

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:

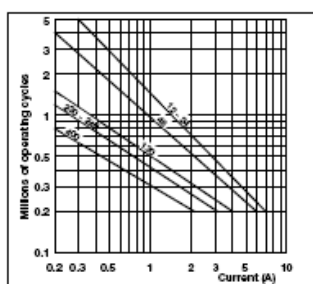
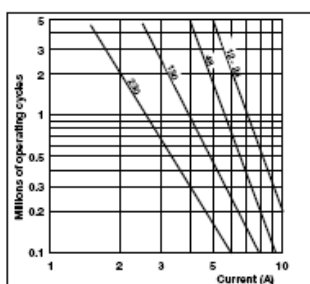


Diagram for non-overlapping slow action contacts:



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

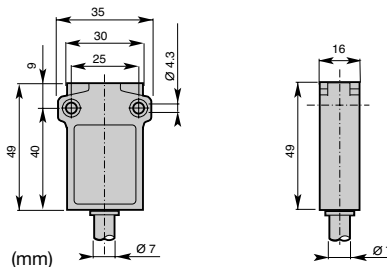
Voltage 110V 3,6W 6W

Limit Switches - Miniature Type (PS31M) Plastic Body IP67

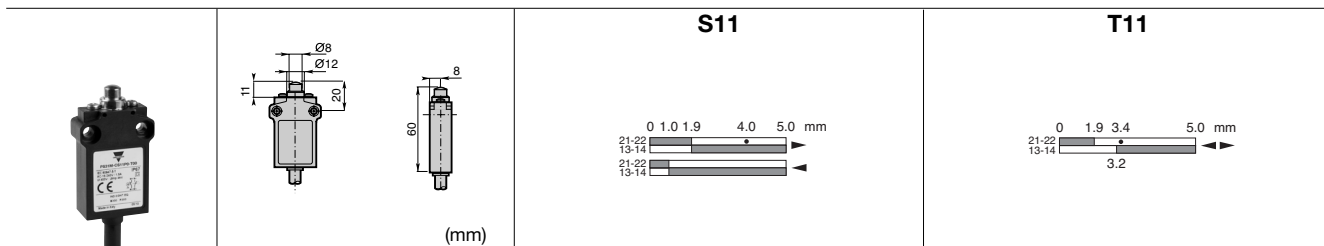
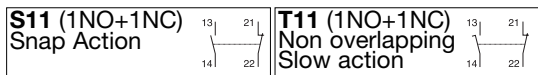


Cable Characteristics

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

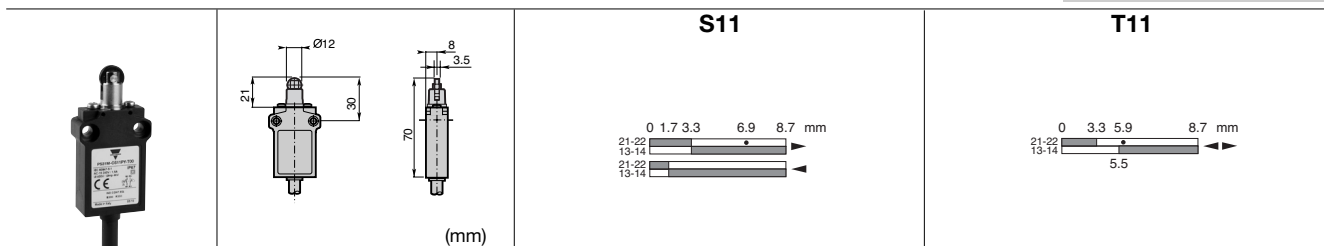


▲ Contact block (Zb type)



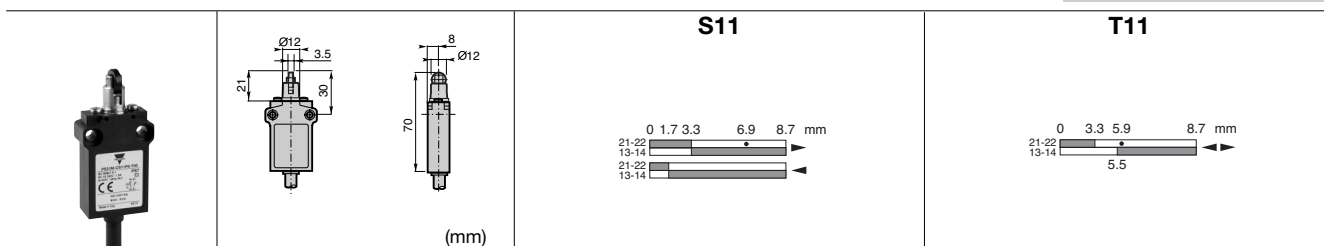
Conformity / (NC) / (NC)
 Max. Actuation speed 0.5ms
 Min. force or torque 15N / 30Nm
 Weight 125g

