

## Technical Data

### Standards

#### Certifications – Approvals

**Air temperature** near the device

- during operation

- for storage

°C

°C

#### Mounting positions

**Protection against electrical shocks** (acc.to IEC 536)

**Degree of protection** (according to IEC 529 and EN 60 529)

**Degree of protection** (according to UL50)

#### Plastic Body

#### Metal body

Devices conform with international IEC 947-5- and European EN 60-947-5- standards

UL (upon request)

-25 ... +70

-25 ... +70

-40 ... +70

-40 ... +70

All positions are authorized

#### Class II

IP67

Type 1 enclosure

("indoor use only")

#### Class I

IP67

Type 4 - 4X - 6 enclosure

("outdoor use - raintight - watertight corrosion resistant")

## Electrical Data

#### Rated insulation voltage $U_i$

-according to IEC 947-1 and EN 60-947-1

V

400 (degree of pollution 3)

#### Rated impulse withstand voltage $U_{imp}$

(according to IEC 60947-1 and EN 60947-1)

kV

4

#### Conventional enclosed thermal current $I_{th}$

(according to IEC 60947-1 and EN 60947-5-1) ( $\theta \leq 40^\circ\text{C}$ )

A

5

#### Short-circuit protection - gG type fuses

A

6

#### Rated operational current

$I_e$  / AC-15 - acc.to IEC 60947-5-1

24V - 50/60 Hz A

5.0

120V - 50/60 Hz A

3.0

240V - 50/60 Hz A

1.5

$I_e$  / DC-13 - acc.to IEC 60947-5-1

24V - d.c. A

1.1

110V - d.c. A

0.22

250V - d.c. A

0.1

#### Electrical durability

(according to IEC 60497-5-1 annex C)

- max. switching frequency Cycles/h

- load factor

mΩ

Utilization categories AC-15 and DC-13 (see curves and value below)

3600

0.5

25

#### Resistance between contacts

#### Mechanical durability

10 millions of operations

Diagram for snap action contacts:

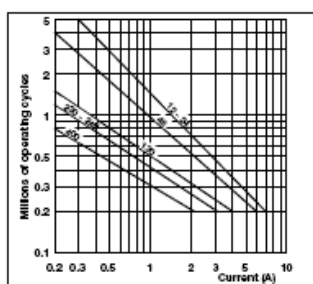
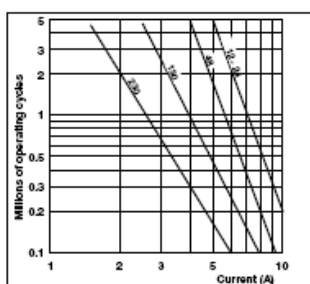


Diagram for non-overlapping slow action contacts:



#### Electrical durability for DC-3 utilization category

Snap action      Slow action

Power breaking for a durability of 5 million operating cycles

Voltage 24V      9,5W      12W

Voltage 48V      6,8W      9W

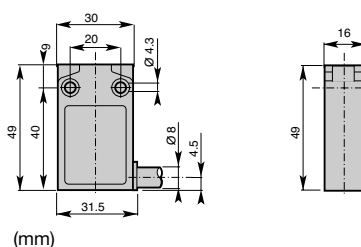
Voltage 110V      3,6W      6W

# Limit Switches - Miniature Type (PS21M) Metal Body IP67

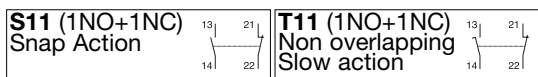


## Cable Characteristics

Pre-wired  
 cable: PVC 4x0.75 mm<sup>2</sup>  
 Length: 1m  
 (Different lengths available on request)



## ▲ Contact block (Zb type)



		<b>S11</b> 	<b>T11</b> 
--	--	----------------	----------------

Conformity / (NC) / (NC)  
 Max. Actuation speed 0.5ms  
 Min. force or torque 15N / 30Nm  
 Weight 175g

Plain Plunger  
 Code PS21M-C ▲ P0-M00

		<b>S11</b> 	<b>T11</b> 
--	--	----------------	----------------

Conformity / (NC) / (NC)  
 Max. Actuation speed 0.1ms  
 Min. force or torque 10N / 30Nm  
 Weight 180g

Roller Plunger  
 Code Metal roller PS21M-C ▲ PR-M00  
 Nylon roller PS21M-C ▲ PY-M00

