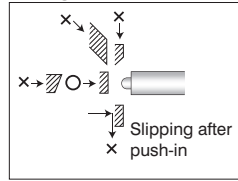


Precision Limit Switches

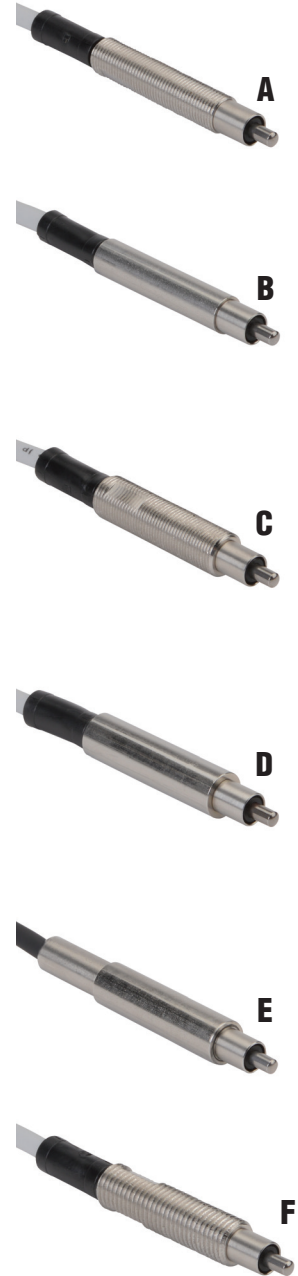
Precision Touch Limit Switches

- 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



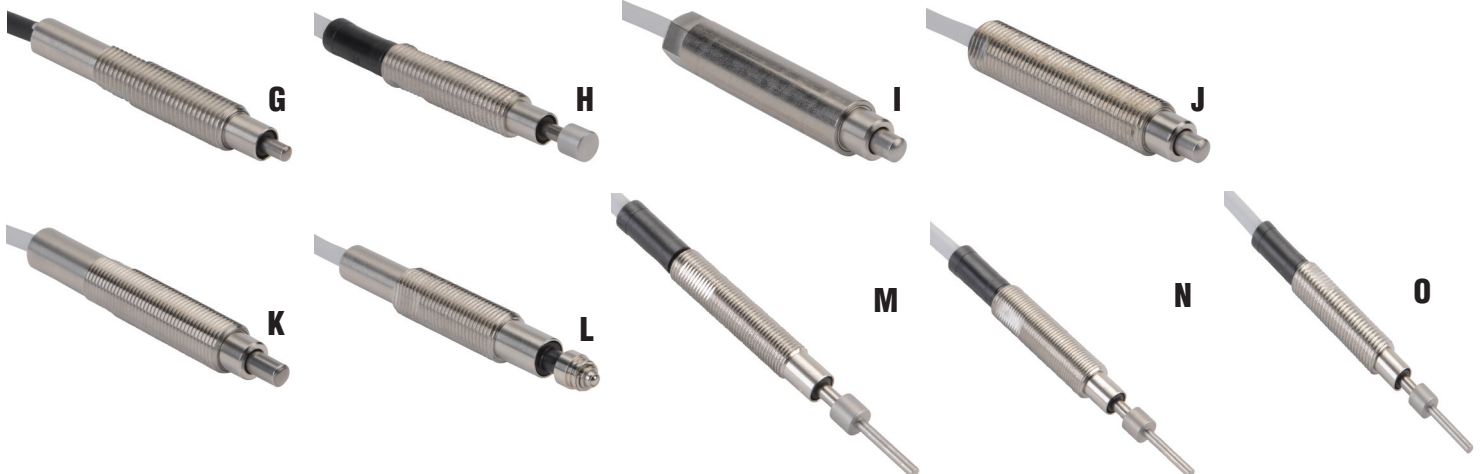
O indicates correct target approach and orientation.
 X indicates approach and orientation that should be avoided.



