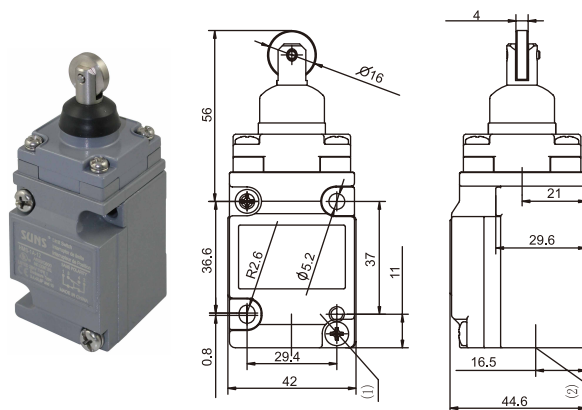


HMS 系列重载限位开关 (紧凑型)



型号

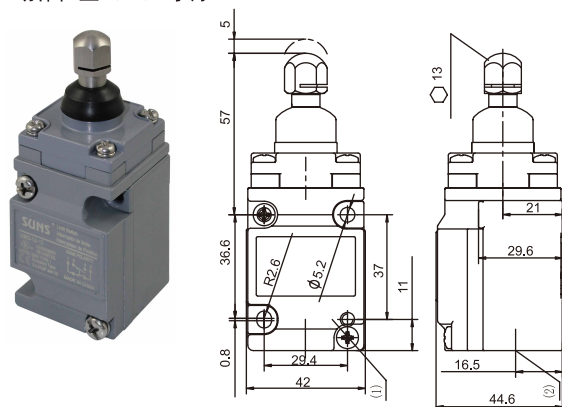
HMS-1A-11: 1NO/1NC



型号

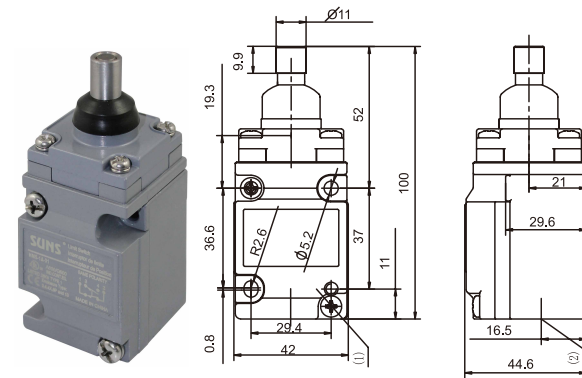
HMS-1A-12: 1NO/1NC

动作位置 (OP) 可调



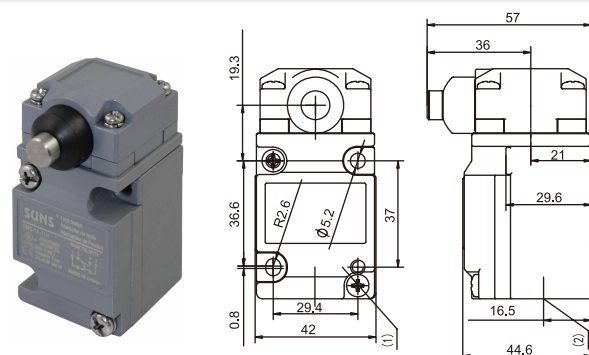
型号

HMS-1A-13: 1NO/1NC



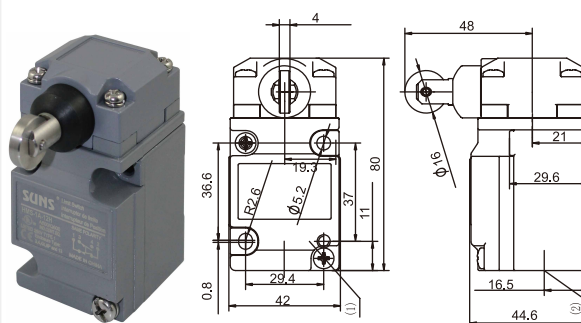
型号

HMS-1A-01: 1NO/1NC



型号

HMS-1A-11H: 1NO/1NC



型号

HMS-1A-12H: 1NO/1NC

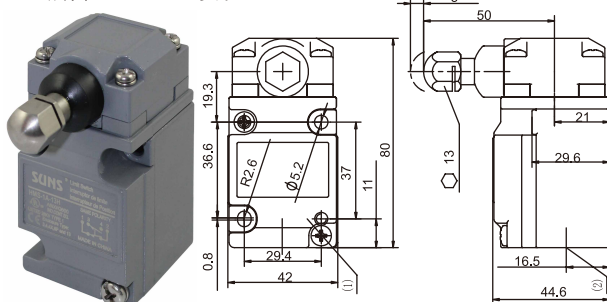
* 注: 用户可将滚轮调为水平方向

* 注: (1): 背面安装螺孔, 两个10-24 UNC

(2): 电缆出线孔, A:1/2"NPT

HMS 系列重载限位开关 (紧凑型)

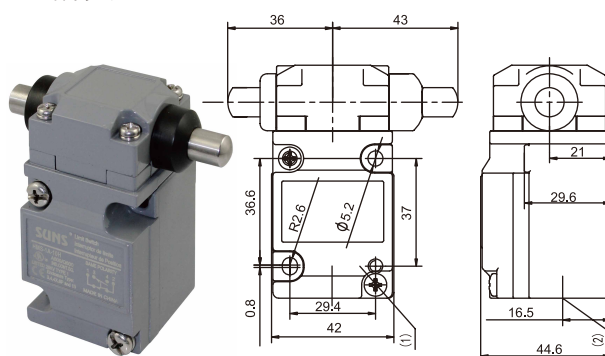
动作位置 (OP) 可调



型号

HMS-1A-13H: 1NO/1NC

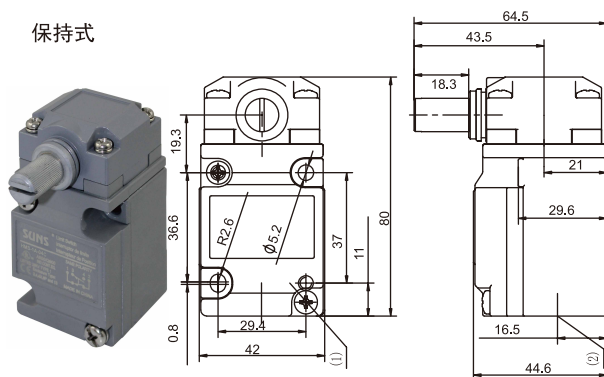
保持式



型号

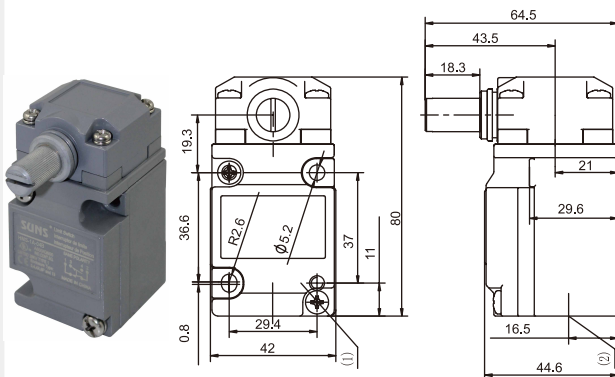
HMS-1A-10H: 1NO/1NC

保持式



型号

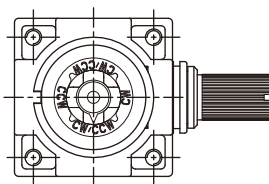
HMS-1A-04C: 1NO/1NC



型号

HMS-1A-04B: 1NO/1NC 标准型
HMS-1A-04A: 1NO/1NC 高精型
HMS-1A-04N: 1NO/1NC 轻动作力型
HMS-1A-04D: 1NO/1NC 高精型, 轻动作力型

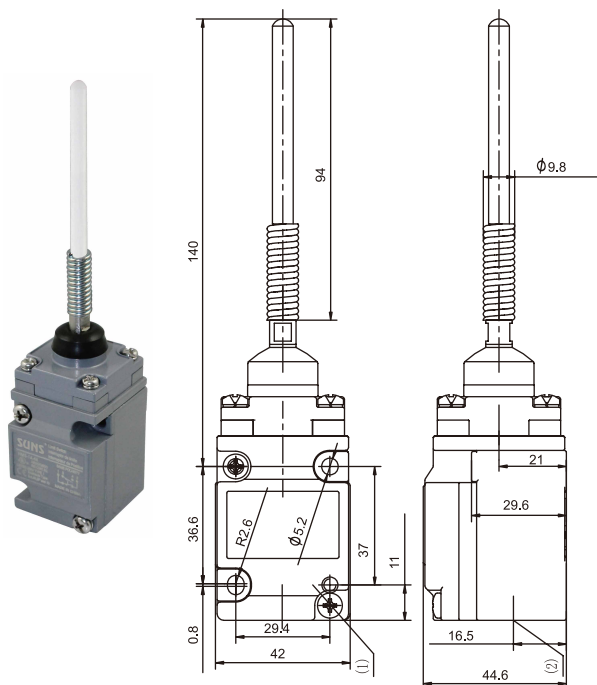
头部出厂设置: 顺时针和逆时针都触发开关。用户可以卸下头部, 拉出头部机构, 旋转到需要的相应指示。可实现只是顺时针或逆时针方向触发开关。



