

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
-40 ... +70

-25 ... +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
 120V - 50/60 Hz A
 240V - 50/60 Hz A

5.0
3.0
1.5

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

24V - d.c. A
 110V - d.c. A
 250V - d.c. A

1.1
0.22
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

Resistance between contacts

Mechanical durability

25

10 millions of operations

Diagram for snap action contacts:

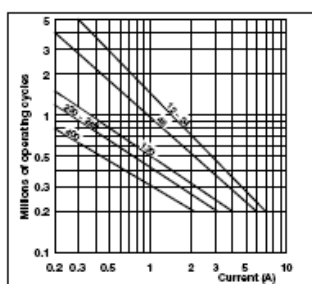
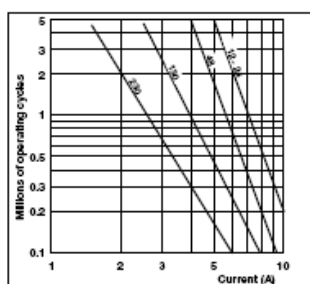


Diagram for non-overlapping slow action contacts:



Electrical durability for DC-3 utilization category

Snap action Slow action

Power breaking for a durability of 5 million operating cycles

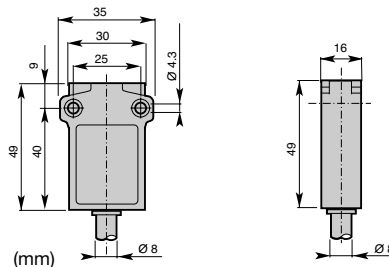
Voltage 24V	9,5W	12W
Voltage 48V	6,8W	9W
Voltage 110V	3,6W	6W

Limit Switches - Miniature Type (PS31M) Metal Body IP67

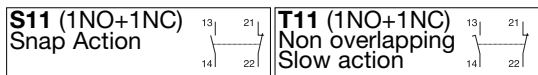


Cable Characteristics

Pre-wired
 cable: PVC 4x0.75 mm²
 Length: 1m
 (Different lengths available on request)



▲ Contact block (Zb type)



		S11	T11

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

Plain Plunger
 Code PS31M-C ▲ P0-M00

		S11	T11

Conformity / (NC) / (NC)
 Max. Actuation speed 0.1ms
 Min. force or torque 10N / 30Nm
 Weight 185g

Roller Plunger
 Code Metal roller PS31M-C ▲ PR-M00
 Nylon roller PS31M-C ▲ PY-M00

		S11	T11

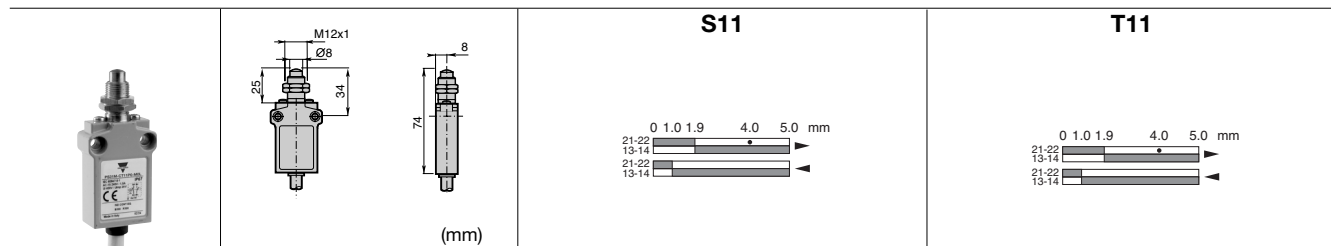
Conformity / (NC) / (NC)
 Max. Actuation speed 0.1ms
 Min. force or torque 10N / 30Nm
 Weight 185g

Cross roller plunger
 Code Metal roller PS31M-C ▲ P9-M00
 Nylon roller PS31M-C ▲ P8-M00

		S11	T11

Conformity / (NC) / (NC)
 Max. Actuation speed 0.5ms
 Min. force or torque 15N / 30Nm
 Weight 185g

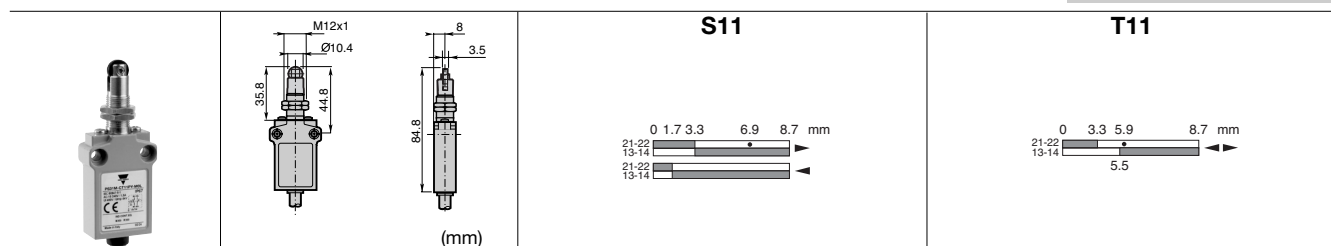
Plain plunger with dust protection cup
 Code PS31M-C ▲ PH-M00



