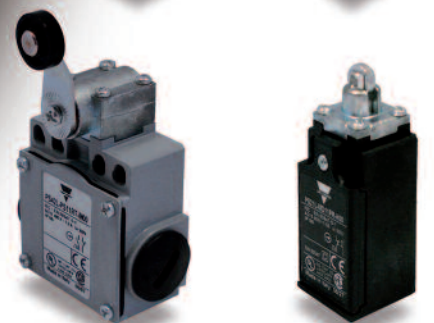


Limit Switches

- Limit Type
- Safety Type




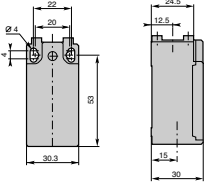
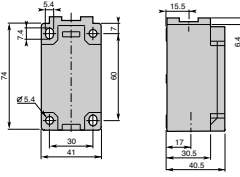
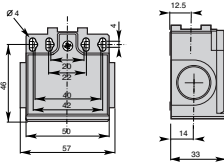


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Limit Switches





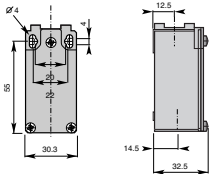
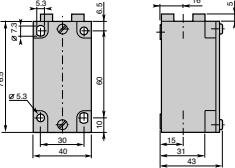
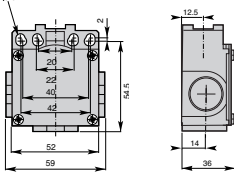
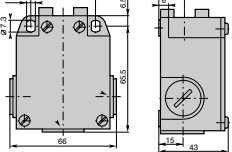


Body	PS21L	PS31L	PS42L	
Type Material	Limit Thermoplastic	Limit Thermoplastic	Limit Thermoplastic	
				
Application	General Purpose	General Purpose	General Purpose	
Dimensions (mm)				
width	30mm	40mm	50mm	
fixing interaxe	20/22mm	30mm	40/42mm	
cable inlet	1	1	2	
Cable Gland				
M20	•	•	•	
PG13.5	•	•	•	
PG11	•	-	•	
M16	•	-	•	
1/2 NPT	•	•	•	
Contact Block				
1NO+1NC overlap slow(+)	•	•	•	
2NC snap(+)	•	•	•	
1NO+1NC snap(+)	•	•	•	
2NC slow(+)	•	•	•	
3NC slow(+)	-	•	-	
1NO+1NC slow(+)	•	•	•	
1NO+2NC slow(+)	-	•	-	
2NO slow	•	•	•	
2NO+1NC slow(+)	-	•	-	
3NO slow	-	•	-	
Head				
plunger type	•	•	•	
lever type	•	•	•	
shaft type	•	•	•	
safety type	-	-	-	
with pull button reset	-	-	-	
Option				
with fixing nut	-	-	-	
Detailed information on page	20	26	30	

• = Available, - = Not available

Limit Switches

CARLO GAVAZZI

Body	PS21L	PS31L	PS42L	PS43L
Type Material	Limit Zinc Alloy	Limit Aluminium	Limit Zinc Alloy	Limit Aluminium
				
Application	General Purpose	General Purpose	General Purpose	General Purpose
Dimensions (mm)				
width	30mm	40mm	50mm	60mm
fixing interaxe	20/22mm	30mm	40/42mm	40/42mm
cable inlet	1	1	3	3
Cable Gland				
M20	•	•	•	•
PG13.5	•	•	•	•
PG11	•	-	•	-
M16	•	-	•	-
1/2 NPT	•	•	•	•
Contact Block				
1NO+1NC overlap slow(+)	•	•	•	•
2NC snap(+)	•	•	•	•
1NO+1NC snap(+)	•	•	•	•
2NC slow(+)	•	•	•	•
3NC slow(+)	-	•	-	•
1NO+1NC slow(+)	•	•	•	•
1NO+2NC slow(+)	-	•	-	•
2NO slow	•	•	•	•
2NO+1NC slow(+)	-	•	-	•
3NO slow	-	•	-	•
Head				
plunger type	•	•	•	•
lever type	•	•	•	•
shaft type	•	•	•	•
safety type	-	-	-	-
with pull button reset	-	-	-	-
Option				
with fixing nut	-	-	-	-
Detailed information on page	34	37	42	45

• = Available, - = Not available

Specifications are subject to change without notice

Limit Switches



Body	PS21S PS21H PS21R	PS31S PS31R	PS42S PS42H PS42R
Type Material	Safety Thermoplastic	Safety Thermoplastic	Safety Thermoplastic
Application	- Key (S) - Hinge (H) - Pull Wire (R)	- Key (S) - Pull Wire (R)	- Key (S) - Hinge (H) - Pull Wire (R)
Dimensions (mm)			
width	30mm	40mm	50mm
fixing interaxe	20/22mm	30mm	40/42mm
cable inlet	1	1	2
Cable Gland			
M20	•	•	•
PG13.5	•	•	•
PG11	•	-	•
M16	•	-	•
1/2 NPT	•	•	•
Contact Block			
1NO+1NC overlap slow(+)	•	•	•
2NC snap(+)	•	•	•
1NO+1NC snap(+)	•	•	•
2NC slow(+)	•	•	•
3NC slow(+)	-	•	-
1NO+1NC slow(+)	•	•	•
1NO+2NC slow(+)	-	•	-
2NO slow	-	-	-
2NO+1NC slow(+)	-	•	-
3NO slow	-	-	-
Head			
plunger type	-	-	-
lever type	-	-	-
shaft type	-	-	-
safety type	•	•	•
with pull button reset	-	-	-
Option			
with fixing nut	-	-	-

Detailed information on page

52

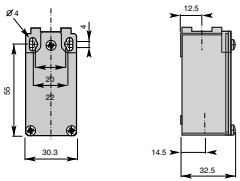
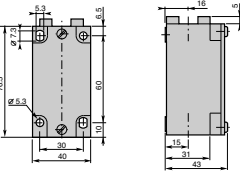
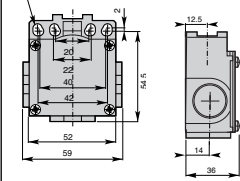
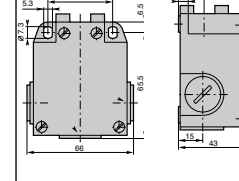
56

54

• = Available, - = Not available

Limit Switches

CARLO GAVAZZI

Body	PS21S PS21H PS21R	PS31S PS31R	PS42S PS42H PS42R	PS43S PS43R
Type Material	Safety Zinc Alloy	Safety Aluminium	Safety Zinc Alloy	Safety Aluminium
Application	- Key (S) - Hinge (H) - Pull Wire (R)	- Key (S) - Pull Wire (R)	- Key (S) - Hinge (H) - Pull Wire (R)	- Key (S) - Pull Wire (R)
Dimensions (mm)				
width	30mm	40mm	50mm	60mm
fixing interaxe	20/22mm	30mm	40/42mm	40/42mm
cable inlet	1	1	2	3
Cable Gland				
M20	•	•	•	•
PG13.5	•	•	•	•
PG11	•	-	•	•
M16	•	-	•	•
1/2 NPT	•	•	•	•
Contact Block				
1NO+1NC overlap slow(+)	•	•	•	-
2NC snap(+)	•	•	•	•
1NO+1NC snap(+)	•	•	•	•
2NC slow(+)	•	•	•	•
3NC slow(+)	-	•	-	•
1NO+1NC slow(+)	•	•	•	•
1NO+2NC slow(+)	-	•	-	•
2NO slow	-	-	-	-
2NO+1NC slow(+)	-	•	-	•
3NO slow	-	-	-	-
Head				
plunger type	-	-	-	-
lever type	-	-	-	-
shaft type	-	-	-	-
safety type	•	•	•	•
with pull button reset	-	-	-	-
Option				
with fixing nut	-	-	-	-
Detailed information on page	58	62	60	63

• = Available, - = Not available

Specifications are subject to change without notice

Limit Switches

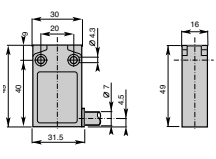
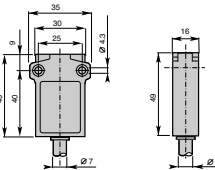
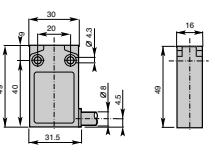
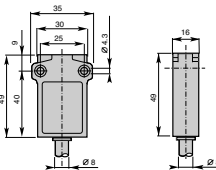


Body	PS21K	PS42K	PS21K	PS42K
Type Material	Safety with reset Thermoplastic	Safety with reset Thermoplastic	Safety with reset Zinc Alloy	Safety with reset Zinc Alloy
Application	With pull button reset	With pull button reset	With pull button reset	With pull button reset
Dimensions (mm)				
width	30mm	50mm	30mm	50mm
fixing interaxe	20/22mm	40/42mm	20/22mm	40/42mm
cable inlet	1	2	1	2
Cable Gland				
M20	•	•	•	•
PG13.5	•	•	•	•
PG11	•	•	•	•
M16	•	•	•	•
1/2 NPT	•	•	•	•
Contact Block				
1NO+1NC overlap slow(+)	-	-	-	-
2NC snap(+)	•	•	•	•
1NO+1NC snap(+)	•	•	•	•
2NC slow(+)	•	•	•	•
3NC slow(+)	-	-	-	-
1NO+1NC slow(+)	•	•	•	•
1NO+2NC slow(+)	-	-	-	-
2NO slow	-	-	-	-
2NO+1NC slow(+)	-	-	-	-
3NO slow	-	-	-	-
Head				
plunger type	-	-	-	-
lever type	-	-	-	-
shaft type	-	-	-	-
safety type	-	-	-	-
with pull button reset	•	•	•	•
Option				
with fixing nut	-	-	-	-
Detailed information on page	66	70	68	72

• = Available, - = Not available

Limit Switches

CARLO GAVAZZI

Body	PS21M	PS31M	PS21M	PS31M
Type Material	Miniature Thermoplastic	Miniature Thermoplastic	Miniature Zinc alloy	Miniature Zinc alloy
Application	Prewired (1m lateral cable)	Prewired (1m lower cable)	Prewired (1m lateral cable)	Prewired (1m lower cable)
Dimensions (mm)				
width	30mm	35mm	30mm	35mm
fixing interaxe	20mm	25mm	20mm	25mm
cable inlet	1	1	1	1
Cable Gland				
M20	-	-	-	-
PG13.5	-	-	-	-
PG11	-	-	-	-
M16	-	-	-	-
1/2 NPT	-	-	-	-
Contact Block				
1NO+1NC overlap slow(+)	-	-	-	-
2NC snap(+)	-	-	-	-
1NO+1NC snap(+)	•	•	•	•
2NC slow(+)	-	-	-	-
3NC slow(+)	-	-	-	-
1NO+1NC slow(+)	•	•	•	•
1NO+2NC slow(+)	-	-	-	-
2NO slow	-	-	-	-
2NO+1NC slow(+)	-	-	-	-
3NO slow	-	-	-	-
Head				
plunger type	•	•	•	•
lever type	•	•	•	•
shaft type	•	•	•	•
safety type	-	-	-	-
with pull button reset	-	-	-	-
Option				
with fixing nut	•	•	•	•
Detailed information on page	76	80	84	88

• = Available, - = Not available

Specifications are subject to change without notice



Ordering Key

PS 21 L-P S11 BR-T 00



Example: PS21L-PS11P0-T00 = PS30mm Thermoplastic body and head 1NO+1NC snap (+) metal plain plunger.

Plastic Body (IP65) with Plastic Head				Plastic Body (IP65) 40mm with Plastic Head				Metal Body (IP66) or Plastic Body (IP65) with Metal Head				Metal Body (IP66) with Metal Head				Safety Switch with Pull Button Reset				Prewired Miniature Plastic or Metal Body (IP67) & Head															
PS21L	P	S11	PN	T	00	PS31L	P	S11	P0	T	00	PS21L	P	S11	P0	M	00	PS31L	P	S11	P0	M	00	PS21K	P	S11	P0	T	00	PS21M	C	S11	P0	M	00
PS42L	N	S02	P0				N	S02	PB			PS42L	N	S02	PR	H		PS43L	N	S02	PB			PS42K	N	S02	PR	Y		PS31M		T11	PR	T	
	B	T11	PR				M	T11	PR				B	T11	RT				M	T11	PR				B	T11	R3						PY		
	A	O11	P1					O11	PH				A	O11	W0					A	T02	R4 ²					P9								
	M	T02	PH					T02	PG				M	T02	RM					M	LR ³						P8								
		T20	RL					T20	RH					T20	RO						RT						PH								
			RH					T21	RK						BR												RT								
			RV ¹					T12	RB						BE												RS								
			RR ¹					T03	RJ						BM												RO								
			RJ					T30	RY						BO												BR								
			RW ¹						RC						R1												BE								
			LR						RT						W1												RM								
			LO						RS						W2												BO								
			RT						RO						LB												R1								
			W0						W0						LZ												R2								
			BR						R1						LA												W1								
			BE						R2						LF												LB								
			R1						R3						LN												LZ								
			W1						R3						LG												LA								
			W2						W1						L3												LF								
			LB						LB						L3												LN								
			LZ						LZ						LA												LG								
			LA						LA						LF												L3								
			LF						LF						LN												LW								
			LN						LN						L3												LP								
			LG						LG						L3												LS								
			L3						L3						LW												P0		OL						
			LW						LW						LP												PR								
			LP						LP						LS												PY								
			LS						LS						N6												P9								
			N6						LS						N6												P8								

¹ = only for PS21L ² = only for PS21K ³ = only for PS42K ⁴ = option for N7 ⁵ = only for PS31S

Description of the key codes

Body

PS21L	PS 30mm (fix 20/22mm) 1 cable inlet for General Purpose
PS31L	PS 40mm (fix 30mm) 1 cable inlet for General Purpose
PS42L	PS 50mm (fix 40/42mm) 2 cable inlet for General Purpose
PS43L	PS 60mm (fix 40/42mm) 3 cable inlet for General Purpose
PS21H	PS 30mm (fix 20/22mm) 1 cable inlet for hinge (shaft or pin)
PS42H	PS 50mm (fix 40/42mm) 2 cable inlet for hinge (shaft or pin)
PS21K	PS 30mm (fix 20/22mm) 1 cable inlet with button reset
PS42K	PS 50mm (fix 40/42mm) 2 cable inlet with button reset
PS21M	PS 30mm (fix 20mm) 1m cable lateral side (prewired)
PS31M	PS 35mm (fix 25mm) 1m cable lower side (prewired)
PS21R	PS 30mm (fix 20/22mm) 1 cable inlet for pull wire
PS31R	PS 40mm (fix 30mm) 1 cable inlet for pull wire
PS42R	PS 50mm (fix 40/42mm) 2 cable inlet for pull wire
PS43R	PS 60mm (fix 40/42mm) 3 cable inlet for pull wire
PS21S	PS 30mm (fix 20/22mm) 1 cable inlet for Key actuator
PS31S	PS 40mm (fix 30mm) 1 cable inlet for Key actuator
PS42S	PS 50mm (fix 40/42mm) 2 cable inlet for Key actuator
PS43S	PS 60mm (fix 40/42mm) 3 cable inlet for Key actuator

Cable Gland

C	Prewired - std cable
M	M20
P	PG13.5
B	PG11
A	M16
N	1/2 NPT

Contact block

O11	1NO+1NC overlap slow(+)
S02	2NC snap(+)
S11	1NO+1NC snap(+)
T02	2NC slow(+)
T03	3NC slow(+)
T11	1NO+1NC slow(+)
T12	1NO+2NC slow(+)
T20	2NO slow
T21	2NO+1NC slow(+)
T30	3NO slow

Material of body and head

H	Thermoplastic Body and Metal head
M	Metal Body and Metal head
T	Thermoplastic Body and Thermoplastic head
Y	Metal Body and Thermoplastic head