* 注: (1): 背面安装螺孔, 两个10-24 UNC

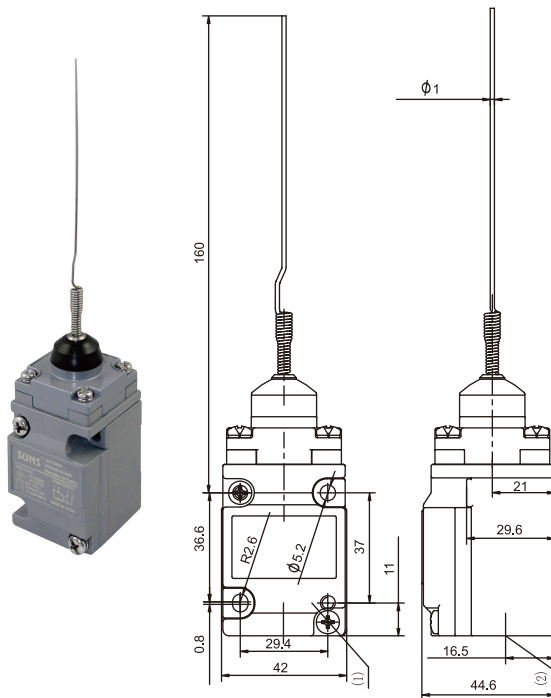
(2): 电缆出线孔, A: 1/2"NPT

HMS 系列重载限位开关 (紧凑型)



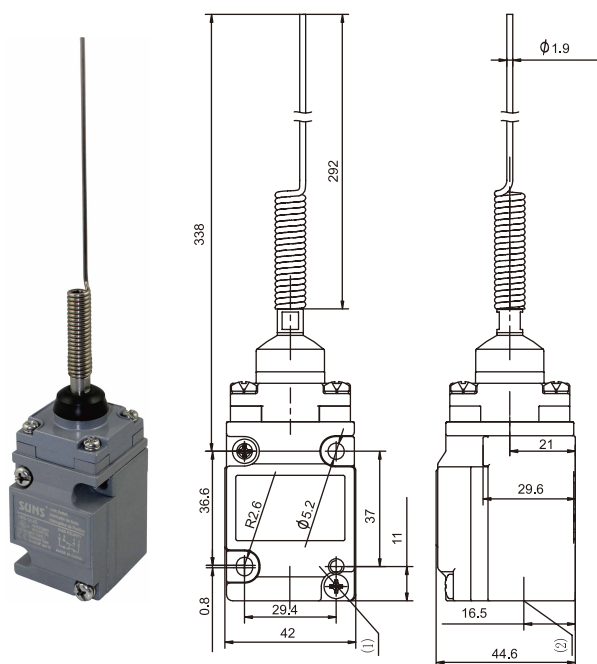
型号

HMS-1A-66: 1NO/1NC



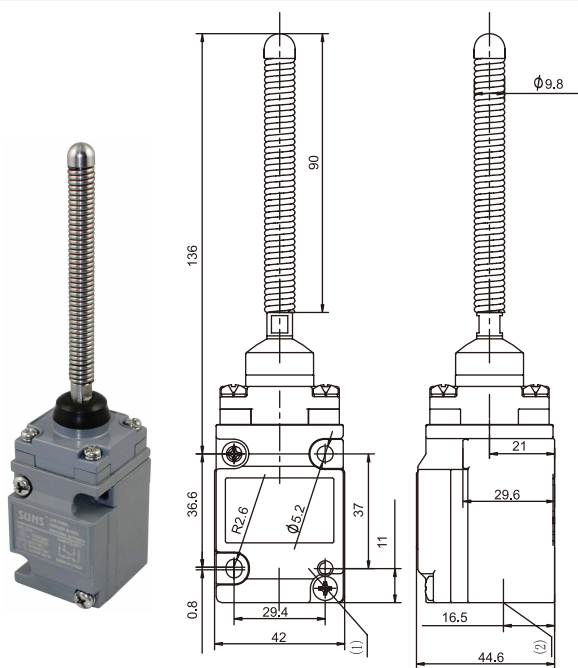
型号

HMS-1A-68: 1NO/1NC



型号

HMS-1A-69: 1NO/1NC



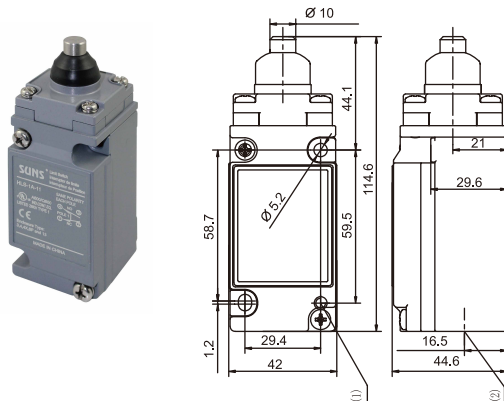
型号

HMS-1A-00: 1NO/1NC

* 注: (1): 背面安装螺孔, 两个10-24 UNC

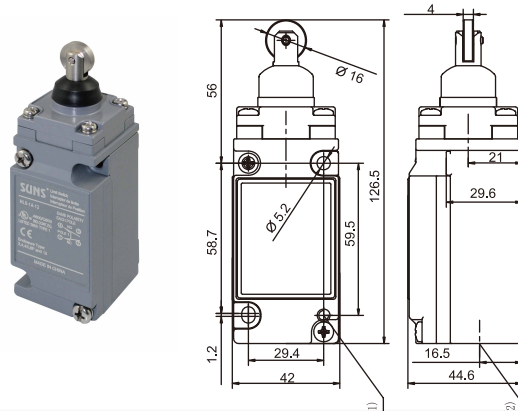
(2): 电缆出线孔, A: 1/2" NPT

HLS 系列重载限位开关



型号

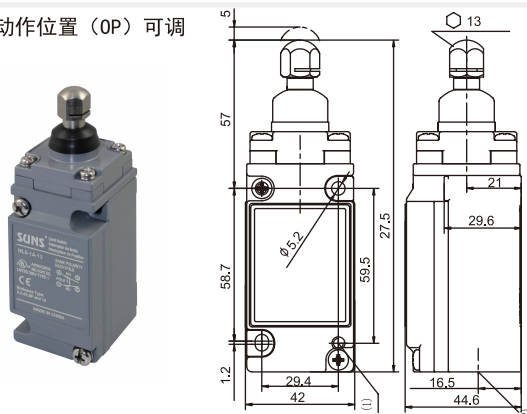
HLS-1A-11: 1NO/1NC
 HLS-2A-11: 2NO/2NC
 HLS-3A-11: 2NO/2NC (两级动作)



型号

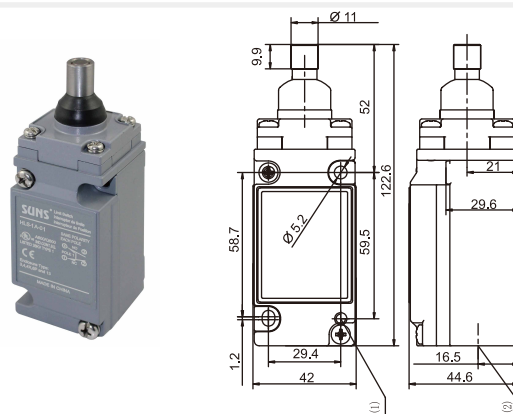
HLS-1A-12: 1NO/1NC
 HLS-2A-12: 2NO/2NC
 HLS-3A-12: 2NO/2NC (两级动作)

动作位置 (OP) 可调



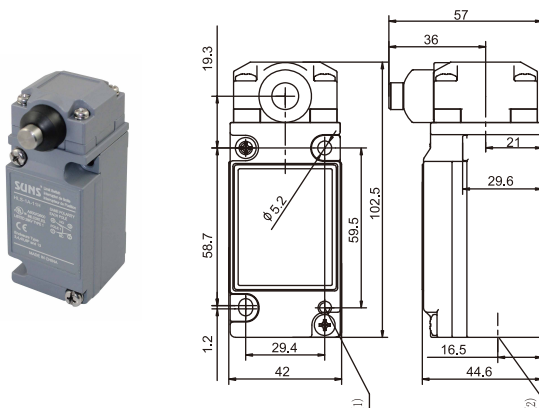
型号

HLS-1A-13: 1NO/1NC
 HLS-2A-13: 2NO/2NC
 HLS-3A-13: 2NO/2NC (两级动作)



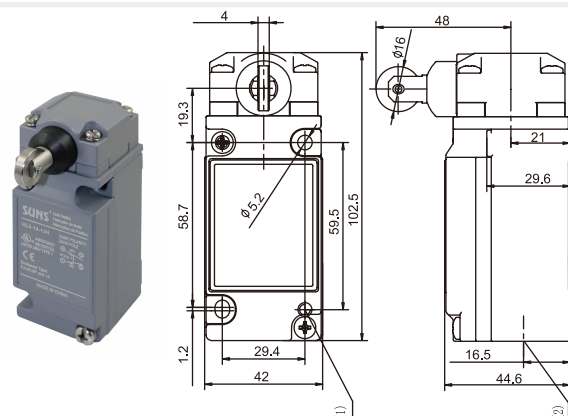
型号

HLS-1A-01: 1NO/1NC
 HLS-2A-01: 2NO/2NC
 HLS-3A-01: 2NO/2NC (两级动作)