Plain Plunger
 Code PS31M-C ▲ P0-T00



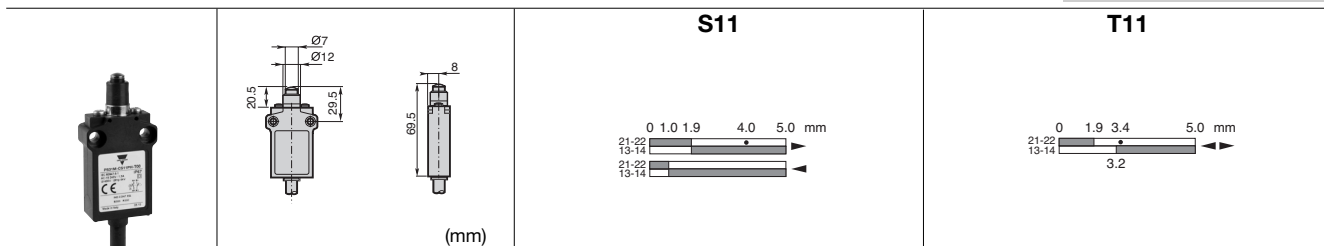
Conformity / (NC) / (NC)
 Max. Actuation speed 0.1ms
 Min. force or torque 10N / 30Nm
 Weight 130g

Roller Plunger
 Code Metal roller PS31M-C ▲ PR-T00
 Nylon roller PS31M-C ▲ PY-T00



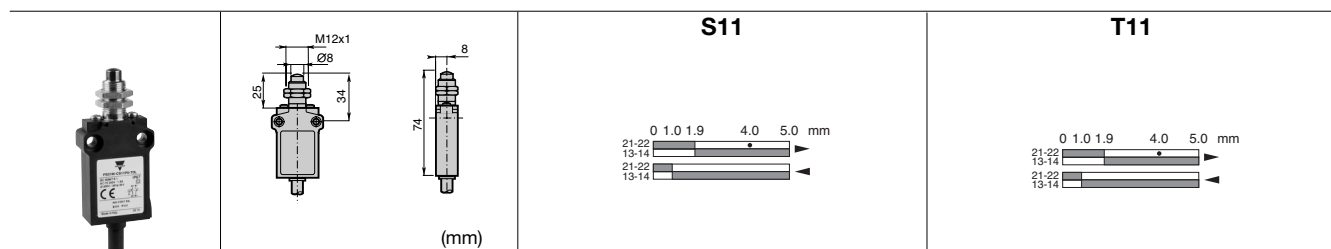
Conformity / (NC) / (NC)
 Max. Actuation speed 0.1ms
 Min. force or torque 10N / 30Nm
 Weight 130g

Cross roller plunger
 Code Metal roller PS31M-C ▲ P9-T00
 Nylon roller PS31M-C ▲ P8-T00



Conformity / (NC) / (NC)
 Max. Actuation speed 0.5ms
 Min. force or torque 15N / 30Nm
 Weight 130g

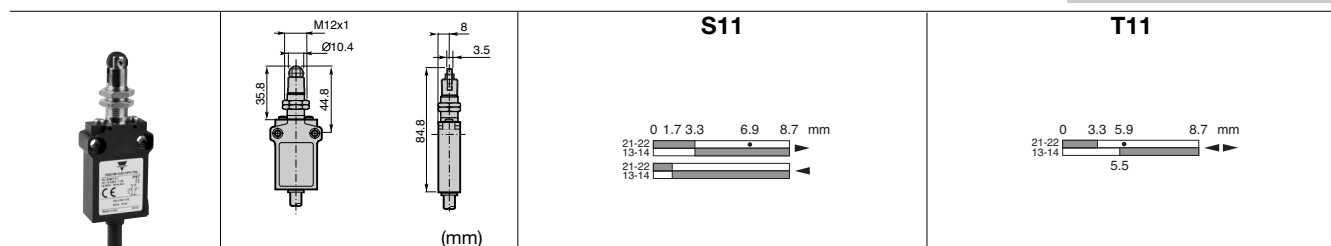
Plain plunger with dust protection cup
 Code PS31M-C ▲ PH-T00



Conformity / (NC) / (NC)
Max. Actuation speed 0.5ms
Min. force or torque 15N / 30Nm
Weight 140g