		<b>S11</b> 	<b>T11</b> 
--	--	----------------	----------------

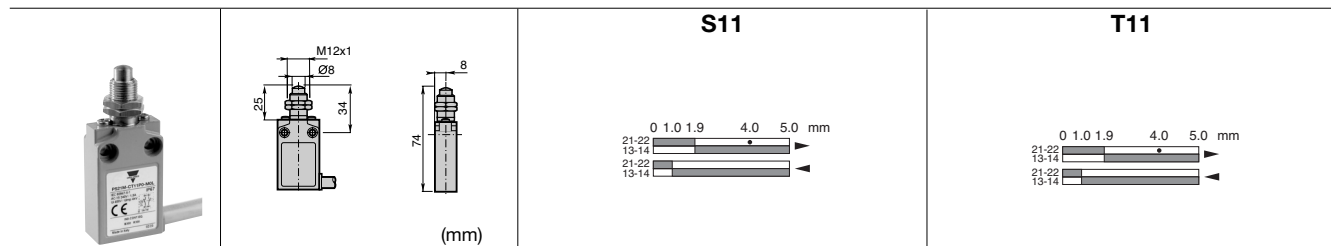
Conformity / (NC) / (NC)  
 Max. Actuation speed 0.1ms  
 Min. force or torque 10N / 30Nm  
 Weight 180g

Cross roller plunger  
 Code Metal roller PS21M-C ▲ P9-M00  
 Nylon roller PS21M-C ▲ P8-M00

		<b>S11</b> 	<b>T11</b> 
--	--	----------------	----------------

Conformity / (NC) / (NC)  
 Max. Actuation speed 0.5ms  
 Min. force or torque 15N / 30Nm  
 Weight 180g

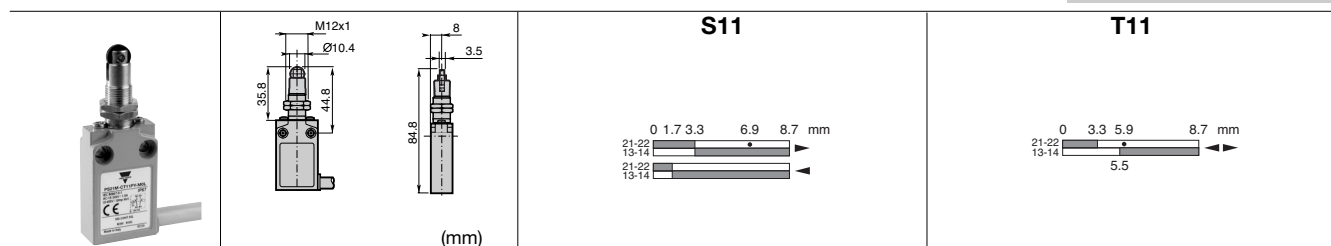
Plain plunger with dust protection cup  
 Code PS21M-C ▲ PH-M00



Conformity /  $\Rightarrow$  (NC) /  $\Rightarrow$   
 Max. Actuation speed 0.5ms  
 Min. force or torque 15N / 30Nm  
 Weight 190g

**S11**  
 Pain plunger with fixing nuts  
 Code

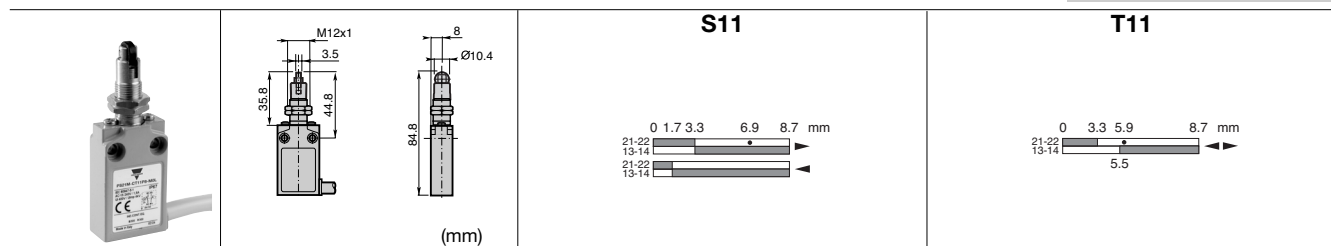
**T11**  
 PS21M-C  $\triangle$  P0-M0L



Conformity /  $\Rightarrow$  (NC) /  $\Rightarrow$   
 Max. Actuation speed 0.1ms  
 Min. force or torque 10N / 30Nm  
 Weight 195g