Options

00	no option
0L	with fixing nuts
K0	with reset button

Head type

05	90° adj key head
09	fully turnable key head
BE	nylon roller ext bent LEVER
BM	metal roller bent LEVER
BO	ball roller bent LEVER
BR	nylon roller int bent LEVER
HC	zinc plated steel LEVER
HS	stainless steel shaft
HZ	zinc plated steel shaft
L3	adj square (3x3) steel rod LEVER
LA	adj Ø3 rod LEVER stainless steel rod
LB	nylon actuator with stainless steel spring
LF	adj fiberglass rod LEVER Ø3
LG	adj fiberglass rod LEVER Ø6
LN	adj nylon rod LEVER
LO	steel PLUNGER with nylon roller+gasket
LP	multidir nylon actuator with stainless steel spring
LR	steel PLUNGER with nylon roller
LS	stainless steel spring multidir actuator
LW	Stainless steel spring multidir actuator (cat Whisker)
LZ	Stainless steel spring actuator
N6	pull wire for simple stop
N7	pull wire for emergency stop
P0	metal plain PLUNGER
P1	nylon roller PLUNGER
P8	nylon cross roller PLUNGER with fixing nuts
P9	cross metal roller PLUNGER
PB	steel ball PLUNGER
PG	steel roller PLUNGER +gasket
PH	metal PLUNGER +gasket
PN	nylon plain PLUNGER
PR	metal roller PLUNGER
PY	nylon roller PLUNGER
R1	adj LEVER with nylon roller
R2	adj LEVER with stainless steel roller
R3	adj LEVER with steel ball bearing
R4	plastic roller LEVER on metal PLUNGER (left)
RB	one way LEVER steel ball bearing
RC	one way LEVER + gasket with steel ball bearing
RH	plastic roller LEVER on metal PLUNGER (left)
RJ	plastic roller LEVER on metal PLUNGER +gasket (left)
RK	one way LEVER stainless steel roller
RL	plastic roller LEVER on plastic PLUNGER (left)
RM	metal roller LEVER
RO	roller LEVER steel ball bearing
RR	plastic roller LEVER on plastic PLUNGER (right)
RS	metal roller LEVER
RT	nylon roller LEVER
RV	plastic roller LEVER on metal PLUNGER (right)
RW	plastic roller LEVER on metal PLUNGER +gasket (right)
RY	one way LEVER +gasket with stainless steel roller
SH	stainless steel lateral PLUNGER with horizontal roller
SP	stainless steel lateral plain PLUNGER
SV	stainless steel lateral PLUNGER with vertical roller
W0	Ø50 rubber roller LEVER
W1	adj LEVER with Ø50 rubber roller
W2	adj LEVER with adj Ø50 rubber roller

Specifications

International Specifications

The International Electrotechnical Commission, IEC, which is part of the International Standards Organization, ISO, publishes IEC publications which act as a basis for the world market.

These European standards differ very little from IEC international standards and use a similar numbering system.

The same is true of national standards. Contradicting national standards are withdrawn.

European Specifications

The European Committee for Electrotechnical Standardisation (CENELEC), grouping 18 European countries, publishes EN standards for low voltage industrial apparatus.

Harmonised European Specifications

The European Committees for Standardisation (CEN and CENELEC), grouping 18 European countries, publish EN standards relating to safety of machinery.

Specifications in Canada and the USA

These are equivalent, but differ markedly from IEC, UTE, VDE and BS specifications.

UL Underwriters Laboratories (USA)
CSA Canadian Standards Association (Canada)

has been entirely mounted and wired by qualified personnel. They are not valid for use as "General purpose products" as their possibilities are limited.

They bear the mark:



"Listed" Authorized to be included in equipment and for separate sale are "General purpose products" components in the USA.

They bear the mark :



Remark concerning the label issued by the UL (USA). Two levels of acceptance between devices must be distinguished.

"Recognized" Authorized to be included in equipment, if the equipment in question

European Directives

The guarantee of free movement of goods within the European Community assumes elimination of any regulatory differences between the member states.

European Directives set up common rules that are included in the legislation of each state while contradictory regulations are cancelled.

There are three main directives :

- **Low Voltage Directive 73/23/EEC**, amended by **Directive 93/68/EEC** concerning electrical equipment from 50 to 1000 V a.c. and from 75 to 1500 V d.c. This specifies that compliance with the requirements that is sets out **is acquired** once the equipment conforms to the standards harmonised at European level: EN 60947-1 and EN-60947-5-1 for **limit switches**.

- **Machine Directives – 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC** – defining main safety and health requirements concerning design and manufacture of the machines and other equipment including safety components in European Union countries.

- **Electromagnetic Compatibility Directive 89/336/EEC**, amended by **Directive 92/31/EEC** and **Directive 93/68/EEC** concerning all electrical devices likely to create electromagnetic disturbances.

Signification of CE marking

CE marking must not be confused with a quality label.

CE marking placed on a product is proof of conformity with the European Devices concerning the product.

CE marking is part of an administrative procedure and guarantees free movement of the product within the European Community

Double Insulation

Class II materials, according to IEC 536, are designed with double insulation. This measure consists in dou-

bling the functional insulation with an additional layer of insulation so as to eliminate the risk of electric

shock and thus not having to protect elsewhere. No conductive part of "double insulated" material should

be connected to a protective conductor.

Positive Opening Operation

A control switch, with one or more break-contact elements, has a positive opening operation when the switch actuator ensures full contact opening of the break-contact. For the part of travel that separates the contacts, there must be a

positive drive, with no resilient member (e.g. springs), between the moving contacts and the point of the actuator to which the actuating force is applied. The positive opening operation does not deal with N.O. contacts. Control switches with

positive opening operation may be provided with either snap action or slow action contact elements. To use several contacts on the same control switch with positive opening operation, they must be electrically separated from each other, if

not, only one may be used. Every control switch with positive opening operation must be permanently marked on the outside with the symbol:

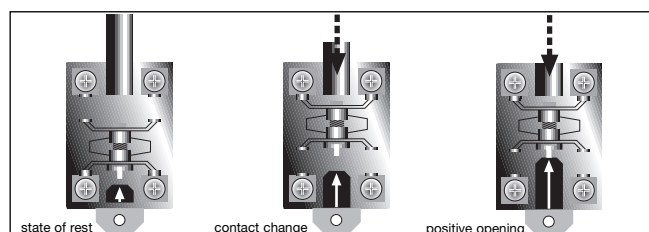


Contact feature

Snap Action

Snap action contacts are characterised by a release position that is distinct from the operating position (differential travel). Snap

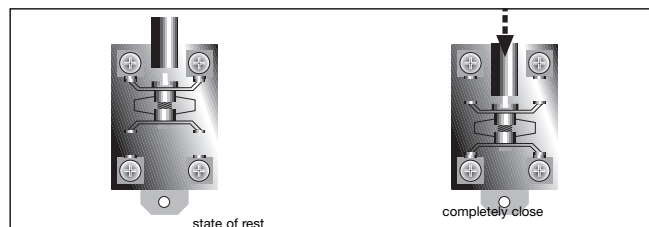
breaking of moving contacts is independent of the switch actuator's speed and contributes to regular electric performance even for slow switch actuator speeds.



Slow action

Slow action contacts are characterised by a release position that is the same

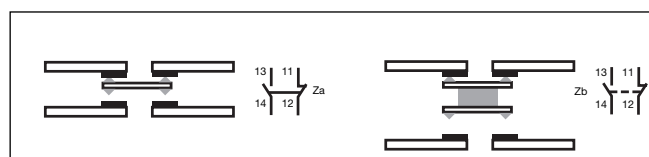
as the operating position. The switch actuator's speed directly conditions the travel speed of contacts.



Contact shape according to IEC 947-5-1

Change-over contact elements with 4 terminals

must be permanently marked with the corresponding Za or Zb symbol as in the diagrams on side.



Utilization Category

AC-15: switching of electromagnetic loads of electromagnets using an alternating current (>72VA).

DC-13: switching of electromagnets using direct current.

Minimum Force/Torque to achieve Positive Opening Operation

The Minimum amount of force/torque that is to be applied to the switch actuator to ensure positive

opening operation of the N.C. contact.

Terminals

Limit switches with metal casings must have a terminal, for a protective conductor, that is placed

inside the casing very close to the cable inlet and must be permanently marked.

Minimum Actuation Force/Torque

The minimum amount of force/torque that is to be applied to the switch actuator to produce a

change in contact position.

Travel and operation diagrams

P_0 Free position:

position of the switch actuator when no external force is applied on it.

P_A Operating position:

position of the switch actuator, under the effect of force F_1 , when the contacts leave their initial free position.

P_P Positive opening position:

position of the switch actuator from which positive opening is ensured.

L Maximum travel position:

maximum acceptable travel position of the switch actuator under the effect of a force F_1 .

P_R release position:

position of the switch actuator when the contacts return to their initial free position.

C_1 Pre-travel:

distance between the free position P_0 and the operating position P_A .

C_P Positive opening travel:

minimum travel of the switch actuator, from the free position, to ensure positive opening operation of the normally closed contact.

C_2 Over-travel:

distance between the operating position P_A and the max. travel position L .

C_L Max. travel:

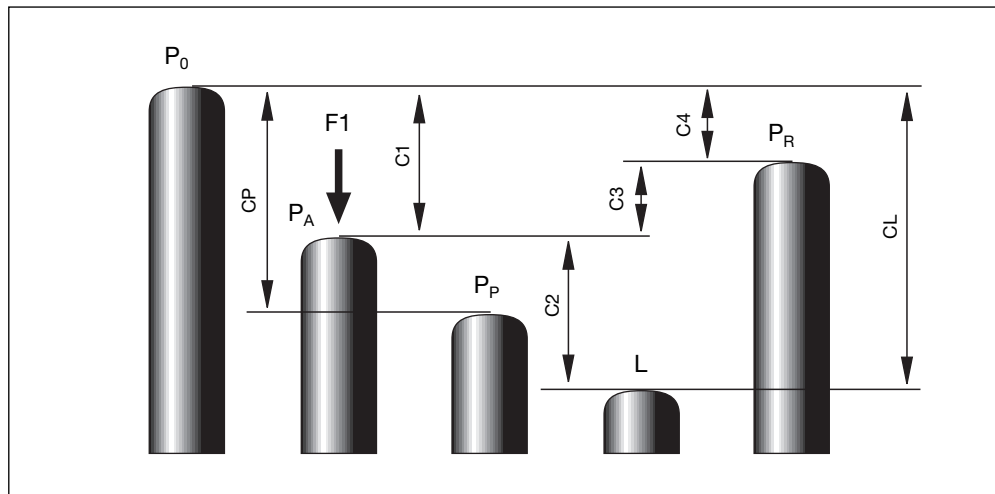
distance between the free position P_0 and the max. travel position L .

C_3 Differential travel (C_1-C_4):

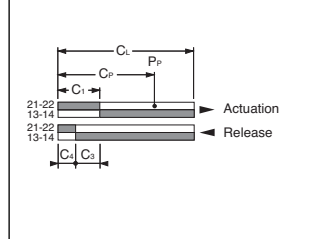
travel difference of the switch actuator between the operating position P_A and the release position P_R .

C_4 Release travel:

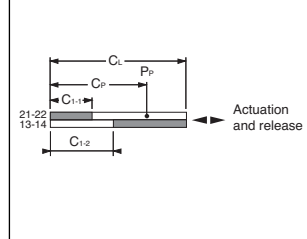
distance between the release position P_R and the free position P_0 .



Travel diagram for snap action contact



Travel diagram for slow action contact

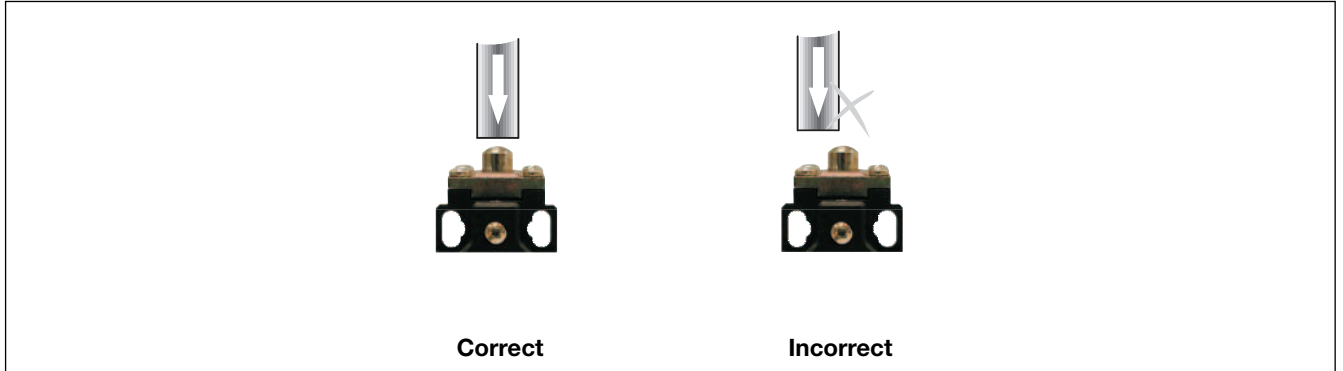


Note: for slow action contacts,
 $C_3 = 0$,
 $C_{1.1}$ = pre-travel of contact 21-22,
 $C_{1.2}$ = pre-travel of contact 13-14

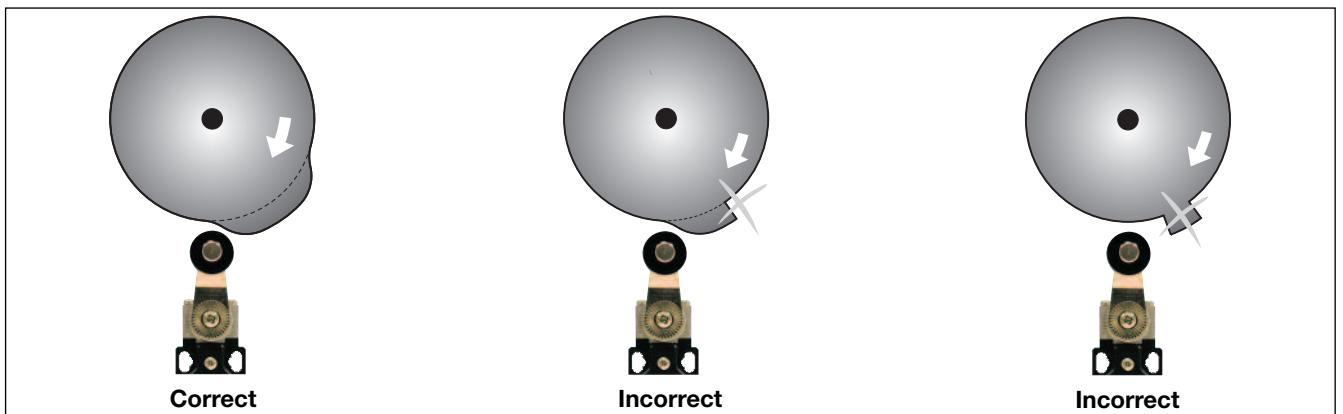
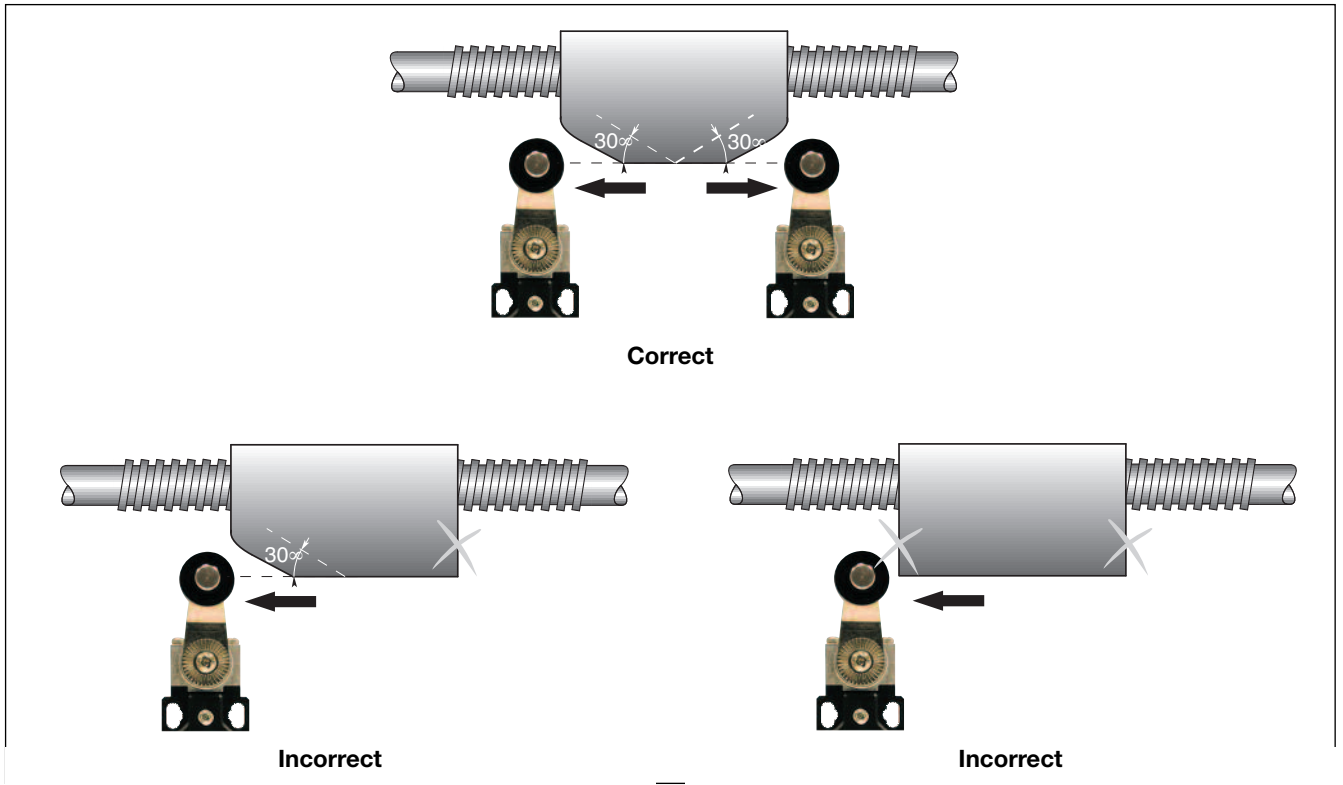


