

Limit Switch - Prewired Type Plastic Body



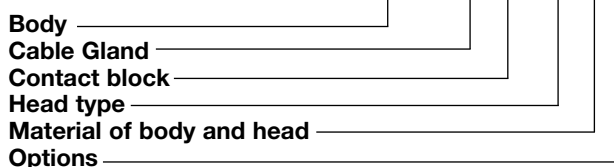
- Double Insulation □
- Sealed with epoxy resin at the base of the box
- Degree of protection IP67
- Thermoplastic material or diecast zinc alloy body
- Positive Opening Operation ⇨
- Minimum Actuation Force/Torque
- Minimum Force to achieve Positive Opening Operation
- Precise operating points (consistency)
- Immune to electromagnetic disturbances
- Zb type contact blocks
- Current I_{th} = 10A
- Rated insulation voltage U_i = 500V
- CE, cULus
- Conform with IEC 947-5-1, EN 60947-5-1 standards and UL508

Product Description

They are developed with very compact size, to enable its mounting on machine's moving member during adverse environmental conditions and controlling their position.

Ordering Key

PS21M-CS11RT-T00



Description of the key codes

Cable gland

C	Prewired - std cable
U	Prewired - UL cable

Contact block

S11	1NO+1NC snap(+)
T11	1NO+1NC slow(+)

Material of body and head

T	Thermoplastic body and Thermoplastic head
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Options

00	no option
0L	with fixing nuts

Head type

BR	Nylon roller internal bent LEVER
L3	Adj. square □ 3 (□ 0.12") steel rod LEVER
LA	Adj. Ø3 (0.12") rod LEVER stainless steel rod
LB	Nylon actuator with stainless steel spring
LF	Adj. fiberglass rod LEVER Ø3 (0.12")
LG	Adj. fiberglass rod LEVER Ø6 (0.24")
LN	Adj. nylon rod LEVER
LP	Multidir. nylon actuator with stainless steel spring
LS	Stainless steel spring multidir actuator
P0	Metal plain PLUNGER
P8	Nylon cross roller PLUNGER with fixing nuts
P9	Cross metal roller PLUNGER
PH	Metal PLUNGER + gasket
PR	Metal roller PLUNGER
PY	Nylon roller PLUNGER
R1	Adj. LEVER with nylon roller
RO	Roller LEVER steel ball bearing
RS	Metal roller LEVER
RT	Nylon roller LEVER

Technical Data

Standards	Plastic Body
Certifications – Approvals	Devices conform with international IEC 947-5-1 and European EN 60947-5-1 standards, UL508
Air temperature near the device	cULus
- during operation	-25°C...+70°C / -13°F...+158°F
- for storage	-40°C...+70°C / -40°F...+158°F
Mounting positions	All positions are authorized
Protection against electrical shocks (according to IEC 536)	Class II
Degree of protection (according to IEC 529 and EN 60529)	IP67
Degree of protection (according to UL508)	Type 1 enclosure (“indoor use only”)

Electrical Data

Rated insulation voltage U_i		Plastic Body
-according to IEC 60947-1 and EN 60947-1		400V (degree of pollution 3)
-according to UL 508		B 300, R 300
Rated impulse withstand voltage U_{imp} (according to IEC 60947-1 and EN 60947-1)		4kV
Conventional enclosed thermal current I_{the} (according to IEC 60947-1 and EN 60947-5-1) ($\theta \leq 40^\circ\text{C}/104^\circ\text{F}$)		5A
Short-circuit protection - gG type fuses		6A
Rated operational current		
I_e / AC-15 - acc.to IEC 60947-5-1	24VAC (50/60 Hz)	5.0A
	120VAC (50/60 Hz)	3.0A
	240VAC (50/60 Hz)	1.5A
- acc.to UL 508		B 300
I_e / DC-13 - acc.to IEC 60947-5-1	24VDC	1.1A
	110VDC	0.22A
	250VDC	0.1A
- acc.to UL 508		R 300
Electrical durability (according to IEC 60497-5-1 annex C)		Utilization categories AC-15 and DC-13 (see curves and value below)
- max. switching frequency Cycles/h		3600
- load factor		0.5
Mechanical durability		10 millions of operations

Diagram for snap action contact:

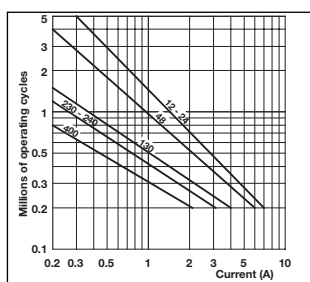
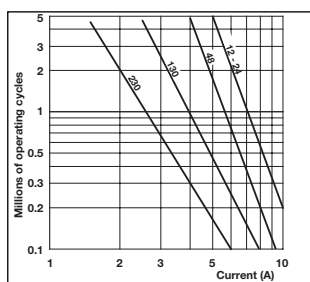