**S11**  
 Roller plunger with fixing nuts  
 Code metal roller  
 nylon roller

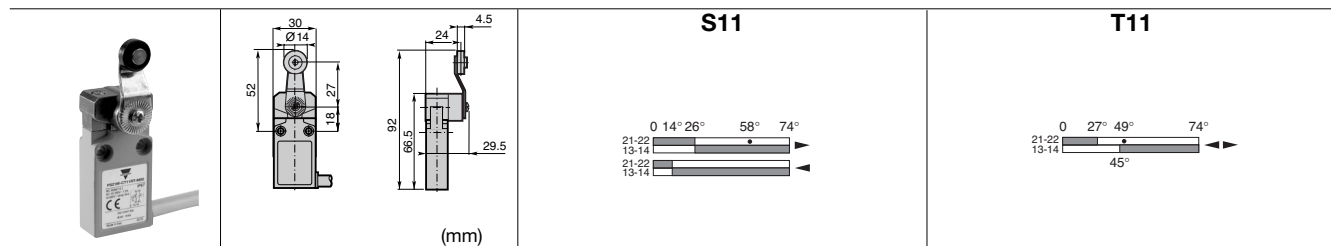
**T11**  
 PS21M-C  $\triangle$  PR-M0L  
 PS21M-C  $\triangle$  PY-M0L



Conformity /  $\Rightarrow$  (NC) /  $\Rightarrow$   
 Max. Actuation speed 0.1ms  
 Min. force or torque 10N / 30Nm  
 Weight 195g

**S11**  
 Cross roller plunger with fixing nuts  
 Code metal roller  
 nylon roller

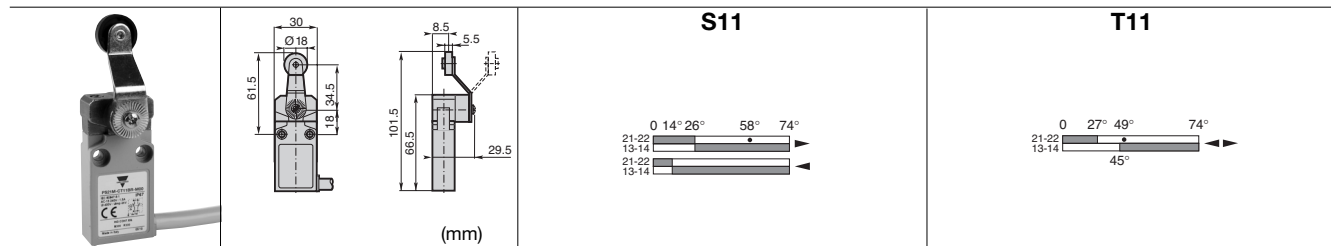
**T11**  
 PS21M-C  $\triangle$  P9-M0L  
 PS21M-C  $\triangle$  P8-M0L



Conformity /  $\Rightarrow$  (NC) /  $\Rightarrow$   
 Max. Actuation speed 1.5ms  
 Min. force or torque 0.08N / 0.28Nm  
 Weight 225g

**S11**  
 Ø14 roller lever  
 Code nylon roller  
 metal roller  
 ball bearing

**T11**  
 PS21M-C  $\triangle$  RT-M00  
 PS21M-C  $\triangle$  RS-M00  
 PS21M-C  $\triangle$  RO-M00



Conformity /  $\Rightarrow$  (NC) /  $\Rightarrow$   
 Max. Actuation speed 1.5ms  
 Min. force or torque 0.08N / 0.28Nm  
 Weight 230g