Utilization precautions

Plain plunger

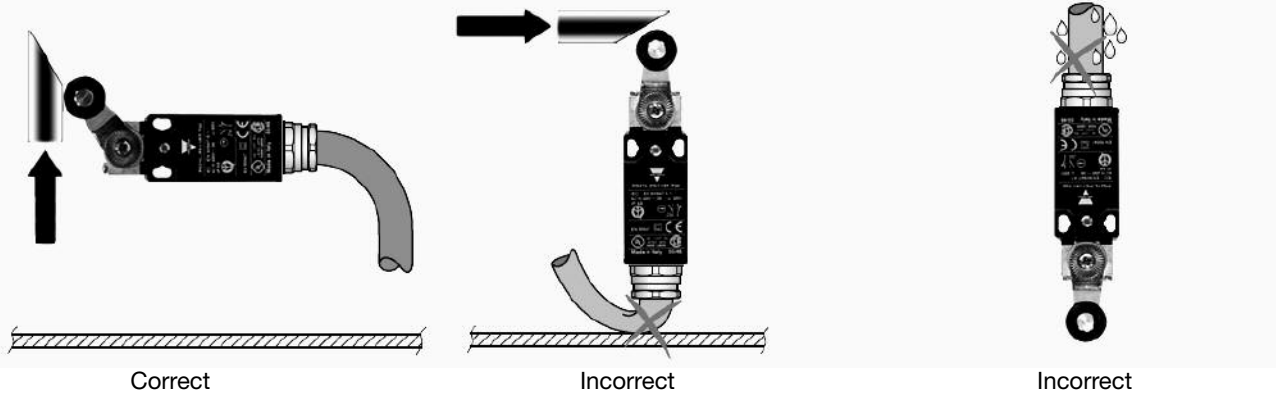


Roller plunger or Roller lever



Utilization precautions

Electrical connection and mounting



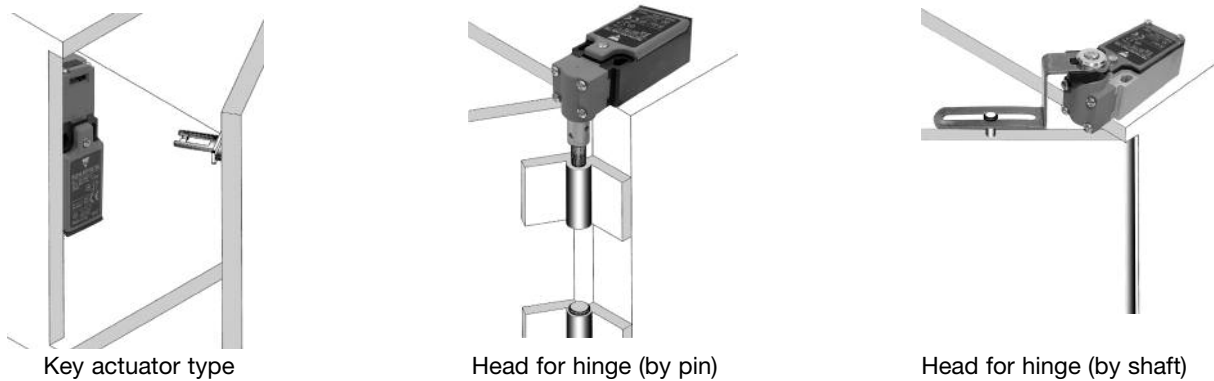
Maximum length application of pullwire head



PS21, PS42: 6m max.
PS31, PS43: 16m max.

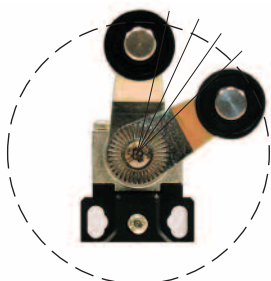
PS21, PS42: 15m max.
PS31, PS43: 25m max.

Example of applications



Adjustement

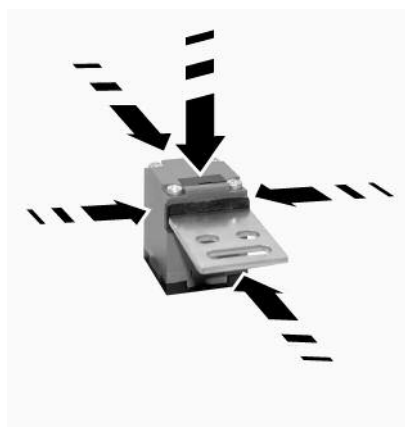
Position adjustment of lever



PS21x, PS42x and PSxxM
Free position adjustment 10 in 10° of lever

PS31x and PS43x
Free position adjustment 9 in 9° of lever

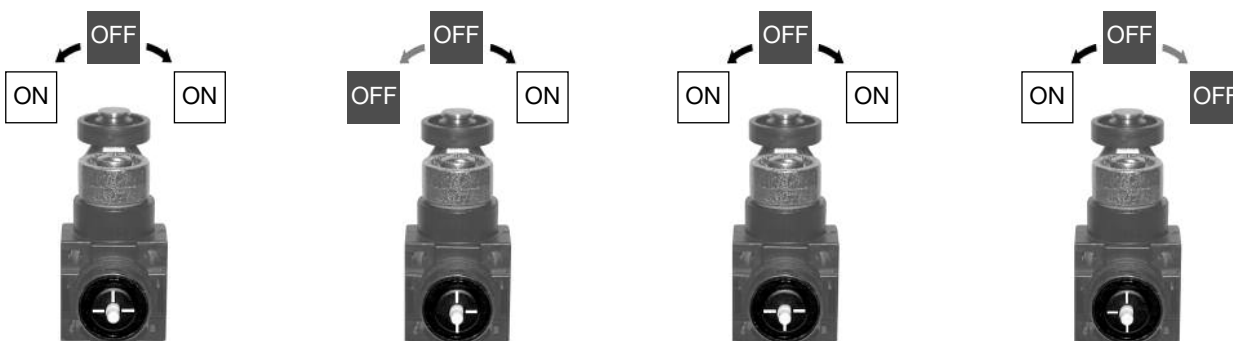
5 way key actuator head





Position adjustment of lever and head



Different operating of head (for PS31 and PS43)



Limit Switch - Limit Type Plastic Body IP65

- Double Insulation 
- Degree of protection IP65
- Reinforced UL-V0 thermoplastic fiber-glass 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 Ith = 10A
- Rated insulation voltage Ui = 500V
- UL, CSA, CE
- Conform with IEC 947-5-1 (EN 60947-5-1)

They are developed in order to be used for following operations:

- Presence/Absence
- Positioning and travel limit
- Objects passing/counting

HEAD

Available with different heads, depending on travel movement:

- Direct (plunger)
- Angular (lever)
- Multidirectional (shaft)

Assembled using 4 screws

BODY

Three different width:

- 30mm (fixing interaxe 20/22mm) with 1 cable inlet
- 50mm (fixing interaxe 40/42mm) with 2 cable inlet
- 40mm (fixing interaxe 30mm) with 1 cable inlet

CONTACT BLOCK

- NO and NC Contact type
- Snap and slow action
- Two moving contact electrically separated (Zb shape)
- Positive opening operation (NC)

CABLE INLET

Available with 5 cable inlet for:

- PG13.5 cable gland
- PG11 cable gland
- M20x1.5 cable gland
- M16x1.5 cable gland
- 1/2" NPT cable gland



Technical Data

Standards

Certifications – Approvals

Air temperature near the device

- during operation

- for storage

°C

°C

Climatic withstand

Mounting positions

Shock withstand (according to IEC 68-2-27 and 60068-2-27) g

(1/2sinusoidal shock for 11 ms) no change in contact position

Resistance to vibrations (acc.to IEC 68-2-6 and EN 60068-2-6) g

Protection against electrical shocks (acc.to IEC 536)

Degree of protection (according to IEC 529 and EN 60529)

Consistency (measured over 1 million operations)

IEC 60947-1, IEC 60947-5-1, EN 60947-1, EN 60947-5-1,
UL508 and CSA C22-2 n°14
UL – CSA

-25 ... +70

-30 ... +80

According to IEC 68-2-3 and salty mist according to IEC 68-2-11

All positions are authorized

50g*

25g (10...500Hz) no change in position of contacts greater than 100µs

Class II

IP65

0.1 mm (upon closing point)

* except for PS21/PS42 with head type W0, W1: 25g.

Electrical Data

Rated insulation voltage U_i

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

-according to UL 508, CSA C22-2 n°14

Rated impulse withstand voltage U_{imp} kV

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

Conventional enclosed thermal current I_{the} A

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

Short-circuit protection - gG type fuses A

Rated operational current

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

24Vac (50/60 Hz) A

130Vac (50/60 Hz) A

230Vac (50/60 Hz) A

240Vac (50/60 Hz) A

400Vac (50/60 Hz) A

- acc.to UL 508, CSA C22 n°14

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

24Vdc A

110Vdc A

250Vdc A

- acc.to UL 508, CSA C22 n°14

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

- max. switching frequency Cycles/h

- load factor

Connecting data of contact blocks

Connecting terminals

Connecting capacity 1 or 2 x mm² / AWG

Terminal marking

Positivity

500V (degree of pollution 3)

A 600, Q 600

6

10

10

10

5.5

3.1

3

1.8

A 600

2.8

0.6

0,27

Q 600

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

3600

0,5

M3,5 (+,-) pozidriv 2 screw with cable clamp

0,5mm² / AWG 20 to 2,5mm² / AWG 14

According to EN 50013

Contacts with positive opening operation as per IEC 60947-5-1 chapter 3

Diagram for snap action contact:

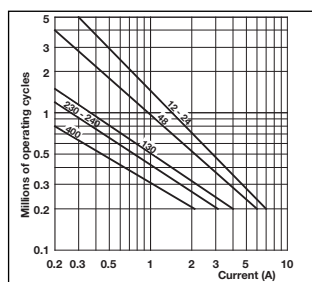
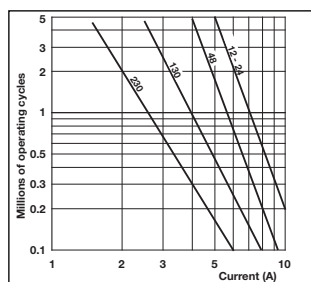


Diagram for slow action contact:



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 Switch - Limit Type Metal Body IP66

- High mechanical resistance
- Degree of protection IP66
- Zinc alloy (Zamack) or aluminium 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 Ith = 10A
- Rated insulation voltage Ui = 500V
- UL, CSA, CE
- Conform with IEC 947-5-1 (EN 60947-5-1)

They are developed in order to be used for following operations:

- Presence/Absence
- Positioning and travel limit
- Objects passing/counting

HEAD

Available with different heads, depending on travel movement:

- Direct (plunger)
- Angular (lever)
- Multidirectional (shaft)

Assembled using 4 screws

BODY

Three different width:

- 30mm (fixing interaxe 20/22mm) with 1 cable inlet
- 50mm (fixing interaxe 40/42mm) with 3 cable inlet
- 40mm (fixing interaxe 30mm) with 1 cable inlet
- 60mm (fixing interaxe 40/42mm) with 3 cable inlet

CONTACT BLOCK

- NO and NC Contact type
- Snap and slow action
- Two moving contact electrically separated (Zb shape)
- Positive opening operation (NC)

CABLE INLET

Available with 5 cable inlet for:

- PG13.5 cable gland
- PG11 cable gland
- M20x1.5 cable gland
- M16x1.5 cable gland
- 1/2" NPT cable gland



Technical Data

Standards

Certifications – Approvals

Air temperature near the device

- during operation

- for storage

°C

°C

Climatic withstand

Mounting positions

Shock withstand (according to IEC 68-2-27 and 60068-2-27) g

(1/2sinusoidal shock for 11 ms) no change in contact position

Resistance to vibrations (acc.to IEC 68-2-6 and EN 60068-2-6) g

Protection against electrical shocks (acc.to IEC 536)

Degree of protection (according to IEC 529 and EN 60529)

Consistency (measured over 1 million operations)

IEC 60947-1, IEC 60947-5-1, EN 60947-1, EN 60947-5-1,
UL508 and CSA C22-2 n°14
UL – CSA

-25 ... +70

-30 ... +80

According to IEC 68-2-3 and salty mist according to IEC 68-2-11

All positions are authorized

50g*

25g (10...500Hz) no change in position of contacts greater than 100µs

Class I

IP66

0.1 mm (upon closing point)

* except for PS21/PS42 with head type W0, W1: 25g.