Diagram for slow action contact:



Electrical durability for DC-13 utilization category

Power breaking for a durability of 5 million operating cycles		
	Snap action	Slow action
Voltage 24V	9.5W	12W
Voltage 48V	6.8W	9W
Voltage 110V	3.6W	6W

Limit Switches - Miniature Type (PS21M) Plastic Body IP67

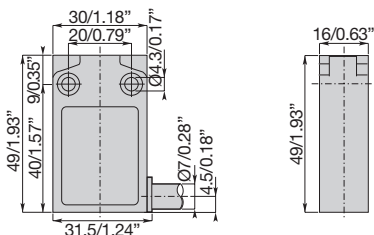


● Cable Gland

- C** = Pre-wired standard cable (PVC) 4x0.75mm² Length: 1m/3.28ft
(Different lengths available on request)
- U** = Pre-wired UL cable 4x0.75mm² Length: 1m/3.28ft
(Different lengths available on request)

▲ Contact block (Zb type)

S11 (1NO+1NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
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		S11		T11	

Conformity / (NC)	/ (NC)	Plain Plunger	
Max. Actuation speed	0.5m/s / 1.64ft/s	Code	PS21M-●▲P0-T00
Min. force or torque	15N / 30Nm		
Weight	125.0g / 4.921oz		

		S11		T11	


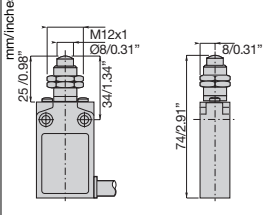
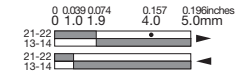
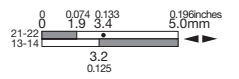
Conformity / (NC)	/ (NC)	Roller Plunger	
Max. Actuation speed	0.1m/s / 0.33ft/s	Code	PS21M-●▲PR-T00 PS21M-●▲PY-T00
Min. force or torque	10N / 30Nm		
Weight	130.0g / 5.118oz		

		S11		T11	


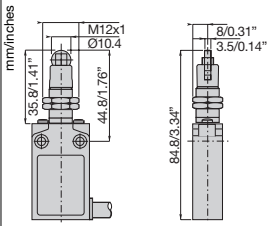
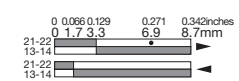
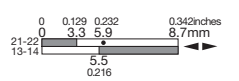
Conformity / (NC)	/ (NC)	Cross roller plunger	
Max. Actuation speed	0.1m/s / 0.33ft/s	Code	PS21M-●▲P9-T00 PS21M-●▲P8-T00
Min. force or torque	10N / 30Nm		
Weight	130.0g / 5.118oz		

		S11		T11	


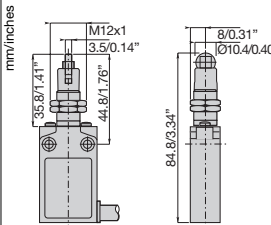
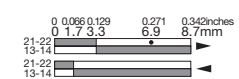
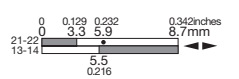
Conformity / (NC)	/ (NC)	Plain plunger with dust protection cup	
Max. Actuation speed	0.5m/s / 1.64ft/s	Code	PS21M-●▲PH-T00
Min. force or torque	15N / 30Nm		
Weight	130.0g / 5.118oz		

		S11	T11
			


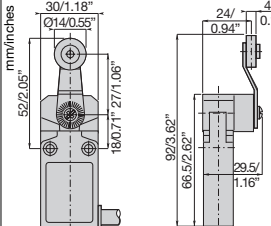
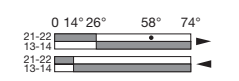
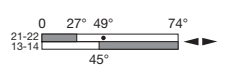
Conformity / \rightarrow (NC)	/ \rightarrow	Pain plunger with fixing nuts	
Max. Actuation speed	0.5m/s / 1.64ft/s	Code	PS21M- \bullet \blacktriangle P0-T0L
Min. force or torque	15N / 30Nm		
Weight	140.0g / 4.938oz		