型号

HLS-1A-11H: 1NO/1NC
 HLS-2A-11H: 2NO/2NC
 HLS-3A-11H: 2NO/2NC (两级动作)



* 注: 用户可将滚轮调为水平方向

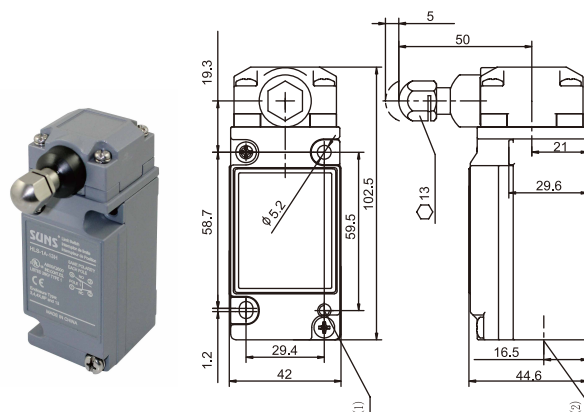
型号

HLS-1A-12H: 1NO/1NC
 HLS-2A-12H: 2NO/2NC
 HLS-3A-12H: 2NO/2NC (两级动作)

* 注: (1): 背面安装螺孔, 两个10-24 UNC

(2): 电缆出线孔, A:1/2"NPT

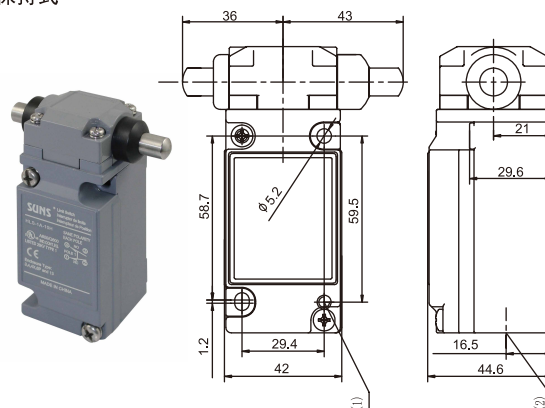
HLS 系列重载限位开关



型号

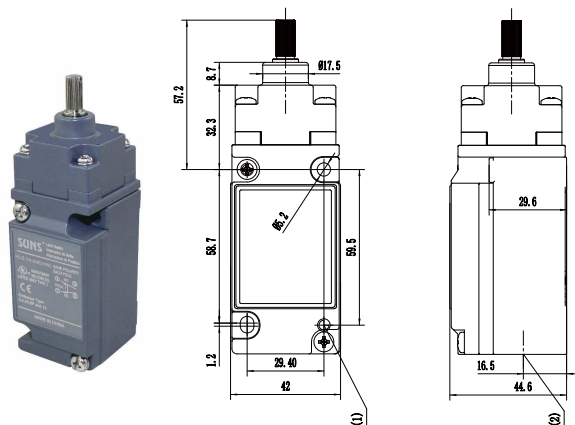
HLS-1A-13H: 1NO/1NC
 HLS-2A-13H: 2NO/2NC
 HLS-3A-13H: 2NO/2NC (两级动作)

保持式



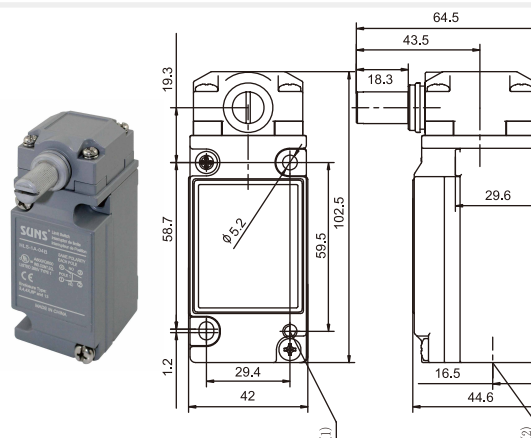
型号

HLS-1A-10H: 1NO/1NC
 HLS-2A-10H: 2NO/2NC



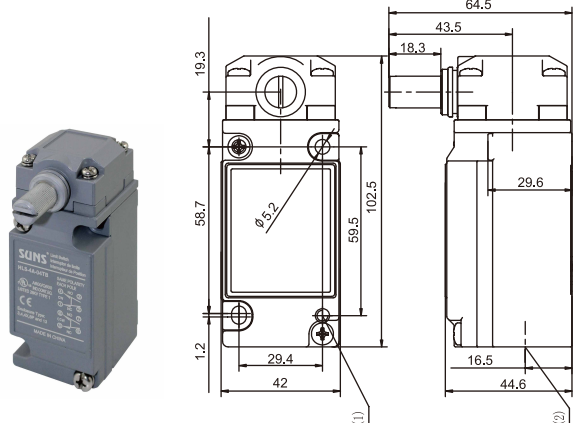
型号

HLS-1A-05B(HW): 1NO/1NC
 HLS-2A-05B(HW): 2NO/2NC



型号

HLS-1A-04B:	1NO/1NC	标准型
HLS-1A-04A:	1NO/1NC	高精密型
HLS-1A-04N:	1NO/1NC	轻动作力型
HLS-1A-04D:	1NO/1NC	高精度, 轻动作力型
HLS-2A-04B:	2NO/2NC	标准型
HLS-2A-04A:	2NO/2NC	高精密型
HLS-2A-04N:	2NO/2NC	轻动作力型
HLS-2A-04D:	2NO/2NC	高精度, 轻动作力型
HLS-3A-04B:	2NO/2NC	标准型 (两级动作)
HLS-3A-04A:	2NO/2NC	高精密型 (两级动作)
HLS-3A-04N:	2NO/2NC	轻动作力型 (两级动作)
HLS-3A-04D:	2NO/2NC	高精度, 轻动作力型 (两级动作)



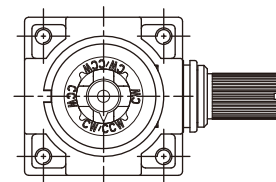
型号

左右分别动作

HLS-4A-04TA: 2NO/2NC (高精密型)
 HLS-4A-04TB: 2NO/2NC

保持式

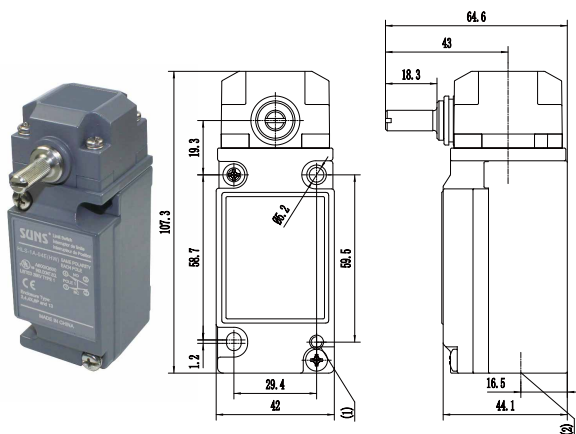
HLS-1A-04C: 1NO/1NC
 HLS-2A-04C: 2NO/2NC



头部出厂设置: 顺时针和逆时针都触发开关。用户可以卸下头部, 拉出头部机构, 旋转到需要的相应指示。可实现只是顺时针或逆时针方向触发开关。

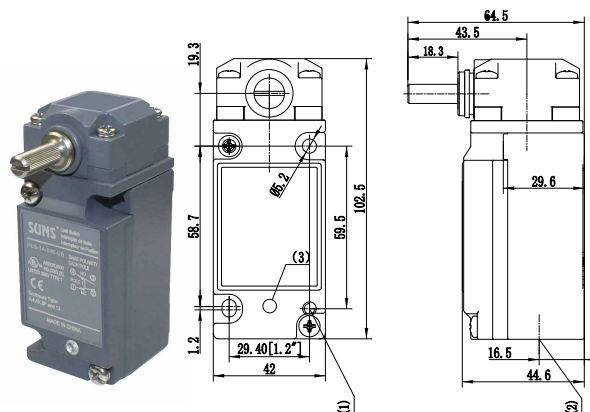
* 注: (1): 背面安装螺孔, 两个10-24 UNC (2): 电缆出线孔, A: 1/2"NPT (3): 状态指示灯

HLS 系列重载限位开关



型号

HLS-1A-04E: 1NO/1NC
 HLS-2A-04E: 2NO/2NC
 HLS-3A-04E: 2NO/2NC (两级动作)

