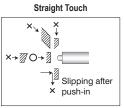


METROL Precision Limit Switches

Precision Straight Touch Limit Switches

Features

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



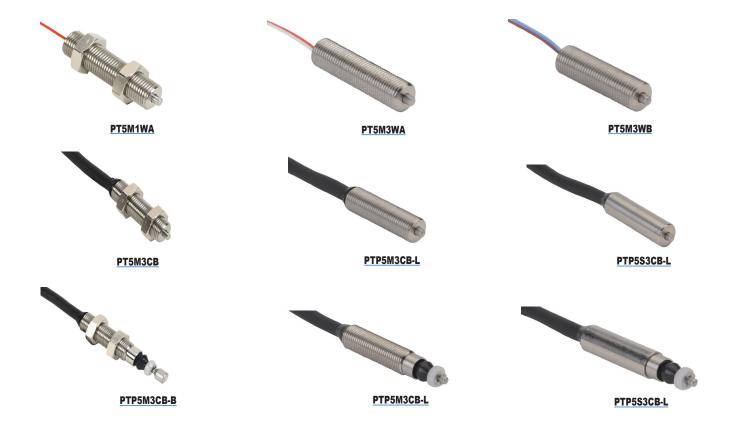
O indicates correct target approach and orientation.

X indicates approach and orientation that should be avoided.

Precision Straight Touch Limit Switches Selection Chart										
Part Number	Price	Drawing Link	Actuator/Head Type*	Barrel	Barrel Diameter/ Thread*	Stroke	Switching Output	Contact Force	Connection Type	
PT5M1WA	\$93.00	PDF	Ø 1.5mm plunger, SR 2mm		M5×0.5	1.5mm	(1) N.O.	0.5N	Core wire, 0.5m [1.6ft]	
PT5M3WA	\$72.00	PDF	Ø 1.5mm plunger, SR 2mm	Threaded		1.5mm	(1) N.O.	0.5N		
PT5M3WB	\$72.00	PDF	Ø 1.5mm plunger, SR 2mm			1.5mm	(1) N.C.	0.5N		
PT5M3CB	\$85.00	PDF	Ø1.5mm plunger, SR 2mm			1.5mm	(1) N.C.	0.5N		
PT5M3CB-L	\$86.00	PDF	Ø 1.5mm plunger, SR 2mm			1.5mm	(1) N.C.	0.5N		
PT5S3CB-L	\$81.00	PDF	Ø 1.5mm plunger, SR 2mm	Smooth	Ø 5 mm	1.5mm	(1) N.C.	0.5N	Cable,	
PTP5M3CB-B	\$101.00	PDF	Ø 1.5mm plunger, Ø 3mm flat	Threaded		1.5mm	(1) N.C.	0.8N	2m [6.5ft]	
PTP5M3CB-L	\$94.00	PDF	Ø 11.5mm plunger, SR 2mm	Threaded	hreaded M5×0.5		(1) N.C.	0.8N		
PTP5S3CB-L	\$88.00	PDF	Ø 1.5mm plunger, SR 2mm	Smooth	Ø 5 mm	1.5mm	(1) N.C.	0.8N		

^{*} Ø = diameter, SR = surface radius

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



METROL Precision Limit Switches

Precision Straight Touch Limit Switches Specifications							
Series	PT5x3xx	PTP5x3CB					
Environmental							
Degree of Protection	IP40	IP67					
Temperature Range	Operating: 0 to 80°C [32 to 176°F] (Ice-free)						
Mechanical Ratings							
Enclosure Material	303 Stainless Steel						
Pretravel	0* (<u>PT5M3WA</u> and <u>PT5M1WA</u> about 0.3 mm)						
Torque (for nuts on threaded barrels, set screws on smooth barrels)	1 N·m						
Vibration	10–55 Hz total amplitude 1.5 for X, Y, Z each direction						
Shock	300 m/s² 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	50 mm/minute						
Contact Voltage	5–24 VDC						
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 (×2) Oil resistant Ø 0.6 Tensile strength 15N. PTxxxCB: Cable, 2m Oil-resistant Ø2.8/2 cores Tensile strength 30N, Minimum bending R7.						
Indicating	-L models: LED indicator (mounted in cable 120mm from the switch)						

Circuit Diagrams

Without LED	With LED (-L models)		
Normally open (N.O.) Red White			
Normally closed (N.C.) Brown Blue	Normally closed (N.C.) Brown + Blue - LED Normally On		

^{*} 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.