		S11	T11
			


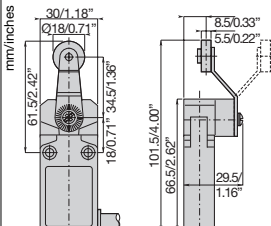
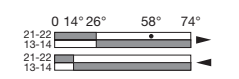
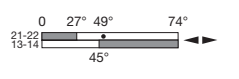
Conformity / \rightarrow (NC)	/ \rightarrow	Roller plunger with fixing nuts	
Max. Actuation speed	0.1m/s / 0.33ft/s	Code	Metal Roller: PS21M- \bullet \blacktriangle PR-T0L Nylon Roller: PS21M- \bullet \blacktriangle PY-T0L
Min. force or torque	10N / 30Nm		
Weight	145.0g / 5.115oz		

		S11	T11
			

Conformity / \rightarrow (NC)	/ \rightarrow	Cross roller plunger with fixing nuts	
Max. Actuation speed	0.1m/s / 0.33ft/s	Code	Metal Roller: PS21M- \bullet \blacktriangle P9-T0L Nylon Roller: PS21M- \bullet \blacktriangle P8-T0L
Min. force or torque	10N / 30Nm		
Weight	145.0g / 5.115oz		

		S11	T11
			

Conformity / \rightarrow (NC)	/ \rightarrow	Ø14 (0.55") roller lever	
Max. Actuation speed	1.5m/s / 4.92ft/s	Code	Nylon Rollerv: PS21M- \bullet \blacktriangle RT-T00 Metal Roller: PS21M- \bullet \blacktriangle RS-T00 Ball Bearing: PS21M- \bullet \blacktriangle RO-T00
Min. force or torque	0.08N / 0.28Nm		
Weight	175.0g / 6.173oz		

		S11	T11
			

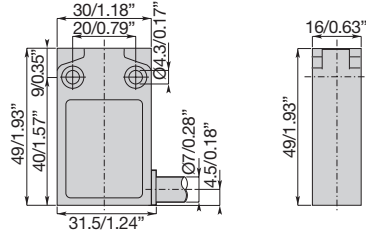
Conformity / \rightarrow (NC)	/ \rightarrow	Ø18 (0.71") Nylon roller lever	
Max. Actuation speed	1.5m/s / 4.92ft/s	Code	PS21M- \bullet \blacktriangle BR-T00
Min. force or torque	0.08N / 0.28Nm		
Weight	180.0g / 6.349oz		

Limit Switches - Miniature Type (PS21M) Plastic Body IP67

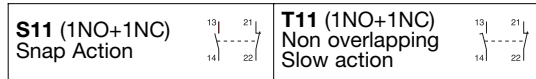


● Cable Gland

- C** = Pre-wired standard cable (PVC) 4x0.75 mm² Length: 1m
(Different lengths available on request)
- U** = Pre-wired UL cable 4x0.75 mm² Length: 1m
(Different lengths available on request)



▲ Contact block (Zb type)



		S11		T11	
Conformity / (NC)		/ (NC)		Adjustable lever with Ø18 (0.71") nylon roller	
Max. Actuation speed		0.5m/s / 1.64ft/s		Code	
Min. force or torque		0.08N / 0.28Nm		PS21M-●▲R1-T00	
Weight		190.0g /6.702oz			

		S11		T11	
Conformity / (NC)		/ (NC)		Nylon actuator with stainless steel spring	
Max. Actuation speed		1.5m/s / 4.92ft/s		Code	
Min. force or torque		0.08N / -		PS21M-●▲LB-T00	
Weight		190.0g /6.702oz			

		S11		T11	
Conformity / (NC)		/ (NC)		Cross roller plunger	
Max. Actuation speed		1.5m/s / 4.92ft/s		Code	
Min. force or torque		0.08N / 0.28Nm		Stainless steel rod Ø3 (0.12") PS21M-●▲LA-T00	
Weight		185.0g /6.526oz		Fiberglass rod Ø3 (0.12") PS21M-●▲LF-T00	
				Square steel rod 3 (0.12") PS21M-●▲L3-T00	

		S11		T11	
Conformity / (NC)		/ (NC)		Adjustable Ø6 (0.24") rod lever	
Max. Actuation speed		1.5m/s / 4.92ft/s		Code	
Min. force or torque		0.08N / 0.28Nm		Nylon rod PS21M-●▲LN-T00	
Weight		200.0g /7.055oz		Fiberglass rod PS21M-●▲LG-T00	



Conformity / (NC)	/	Multidirectional nylon actuator with stainless steel spring
Max. Actuation speed	1.0m/s / 3.28ft/s	Code PS21M-●▲LP-T00
Min. force or torque	0.10N / -	
Weight	195.0g / 6.878oz	



