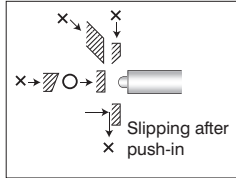


Precision Limit Switches

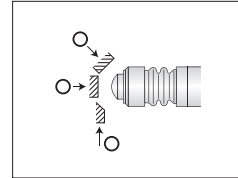
Precision Touch Limit Switches

- Slim design (from M5) allows side-by-side installation
- Long-stroke and water-resistant models available
- 5 micron (μm) repeat accuracy
- Stainless steel housing
- Metal bearing
- Straight-touch and Sliding-touch/Angled-touch variants available

Straight Touch



Angled/Sliding Touch



O indicates correct target approach and orientation.
 X indicates approach and orientation that should be avoided.



Precision Touch Limit Switches Selection Chart										
Part Number	Price	Actuator/ Head Type*	Barrel Type	Barrel Diameter/ Thread*	Stroke	Switching Output	Contact Force	Sensor Dimension	Connection Type	Photo
Straight Touch										
CSJ055A-L	\$42.00	Ø 2mm plunger, SR 1.5 mm	Threaded	M5×0.5	2.8 mm	N.O.	1N	Figure 1	Cable, 3m length	A
CSJS50A-L	\$42.00		Smooth	Ø 5mm				Figure 2		B
CS065A-L	\$47.50		Threaded	M6×0.5				Figure 3		C
CSS60A-L	\$43.50		Smooth	Ø 6mm				Figure 4		D
CSS60B-L	\$43.50		Threaded	M6×0.75				Figure 5		E
CS067A-L	\$47.50							N.O.		Figure 6
CS067B-L	\$47.50	Ø 2mm plunger, Ø 4mm flat	Smooth	Ø 8mm	5mm	N.O.	1N	Figure 7	Cable, 3m length	G
CSS80A-L	\$43.50							Figure 8		H
CS087A-L	\$47.50	Ø 3.5 mm plunger, SR 3mm	Threaded	M8×0.75	2.8 mm	N.C.	1N	Figure 9	Cable, 2m length	I
CSK087A-L	\$53.00							Figure 10		J
CSK087B-L	\$53.00	Ø 2mm ball	Threaded	M8×0.75	2.8 mm	N.O.	1N	Figure 10	Cable, 2m length	K
CSP087A-AL	\$60.00									N.C.
CSP087B-AL	\$60.00									
Angled/Sliding Touch										
CSHP085A-L	\$124.00	Ø 4.7 mm SR 3mm	Threaded	M8×0.5	2.8 mm	N.O.	1N	Figure 11	Cable, 2m length	M
CSHP085B-L	\$124.00					N.C.				

* Ø = diameter, SR = surface radius

-L: LED indicator (mounted in cable 120mm from the switch)



Precision Limit Switches Dimensions

Precision Touch: CS / CSJ / CSS / CSK / CSP / CSHP Series

Dimensions

mm [inches]