Conformity / \Rightarrow (NC) / \Rightarrow
 Max. Actuation speed 0.5ms
 Min. force or torque 15N / 30Nm
 Weight 195g

S11
 Pain plunger with fixing nuts
 Code

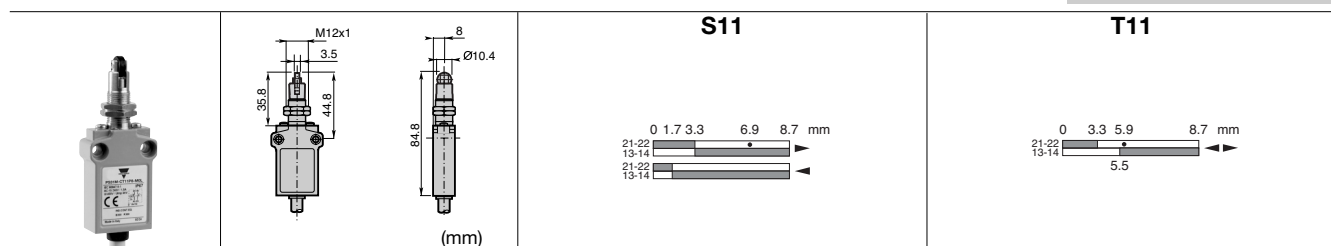
T11
 PS31M-C \triangle P0-M0L



Conformity / \Rightarrow (NC) / \Rightarrow
 Max. Actuation speed 0.1ms
 Min. force or torque 10N / 30Nm
 Weight 200g

S11
 Roller plunger with fixing nuts
 Code metal roller
 nylon roller

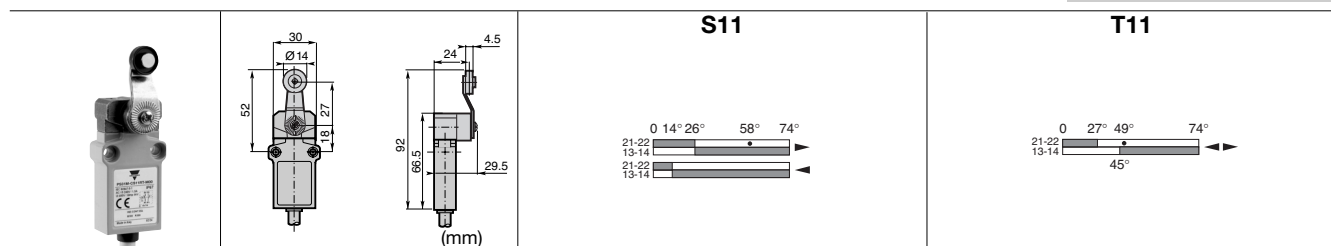
T11
 PS31M-C \triangle PR-M0L
 PS31M-C \triangle PY-M0L



Conformity / \Rightarrow / \Rightarrow
 Max. Actuation speed 0.1ms
 Min. force or torque 10N / 30Nm
 Weight 200g

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

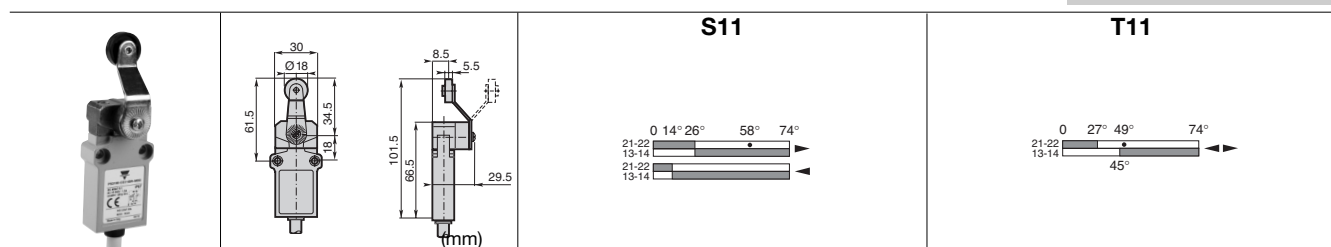
T11
 PS31M-C \triangle P9-M0L
 PS31M-C \triangle P8-M0L