Conformity / (NC)	/	Multidirectional actuator with stainless steel spring
Max. Actuation speed	1.0m/s / 3.28ft/s	Code PS21M-●▲LS-T00
Min. force or torque	0.10N / -	
Weight	200.0g / 7.055oz	

Utilization precautions

Plain plunger

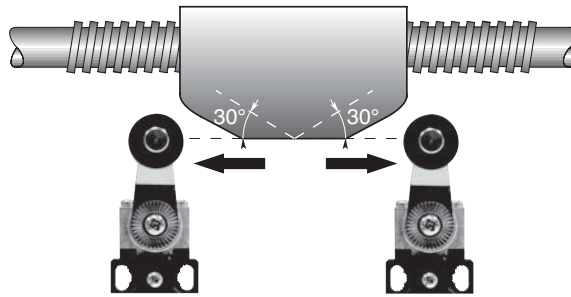


Correct

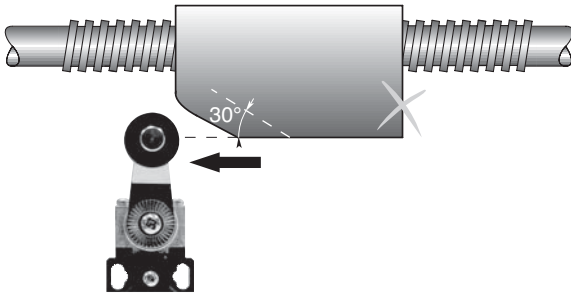


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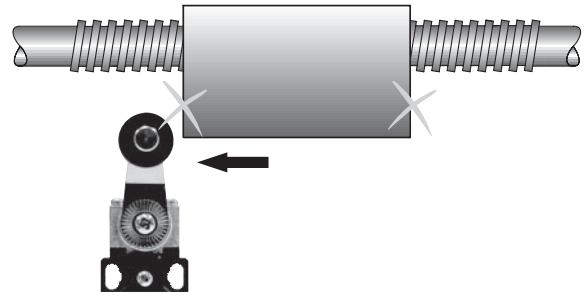
Roller plunger or Roller lever



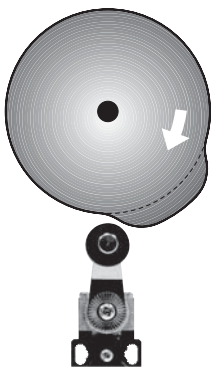
Correct



Incorrect



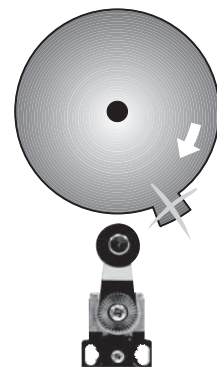
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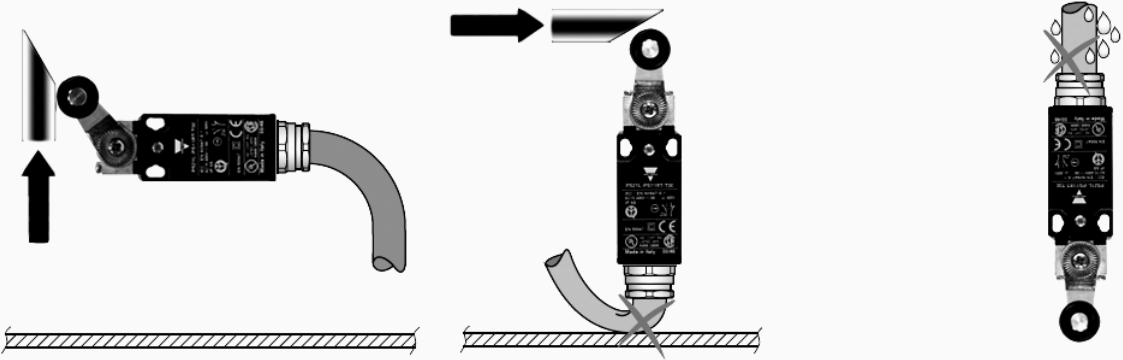
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Utilization precautions

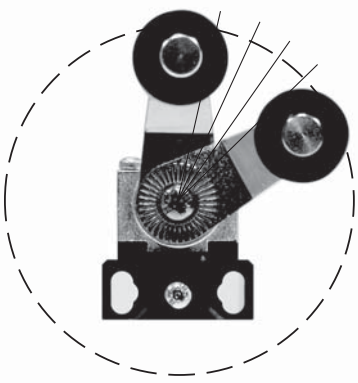
Electrical connection and mounting



Correct Incorrect Incorrect

Adjustement

Position ajustement of lever



Free position ajustement 10 in 10° of lever

Position ajustement of lever and head

