

# Precision Limit Switches Specifications

Precision Mini Touch Limit Switches Specifications		
Type	Precision Angled	Precision Mini
Series	CSM	CSMP
<b>Environmental</b>		
Degree of Protection	IP65	IP67
Temperature Range	Operating: 0 to 80°C [32 to 176°F] (Ice-free)	
<b>Mechanical Ratings</b>		
Enclosure Material	303 Stainless Steel	
Pretravel	0.3 mm	
Torque (for nuts on threaded barrels, set screws on smooth barrels)	8 N•m [5.901 lb•ft]	
Oscillation	10–55Hz total amplitude 1.5 for X, Y, Z each direction	
Impact	300 m/s <sup>2</sup> for X, Y, Z each direction	
Repeat Accuracy	Both On–Off, Off–On: 0.003 mm*	
Recommended Minimum Operating Speed	10 mm/minute	
<b>Electrical Ratings</b>		
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	Core wire cable, 0.5 m (x2), oil resistant, Ø 0.6, tensile strength 15N, Cable: 2m, oil resistant Ø2.8/2 cores, tensile strength 30N [6.74 lbf], 2-26AWG	
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>Normally closed (N.C.)</p>	<p>Normally closed (N.C.)</p>