Electrical Data

Rated insulation voltage U_i

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

-according to UL 508, CSA C22-2 n°14

Rated impulse withstand voltage U_{imp} kV

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

Conventional enclosed thermal current I_{the} A

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

Short-circuit protection - gG type fuses A

Rated operational current

I_e / AC-15 - acc.to IEC 60947-5-1 24Vac (50/60 Hz) A

130Vac (50/60 Hz) A

230Vac (50/60 Hz) A

240Vac (50/60 Hz) A

400Vac (50/60 Hz) A

- acc.to UL 508, CSA C22 n°14

I_e / DC-13 - acc.to IEC 60947-5-1 24Vdc A

110Vdc A

250Vdc A

- acc.to UL 508, CSA C22 n°14

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

- max. switching frequency Cycles/h

- load factor

Connecting data of contact blocks

Connecting terminals

Connecting capacity 1 or 2 x mm² / AWG

Terminal marking

Positivity

400V (PS21, PS42), 500V (PS31, PS43) (degree of pollution 3)

A 300 Q 300 (PS21, PS42), A 600 Q 600 (PS31, PS43)

6

10

10

10

5.5

3.1

3

1.8

A 300 (PS21, PS42), A 600 (PS31, PS43)

2.8

0.6

0,27

Q 300 (PS21, PS42), Q 600 (PS31, PS43)

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

3600

0,5

M3,5 (+,-) pozidriv 2 screw with cable clamp

0,5mm² / AWG 20 to 2,5mm² / AWG 14

According to EN 50013

Contacts with positive opening operation as per IEC 60947-5-1 chapter 3

Diagram for snap action contact:

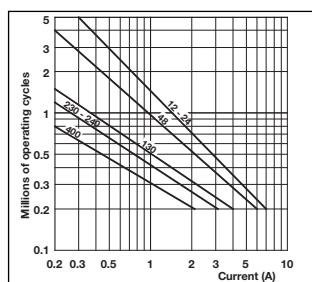
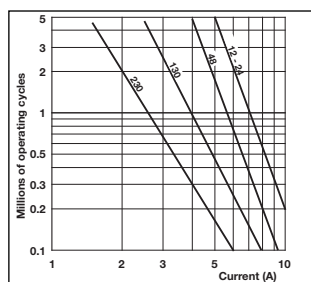


Diagram for slow action contact:



Electrical durability for DC-13 utilization category

Power breaking for a durability of 5 million operating cycles

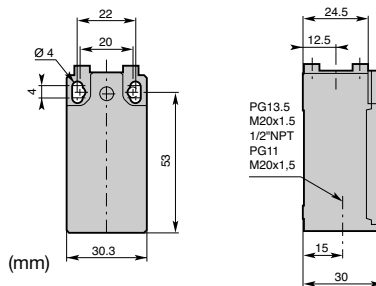
	Snap action	Slow action
Voltage 24V	9,5W	12W
Voltage 48V	6,8W	9W
Voltage 110V	3,6W	6W

Limit Switches - Limit Type (PS21) Plastic Body IP65

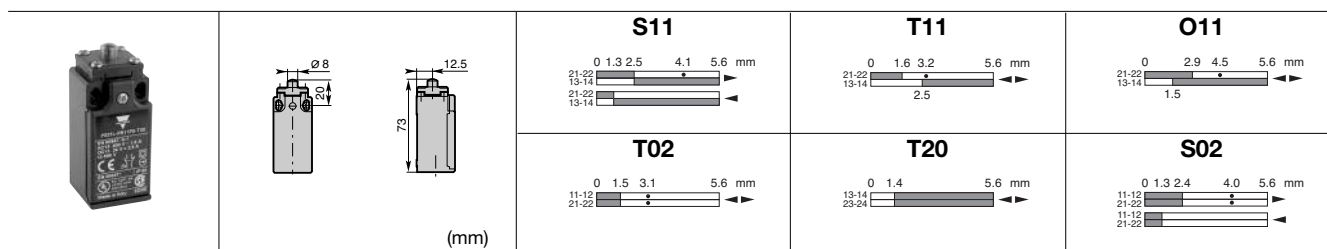
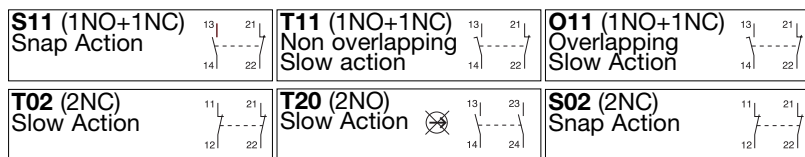


• Cable Gland

- P** = one cable inlet PG13.5 cable gland
- M** = one cable inlet M20x1.5 cable gland
- N** = one cable inlet 1/2" NPT cable gland
- B** = one cable inlet PG11 cable gland
- A** = one cable inlet M16x1.5 cable gland



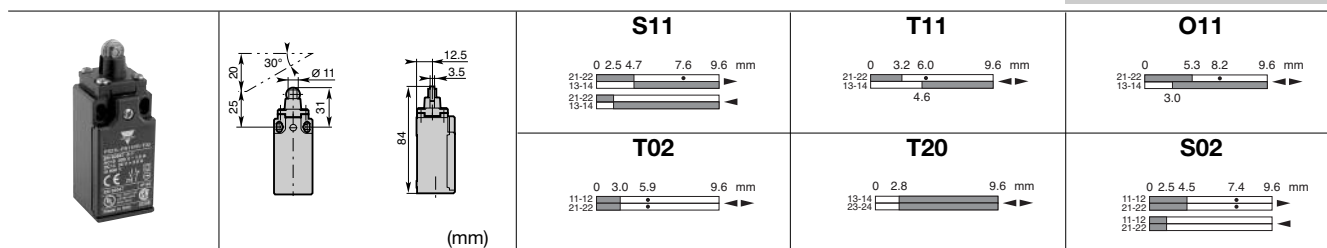
▲ Contact block (Zb type)



Conformity / (NC) EN 50047 / (C)
Max. Actuation speed 0.5ms
Min. force or torque 15N / 30Nm
Weight 70g

Plain Plunger
Code Nylon plunger
 Metal plunger

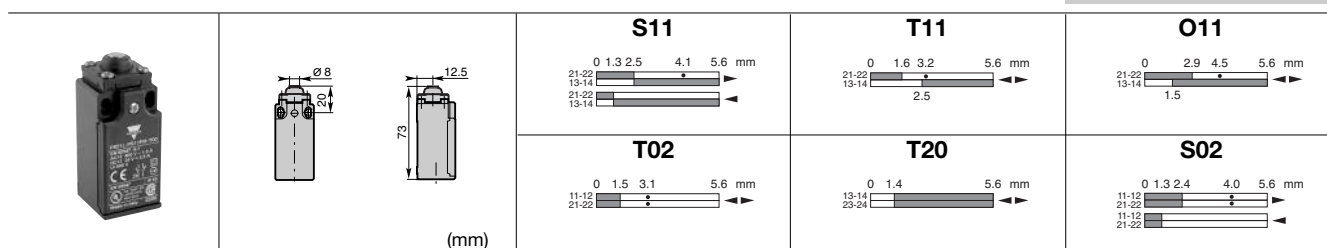
PS21L-●▲PN-T00
PS21L-●▲P0-T00



Conformity / (NC) EN 50047 / (C)
Max. Actuation speed 0.3ms
Min. force or torque 12N / 30Nm
Weight 75g

Roller Plunger
Code Metal roller
 Nylon roller

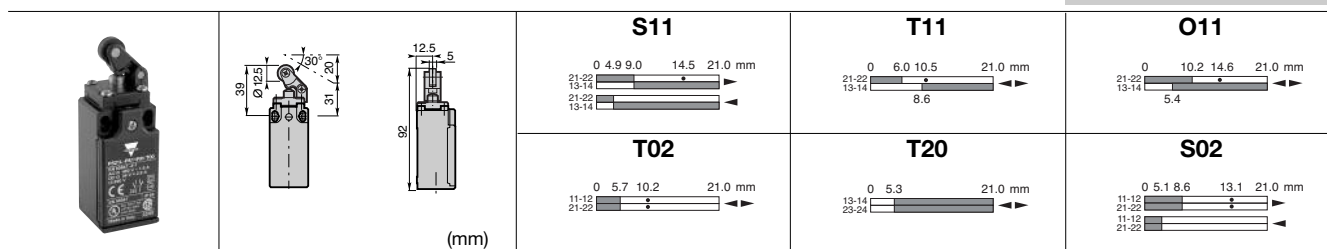
PS21L-●▲PR-T00
PS21L-●▲P1-T00



Conformity / (NC) EN 50047 / (C)
Max. Actuation speed 0.5ms
Min. force or torque 15N / 30Nm
Weight 70g

Metal plunger with dust protection cup
Code

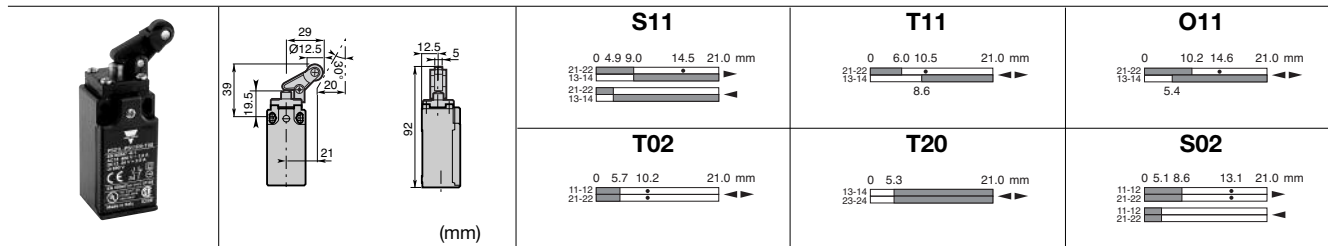
PS21L-●▲PH-T00



Conformity / (NC) EN 50047 / (C)
Max. Actuation speed 1.0ms
Min. force or torque 7N / 24Nm
Weight 75g

Plastic roller lever
Code on plastic plunger
 on metal plunger

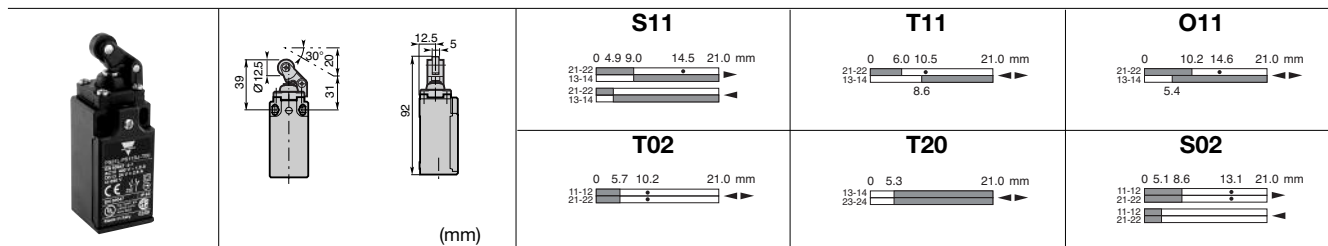
PS21L-●▲RL-T00
PS21L-●▲RH-T00



Conformity / (NC) / (NC)
Max. Actuation speed 1.0ms
Min. force or torque 7N / 24Nm
Weight 80g

Plastic roller lever
Code on metal plunger
on plastic plunger

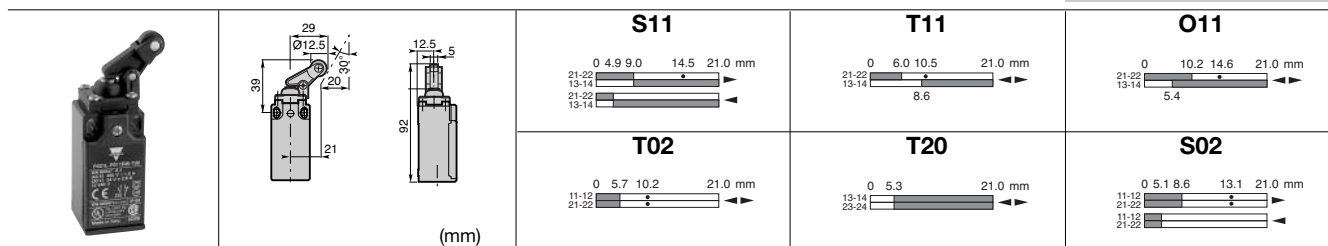
PS21L- [] [] RV-T00
PS21L- [] [] RR-T00



Conformity / (NC) EN 50047 / (NC)
Max. Actuation speed 1.0ms
Min. force or torque 7N / 24Nm
Weight 75g

Plastic roller lever on metal plunger with dust protection cup
Code

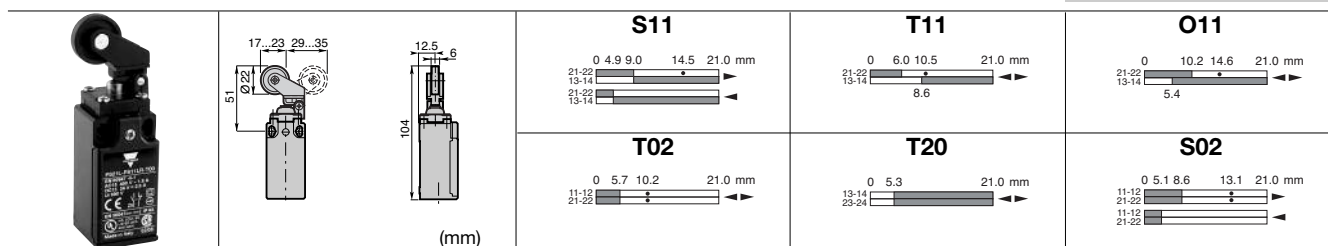
PS21L- [] [] RJ-T00



Conformity / (NC) / (NC)
Max. Actuation speed 1.0ms
Min. force or torque 7N / 24Nm
Weight 80g

Plastic roller lever on metal plunger with dust protection cup
Code

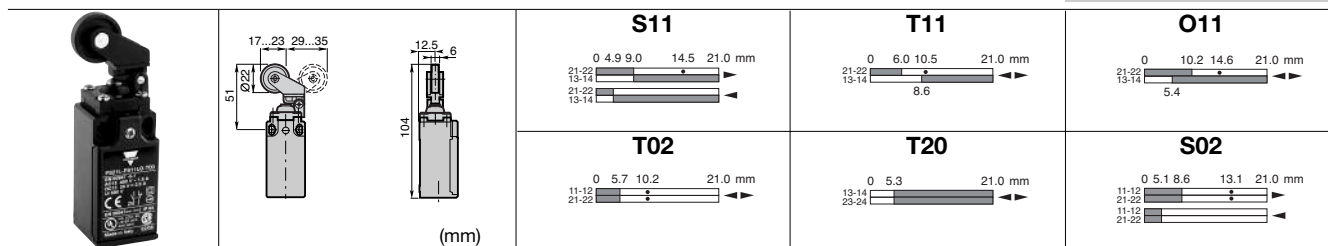
PS21L- [] [] RW-T00



Conformity / (NC) EN 50047 / (NC)
Max. Actuation speed 1.0ms
Min. force or torque 7N / 24Nm
Weight 80g

Adjustable plastic roller lever on metal plunger
Code

PS21L- [] [] LR-T00



Conformity / (NC) EN 50047 / (NC)
Max. Actuation speed 1.0ms
Min. force or torque 7N / 24Nm
Weight 80g

Adj. plastic roller lever on metal plunger with dust prot. cup
Code

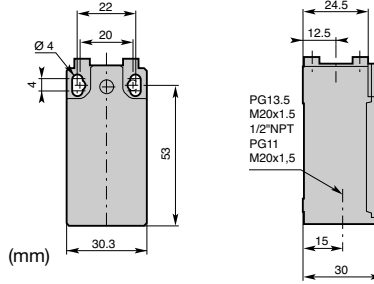
PS21L- [] [] LO-T00

Limit Switches - Limit Type (PS21) Plastic Body IP65



• Cable Gland

- P** = one cable inlet PG13.5 cable gland
- M** = one cable inlet M20x1.5 cable gland
- N** = one cable inlet 1/2" NPT cable gland
- B** = one cable inlet PG11 cable gland
- A** = one cable inlet M16x1.5 cable gland



▲ Contact block (Zb type)

S11 (1NO+1NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action		O11 (1NO+1NC) Overlapping Slow Action	
T02 (2NC) Slow Action		T20 (2NO) Slow Action		S02 (2NC) Snap Action	

		S11	T11	O11
		T02	T20	S02

Conformity / (NC)	EN 50047 / (NC)	Ø 18 Nylon roller lever	PS21-L-RT-T00
Max. Actuation speed	1.5ms	Code	
Min. force or torque	0.10N / 0.32Nm		
Weight	95g		