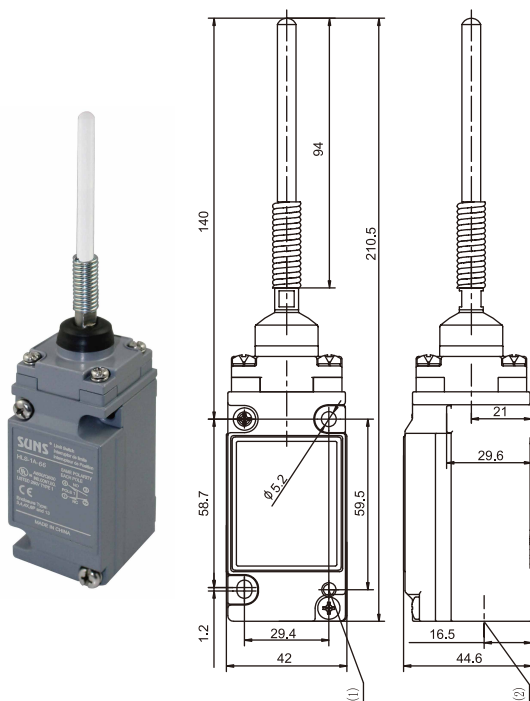


型号

HLS-1A-04E-UR(HW): 1NO/1NC
 HLS-2A-04E-UR(HW): 2NO/2NC

* 注：（1）：背面安装螺孔，两个10-24 UNC （2）：电缆出线孔，A:1/2"NPT （3）：状态指示灯

HLS 系列重载限位开关

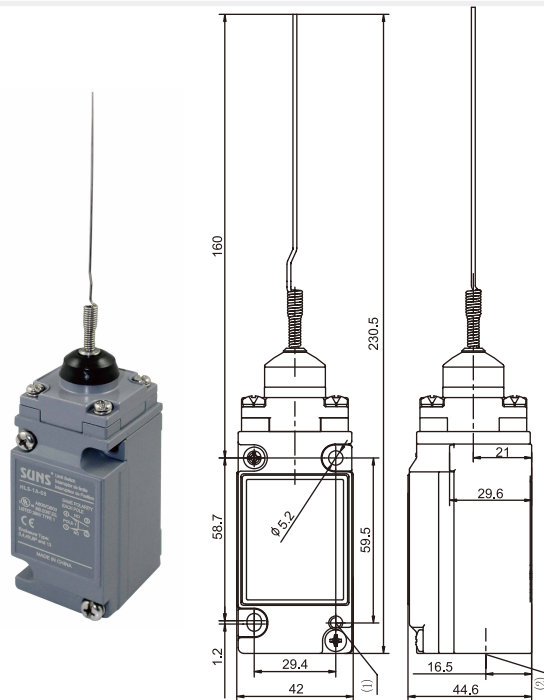


型号

HLS-1A-66: 1NO/1NC

HLS-2A-66: 2NO/2NC

HLS-3A-66: 2NO/2NC (两级动作)

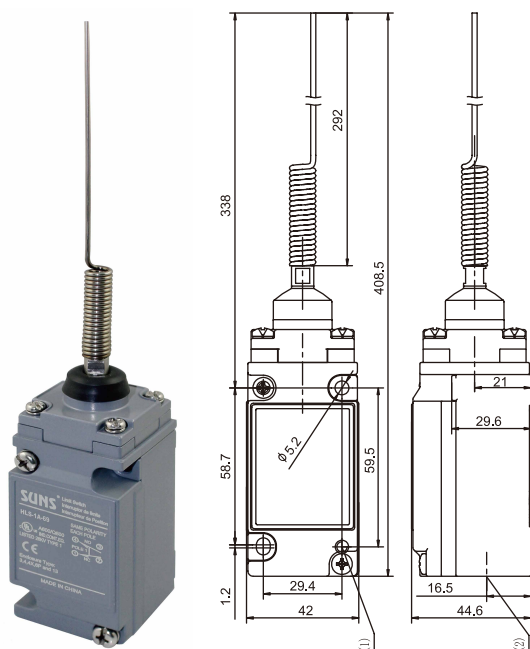


型号

HLS-1A-68: 1NO/1NC

HLS-2A-68: 2NO/2NC

HLS-3A-68: 2NO/2NC (两级动作)

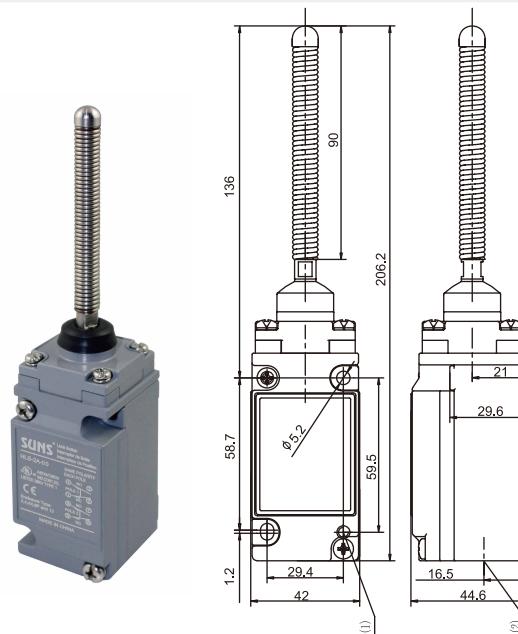


型号

HLS-1A-69: 1NO/1NC

HLS-2A-69: 2NO/2NC

HLS-3A-69: 2NO/2NC (两级动作)



型号

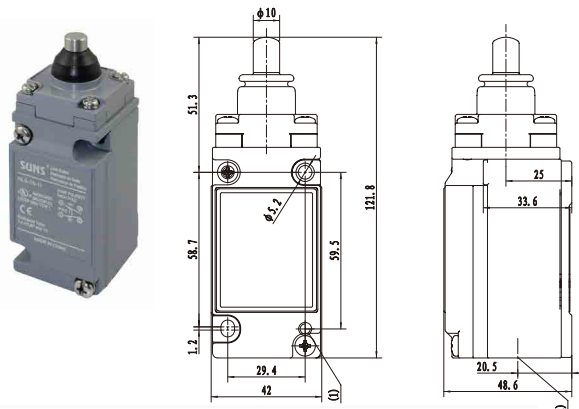
HLS-1A-00: 1NO/1NC

HLS-2A-00: 2NO/2NC

HLS-3A-00: 2NO/2NC (两级动作)

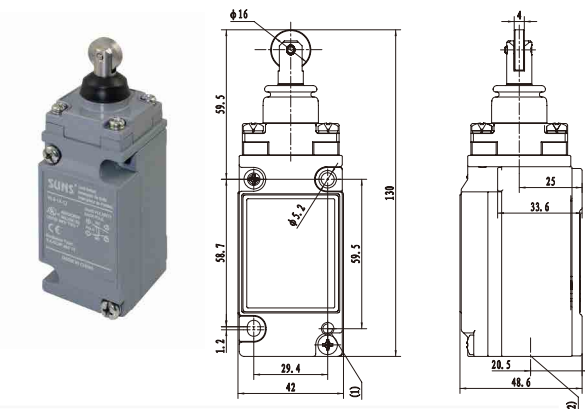
* 注: (1): 背面安装螺孔, 两个10-24 UNC (2): 电缆出线孔, A:1/2"NPT (3): 状态指示灯

HLS(AB) 系列重载限位开关



型号

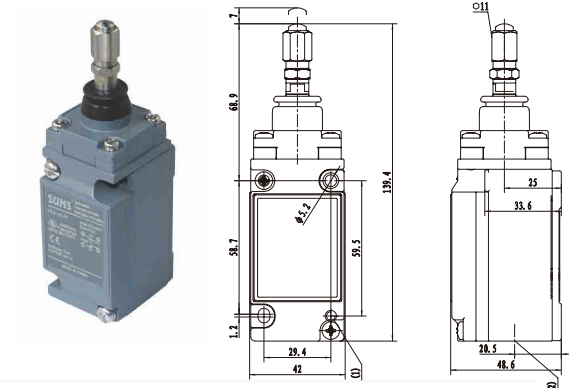
HLS-1A-11(AB): 1NO/1NC
 HLS-2A-11(AB): 2NO/2NC
 HLS-3A-11(AB): 2NO/2NC (两级动作)



型号

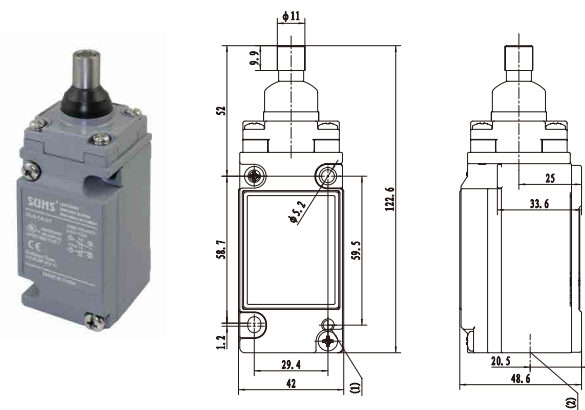
HLS-1A-12(AB): 1NO/1NC
 HLS-2A-12(AB): 2NO/2NC
 HLS-3A-12(AB): 2NO/2NC (两级动作)

动作位置 (0P) 可调



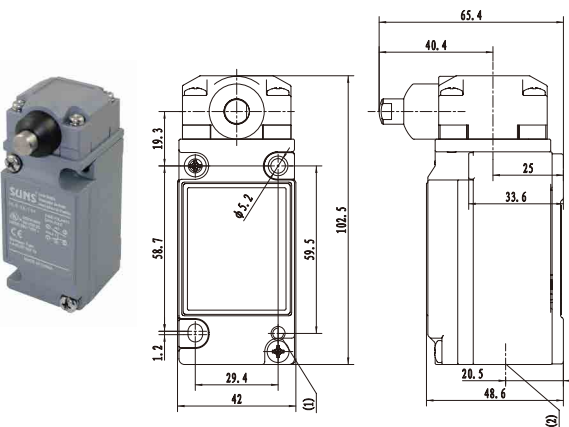
型号

HLS-1A-13(AB): 1NO/1NC
 HLS-2A-13(AB): 2NO/2NC
 HLS-3A-13(AB): 2NO/2NC (两级动作)



