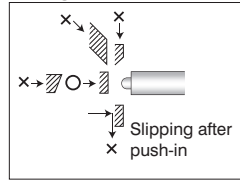


Precision Limit Switches

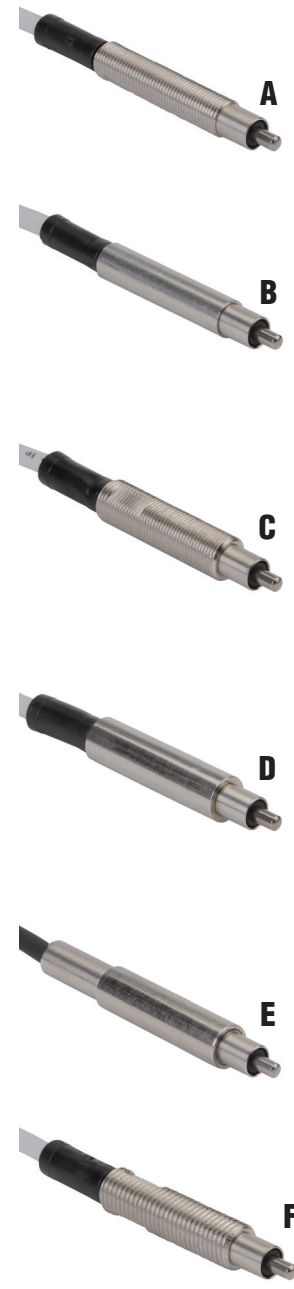
Precision Touch Limit Switches

- 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 straight needle touch available

Straight Touch



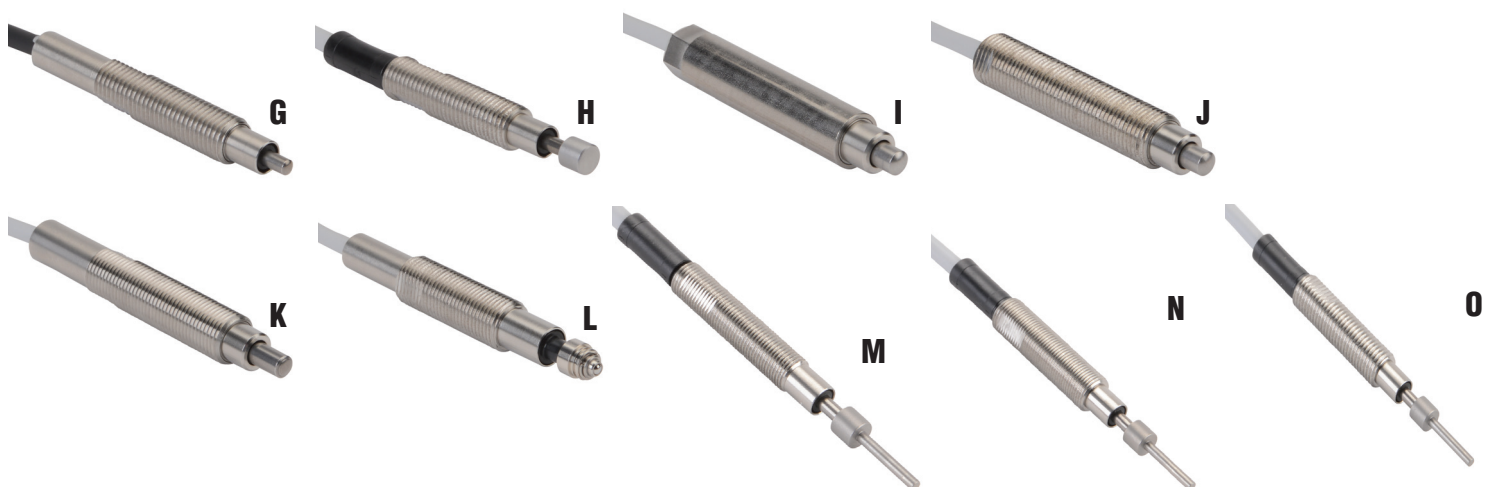
O indicates correct target approach and orientation.
 X indicates approach and orientation that should be avoided.