		S11	T11	O11
		T02	T20	S02

Conformity / (NC)	/ (NC)	Ø 50 Rubber roller lever	PS21-L-W0-T00
Max. Actuation speed	1.5ms	Code	
Min. force or torque	0.10N / 0.32Nm		
Weight	115g		

		S11	T11	O11
		T02	T20	S02

Conformity / (NC)	/ (NC)	Ø 18 Nylon roller lever	PS21-L-BR-T00
Max. Actuation speed	1.5ms	Code	
Min. force or torque	0.10N / 0.32Nm		
Weight	95g		

		S11	T11	O11
		T02	T20	S02

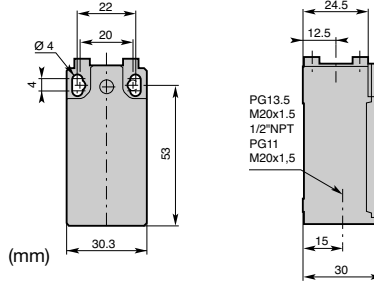
Conformity / (NC)	/ (NC)	Ø 18 Nylon roller lever	PS21-L-BE-T00
Max. Actuation speed	1.5ms	Code	
Min. force or torque	0.10N / 0.32Nm		
Weight	95g		

Limit Switches - Limit Type (PS21) Plastic Body IP65

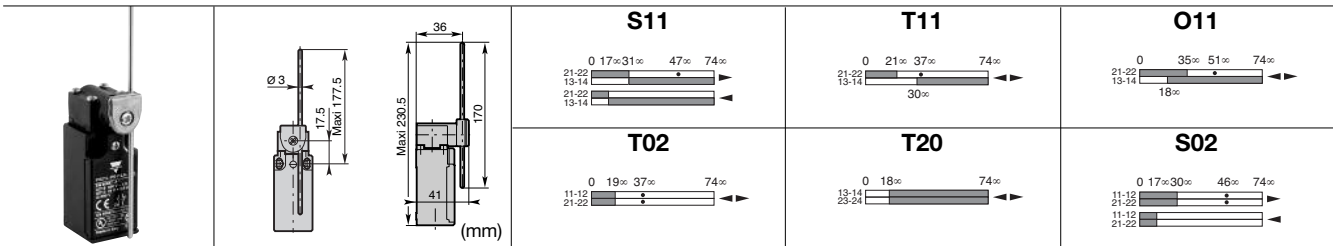
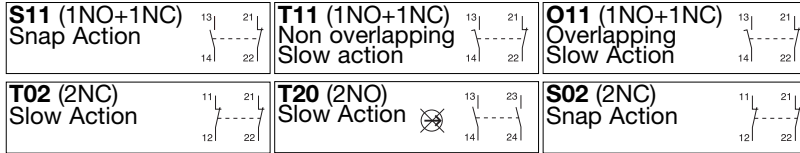


• Cable Gland

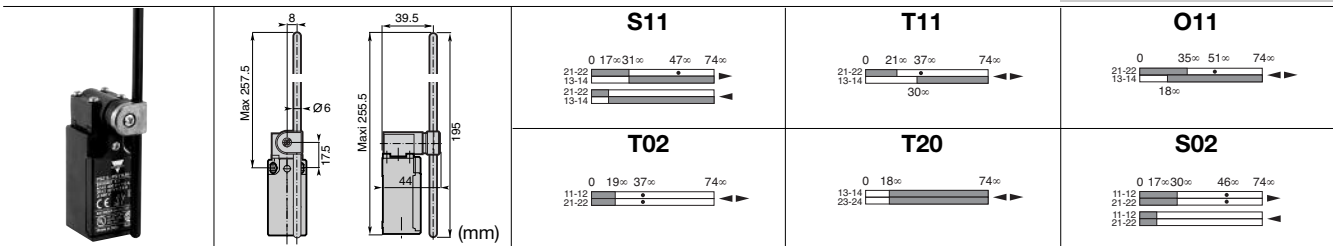
- P** = one cable inlet PG13.5 cable gland
- M** = one cable inlet M20x1.5 cable gland
- N** = one cable inlet 1/2" NPT cable gland
- B** = one cable inlet PG11 cable gland
- A** = one cable inlet M16x1.5 cable gland



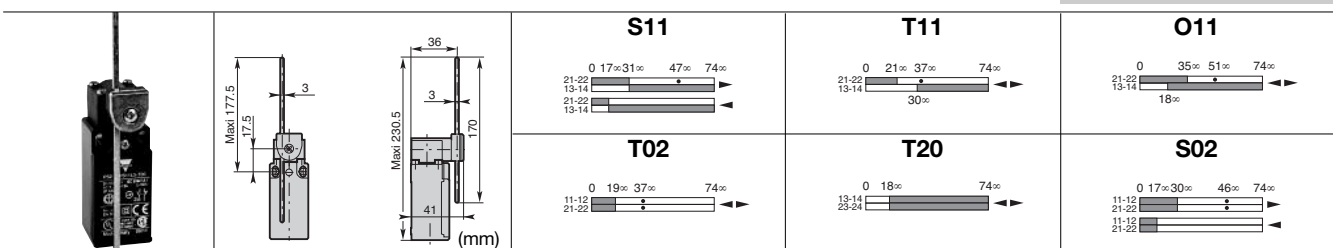
▲ Contact block (Zb type)



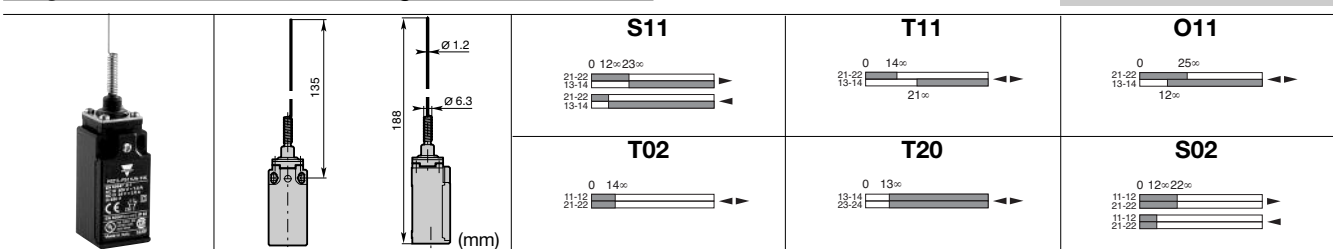
Conformity / (NC) Max. Actuation speed 1.5ms Min. force or torque 0.10N / 0.32 Weight 105g	Adjustable Ø 3 rod lever Code stainless steel rod fiberglass rod	PS21L-03 LA-T00 LF-T00
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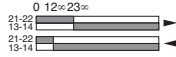
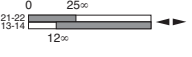
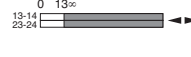
Conformity / (NC) Max. Actuation speed 1.5ms Min. force or torque 0.10N / 0.32Nm Weight 115g	Adjustable Ø 6 rod lever Code nylon rod fiberglass rod	PS21L-06 LN-T00 LG-T00
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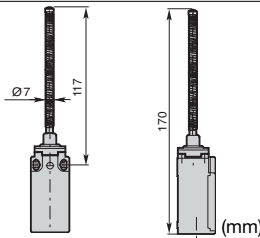
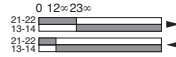
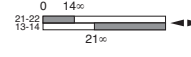
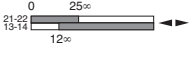
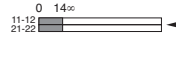
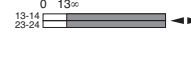




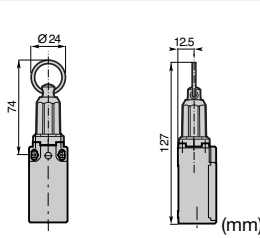

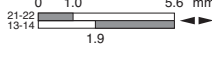
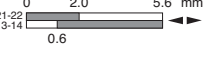
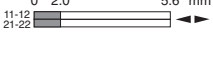

Conformity / (NC) Max. Actuation speed 1.5ms Min. force or torque 0.10N / 0.32Nm Weight 105g	Adjustable square steel rod lever Code	PS21L-03 L3-T00
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Conformity / (NC) Max. Actuation speed 1.0ms Min. force or torque 0.12N / - Weight 80g	Stainless steel spring multidirectional actuator Code	PS21L-03 LW-T00
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		S11 	T11 	O11 	
		T02 	T20 	S02 	
Conformity / (NC) /		Multidirectional nylon actuator with stainless steel spring Code			PS21L-□▲LP-T00
Max. Actuation speed 1.0ms					
Min. force or torque 0.12N / -					
Weight 85g					

		S11 	T11 	O11 	
		T02 	T20 	S02 	
Conformity / (NC) /		Stainless steel spring multidirectional actuator Code			PS21L-□▲LS-T00
Max. Actuation speed 1.0ms					
Min. force or torque 0.12N / -					
Weight 90g					

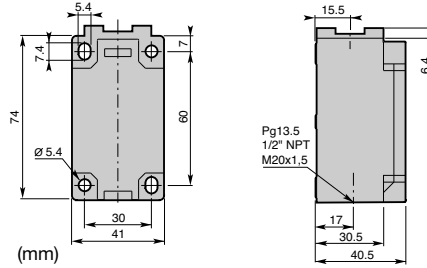
		S11 	T11 	O11 	
		T02 	T20 		
Conformity / (NC) /		Pull action with ring Code			PS21L-□▲N6-T00
Max. Actuation speed 0.5ms					
Min. force or torque 30N / -					
Weight 115g					

Limit Switches - Limit Type (PS31) Plastic Body IP65

CARLO GAVAZZI

• Cable Gland

- P = one cable inlet PG13.5 cable gland
- M = one cable inlet M20x1.5 cable gland
- N = one cable inlet 1/2" NPT cable gland



▲ Contact block (Zb type)

S11 (1NO+1NC) Snap action	T11 (1NO+1NC) Non overlapping Slow action	O11 (1NO+1NC) Overlapping Slow action	T02 (2NC) Slow Action	T20 (2NO) Slow action
S02 (2NC) Snap action	T12 (1NO+2NC) Non overlapping Slow action	T21 (2NO+1NC) Non overlapping Slow action	T03 (3NC) Simultaneous Slow action	T30 (3NO) Simultaneous Slow action

		S11 0 1.0 2.2 3.8 5.9 mm	T11 0 1.3 2.9 5.9 mm	O11 0 2.4 5.0 5.9 mm	T02 0 1.1 2.7 5.9 mm
		T20 0 1.0 5.9 mm	S02 0 1.0 2.0 3.6 5.9 mm	T12 0 0.9 2.4 5.9 mm	T21 0 1.0 2.5 5.9 mm
		T03 0 0.9 2.4 5.9 mm	T30 0 1.3 5.9 mm		

Conformity / (NC) EN 50041 / (NC)
 Max. Actuation speed 0.5ms
 Min. force or torque 14N / 40Nm
 Weight 145g

Plain steel plunger
Code

PS31L-●▲P0-T00

		S11 0 1.0 2.2 3.8 5.9 mm	T11 0 1.3 2.9 5.9 mm	O11 0 2.4 5.0 5.9 mm	T02 0 1.1 2.7 5.9 mm
		T20 0 1.0 5.9 mm	S02 0 1.0 2.0 3.6 5.9 mm	T12 0 0.9 2.4 5.9 mm	T21 0 1.0 2.5 5.9 mm
		T03 0 0.9 2.4 5.9 mm	T30 0 1.3 5.9 mm		

Conformity / (NC) EN 50041 / (NC)
 Max. Actuation speed 0.5ms
 Min. force or torque 14N / 40Nm
 Weight 145g

Steel ball plunger
Code

PS31L-●▲PB-T00

		S11 0 2.4 4.6 7.5 10.5 mm	T11 0 3.1 6.0 10.5 mm	O11 0 5.1 8.0 10.5 mm	T02 0 2.8 5.7 10.5 mm
		T20 0 2.6 10.5 mm	S02 0 2.4 4.4 7.3 10.5 mm	T12 0 2.8 5.3 10.5 mm	T21 0 2.9 5.4 10.5 mm
		T03 0 2.8 5.3 10.5 mm	T30 0 3.3 10.5 mm		

Conformity / (NC) EN 50041 / (NC)
 Max. Actuation speed 0.5ms
 Min. force or torque 14N / 40Nm
 Weight 150g

Steel roller plunger
Code

PS31L-●▲PR-T00

		S11 0 1.0 2.2 3.8 5.9 mm	T11 0 1.3 2.9 5.9 mm	O11 0 2.4 5.0 5.9 mm	T02 0 1.1 2.7 5.9 mm
		T20 0 1.0 5.9 mm	S02 0 1.0 2.0 3.6 5.9 mm	T12 0 0.9 2.4 5.9 mm	T21 0 1.0 2.5 5.9 mm
		T03 0 0.9 2.4 5.9 mm	T30 0 1.3 5.9 mm		

Conformity / (NC) EN 50041 / (NC)
 Max. Actuation speed 0.5ms
 Min. force or torque 14N / 40Nm
 Weight 145g

Plain steel plunger with dust protection cup
Code

PS31L-●▲PH-T00

S11 0 2.4 4.6 7.5 10.5 mm 21-22 13-14 21-22 13-14	T11 0 3.1 6.0 10.5 mm 21-22 13-14 4.4	O11 0 5.1 8.0 10.5 mm 21-22 13-14 2.8	T02 0 2.8 5.7 10.5 mm 11-12 21-22
T20 0 2.6 10.5 mm 13-14 23-24	S02 0 2.4 4.4 7.3 10.5 mm 11-12 21-22 11-12 21-22	T12 0 2.8 5.3 10.5 mm 21-22 13-14 5.5	T21 0 2.9 5.4 10.5 mm 31-32 13-14 23-24 5.5
T03 0 2.8 5.3 10.5 mm 11-12 31-32	T30 0 3.3 10.5 mm 13-14 23-24 33-34		

Conformity / (NC) EN 50041 / (NC)

Max. Actuation speed 0.5ms

Min. force or torque 14N / 40Nm

Weight 150g

Steel roller plunger with dust protection cup
Code **PS31L- [] [] PG-T00**

S11 0 3.8 6.8 11.3 17.0 mm 21-22 13-14 21-22 13-14	T11 0 4.9 9.4 17.0 mm 21-22 13-14 6.3	O11 0 7.6 12.1 17.0 mm 21-22 13-14 4.4	T02 0 4.4 8.9 17.0 mm 11-12 21-22
T20 0 4.0 17.0 mm 13-14 23-24	S02 0 3.8 6.6 11.1 17.0 mm 11-12 21-22 11-12 21-22	T12 0 3.7 7.5 17.0 mm 21-22 13-14 7.7	T21 0 4.0 7.6 17.0 mm 31-32 13-14 23-24 7.7
T03 0 3.7 7.5 17.0 mm 11-12 31-32	T30 0 4.8 17.0 mm 13-14 23-24 33-34		

Conformity / (NC) / (NC)

Max. Actuation speed 1.0ms

Min. force or torque 8N / 30Nm

Weight 185g

One way lever
Code $\varnothing 22$ nylon roller
 $\varnothing 22$ stainless steel roller
 $\varnothing 22$ steel ball bearing

PS31L- [] [] RH-T00
PS31L- [] [] RK-T00
PS31L- [] [] RB-T00

S11 0 3.8 6.8 11.3 17.0 mm 21-22 13-14 21-22 13-14	T11 0 4.9 9.4 17.0 mm 21-22 13-14 6.3	O11 0 7.6 12.1 17.0 mm 21-22 13-14 4.4	T02 0 4.4 8.9 17.0 mm 11-12 21-22
T20 0 4.0 17.0 mm 13-14 23-24	S02 0 3.8 6.6 11.1 17.0 mm 11-12 21-22 11-12 21-22	T12 0 3.7 7.5 17.0 mm 21-22 13-14 7.7	T21 0 4.0 7.6 17.0 mm 31-32 13-14 23-24 7.7
T03 0 3.7 7.5 17.0 mm 11-12 31-32	T30 0 4.8 17.0 mm 13-14 23-24 33-34		