S11
Pain plunger with fixing nuts
Code

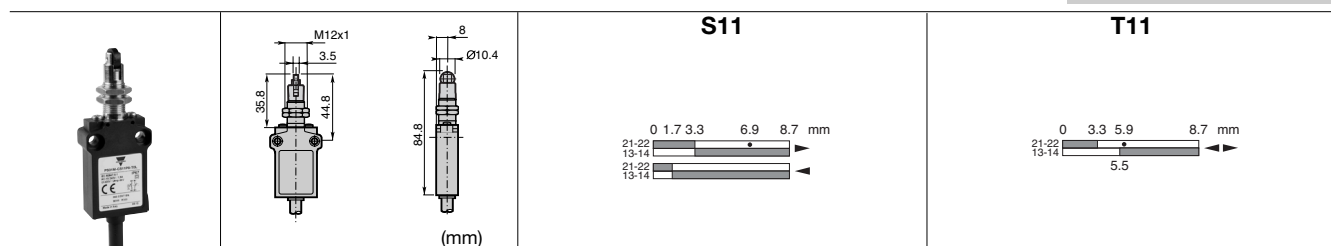
T11
PS31M-C ▲ P0-T0L



Conformity / (NC) / (NC)
Max. Actuation speed 0.1ms
Min. force or torque 10N / 30Nm
Weight 145g

S11
Roller plunger with fixing nuts
Code metal roller
nylon roller

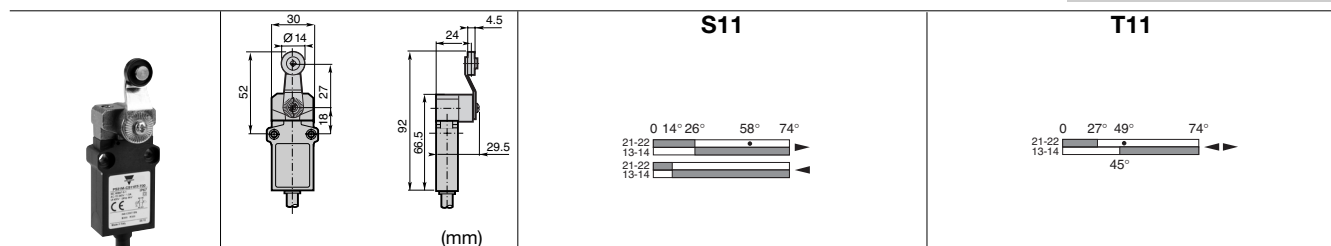
T11
PS31M-C ▲ PR-T0L
PS31M-C ▲ PY-T0L



Conformity / (NC) / (NC)
Max. Actuation speed 0.1ms
Min. force or torque 10N / 30Nm
Weight 145g

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

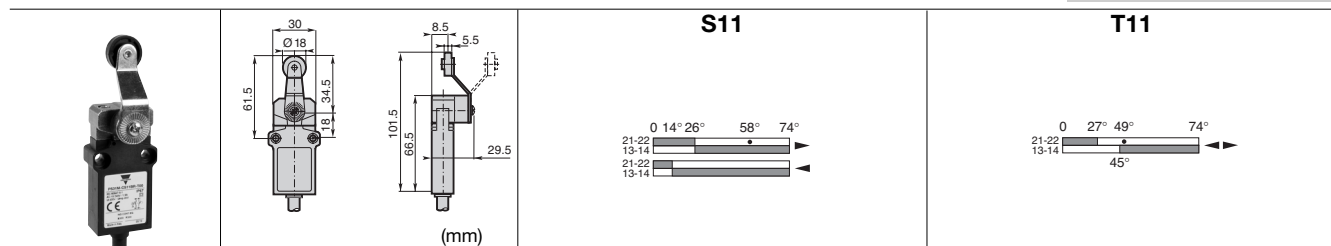
T11
PS31M-C ▲ P9-T0L
PS31M-C ▲ P8-T0L



Conformity / (NC) / (NC)
Max. Actuation speed 1.5ms
Min. force or torque 0.08N / 0.28Nm
Weight 175g

S11
Ø14 roller lever
Code nylon roller
metal roller
ball bearing

T11
PS31M-C ▲ RT-T00
PS31M-C ▲ RS-T00
PS31M-C ▲ RO-T00



Conformity / (NC) / (NC)
Max. Actuation speed 1.5ms
Min. force or torque 0.08N / 0.28Nm
Weight 180g

