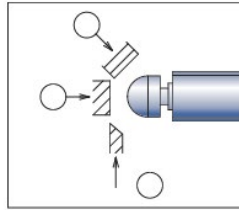


Precision Limit Switches

Sliding Angled Offset Touch Limit Switches

- Metal and plastic hemisphere actuators
- 5 micron (μm) repeat accuracy
- Stainless steel housing

Sliding Angled Offset Touch



- indicates correct target approach and orientation.
- ✕ indicates approach and orientation that should be avoided.

Sliding Angled Offset Touch Limit Switches Selection Chart									
Part Number	Price	Actuator/ Head Type*	Barrel Type	Barrel Diameter/Thread*	Stroke	Switching Output	Contact Force	Sensor Dimensions	Connection Type
Sliding Angled Offset Touch									
CSHP085A-L	\$126.00	Ø 4.7 mm SR 3mm	Threaded	M8×0.5	2.8 mm (0.110 in)	N.O.	1N	Figure 1	2m (6.56 ft) cable
CSHP085B-L	\$126.00	Ø 4.7 mm SR 3mm	Threaded	M8×0.5	2.8 mm (0.110 in)	N.C.	1N	Figure 1	2m (6.56 ft) cable
CSH121A-AL	\$63.00	Ø 10 hemisphere	Threaded	M12×1	2.8 mm (0.110 in)	N.O.	1.5 N	Figure 2	2m (6.56 ft) cable
CSH121B-AL	\$66.00	Ø 10 hemisphere	Threaded	M12×1	2.8 mm (0.110 in)	N.C.	1.5 N	Figure 3	2m (6.56 ft) cable
CSH121A-APL	\$74.00	Ø 10 hemisphere, plastic	Threaded	M12×1	2.8 mm (0.110 in)	N.O.	1.5 N	Figure 4	2m (6.56 ft) cable
CSH121B-APL	\$74.00	Ø 10 hemisphere, plastic	Threaded	M12×1	2.8 mm (0.110 in)	N.C.	1.5 N	Figure 5	2m (6.56 ft) cable

* Ø = diameter, SR = surface radius



CSHP085A-L
CSHP085B-L



CSH121A-AL



CSH121B-AL



CSH121A-APL



CSH121B-APL

Precision Limit Switches

Sliding Angled Offset Touch Limit Switches

Dimensions

mm [inches]

Figure 1
CSHP085A-L
CSHP085B-L

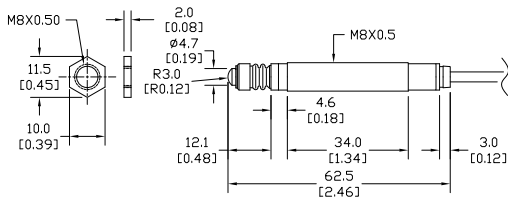


Figure 2
CSH121A-AL

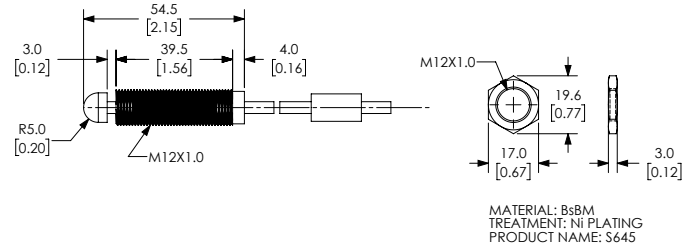


Figure 3
CSH121B-AL

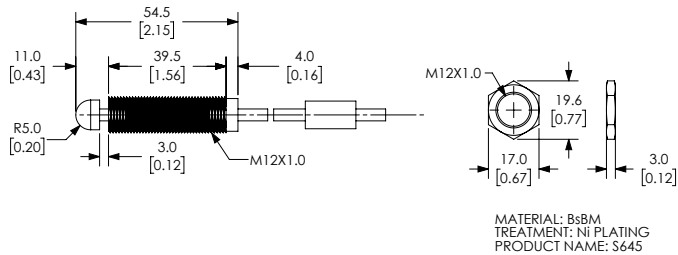


Figure 4
CSH121A-APL

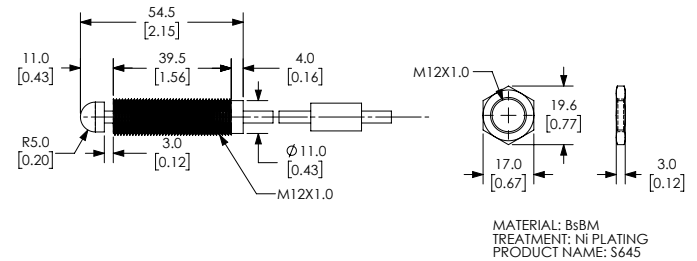
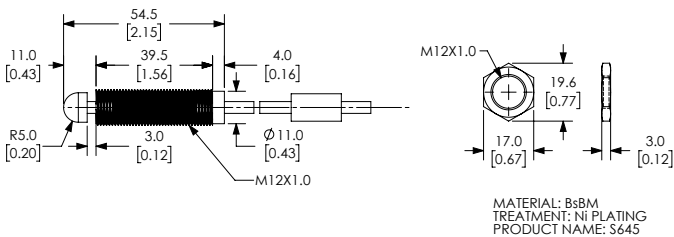


Figure 5
CSH121B-APL



Precision Limit Switches

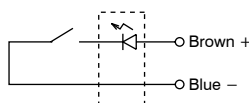
Sliding Angled Offset Touch Limit Switches

Sliding Angled Offset Touch Limit Switches Specifications		
	CSHP	CSH
Environmental		
Degree of Protection	IP67	IP65
Temperature Range	Operating: 0–80°C (32–176°F) (Ice-free)	
Mechanical Ratings		
Enclosure Material	Stainless Steel	
Pretravel	0.3 mm	
Torque (for nuts on threaded barrels, set screws on smooth barrels)	4 N•m (2.95 lb•ft)	12 N•m (8.85 lb•ft)
Oscillation	10–55Hz total amplitude 1.5 for X, Y, Z each direction	
Impact	300 m/s ² for X, Y, Z each direction	
Repeat Accuracy	0.005 mm (5 micron [µm])	
Recommended Minimum Operating Speed	10 mm (0.394 in)/minute	
Electrical Ratings		
Contact Life	10 million operations	
Contact Voltage	5–24VDC	
Steady Current Rating	10mA or less	
Max In-rush Current Rating	10mA (limit current to protect LED indicator)	
Connection Type	Cable: 3m, oil resistant Ø2.8/2 cores, Tensile strength 30N (6.74 lbf), minimum bending R7, 2-26AWG	
Indicating	-L: LED indicator (mounted in cable 120mm from the switch)	

* At operating speed 50-200 mm/minute. Operating speed slower than 10 mm/min is not recommended.

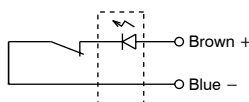
Circuit Diagrams

Normally open (NO)



LED Normally Off

Normally closed (NC)



LED Normally On