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	\$45.50	Ø 2mm plunger, SR 1.5 mm	Threaded	M5x0.5	2.8 mm	N.O.	1N	Figure 1	Cable, 3m length	A		
CSJS50A-L	\$45.50		Smooth	Ø 5mm				Figure 2		B		
CS065A-L	\$51.00		Threaded	M6x0.5				Figure 3		C		
CSS60A-L	\$47.00		Smooth	Ø 6mm				Figure 4		D		
CSS60B-L	\$47.00		Threaded	M6x0.75				Figure 5		E		
CS067A-L	\$51.00									N.C.	F	
CS067B-L	\$51.00									N.O.	G	
CS067A-BL	\$55.00		Ø 2mm plunger, Ø 4mm flat	Smooth				Ø 8mm		Figure 6	N.C.	H
CSS80A-L	\$47.00		N.O.								I	
CS087A-L	\$51.00		Ø 3.5 mm plunger, SR 3mm								Threaded	M8x0.75
CSK087A-L	\$57.00	Figure 8		K								
CSK087B-L	\$57.00	Ø 2mm ball	Threaded	M8x0.75	2.8 mm	N.O.	Figure 9	Figure 10	L			
CSP087A-AL	\$65.00									N.C.		
CSP087B-AL	\$65.00									N.C.		
Straight Needle Contact Touch												
CSJ055A-CL	\$51.00	1.5mm flat	Threaded	M5x0.5	2.8 mm	N.O.	1N	Figure 11	Cable, 3m length	M		
CS065A-CL	\$57.00			M6x0.5				Figure 12		N		
CS067A-CL	\$70.00			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