**S11**  
 Ø18 nylon roller lever  
 Code

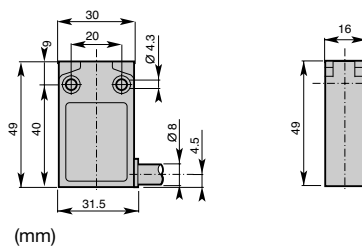
**T11**  
 PS21M-C  $\triangle$  BR-M00

# Limit Switches - Miniature Type (PS21M) Metal Body IP67

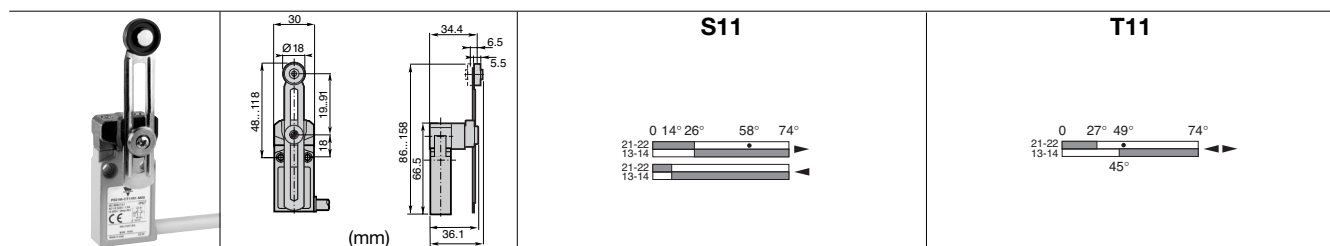
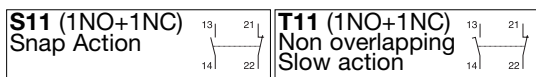


## Cable Characteristics

Pre-wired  
cable: PVC 4x0.75 mm<sup>2</sup>  
Length: 1m  
(Different lengths available on request)

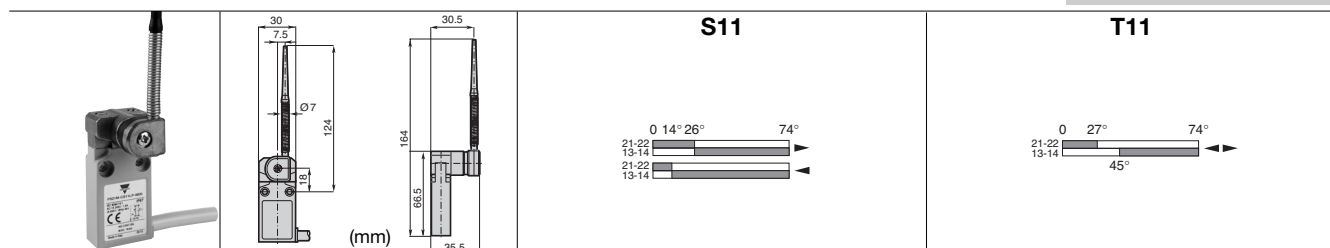


## ▲ Contact block (Zb type)



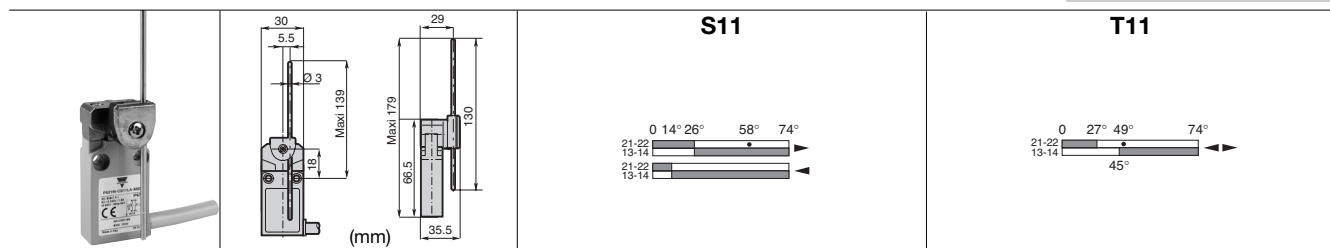
Conformity / (NC) / (NC)  
Max. Actuation speed 1.5ms  
Min. force or torque 0.08N / 0.28Nm  
Weight 240g