Conformity / (NC) / (NC)

Max. Actuation speed 1.0ms

Min. force or torque 8N / 30Nm

Weight 180g

One way lever with dust protection cup
Code $\varnothing 22$ nylon roller
 $\varnothing 22$ stainless steel roller
 $\varnothing 22$ steel ball bearing

PS31L- [] [] RJ-T00
PS31L- [] [] RY-T00
PS31L- [] [] RC-T00

S11 0 19x31x 47x 90x 21-22 13-14 21-22 13-14	T11 0 21x 37x 90x 21-22 13-14 30x	O11 0 34x 50x 90x 21-22 13-14 19x	T02 0 19x 35x 90x 11-12 21-22
T20 0 18x 90x 13-14 23-24	S02 0 19x30x 46x 90x 11-12 21-22 11-12 21-22	T12 0 16x 33x 90x 21-22 13-14 35x	T21 0 17x 34x 90x 31-32 13-14 23-24 35x
T03 0 16x 33x 90x 11-12 31-32	T30 0 21x 90x 13-14 23-24 33-34		

Conformity / (NC) EN 50041 / (NC)

Max. Actuation speed 1.5ms

Min. force or torque 0.15N / 0.30Nm

Weight 200g

$\varnothing 22$ Roller lever
Code nylon roller
stainless steel roller
steel ball bearing

PS31L- [] [] RT-T00
PS31L- [] [] RS-T00
PS31L- [] [] RO-T00

S11 0 19x31x 47x 90x 21-22 13-14 21-22 13-14	T11 0 21x 37x 90x 21-22 13-14 30x	O11 0 34x 50x 90x 21-22 13-14 19x	T02 0 19x 35x 90x 11-12 21-22
T20 0 18x 90x 13-14 23-24	S02 0 19x30x 46x 90x 11-12 21-22 11-12 21-22	T12 0 16x 33x 90x 21-22 13-14 35x	T21 0 17x 34x 90x 31-32 13-14 23-24 35x
T03 0 16x 33x 90x 11-12 31-32	T30 0 21x 90x 13-14 23-24 33-34		

Conformity / (NC) / (NC)

Max. Actuation speed 1.5ms

Min. force or torque 0.15N / 0.30Nm

Weight 205g

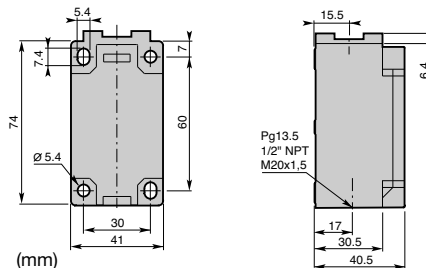
$\varnothing 50$ Rubber roller lever
Code **PS31L- [] [] W0-T00**

Limit Switches - Limit Type (PS31) Plastic Body IP65



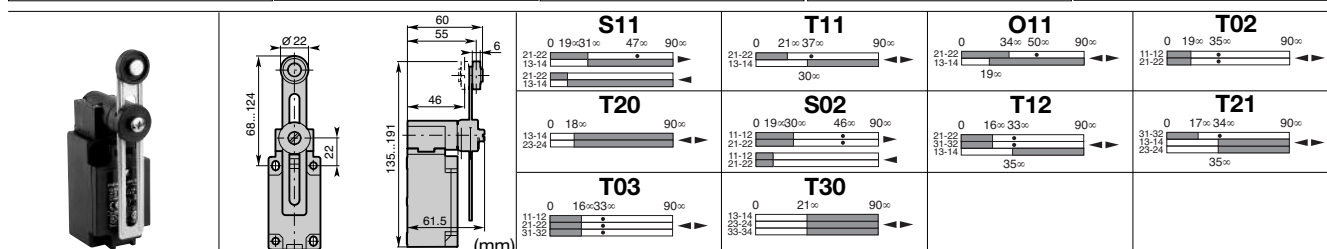
□ Cable Gland

- P** = one cable inlet PG13.5 cable gland
- M** = one cable inlet M20x1.5 cable gland
- N** = one cable inlet 1/2" NPT cable gland



▲ Contact block (Zb type)

S11 (1NO+1NC) Snap action	T11 (1NO+1NC) Non overlapping Slow action	O11 (1NO+1NC) Overlapping Slow action	T02 (2NC) Slow Action	T20 (2NO) Slow action
S02 (2NC) Snap action	T12 (1NO+2NC) Non overlapping Slow action	T21 (2NO+1NC) Non overlapping Slow action	T03 (3NC) Simultaneous Slow action	T30 (3NO) Simultaneous Slow action



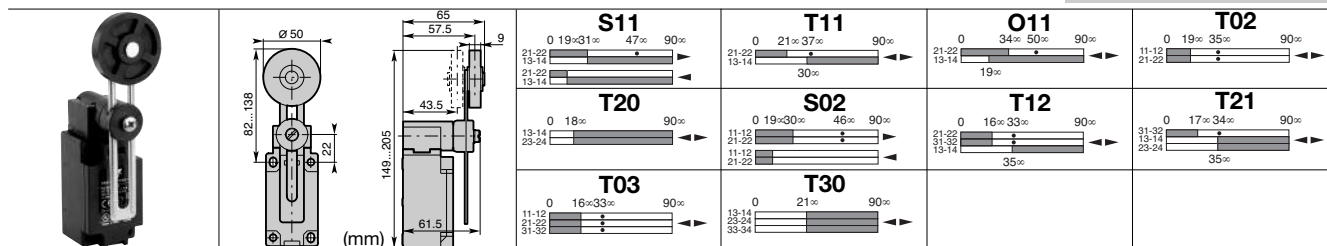
Conformity / (NC)

Max. Actuation speed	1.5ms
Min. force or torque	0.15N / 0.30Nm
Weight	195g

Adjustable Ø22 roller lever

Code	nylon lever stainless steel roller steel ball bearing
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PS31L-	●▲R1-T00
PS31L-	●▲R2-T00
PS31L-	●▲R3-T00



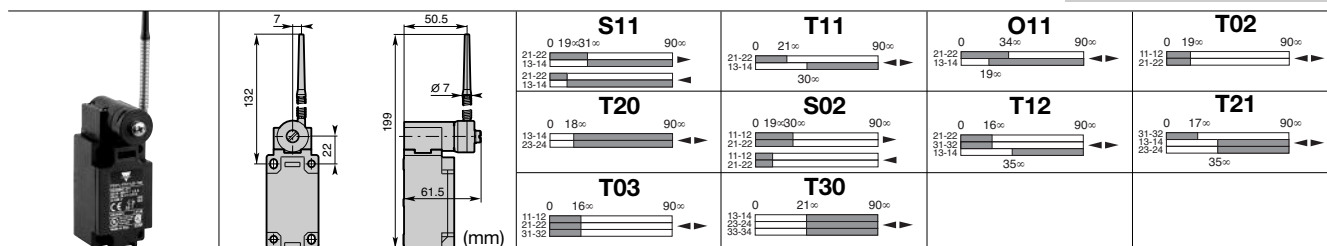
Conformity / (NC)

Max. Actuation speed	1.5ms
Min. force or torque	0.15N / 0.30Nm
Weight	205g

Adjustable Ø50 rubber roller lever

Code

PS31L-	●▲W1-T00
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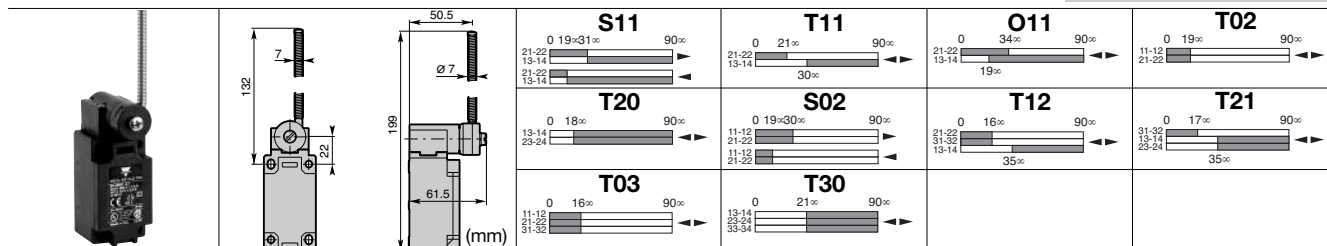
Conformity / (NC)

Max. Actuation speed	1.5ms
Min. force or torque	0.15N / -
Weight	190g

Nylon actuator with stainless steel spring

Code

PS31L-	●▲LB-T00
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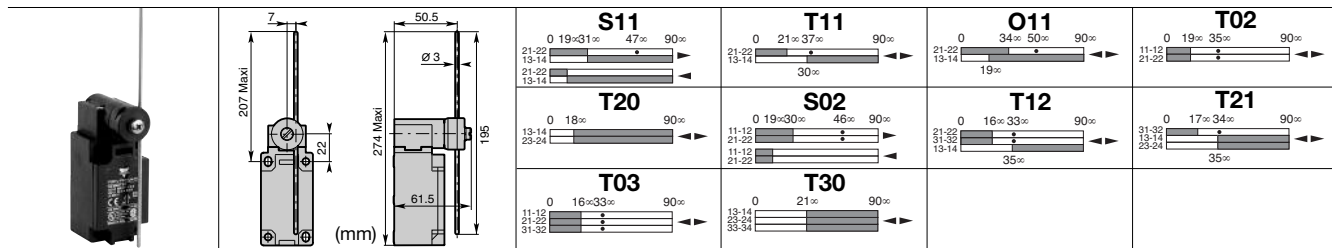
Conformity / (NC)

Max. Actuation speed	1.5ms
Min. force or torque	0.15N / -
Weight	195g

Stainless steel spring actuator

Code

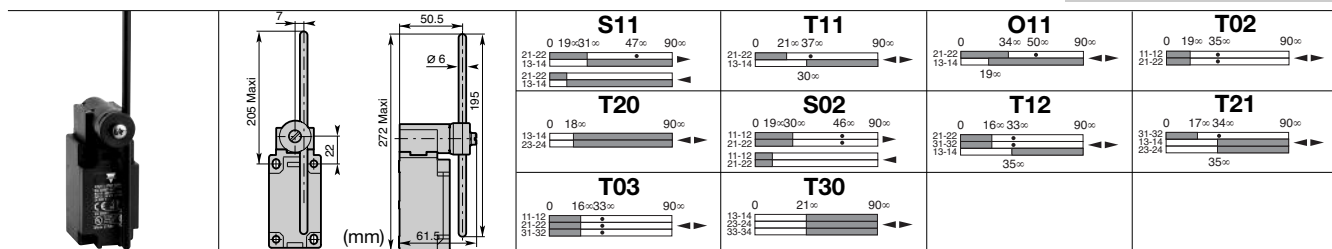
PS31L-	●▲LZ-T00
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Conformity / (NC) / (C)
Max. Actuation speed 1.5ms
Min. force or torque 0.15N / 0.30
Weight 185g

Adjustable rod lever
Code stainless steel rod Ø3
 fiberglass rod Ø3
 square steel rod 3x3

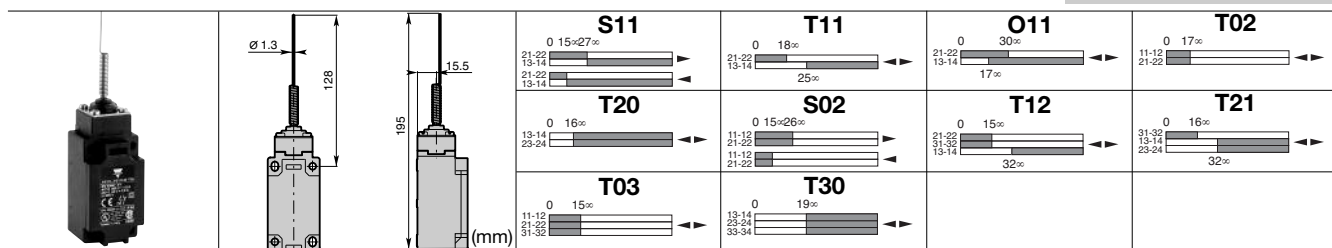
PS31L-▲LA-T00
 PS31L-▲LF-T00
 PS31L-▲L3-T00



Conformity / (NC) / (C)
Max. Actuation speed 1.5ms
Min. force or torque 0.15N / 0.30Nm
Weight 185g

Adjustable Ø6 rod lever
Code nylon rod
 fiberglass rod

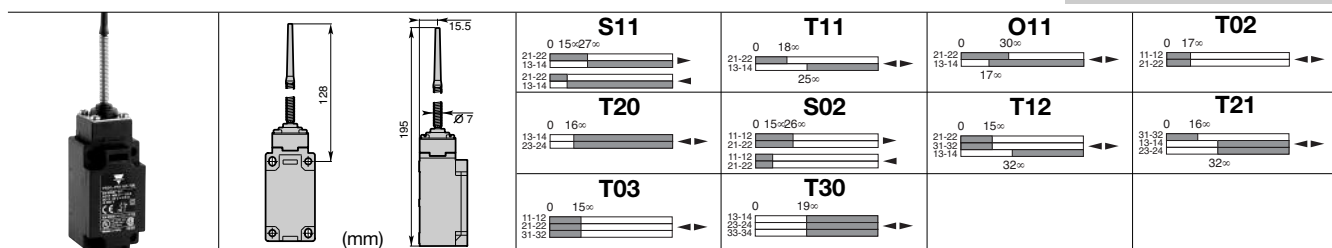
PS31L-▲LN-T00
 PS31L-▲LG-T00



Conformity / (C) / (NC)
Max. Actuation speed 1.0ms
Min. force or torque 0.18N / -
Weight 150g

Stainless steel spring multidirectional actuator
Code

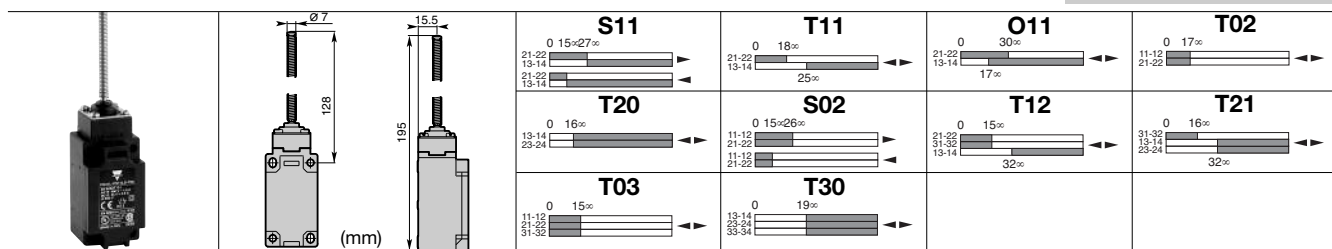
PS31L-▲LW-T00



Conformity / (NC) / (C)
Max. Actuation speed 1.0ms
Min. force or torque 0.18N / -
Weight 155g

Multidirectional nylon actuator with stainless steel spring
Code

PS31L-▲LP-T00



Conformity / (NC) / (C)
Max. Actuation speed 1.0ms
Min. force or torque 0.18N / -
Weight 160g