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	M5x0.5	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	M6x0.5				Figure 3		C
CSS60A-L	\$43.50		Smooth	Ø 6mm				Figure 4		D
CSS60B-L	\$43.50							Figure 5		E
CS067A-L	\$47.50		Threaded	M6x0.75				Figure 6		F
CS067B-L	\$47.50	Figure 7			G					
CS067A-BL	\$50.50	Ø 2mm plunger, Ø 4mm flat	Smooth	Ø 8mm	5mm	N.O.	1N	Figure 8	Cable, 3m length	H
CSS80A-L	\$43.50	Figure 9						I		
CS087A-L	\$47.50	Ø 3.5 mm plunger, SR 3mm	Threaded	M8x0.75	2.8 mm	N.O.	1N	Figure 10	Cable, 3m length	J
CSK087A-L	\$53.00							Figure 11		K
CSK087B-L	\$53.00	Ø 2mm ball	Threaded	M6x0.75	2.8 mm	N.C.	1N	Figure 12	Cable, 3m length	L
CSP087A-AL	\$60.00							Figure 13		M
CSP087B-AL	\$60.00									N
Straight Needle Contact Touch										
CSJ055A-CL	\$47.00	1.5mm flat	Threaded	M5x0.5	2.8 mm	N.O.	1N	Figure 11	Cable, 3m length	O
CS065A-CL	\$53.00			M6x0.5				Figure 12		N
CS067A-CL	\$64.00			M6x0.75				Figure 13		O

* 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 Series

Dimensions

mm [inches]