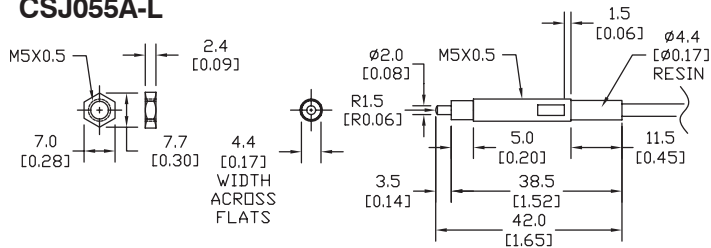


Figure 2
CSJS50A-L

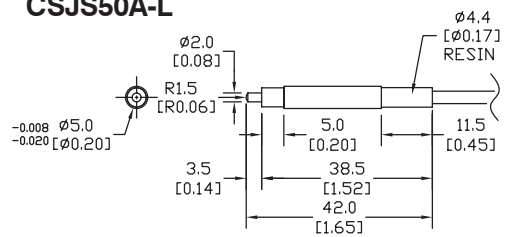


Figure 3
CS065A-L

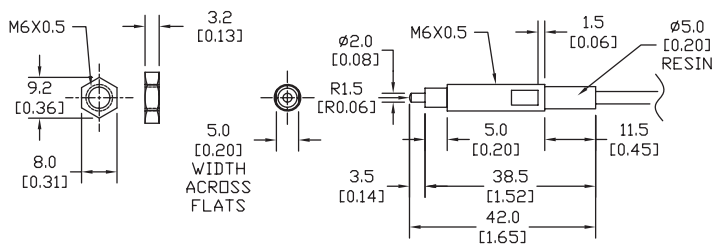


Figure 4
CSS60A-L / CSS60B-L

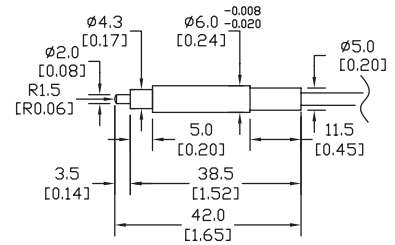


Figure 5
CS067A-L / CS067B-L

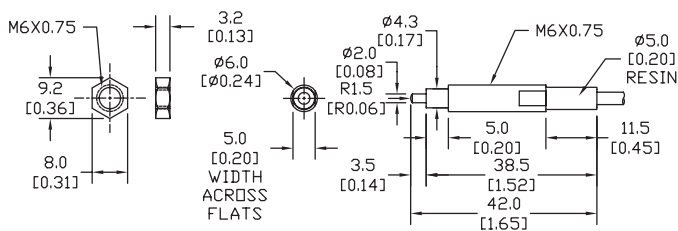
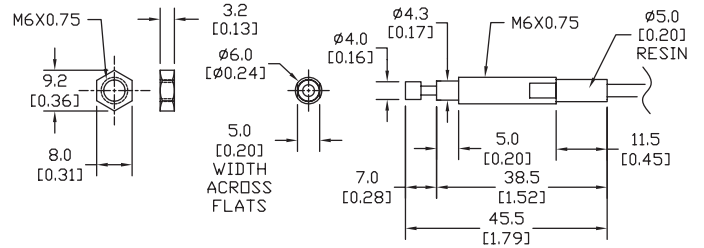


Figure 6
CS067A-BL



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

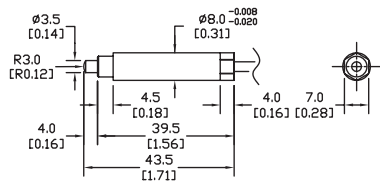


Figure 8
CS087A-L

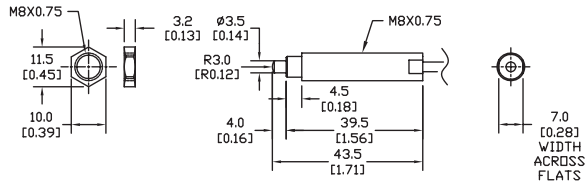


Figure 9
CSK087A-L / CSK087B-L

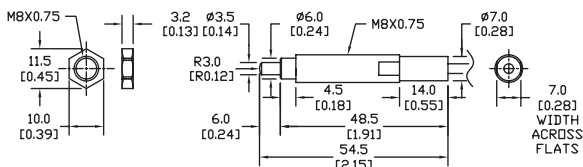


Figure 10
CSP087A-AL / CSP087B-AL

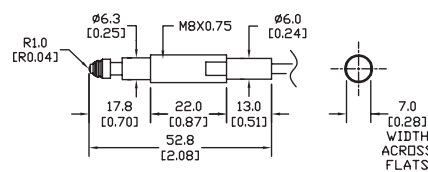


Figure 11
CSJ055A-CL

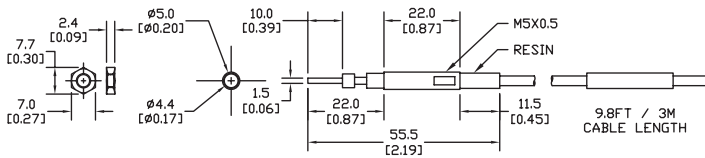


Figure 12
CS065A-CL

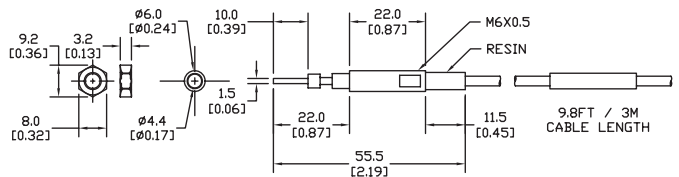
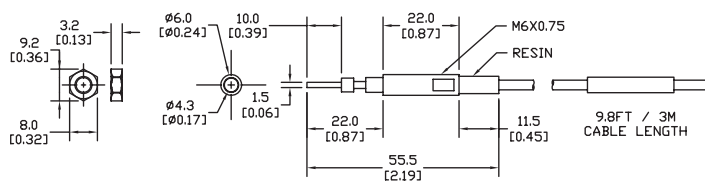


Figure 13
CS067A-CL



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)	4 N•m	2 N•m	N/A	7 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			
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 (N.O.)</p>	<p>Normally open (N.O.)</p> <p>LED Normally Off</p>
<p>Normally closed (N.C.)</p>	<p>Normally closed (N.C.)</p> <p>LED Normally On</p>