S11
Ø18 nylon roller lever
Code

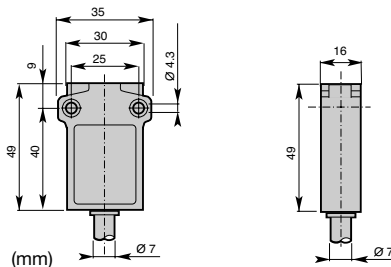
T11
PS31M-C ▲ BR-T00

Limit Switches - Miniature Type (PS31M) Plastic Body IP67



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 | |
|-------------------------------------|--|--|--|

| | | | |
|--|--|------------|------------|
| | | S11 | T11 |
| | | | |

Conformity / (NC) / (NC)
Max. Actuation speed 1.5ms
Min. force or torque 0.08N / 0.28Nm
Weight 190g

Adjustable lever with Ø18 nylon roller
Code **PS31M-C ▲ R1-T00**

| | | | |
|--|--|------------|------------|
| | | S11 | T11 |
| | | | |

Conformity / (NC) / (NC)
Max. Actuation speed 1.5ms
Min. force or torque 0.08N / -
Weight 190g

Nylon actuator with stainless steel spring
Code **PS31M-C ▲ LB-T00**

| | | | |
|--|--|------------|------------|
| | | S11 | T11 |
| | | | |

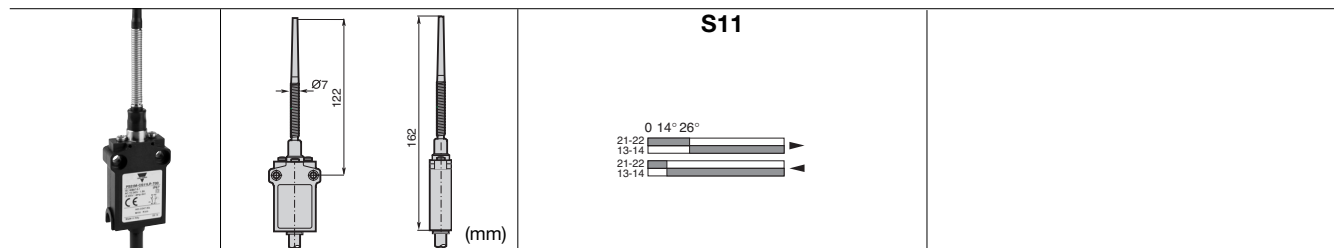
Conformity / (NC) / (NC)
Max. Actuation speed 1.5ms
Min. force or torque 0.08N / 0.28Nm
Weight 185g



Adjustable rod lever
Code stainless steel rod Ø3
fiberglass rod Ø3
square steel rod 3x3
PS31M-C ▲ LA-T00
PS31M-C ▲ LF-T00
PS31M-C ▲ L3-T00

| | | | |
|--|--|------------|------------|
| | | S11 | T11 |
| | | | |

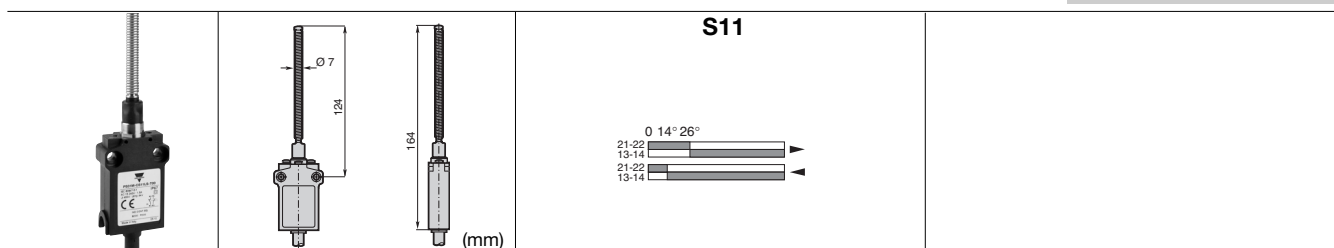
Conformity / (NC) / (NC)
Max. Actuation speed 1.5ms
Min. force or torque 0.08N / 0.28Nm
Weight 200g



Adjustable Ø6 rod lever
Code Nylon rod
fiberglass rod
PS31M-C ▲ LN-T00
PS31M-C ▲ LG-T00




| | |
|---|--|
| Conformity /  (NC) | /  |
| Max. Actuation speed | 1.0ms |
| Min. force or torque | 0.10N / - |
| Weight | 195g |

Multidirectional nylon actuator with stainless steel spring
Code PS31M-C  LP-T00



| | |
|---|--|
| Conformity /  (NC) | /  |
| Max. Actuation speed | 1.0ms |
| Min. force or torque | 0.10N / - |
| Weight | 200g |

Multidirectional actuator with stainless steel spring
Code PS31M-C  LS-T00