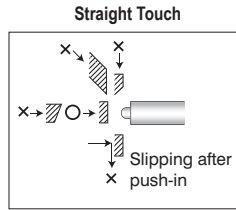


Precision Limit Switches

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



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	Drawing Link	Actuator/ Head Type*	Barrel Type	Barrel Diameter/ Thread*	Stroke	Switching Output	Contact Force	Connection Type	Photo	
Straight Touch											
CSJ055A-L	\$54.00	PDF	Ø 2mm plunger, SR 1.5 mm	Threaded	M5×0.5	2.8 mm	N.O.	1N	Cable, 3m length	A	
CSJS50A-L	\$54.00	PDF		Smooth	Ø 5mm					B	
CS065A-L	\$60.00	PDF		Threaded	M6×0.5					C	
CSS60A-L	\$56.00	PDF		Smooth	Ø 6mm					D	
CSS60B-L	\$56.00	PDF								E	
CS067A-L	\$60.00	PDF								F	
CS067B-L	\$60.00	PDF	Ø 2mm plunger, Ø 4mm flat	Threaded	M6×0.75		N.C.			G	
CS067A-BL	\$65.00	PDF					N.O.			H	
CSS80A-L	\$56.00	PDF	Ø 3.5 mm plunger, SR 3mm	Smooth	Ø 8mm		N.O.			I	
CS087A-L	\$60.00	PDF								J	
CSK087A-L	\$67.00	PDF			Threaded	M8×0.75	5mm	N.C.			K
CSK087B-L	\$67.00	PDF									L
CSP087A-AL	\$78.00	PDF	Ø 2mm ball			2.8 mm	N.O.				
CSP087B-AL	\$78.00	PDF					N.C.				
Straight Needle Contact Touch											
CSJ055A-CL	\$60.00	PDF	1.5mm flat	Threaded	M5×0.5	2.8 mm	N.O.	1N	Cable, 3m length	M	
CS065A-CL	\$67.00	PDF			M6×0.5					N	
CS067A-CL	\$83.00	PDF			M6×0.75					O	

* Ø = diameter, SR = surface radius
-L: LED indicator (mounted in cable 120mm from the switch)



Precision Limit Switches

Precision Touch Limit Switches Specifications					
Type	Straight Touch Switches				
Series	CS	CSJ	CSS	CSK	CSP
Environmental					
Degree of Protection	IP65				
Temperature Range	Operating: 0 to 80°C [32 to 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	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>○ Brown</p> <p>○ Blue</p>	<p>Normally open (N.O.)</p> <p>○ Brown +</p> <p>○ Blue -</p> <p>LED Normally Off</p>
<p>Normally closed (N.C.)</p> <p>○ Brown</p> <p>○ Blue</p>	<p>Normally closed (N.C.)</p> <p>○ Brown +</p> <p>○ Blue -</p> <p>LED Normally On</p>