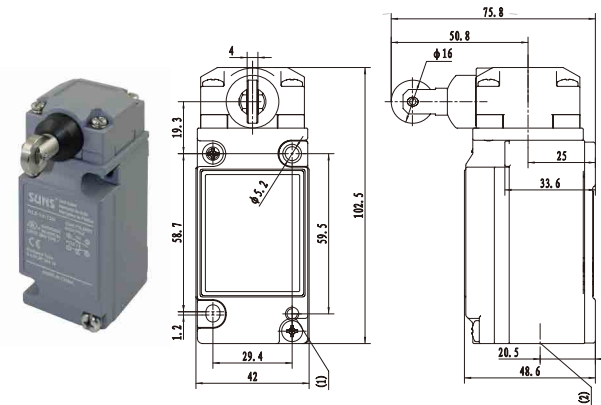
型号

HLS-1A-01(AB): 1NO/1NC
 HLS-2A-01(AB): 2NO/2NC
 HLS-3A-01(AB): 2NO/2NC (两级动作)



型号

HLS-1A-11H(AB): 1NO/1NC
 HLS-2A-11H(AB): 2NO/2NC
 HLS-3A-11H(AB): 2NO/2NC (两级动作)



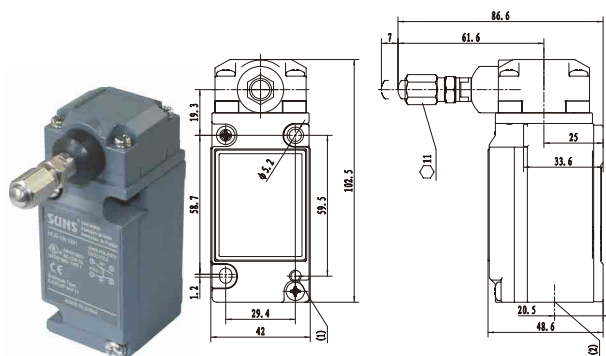
* 注: 用户可将滚轮调为水平方向

型号

HLS-1A-12H(AB): 1NO/1NC
 HLS-2A-12H(AB): 2NO/2NC
 HLS-3A-12H(AB): 2NO/2NC (两级动作)

* 注: (1): 背面安装螺孔, 两个10-24 UNC (2): 电缆出线孔, A: 1/2"NPT (3): 状态指示灯

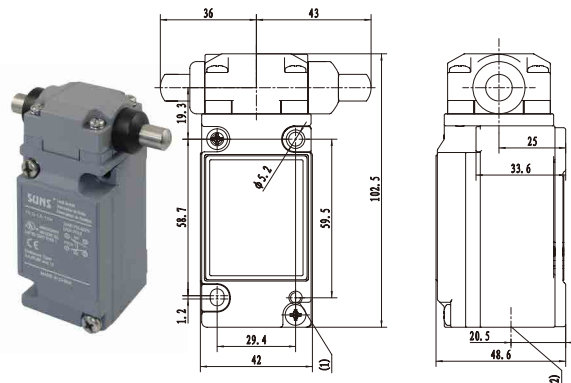
HLS(AB) 系列重载限位开关



型号

HLS-1A-13H(AB): 1NO/1NC
HLS-2A-13H(AB): 2NO/2NC
HLS-3A-13H(AB): 2NO/2NC (两级动作)

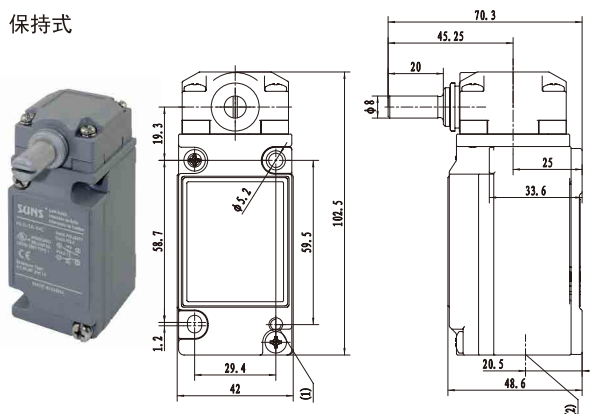
保持式



型号

HLS-1A-10H(AB): 1NO/1NC
HLS-2A-10H(AB): 2NO/2NC

保持式



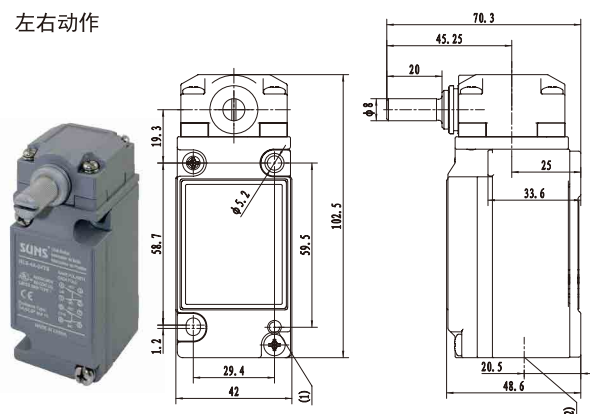
型号

HLS-1A-04C(AB): 1NO/1NC
HLS-2A-04C(AB): 2NO/2NC

型号

HLS-1A-04B(AB): 1NO/1NC 标准型
HLS-1A-04A(AB): 1NO/1NC 高精型
HLS-1A-04N(AB): 1NO/1NC 轻动作力型
HLS-1A-04D(AB): 1NO/1NC 高精型, 轻动作力型
HLS-2A-04B(AB): 2NO/2NC 标准型
HLS-2A-04A(AB): 2NO/2NC 高精型
HLS-2A-04N(AB): 2NO/2NC 轻动作力型
HLS-2A-04D(AB): 2NO/2NC 高精型, 轻动作力型
HLS-3A-04B(AB): 2NO/2NC 标准型 (两级动作)
HLS-3A-04A(AB): 2NO/2NC 高精型 (两级动作)
HLS-3A-04N(AB): 2NO/2NC 轻动作力型 (两级动作)
HLS-3A-04D(AB): 2NO/2NC 高精型, 轻动作力型 (两级动作)

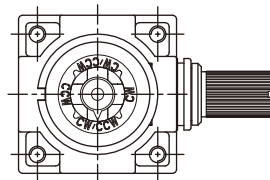
左右动作



型号

HLS-4A-04TA(AB): 2NO/2NC (高精型)
HLS-4A-04TB(AB): 2NO/2NC

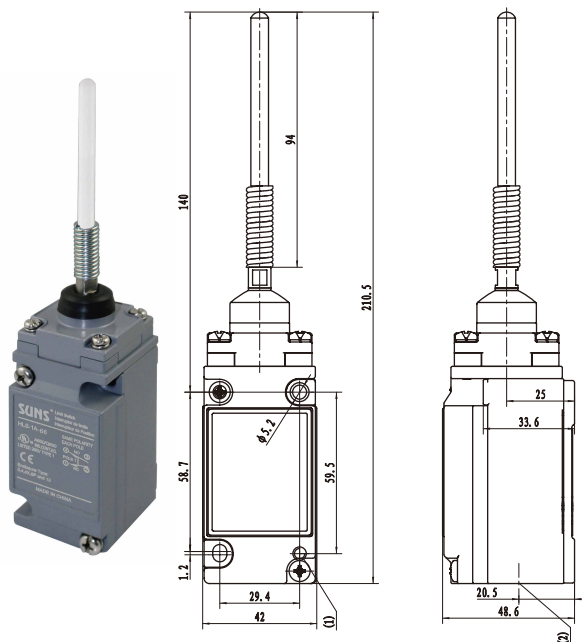
头部出厂设置: 顺时针和逆时针都触发开关。用户可以卸下头部, 拉出头部机构, 旋转到需要的相应指示。可实现只是顺时针或逆时针方向触发开关。