Stainless steel spring multidirectional actuator
Code

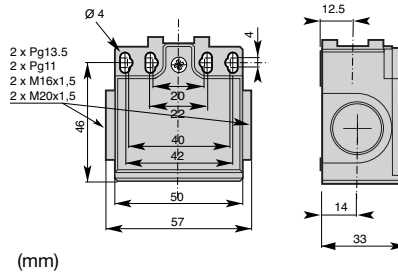
PS31L-▲LS-T00

Limit Switches - Limit Type (PS42) Plastic Body IP65

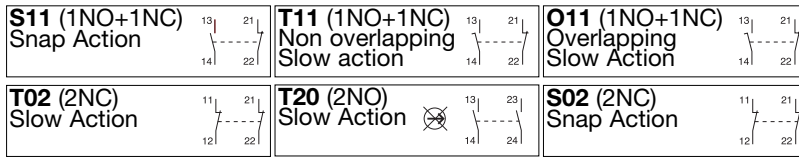


• Cable Gland

- P** = two cable inlet PG13.5 cable gland
- M** = two cable inlet M20x1.5 cable gland
- N** = two cable inlet 1/2" NPT cable gland
- B** = two cable inlet PG11 cable gland
- A** = two cable inlet M16x1.5 cable gland



▲ Contact block (Zb type)



			S11 0 1.3 2.5 4.1 5.6 mm	T11 0 1.6 3.2 5.6 mm	O11 0 2.9 4.5 5.6 mm
			T02 11-12 0 1.5 3.1 5.6 mm	T20 13-14 0 1.4 5.6 mm	S02 11-12 0 1.3 2.4 4.0 5.6 mm

Conformity / (NC)

Max. Actuation speed	0.5ms
Min. force or torque	15N / 30Nm
Weight	100g

Plain Plunger

Code	Nylon plunger Metal plunger Metal pl. with dust prot. cup
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PS42L-01	PN-T00
PS42L-02	P0-T00
PS42L-03	PH-T00

			S11 0 2.5 4.7 7.6 9.6 mm	T11 0 3.2 6.0 9.6 mm	O11 0 5.3 8.2 9.6 mm
			T02 11-12 0 3.0 5.9 9.6 mm	T20 13-14 0 2.8 9.6 mm	S02 11-12 0 2.5 4.5 7.4 9.6 mm

Conformity / (NC)

Max. Actuation speed	0.3ms
Min. force or torque	12N / 30Nm
Weight	105g

Roller Plunger

Code	Metal roller Nylon roller
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PS42L-04	PR-T00
PS42L-05	P1-T00

			S11 0 4.9 9.0 14.5 21.0 mm	T11 0 6.0 10.5 21.0 mm	O11 0 10.2 14.6 21.0 mm
			T02 11-12 0 5.7 10.2 21.0 mm	T20 13-14 0 5.3 21.0 mm	S02 11-12 0 5.1 8.6 13.1 21.0 mm

Conformity / (NC)

Max. Actuation speed	1.0ms
Min. force or torque	7N / 24Nm
Weight	105g

Plastic roller

Code	on plastic plunger on metal plunger on metal pl. with dust prot. cup
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PS42L-06	RL-T00
PS42L-07	RH-T00
PS42L-08	RJ-T00

			S11 0 8.8 15.0 23.2 32.0 mm	T11 0 10.6 18.5 32.0 mm	O11 0 16.8 25.1 32.0 mm
			T02 11-12 0 9.6 17.8 32.0 mm	T20 13-14 0 9.2 32.0 mm	S02 11-12 0 8.8 14.6 22.8 32.0 mm


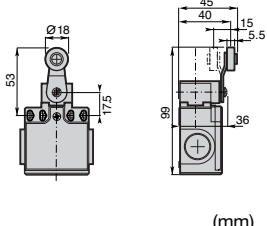

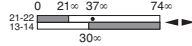
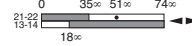
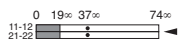

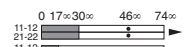
Conformity / (NC)


Max. Actuation speed	1.0ms
Min. force or torque	7N / 24Nm
Weight	110g


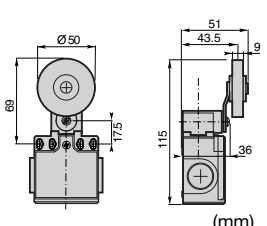

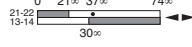
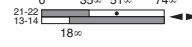
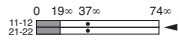

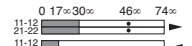
Adjustable plastic roller lever on metal plunger


Code	standard with dust protection cup
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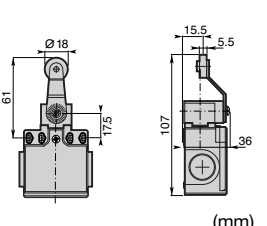

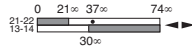
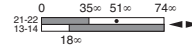
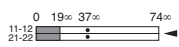

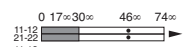
PS42L-09	LR-T00
PS42L-10	LO-T00


		S11 	T11 	O11 
		T02 	T20 	S02 


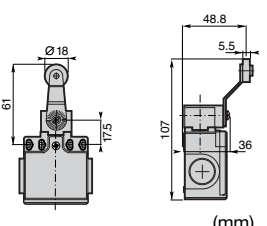

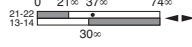
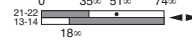
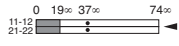

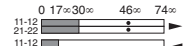
Conformity / (NC) / **Ø 18 Nylon roller lever**
Max. Actuation speed 1.5ms **Code**
Min. force or torque 0.10N / 0.32Nm
Weight 125g **PS42L-RT-T00**


		S11 	T11 	O11 
		T02 	T20 	S02 


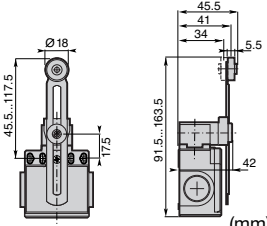

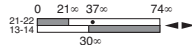
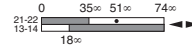
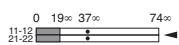

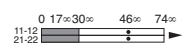
Conformity / (NC) / **Ø 50 Rubber roller lever**
Max. Actuation speed 1.5ms **Code**
Min. force or torque 0.10N / 0.32Nm
Weight 145g **PS42L-W0-T00**


		S11 	T11 	O11 
		T02 	T20 	S02 

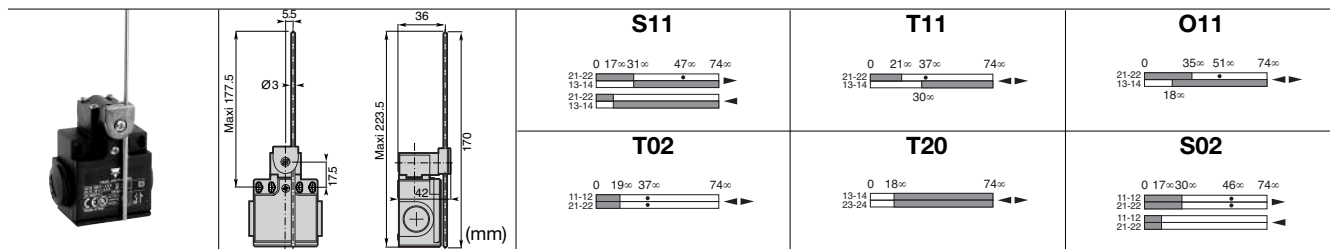
Conformity / (NC) / **Ø 18 Nylon roller lever**
Max. Actuation speed 1.5ms **Code**
Min. force or torque 0.10N / 0.32Nm
Weight 125g **PS42L-BR-T00**

		S11 	T11 	O11 
		T02 	T20 	S02 

Conformity / (NC) / **Ø 18 Nylon roller lever**
Max. Actuation speed 1.5ms **Code**
Min. force or torque 0.10N / 0.32Nm
Weight 125g **PS42L-BE-T00**

		S11 	T11 	O11 
		T02 	T20 	S02 

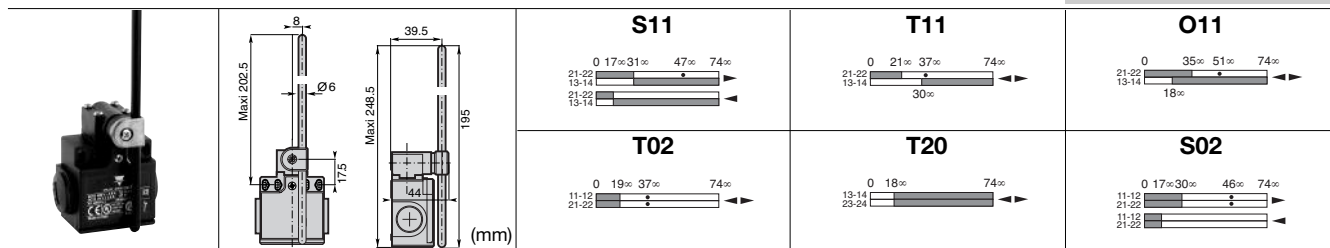
Conformity / (NC) / **Adjustable lever with Ø 18 nylon roller**
Max. Actuation speed 1.5ms **Code**
Min. force or torque 0.10N / 0.32Nm
Weight 135g **PS42L-R1-T00**



Conformity / (NC) / (C)
Max. Actuation speed 1.5ms
Min. force or torque 0.10N / 0.32
Weight 130g

Adjustable rod lever
Code stainless steel rod Ø3
 fiberglass rod Ø3
 square steel rod 3x3

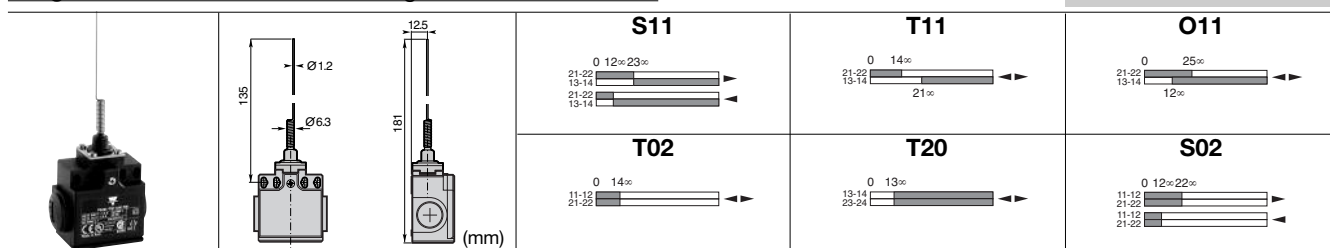
PS42L- () (▲) LA-T00
PS42L- () (▲) LF-T00
PS42L- () (▲) L3-T00



Conformity / (NC) / (C)
Max. Actuation speed 1.5ms
Min. force or torque 0.10N / 0.32Nm
Weight 145g

Adjustable Ø 6 rod lever
Code nylon rod
 fiberglass rod

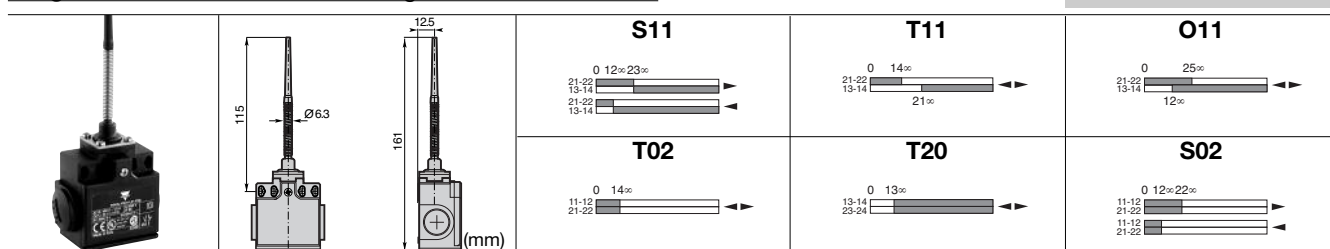
PS42L- () (▲) LN-T00
PS42L- () (▲) LG-T00



Conformity / (NC) / (C)
Max. Actuation speed 1.0ms
Min. force or torque 0.12N / -
Weight 110g

Stainless steel spring multidirectional actuator
Code

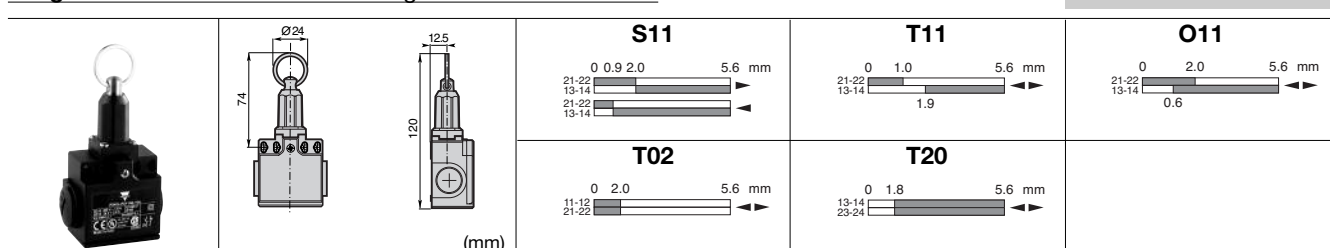
PS42L- () (▲) LW-T00



Conformity / (NC) / (C)
Max. Actuation speed 1.0ms
Min. force or torque 0.12N / -
Weight 115g

Multidirectional stainless steel spring
Code nylon actuator
 stainless steel spring actuator

PS42L- () (▲) LP-T00
PS42L- () (▲) LS-T00



Conformity / (NC) / (C)
Max. Actuation speed 0.5ms
Min. force or torque 30N / -
Weight 145g

Pull action with ring
Code

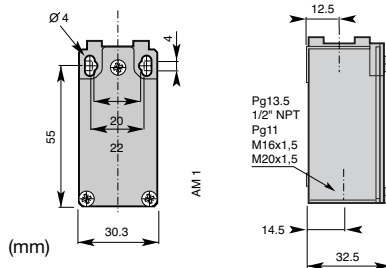
PS42L- () (▲) N6-T00

Limit Switches - Limit Type (PS21) Metal Body IP66

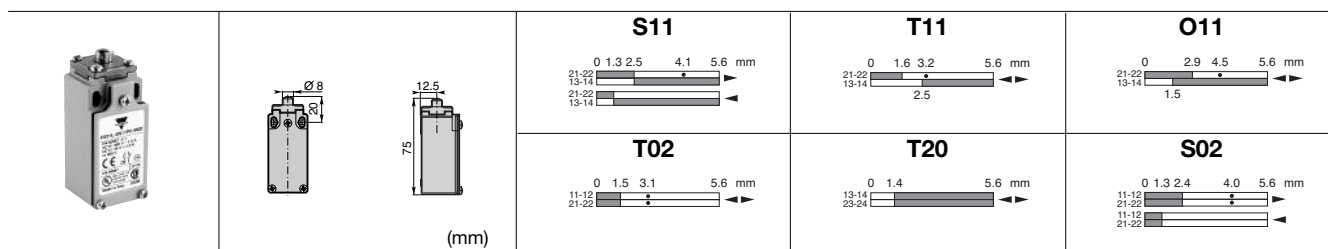
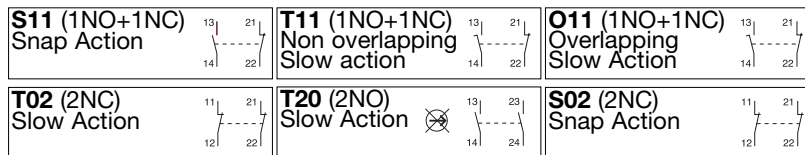


• Cable Gland

- P** = one cable inlet PG13.5 cable gland
- M** = one cable inlet M20x1.5 cable gland
- N** = one cable inlet 1/2" NPT cable gland
- B** = one cable inlet PG11 cable gland
- A** = one cable inlet M16x1.5 cable gland



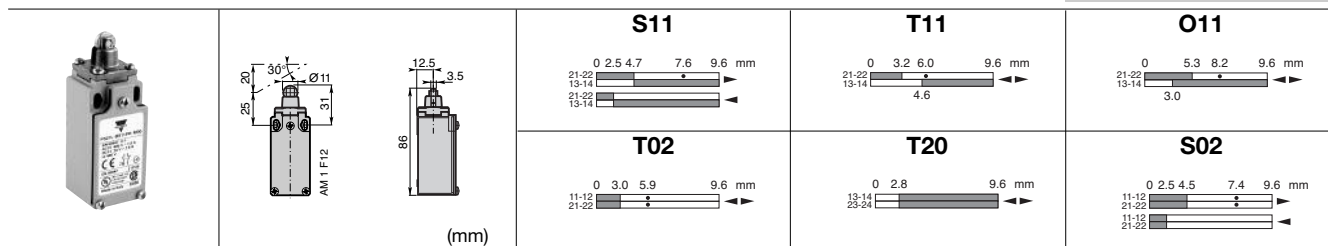
▲ Contact block (Zb type)



