

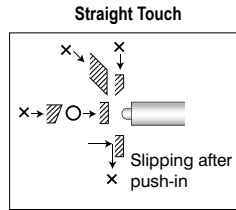


Precision Limit Switches

Precision Touch Limit Switches

Features

- 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.



CSJ055A-L



CS067A-CL

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
Straight Touch									
CSJ055A	\$6boh:	PDF	Ø 2mm plunger, SR 1.5 mm	Threaded	M5×0.5	2.8mm	(1) N.O.	1N	Cable, 3m [9.8ft]
CSJ055A-L	\$1n7?:	PDF	Ø 2mm plunger, SR 1.5mm			2.8mm	(1) N.O.	1N	
CSJS50A	\$6bog:	PDF	Ø 2mm plunger SR 1.5mm	Smooth	Ø 5mm	2.8mm	(1) N.O.	1N	
CSJS50A-L	\$.1n7.:	PDF	Ø 2mm plunger, SR 1.5mm			Ø 5mm	2.8mm	(1) N.O.	
CS065A-L	\$1n80:	PDF	Ø 2mm plunger, SR 1.5mm	Threaded	M6×0.5	2.8mm	(1) N.O.	1N	
CSS60A-L	\$1n81:	PDF	Ø 2mm plunger, SR 1.5mm	Smooth	Ø 6mm	2.8mm	(1) N.O.	1N	
CSS60B-L	\$1n82:	PDF	Ø 2mm plunger, SR 1.5mm			2.8mm	(1) N.C.	1N	
CS067A	\$\$6boj:	PDF	Ø 2mm plunger, SR 1.5mm	Threaded	M6×0.75	2.8mm	(1) N.O.	1N	
CS067A-B	\$\$6boi:	PDF	Ø 2mm plunger, Ø 4mm flat			2.8mm	(1) N.O.	1N	
CS067A-L	\$1n83:	PDF	Ø 2mm plunger, SR 1.5mm			2.8mm	(1) N.O.	1N	
CS067B	\$6bok:	PDF	Ø 2mm plunger, SR 1.5mm			2.8mm	(1) N.C.	1N	
CS067B-L	\$1n85:	PDF	Ø 2mm plunger, SR 1.5mm			2.8mm	(1) N.C.	1N	
CS067A-BL	\$1n84:	PDF	Ø 2mm plunger, Ø 4mm flat			2.8mm	(1) N.O.	1N	
CSS80A-L	\$1n86:	PDF	Ø 3.5mm plunger, SR 3mm	Smooth	Ø 8mm	2.8mm	(1) N.O.	1N	
CS087A-L	\$1n87:	PDF	Ø 3.5mm plunger, SR 3mm	Threaded	M8×0.75	2.8mm	(1) N.O.	1N	
CSK087A	\$.6bof:	PDF	Ø 3.5mm plunger, SR 3mm			5mm	(1) N.O.	1N	
CSK087A-L	\$1n88:	PDF	Ø3.5mm plunger, SR 3mm			5mm	(1) N.O.	1N	
CSK087B-L	\$1n89:	PDF	Ø 3.5mm plunger, SR 5mm			5mm	(1) N.C.	1N	
CSP087A-AL	\$1n8a:	PDF	Ø 5.5mm plunger, 2mm round			2.8mm	(1) N.O.	1N	
CSP087B-AL	\$1n8b:	PDF	Ø 5.5mm plunger, 2mm round			2.8mm	(1) N.C.	1N	
Straight Needle Contact Touch									
CSJ055A-CL	\$2bvo:	PDF	needle plunger, 1.5mm flat	Threaded	M5×0.5	2.8mm	(1) N.O.	1N	Cable, 3m [9.8ft]
CS065A-CL	\$2bvp:	PDF	needle plunger, 1.5mm flat		M6×0.5	2.8mm	(1) N.O.	1N	
CS067A-CL	\$2bvq:	PDF	needle plunger, 1.5mm flat		M6×0.75	2.8mm	(1) N.O.	1N	
Spring Plunger									
SP080A-L	\$6box:	PDF	Ø 2.5mm plunger SR 1.25mm	Threaded	M8×1.25 mm	3mm	(1) N.O.	8N	Cable 2m [6.56ft]

* Ø = diameter, SR = surface radius

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



Precision Limit Switches

**CSJ055A****CSJ055A-L****CSJS50A****CSJS50A-L****CS065A-L****CSS60A-L****CSS60B-L****CS067A****CS067A-B****CS067A-L****CS067B****CS067B-L****CS067A-BL****CSS80A-L****CS087A-L****CSK087A****CSK087A-L****CSP087A-AL****CSJ055A-CL****CS065A-CL****CS067A-CL****SP080A-L**



Precision Limit Switches

Precision Touch Limit Switches Specifications						
Type	Straight Touch Switches					
Series	CS	CSJ	CSS	CSK	CSP	SP
Environmental						
Degree of Protection	IP65				IP67	IP40
Temperature Range	Operating: 0 to 80°C [32 to176°F] (Ice-free)					
Mechanical Ratings						
Enclosure Material	Stainless Steel					
Pretravel	0.3 mm					2.2 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	L1 10N•m L2 5•Nm
Vibration	10–55Hz total amplitude 1.5 for X, Y, Z each direction					
Shock	300 m/s² for X, Y, Z each direction					
Repeat Accuracy	5 micron (µm) *					Both On-Off, Off-On 0.01mm (range)
Recommended Minimum Operating Speed	50mm (1.96 in)/minute					
Electrical Ratings						
Contact Life	10 million operations					3 million (spring)
Contact Voltage	5–24VDC					
Steady Current Rating	10mA or less					
Max In-rush Current Rating	20mA without LED indicator, 10mA with LED indicator					
Connection Type	Cable: 3m (2m for SP series) Oil resistant Ø2.8/ 2 cores, Tensile strength 30N, minimum bending R7					
Indicating	-L models: 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 (-L models)
Normally open (N.O.) 	Normally open (N.O.)
Normally closed (N.C.) 	Normally closed (N.C.)