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

S11
 Ø14 roller lever
 Code nylon roller
 metal roller
 ball bearing

T11
 PS31M-C \triangle RT-M00
 PS31M-C \triangle RS-M00
 PS31M-C \triangle RO-M00



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

S11
 Ø18 nylon roller lever
 Code

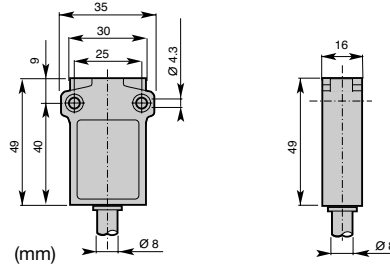
T11
 PS31M-C \triangle BR-M00

Limit Switches - Miniature Type (PS31M) Metal Body IP67

CARLO GAVAZZI

Cable Characteristics

Pre-wired
cable: PVC 4x0.75 mm²
Length: 1m
(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
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Conformity / (NC)	/ (NC)
Max. Actuation speed	1.5ms
Min. force or torque	0.08N / 0.28Nm
Weight	245g

Adjustable lever with Ø18 nylon roller
Code PS31M-C ▲ R1-M00

		S11 	T11
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Conformity / (NC)	/ (NC)
Max. Actuation speed	1.5ms
Min. force or torque	0.08N / -
Weight	245g

Nylon actuator with stainless steel spring
Code PS31M-C ▲ LB-M00

		S11 	T11
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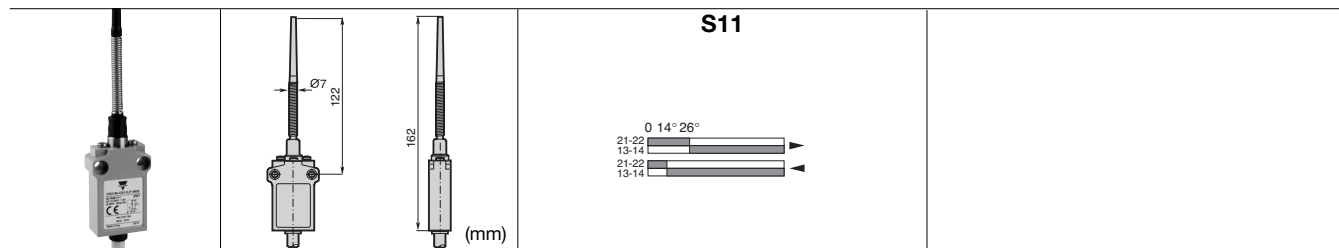
Conformity / (NC)	/ (NC)
Max. Actuation speed	1.5ms
Min. force or torque	0.08N / 0.28Nm
Weight	240g



Adjustable rod lever
Code stainless steel rod Ø3
fiberglass rod Ø3
square steel rod 3x3
PS31M-C ▲ LA-M00
PS31M-C ▲ LF-M00
PS31M-C ▲ L3-M00

		S11 	T11
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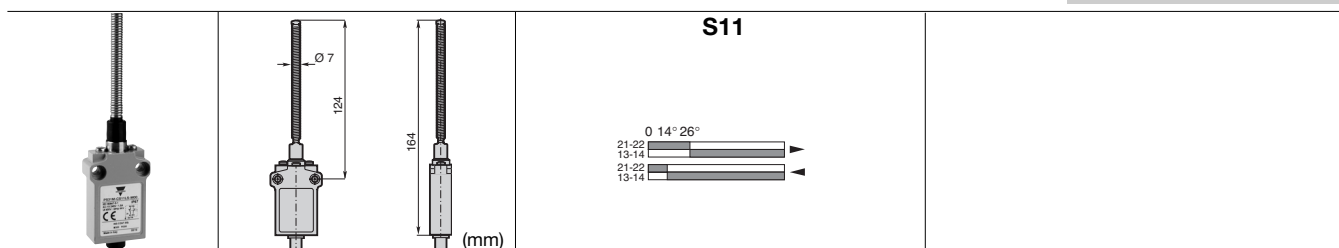
Conformity / (NC)	/ (NC)
Max. Actuation speed	1.5ms
Min. force or torque	0.08N / 0.28Nm
Weight	255g



Adjustable Ø6 rod lever
Code Nylon rod
fiberglass rod
PS31M-C ▲ LN-M00
PS31M-C ▲ LG-M00




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

Multidirectional nylon actuator with stainless steel spring
Code PS31M-C  LP-M00



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

Multidirectional actuator with stainless steel spring
Code PS31M-C  LS-M00