* 注: (1): 背面安装螺孔, 两个10-24 UNC

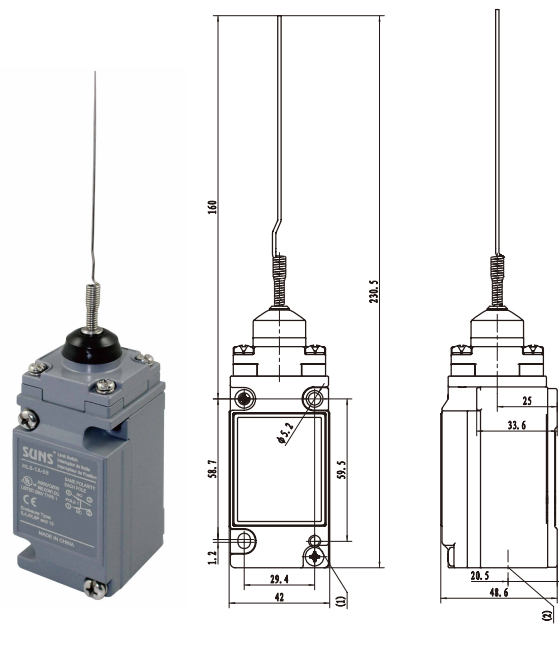
(2): 电缆出线孔, A: 1/2"NPT

HLS(AB) 系列重载限位开关



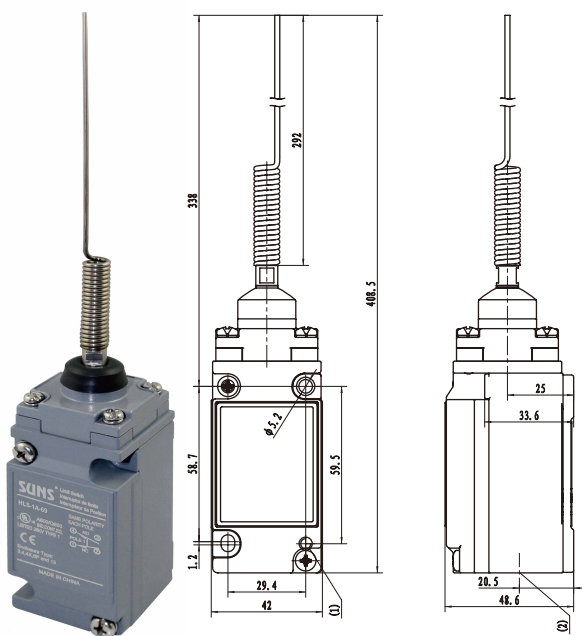
型号

HLS-1A-66(AB): 1NO/1NC
 HLS-2A-66(AB): 2NO/2NC
 HLS-3A-66(AB): 2NO/2NC (两级动作)



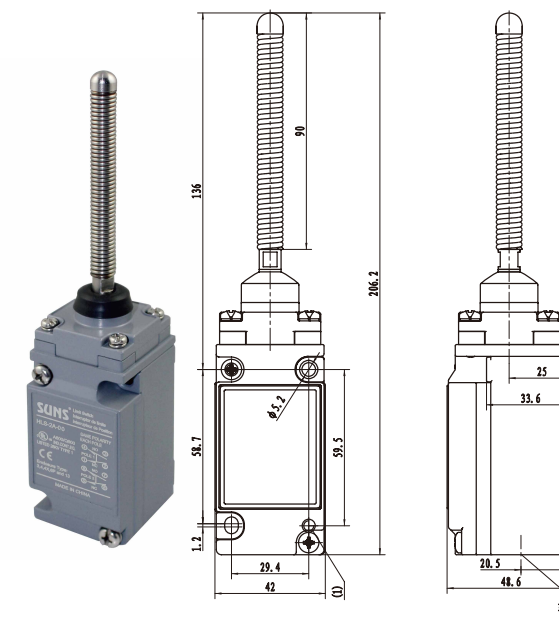
型号

HLS-1A-68(AB): 1NO/1NC
 HLS-2A-68(AB): 2NO/2NC
 HLS-3A-68(AB): 2NO/2NC (两级动作)



型号

HLS-1A-69(AB): 1NO/1NC
 HLS-2A-69(AB): 2NO/2NC
 HLS-3A-69(AB): 2NO/2NC (两级动作)



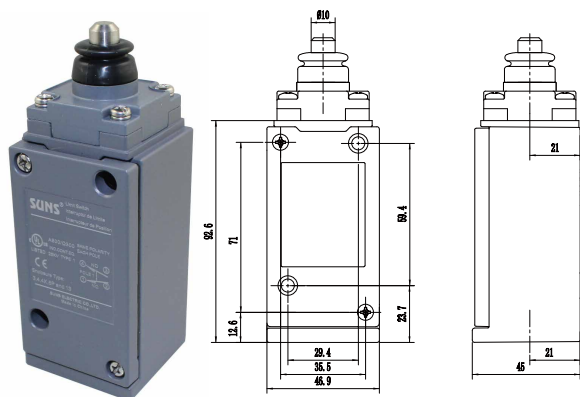
型号

HLS-1A-00(AB): 1NO/1NC
 HLS-2A-00(AB): 2NO/2NC
 HLS-3A-00(AB): 2NO/2NC (两级动作)

