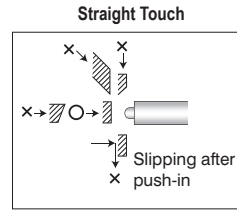


Precision Limit Switches

Precision Touch Limit Switches

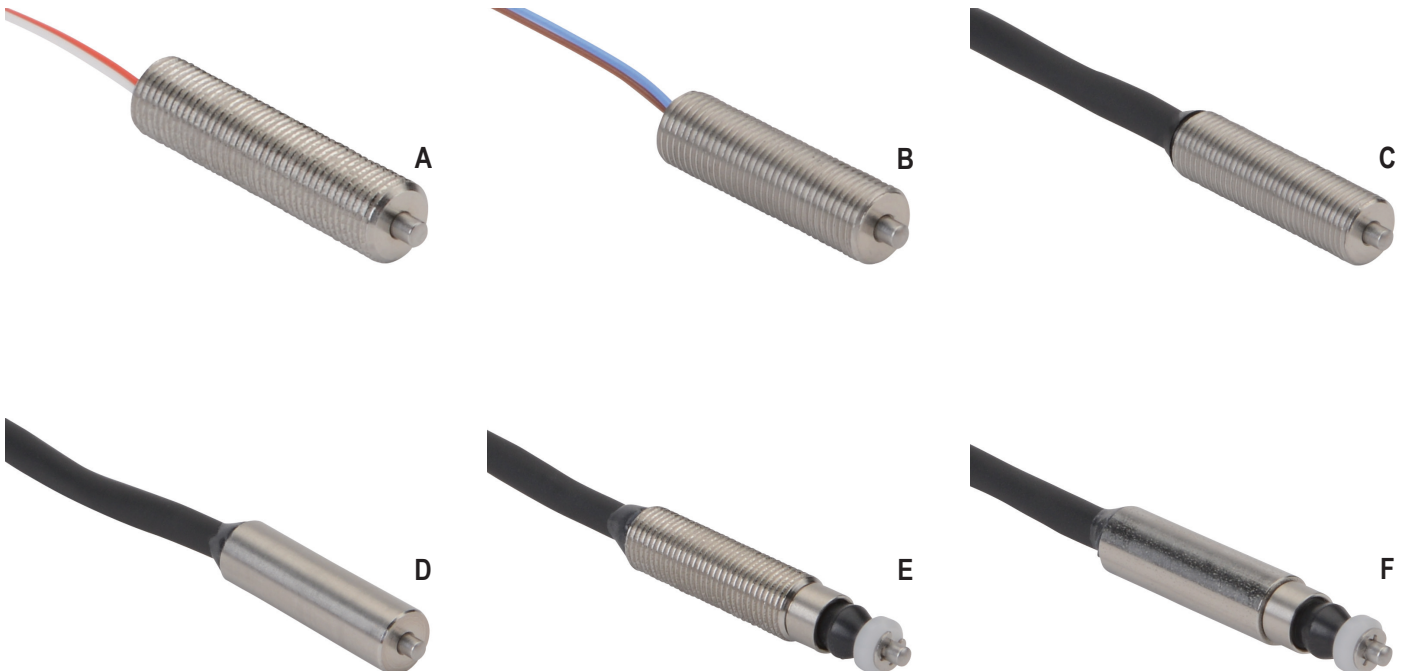
- Ultra-small design (M5 or Ø5)
- 3 micron (µm) repeat accuracy
- No movement differential
- Dustproof / water-resistant (IP67) models available
- Stainless steel housings
- Metal bearing



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										
PT5M3WA		PDF	Ø 1.5 mm plunger, SR 2mm	Threaded	M5×0.5	1.5 mm	N.O.	0.5 N	Core wire, 0.5m length	A
PT5M3WB		PDF								B
PT5M3CB-L		PDF		C						
PT5S3CB-L		PDF		Smooth	Ø 5mm		N.C.	0.8 N	Cable, 2m length	D
PTP5M3CB-L		PDF		Threaded	M5×0.5					E
PTP5S3CB-L		PDF		Smooth	Ø 5mm		F			

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



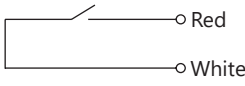
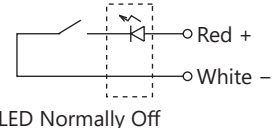
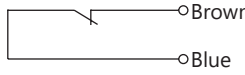
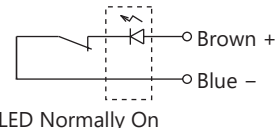
Precision Limit Switches

Precision Touch Limit Switches Specifications		
Series	PT5x3xx	PTP5x3CB
Environmental		
Degree of Protection	IP40	IP67
Temperature Range	Operating: 0–80°C (32–176°F) (Ice-free)	
Mechanical Ratings		
Enclosure Material	303 Stainless Steel	
Pretravel	0* (PT5M3WA: about 0.3 mm)	
Torque (for nuts on threaded barrels, set screws on smooth barrels)	1 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	
Electrical Ratings		
Contact Life	3 million operations	
Repeat Accuracy	Both On–Off, Off–On: 0.003 mm**	
Recommended Minimum Operating Speed	10 mm/minute	
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	PTxxxWx: Core-wire cable, 0.5m (x2) Oil resistant Ø0.6 Tensile strength 15N. PTxxxCB: Cable, 2m Oil-resistant Ø2.8/2 cores Tensile strength 30N, Minimum bending R7.	
Indicating	-L: LED indicator (mounted in cable 120mm from the switch)	

* Adjust the installed location of the switch by the signal switching point.

** 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>