Figure 1
CSJ055A-L

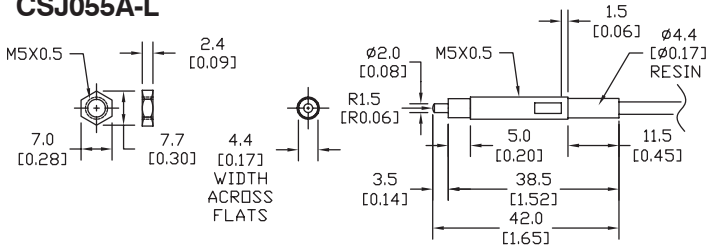


Figure 2
CSJS50A-L

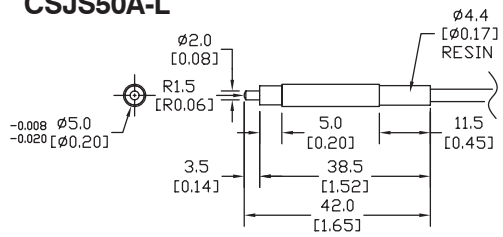


Figure 3
CS065A-L

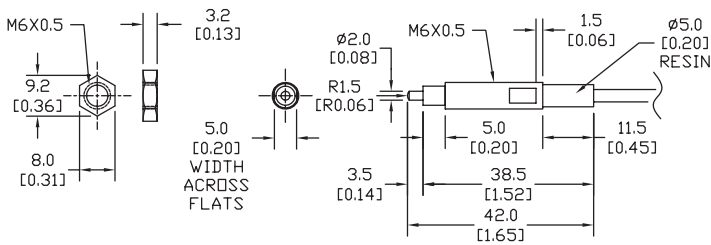


Figure 4
CSS60A-L / CSS60B-L

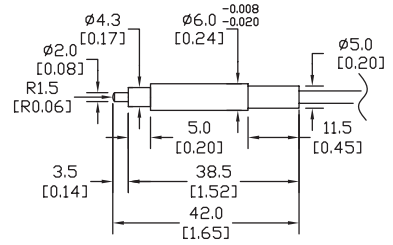


Figure 5
CS067A-L / CS067B-L

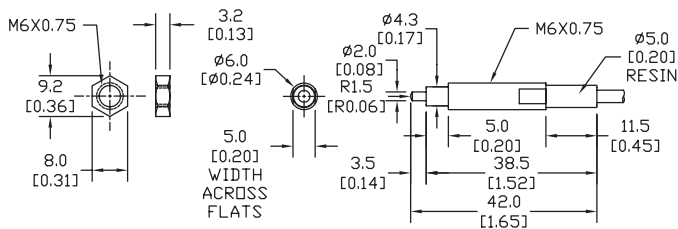
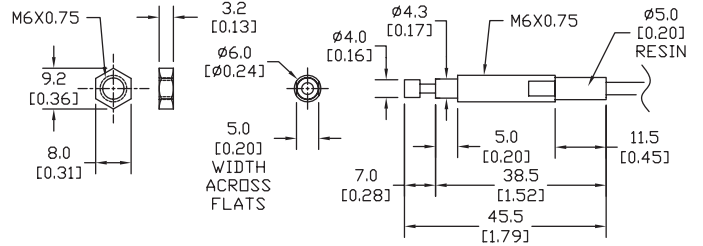


Figure 6
CS067A-BL



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

Precision Limit Switches Dimensions

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

Dimensions

mm [inches]

Figure 7
CSS80A-L

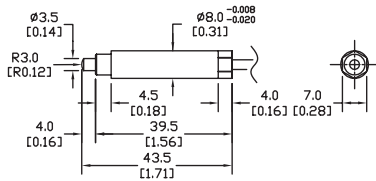


Figure 8
CS087A-L

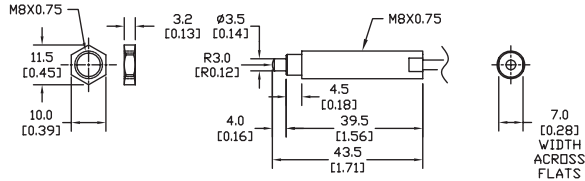


Figure 9
CSK087A-L / CSK087B-L

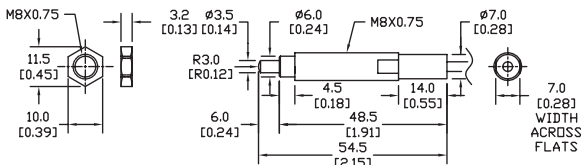


Figure 10
CSP087A-AL / CSP087B-AL

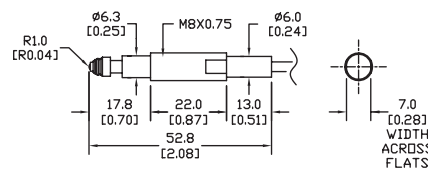


Figure 11
CSJ055A-CL

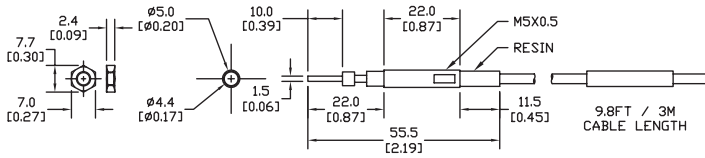


Figure 12
CS065A-CL

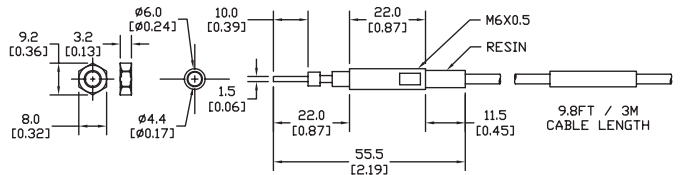
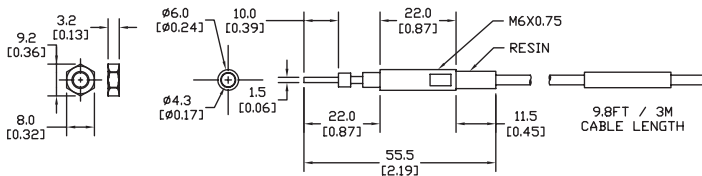


Figure 13
CS067A-CL



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

Precision Limit Switches

Precision Touch Limit Switches Specifications					
	Straight Touch Switches				
	CS	CSJ	CSS	CSK	CSP
Environmental					
Degree of Protection	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)	4Nm	2Nm	N/A	N/A	7Nm
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	5 micron (µm)				
Recommended Minimum Operating Speed	10 mm/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 (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>