* 注: (1): 背面安装螺孔, 两个10-24 UNC

(2): 电缆出线孔, A: 1/2"NPT

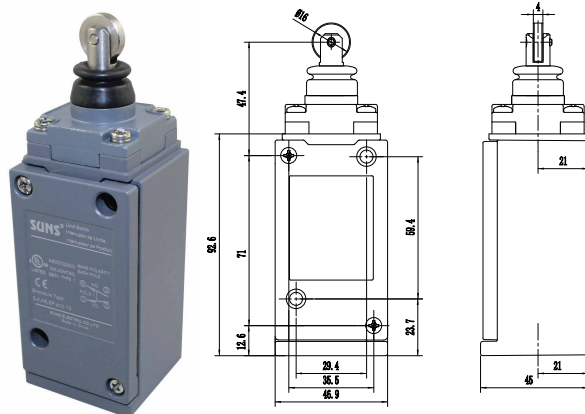
HNS 系列重载限位开关



型号

HNS-1A-11: 1NO/1NC

HNS-2A-11: 2NO/2NC

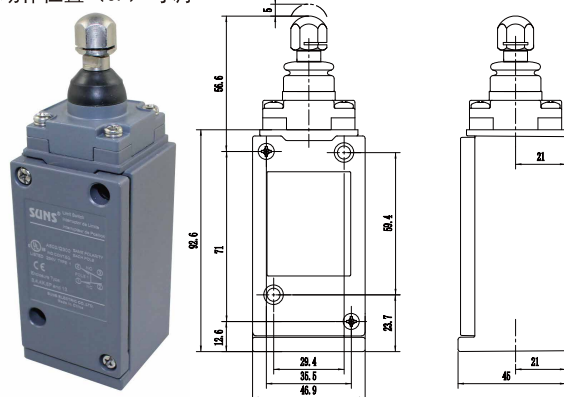


型号

HNS-1A-12: 1NO/1NC

HNS-2A-12: 2NO/2NC

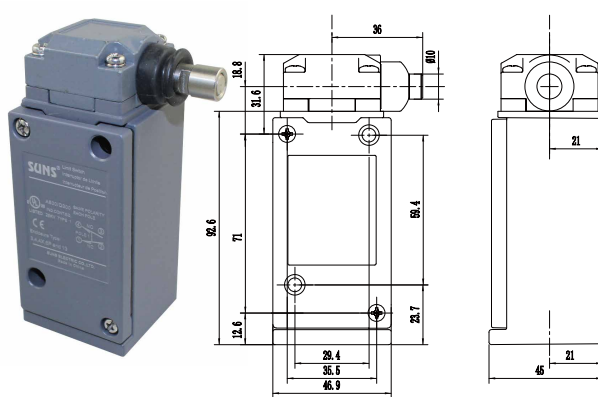
动作位置 (0P) 可调



型号

HNS-1A-13: 1NO/1NC

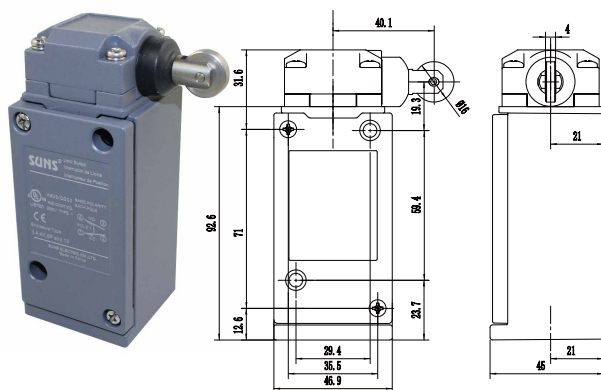
HNS-2A-13: 2NO/2NC



型号

HNS-1A-11H: 1NO/1NC

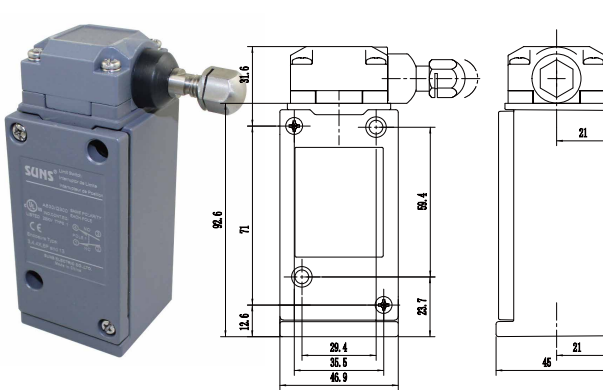
HNS-2A-11H: 2NO/2NC



型号

HNS-1A-12H: 1NO/1NC

HNS-2A-12H: 2NO/2NC



型号

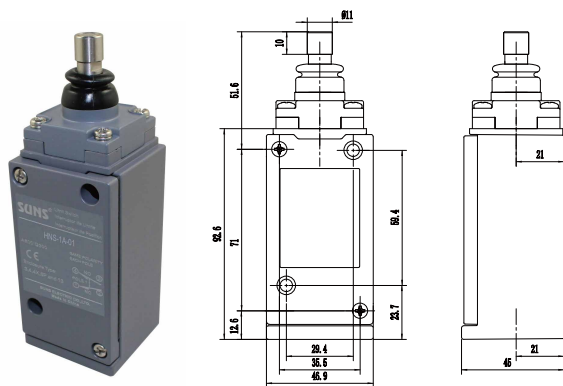
HNS-1A-13H: 1NO/1NC

HNS-2A-13H: 2NO/2NC

注: (1) 背面安装螺孔, 两个10-24 UNC, (2) 电缆出线孔: 1/2NPT

HNS 系列重载限位开关

动作位置 (OP) 可调

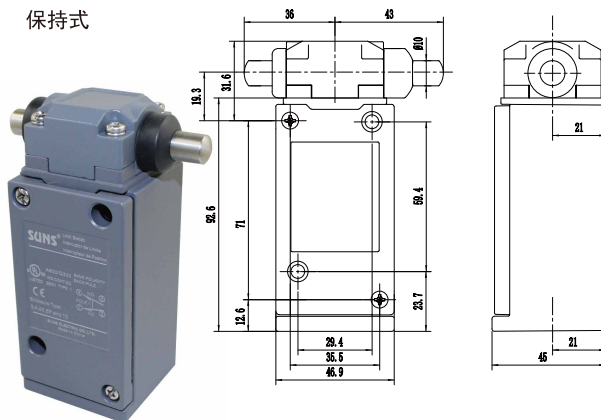


型号

HNS-1A-01: 1NO/1NC

HNS-2A-01: 2NO/2NC

保持式

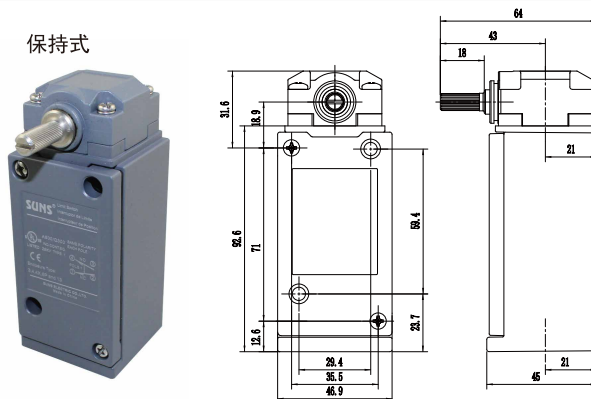


型号

HNS-1A-10H: 1NO/1NC

HNS-2A-10H: 2NO/2NC

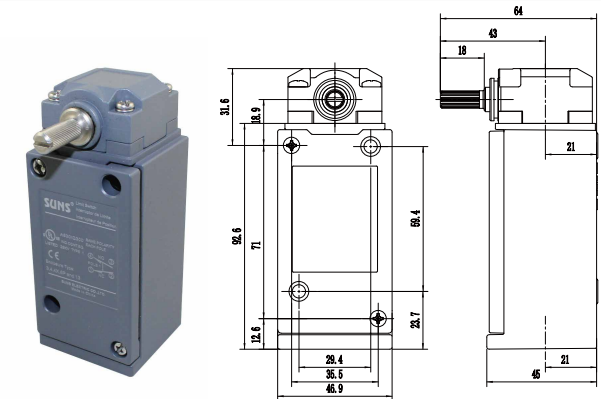
保持式



型号

HNS-1A-04C: 1NO/1NC

HNS-2A-04C: 2NO/2NC



型号

HNS-1A-04B: 1NO/1NC 标准型

HNS-1A-04A: 1NO/1NC 高精型

HNS-1A-04N: 1NO/1NC 轻动作力型

HNS-1A-04D: 1NO/1NC 高精型, 轻动作力型

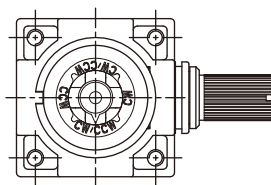
HNS-2A-04B: 2NO/2NC 标准型

HNS-2A-04A: 2NO/2NC 高精型

HNS-2A-04N: 2NO/2NC 轻动作力型

HNS-2A-04D: 2NO/2NC 高精型, 轻动作力型

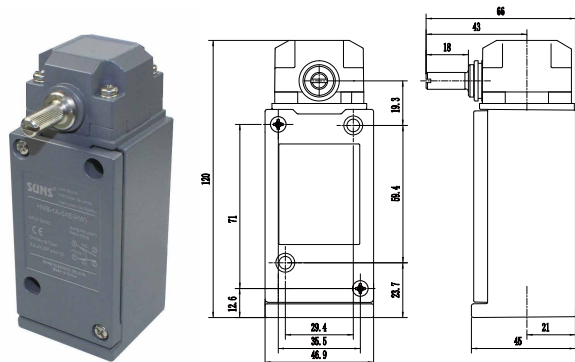
头部出厂设置: 顺时针和逆时针都触发开关。用户可以卸下头部, 拉出头部机构, 旋转到需要的相应指示。可实现只是顺时针或逆时针方向触发开关。