Figure 1
CSJ055A-L

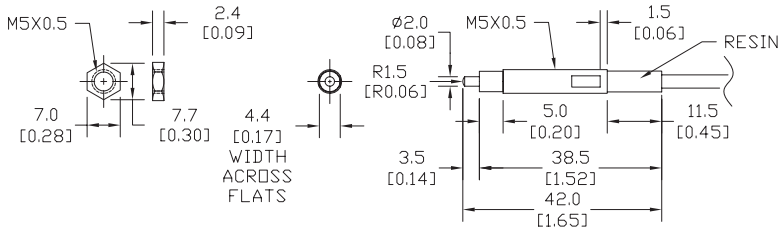


Figure 2
CSJS50A-L

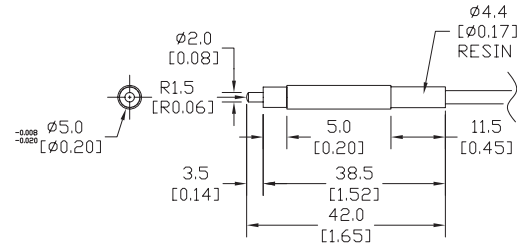


Figure 3
CS065A-L

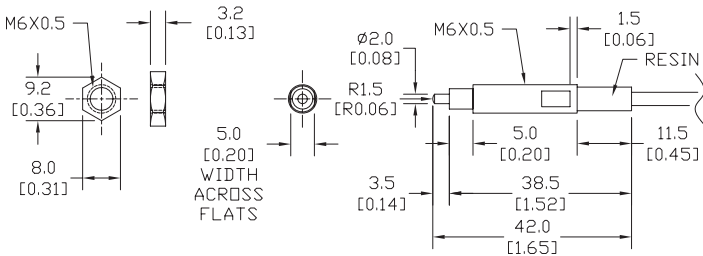


Figure 4
CSS60A-L / CSS60B-L

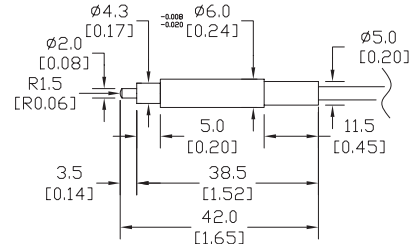


Figure 5
CS067A-L / CS067B-L

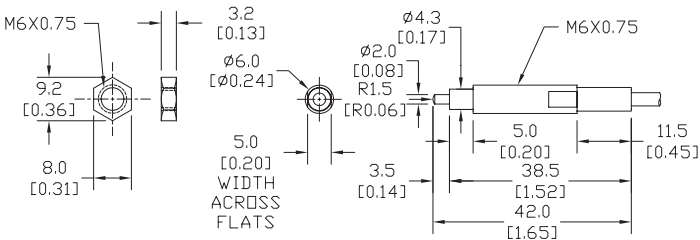
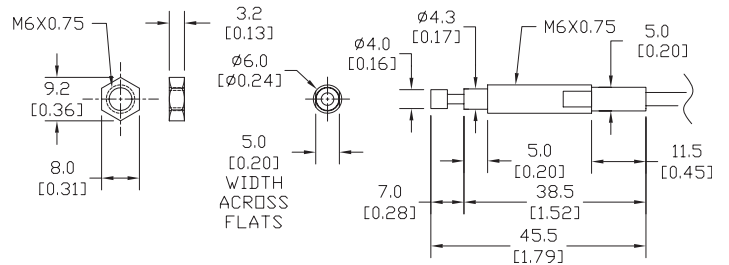


Figure 6
CS067A-BL



See our website, www.AutomationDirect.com, for complete Engineering drawings.

Precision Limit Switches Dimensions

Precision Touch: CS / CSJ / CSS / CSK / CSP / CSHP Series (continued)

Dimensions

mm [inches]

Figure 7
CSS80A-L

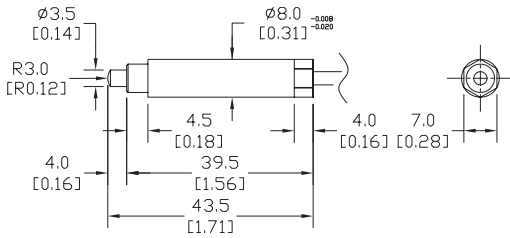


Figure 8
CS087A-L

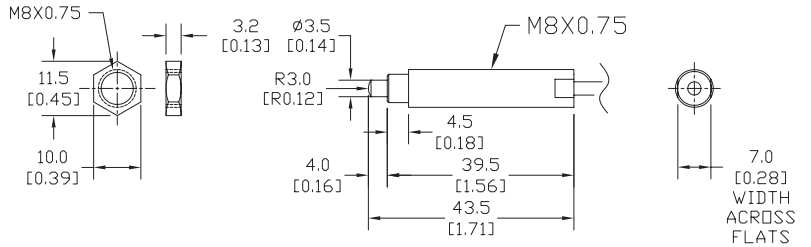


Figure 9
CSK087A-L / CSK087B-L

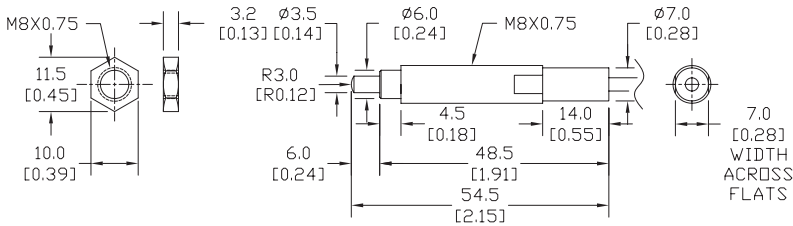


Figure 10
CSP087A-AL / CSP087B-AL

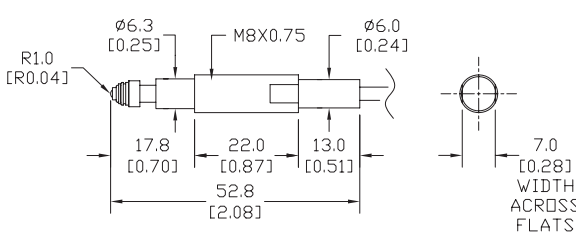
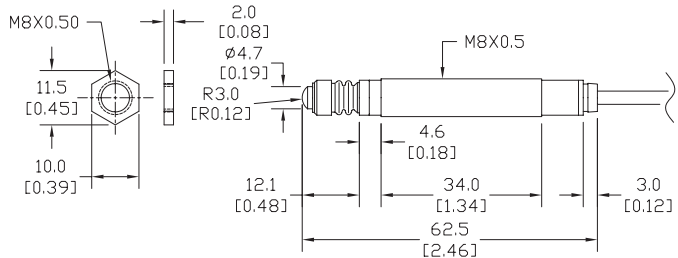


Figure 11
CSHP085A-L / CSHP085B-L



See our website, www.AutomationDirect.com, for complete Engineering drawings.

Precision Limit Switches

Precision Touch Limit Switches Specifications						
	Straight Touch Switches					Angled Touch Switches
	CS	CSJ	CSS	CSK	CSP	CSHP
Environmental						
Degree of Protection	IP65				IP67	
Temperature Range	Operating: 0–80°C (32–176°F) (Ice-free)					
Mechanical Ratings						
Enclosure Material	Stainless Steel				303 Stainless Steel	
Pretravel	0.3 mm					
Torque (for nuts on threaded barrels, set screws on smooth barrels)	4 N-m	2 N-m	N/A	N/A	7 N-m	4 N-m
Oscillation	10–55Hz total amplitude 1.5 for X, Y, Z each direction					
Impact	300 m/s ² for X, Y, Z each direction					
Electrical Ratings						
Contact Life	10 million operations					
Repeat Accuracy	Both On–Off, Off–On: 0.005 mm*					
Recommended Minimum Operating Speed	10 mm/minute					
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 (2m for CSHP series) Oil resistant Ø2.8/2 cores, Tensile strength 30N, minimum bending R7					
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

Without LED	With LED
<p>Normally open (NO)</p>	<p>Normally open (NO)</p> <p>LED Normally Off</p>
<p>Normally closed (NC)</p>	<p>Normally closed (NC)</p> <p>LED Normally On</p>