Adjustable lever with Ø18 nylon roller  
Code **PS21M-C ▲ R1-M00**



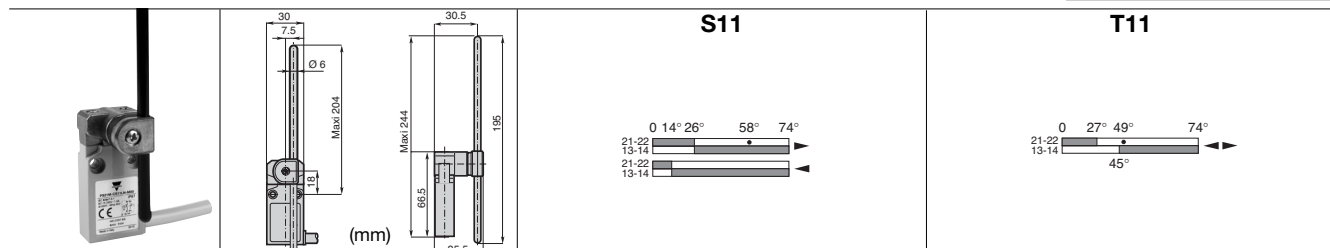
Conformity / (NC) / (NC)  
Max. Actuation speed 1.5ms  
Min. force or torque 0.08N / -  
Weight 240g

Nylon actuator with stainless steel spring  
Code **PS21M-C ▲ LB-M00**



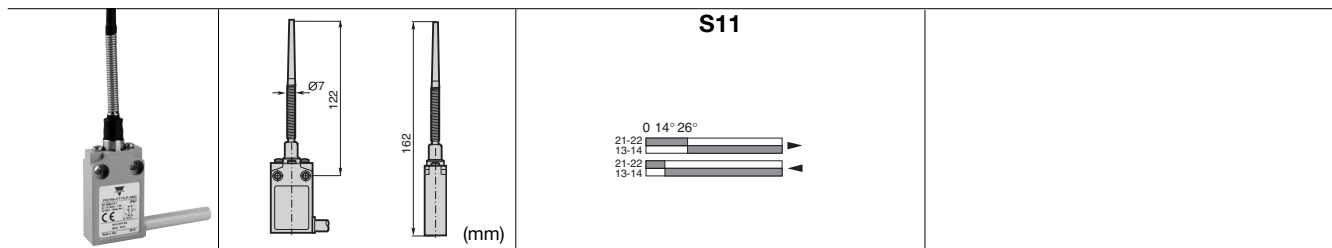
Conformity / (NC) / (NC)  
Max. Actuation speed 1.5ms  
Min. force or torque 0.08N / 0.28Nm  
Weight 235g



Adjustable rod lever  
Code stainless steel rod Ø3  
fiberglass rod Ø3  
square steel rod 3x3  
**PS21M-C ▲ LA-M00**  
**PS21M-C ▲ LF-M00**  
**PS21M-C ▲ L3-M00**



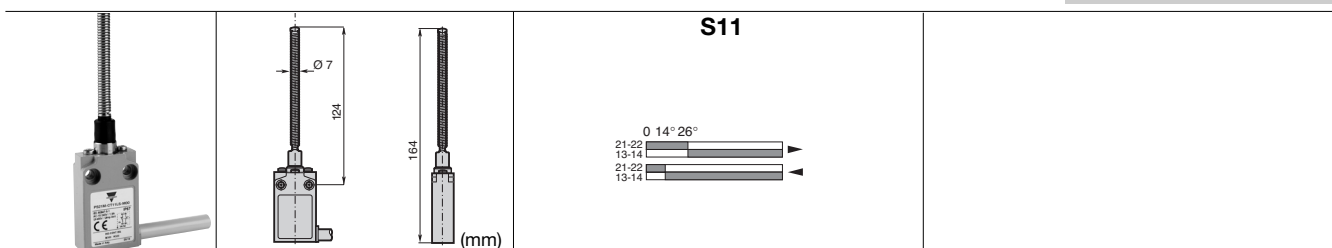
Conformity / (NC) / (NC)  
Max. Actuation speed 1.5ms  
Min. force or torque 0.08N / 0.28Nm  
Weight 250g



Adjustable Ø6 rod lever  
Code Nylon rod  
fiberglass rod  
**PS21M-C ▲ LN-M00**  
**PS21M-C ▲ LG-M00**




<b>Conformity /</b>  <b>(NC)</b>	<b>/</b> 
<b>Max. Actuation speed</b>	1.0ms
<b>Min. force or torque</b>	0.10N / -
<b>Weight</b>	245g

**Multidirectional nylon actuator with stainless steel spring**  
**Code** PS21M-C  LP-M00



<b>Conformity /</b>  <b>(NC)</b>	<b>/</b> 
<b>Max. Actuation speed</b>	1.0ms
<b>Min. force or torque</b>	0.10N / -
<b>Weight</b>	250g

**Multidirectional actuator with stainless steel spring**  
**Code** PS21M-C  LS-M00