注: (1) 背面安装螺孔, 两个10-24 UNC, (2) 电缆出线孔: 1/2NPT

HNS 系列重载限位开关

动作位置 (OP) 可调

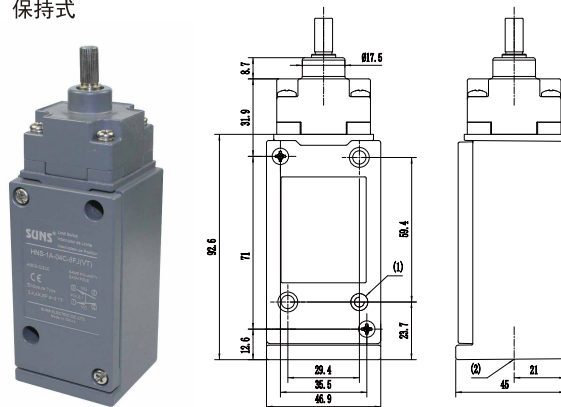


型号

HNS-1A-04E: 1NO/1NC

HNS-2A-04E: 2NO/2NC

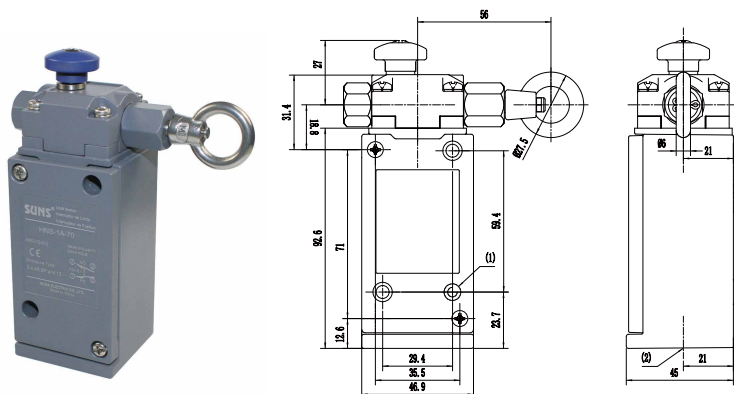
保持式



型号

HNS-1A-05B(HW): 1NO/1NC

HNS-2A-05B(HW): 2NO/2NC



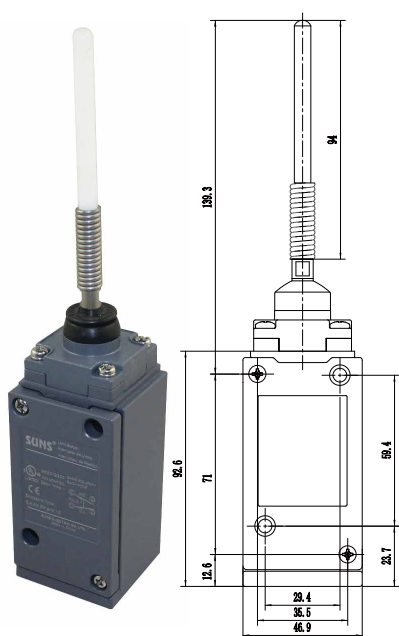
型号

HNS-1A-70: 1NO/1NC

HNS-2A-70: 2NO/2NC

注: (1) 背面安装螺孔, 两个10-24 UNC, (2) 电缆出线孔: 1/2NPT

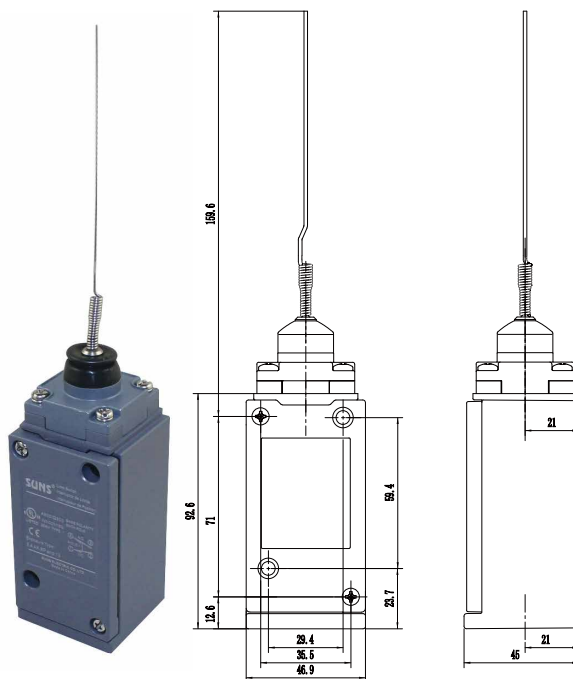
HNS 系列重载限位开关



型号

HNS-1A-66: 1NO/1NC

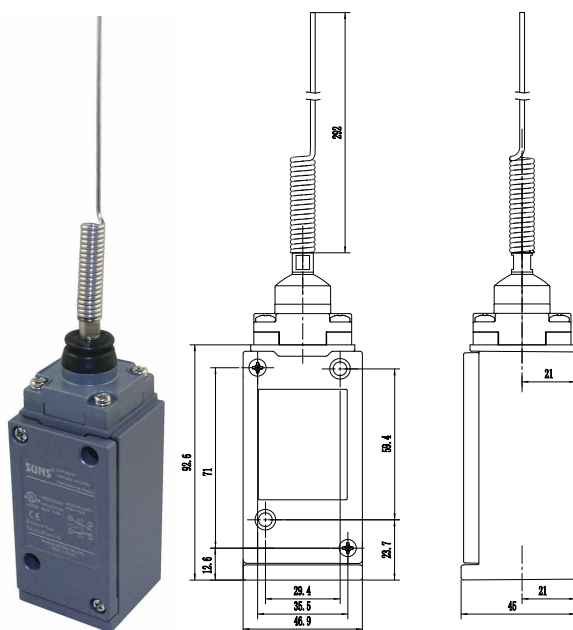
HNS-2A-66: 2NO/2NC



型号

HNS-1A-68: 1NO/1NC

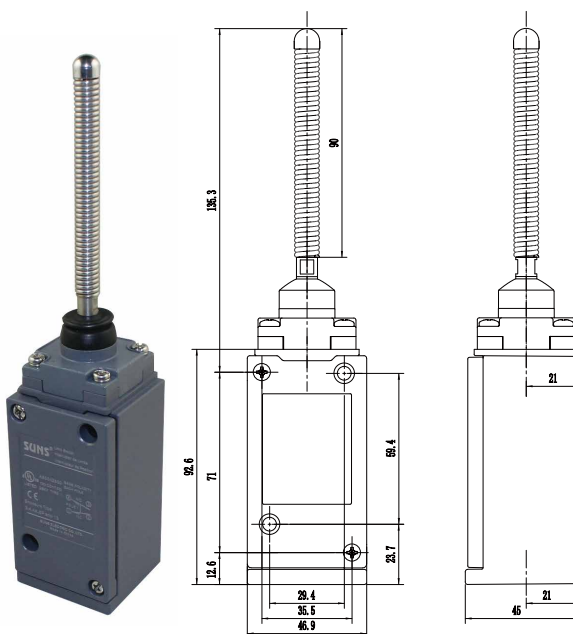
HNS-2A-68: 2NO/2NC



型号

HNS-1A-69: 1NO/1NC

HNS-2A-69: 2NO/2NC



型号

HNS-1A-00: 1NO/1NC

HNS-2A-00: 2NO/2NC

注：（1）背面安装螺孔，两个10-24 UNC，（2）电缆出线孔：1/2NPT

摆臂

*适用于HMS/HLS/HNS/HES/HEX/HCX系列

铝铸件滚轮摆臂

需要尼龙材料：在型号后面加 -P



摆臂长度 in. (mm)	滚轮直径 in. (mm)	滚轮厚度 in. (mm)	订货型号
1.38 (35)	0.75 (19)	0.25 (6.3)	H-04B1
		0.63 (16)	H-04B2
	0.63 (16)	0.25 (6.3)	H-04B3
		0.63 (16)	H-04B4
1.5 (38)	0.75 (19)	0.25 (6.3)	H-04B5
		0.63 (16)	H-04C1
	0.63 (16)	0.25 (6.3)	H-04C2
		0.63 (16)	H-04C3
		1(25.4)	H-04C4
		1.97(50)	H-04C5
2 (51)	0.75 (19)	0.25 (6.3)	H-04C6
		0.63 (16)	H-04D1
	0.63 (16)	0.25 (6.3)	H-04D2
		0.63 (16)	H-04D3
		0.63 (16)	H-04D4
		0.63 (16)	H-04E1
2.5 (63.5)	0.75 (19)	0.25 (6.3)	H-04E2
		0.63 (16)	H-04E3
	0.63 (16)	0.25 (6.3)	H-04E4
		0.63 (16)	H-04F1
3 (76)	0.75 (19)	0.25 (6.3)	H-04F2
		0.63 (16)	H-04F3
	0.63 (16)	0.25 (6.3)	H-04F4
		0.63 (16)	H-04F5

*安装孔到滚轮中心距离

90° 双滚轮（羊角式）

需要尼龙材料：在型号后面加 -P



摆臂长度 in. (mm)	滚轮			订货型号
	滚轮位置	滚轮直径 in. (mm)	滚轮厚度 in. (mm)	
1.5 (38)	两滚轮在同侧	0.75 (19)	0.25 (6.3)	H-05-1
		0.63 (16)	0.25 (6.3)	H-05-3
	右滚轮在对侧	0.75 (19)	0.25 (6.3)	H-05-1RH
		0.63 (16)	0.25 (6.3)	H-05-3RH
	左滚轮在对侧	0.75 (19)	0.25 (6.3)	H-05-1LH
		0.63 (16)	0.25 (6.3)	H-05-3LH

*安装孔到滚轮中心距离

金属轮可调摆臂



摆臂长度 in. (mm)	滚轮直径 in. (mm)	滚轮厚度 in. (mm)	订货型号
不可折弯，可调范围： 22-101mm	0.63 (16)	0.25 (6.3)	H-08-3
	0.63 (16)	0.63 (16)	H-08-4
	0.75(19)	0.25(6.3)	H-08-5
用户可折弯，可调范围： 22-101mm	0.63 (16)	0.25 (6.3)	H-08B-3
	0.63 (16)	0.63 (16)	H-08B-4
	0.75(19)	0.25(6.3)	H-08B-5

塑料轮可调摆臂

摆臂长度 in. (mm)	滚轮直径 in. (mm)	滚轮厚度 in. (mm)	订货型号
不可折弯，可调范围： 22-101mm	0.63 (16)	0.25 (6.3)	H-08-3P
	1 (25.4)	0.63 (16)	H-08-5P
	0.75(19)	0.25(6.3)	H-08-7P
用户可折弯，可调范围： 22-101mm	0.63 (16)	0.25 (6.3)	H-08B-3P
	1.0 (25.4)	0.63 (16)	H-08B-5P
	2 (51)	0.25 (6.3)	H-08B-6P

*安装孔到滚轮中心距离

*适用与11mm轴直径（无后缀）、7.0mm轴直径（后缀-CH）、7.3mm轴直径（后缀-HW）和8.0mm轴直径（后缀-AB）

摆臂



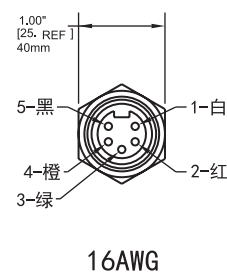
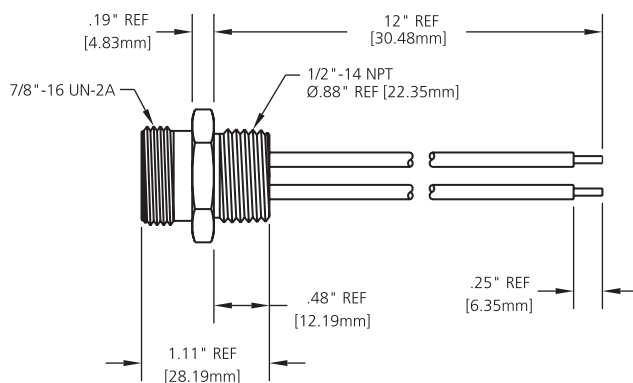
*适用于HMS/HLS/HNS/HES/HEX/HCX系列

杆型摆臂

说明	长度 in. (mm)	订货型号
不锈钢杆	10 (254)	H-07-10
钢制盘簧杆	12 (304)	H-07S-12
钢盘簧聚甲醛树脂杆	12 (304)	H-07P-12
环型聚甲醛树脂棒	6.3 (160)	H-06
环型聚甲醛树脂棒	9 (228)	H-09

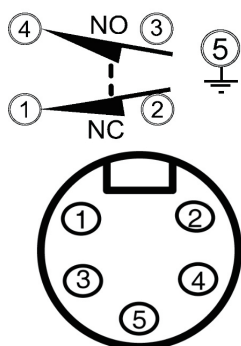
* 适用于 11mm 轴直径 (空后缀)、7.0mm轴直径 (后缀 -CH)、7.3mm 轴直径 (后缀 -HW) 和 8.0mm 轴直径 (后缀 -AB)

NPT12-16-5P 接线器 (5-PIN)



如要预定配有NPT-12-16-5P 连接器的预接线款, 请于产品型号后加上 -Q1 或 -Q9 后缀

-Q1: 接线图



-Q9: 接线图