Conformity / (NC) EN 50047 / (NC)
Max. Actuation speed 0.5ms
Min. force or torque 15N / 30Nm
Weight 180g

Plain Metal Plunger
Code

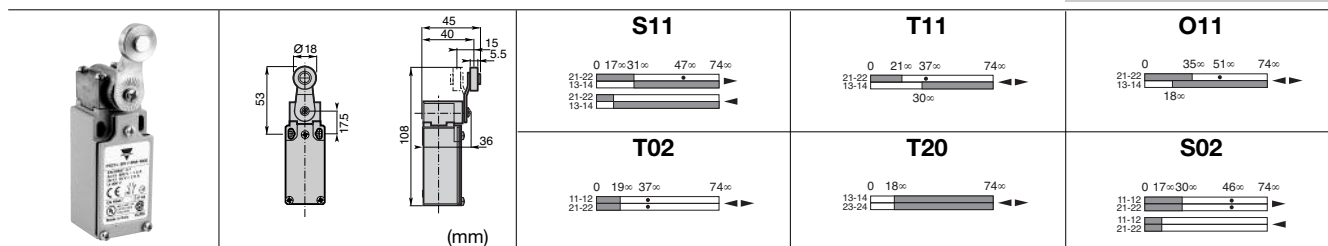
PS21L- [Symbol] P0-M00



Conformity / (NC) EN 50047 / (NC)
Max. Actuation speed 0.3ms
Min. force or torque 12N / 30Nm
Weight 190g

Roller Metal Plunger
Code

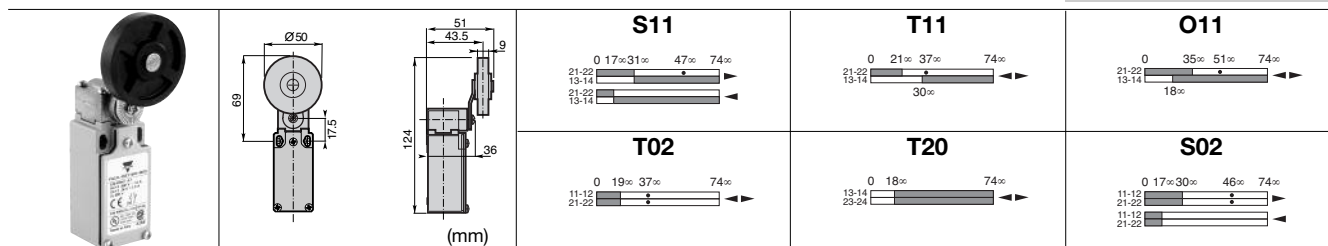
PS21L- [Symbol] PR-M00



Conformity / (NC) EN 50047 / (NC)
Max. Actuation speed 1.5ms
Min. force or torque 0.10N / 0.32Nm
Weight 235g

Ø 18 Nylon roller lever
Code metal roller
nylon roller


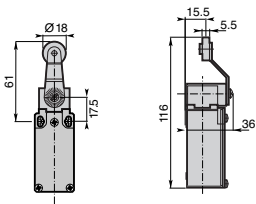
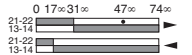
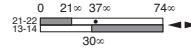
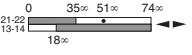

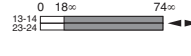

PS21L- [Symbol] RM-M00
PS21L- [Symbol] RT-M00



Conformity / (NC) EN 50047 / (NC)
Max. Actuation speed 1.5ms
Min. force or torque 0.10N / 0.32Nm
Weight 255g

Ø 50 Rubber roller lever
Code

PS21L- [Symbol] W0-M00

	 <p>(mm)</p>	<p>S11</p> 	<p>T11</p> 	<p>O11</p> 
		<p>T02</p> 	<p>T20</p> 	<p>S02</p> 

Conformity / (NC) / (N)


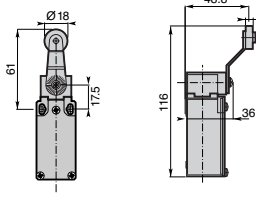
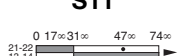
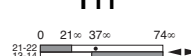

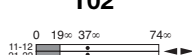

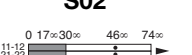
Max. Actuation speed 1.5ms

Min. force or torque 0.10N / 0.32Nm

Weight 250g

Ø 18 Roller lever
Code metal roller
nylon roller

PS21L- BM-M00
PS21L- BR-M00

	 <p>(mm)</p>	<p>S11</p> 	<p>T11</p> 	<p>O11</p> 
		<p>T02</p> 	<p>T20</p> 	<p>S02</p> 

Conformity / (NC) / (N)


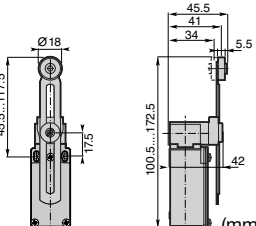
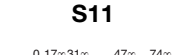
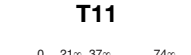




Max. Actuation speed 1.5ms

Min. force or torque 0.10N / 0.32Nm

Weight 250g

Ø 18 Roller lever
Code nylon roller

PS21L- BE-M00

	 <p>(mm)</p>	<p>S11</p> 	<p>T11</p> 	<p>O11</p> 
		<p>T02</p> 	<p>T20</p> 	<p>S02</p> 

Conformity / (NC) / (N)


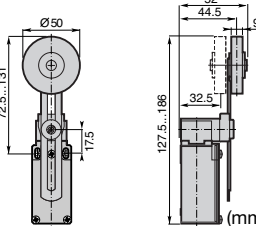

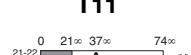



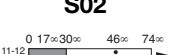
Max. Actuation speed 1.5ms

Min. force or torque 0.10N / 0.32Nm

Weight 245g

Adjustable lever with Ø 18 nylon roller
Code

PS21L- R1-M00

	 <p>(mm)</p>	<p>S11</p> 	<p>T11</p> 	<p>O11</p> 
		<p>T02</p> 	<p>T20</p> 	<p>S02</p> 

Conformity / (NC) / (N)


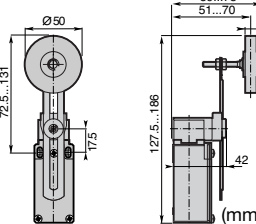

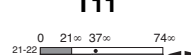
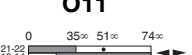


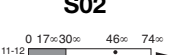
Max. Actuation speed 1.5ms

Min. force or torque 0.10N / 0.32Nm

Weight 265g

Adjustable lever with Ø 50 rubber roller
Code

PS21L- W1-M00

	 <p>(mm)</p>	<p>S11</p> 	<p>T11</p> 	<p>O11</p> 
		<p>T02</p> 	<p>T20</p> 	<p>S02</p> 

Conformity / (NC) / (N)

Max. Actuation speed 1.5ms

Min. force or torque 0.10N / 0.32Nm

Weight 265g

Adjustable lever with adjustable Ø 50 rubber roller
Code

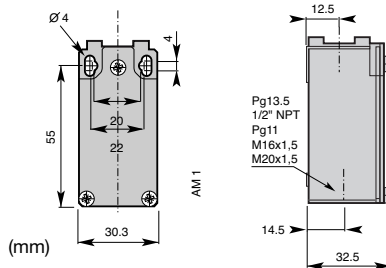
PS21L- W2-M00

Limit Switches - Limit Type (PS21) Metal Body IP66



• Cable Gland

- P** = one cable inlet PG13.5 cable gland
- M** = one cable inlet M20x1.5 cable gland
- N** = one cable inlet 1/2" NPT cable gland
- B** = one cable inlet PG11 cable gland
- A** = one cable inlet M16x1.5 cable gland



▲ Contact block (Zb type)

S11 (1NO+1NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action		O11 (1NO+1NC) Overlapping Slow Action	
T02 (2NC) Slow Action		T20 (2NO) Slow Action		S02 (2NC) Snap Action	

			S11	T11	O11
			T02	T20	S02

Conformity / (NC)

Max. Actuation speed	1.5ms
Min. force or torque	0.10N / -
Weight	245g

Stainless steel spring

Code nylon actuator
stainless steel spring actuator

PS21L-●▲LB-M00
PS21L-●▲LZ-M00

			S11	T11	O11
			T02	T20	S02

Conformity / (NC)

Max. Actuation speed	1.5ms
Min. force or torque	0.10N / 0.32
Weight	245g

Adjustable rod lever

Code stainless steel rod Ø3
fiberglass rod Ø3
square steel rod 3x3

PS21L-●▲LA-M00
PS21L-●▲LF-M00
PS21L-●▲L3-M00

			S11	T11	O11
			T02	T20	S02

Conformity / (NC)

Max. Actuation speed	1.5ms
Min. force or torque	0.10N / 0.32Nm
Weight	255g

Adjustable Ø 6 rod lever

Code nylon rod
fiberglass rod

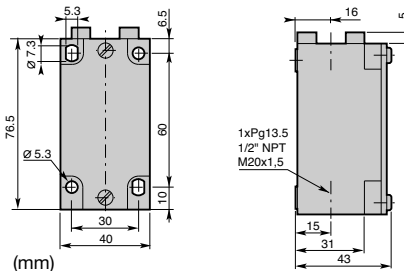
PS21L-●▲LN-M00
PS21L-●▲LG-M00

Limit Switches - Limit Type (PS31) Metal Body IP66




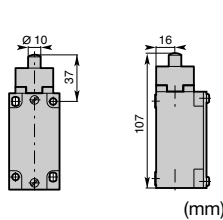
▣ Cable Gland

- P** = one cable inlet PG13.5 cable gland
- M** = one cable inlet M20x1.5 cable gland
- N** = one cable inlet 1/2" NPT cable gland



▴ Contact block (Zb type)


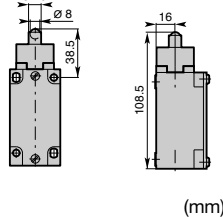
S11 (1NO+1NC) Snap action	T11 (1NO+1NC) Non overlapping Slow action	O11 (1NO+1NC) Overlapping Slow action	T02 (2NC) Slow Action	T20 (2NO) Slow action
S02 (2NC) Snap action	T12 (1NO+2NC) Non overlapping Slow action	T21 (2NO+1NC) Non overlapping Slow action	T03 (3NC) Simultaneous Slow action	T30 (3NO) Simultaneous Slow action

		S11 0 1.8 3.0 4.6 6.0 mm	T11 0 2.1 3.7 6.0 mm	O11 0 3.4 5.0 6.0 mm	T02 0 2.0 3.6 6.0 mm
		T20 0 1.9 6.0 mm	S02 0 1.8 2.9 4.5 6.0 mm	T12 0 2.0 3.5 6.0 mm	T21 0 2.1 3.6 6.0 mm
		T03 0 2.0 3.5 6.0 mm	T30 0 2.3 6.0 mm		

Conformity / (NC) EN 50041 / (NC)
 Max. Actuation speed 0.5ms
 Min. force or torque 30N / 45Nm
 Weight 240g

Stainless steel plain plunger
 Code


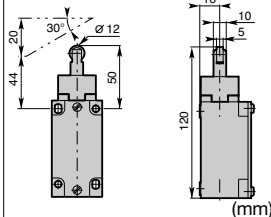
PS31L-▣▴P0-M00

		S11 0 1.8 3.0 4.6 6.0 mm	T11 0 2.1 3.7 6.0 mm	O11 0 3.4 5.0 6.0 mm	T02 0 2.0 3.6 6.0 mm
		T20 0 1.9 6.0 mm	S02 0 1.8 2.9 4.5 6.0 mm	T12 0 2.0 3.5 6.0 mm	T21 0 2.1 3.6 6.0 mm
		T03 0 2.0 3.5 6.0 mm	T30 0 2.3 6.0 mm		

Conformity / (NC) EN 50041 / (NC)
 Max. Actuation speed 0.5ms
 Min. force or torque 30N / 45Nm
 Weight 240g

Stainless steel ball plunger
 Code


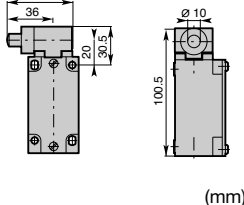
PS31L-▣▴PB-M00

		S11 0 3.1 5.3 8.2 10.5 mm	T11 0 4.0 6.9 10.5 mm	O11 0 6.0 8.9 10.5 mm	T02 0 3.7 6.6 10.5 mm
		T20 0 3.5 10.5 mm	S02 0 3.1 5.1 8.0 10.5 mm	T12 0 3.8 6.3 10.5 mm	T21 0 3.9 6.4 10.5 mm
		T03 0 3.8 6.3 10.5 mm	T30 0 4.3 10.5 mm		

Conformity / (NC) EN 50041 / (NC)
 Max. Actuation speed 0.5ms
 Min. force or torque 22N / 40Nm
 Weight 245g

Stainless steel Ø22 roller plunger
 Code

PS31L-▣▴PR-M00

		S11 0 2.0 3.2 4.8 6.0 mm	T11 0 2.3 3.9 6.0 mm	O11 0 3.6 5.2 6.0 mm	T02 0 2.2 3.8 6.0 mm
		T20 0 2.1 6.0 mm	S02 0 2.0 3.1 4.7 6.0 mm	T12 0 1.4 2.9 6.0 mm	T21 0 1.5 3.0 6.0 mm
		T03 0 1.4 2.9 6.0 mm	T30 0 1.9 6.0 mm		

Conformity / (NC) EN 50041 / (NC)
 Max. Actuation speed 0.5ms
 Min. force or torque 30N / 50Nm
 Weight 260g

Stainless steel lateral plain plunger
 Code

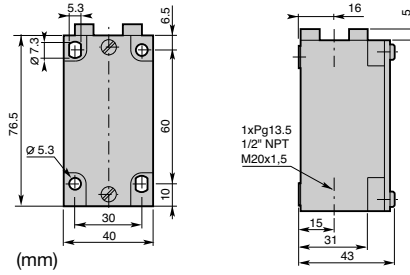
PS31L-▣▴SP-M00

Limit Switches - Limit Type (PS31) Metal Body IP66



□ Cable Gland

- P** = one cable inlet PG13.5 cable gland
- M** = one cable inlet M20x1.5 cable gland
- N** = one cable inlet 1/2" NPT cable gland



▲ Contact block (Zb type)

S11 (1NO+1NC) Snap action	T11 (1NO+1NC) Non overlapping Slow action	O11 (1NO+1NC) Overlapping Slow action	T02 (2NC) Slow Action	T20 (2NO) Slow action
S02 (2NC) Snap action	T12 (1NO+2NC) Non overlapping Slow action	T21 (2NO+1NC) Non overlapping Slow action	T03 (3NC) Simultaneous Slow action	T30 (3NO) Simultaneous Slow action

		S11 0 3.7 5.9 8.8 10.2 mm	T11 0 4.6 7.5 10.2 mm	O11 0 6.6 9.5 10.2 mm	T02 0 4.3 7.2 10.2 mm
		T20 0 4.1 10.2 mm	S02 0 3.5 5.7 8.6 10.2 mm	T12 0 3.5 6.1 10.2 mm	T21 0 3.6 6.2 10.2 mm
		T03 0 3.5 6.1 10.2 mm	T30 0 4.0 10.2 mm		

Conformity / (NC) EN 50041 / (NC)
 Max. Actuation speed 0.5ms
 Min. force or torque 30N / 50Nm
 Weight 265g

Stainless steel lateral plunger with Ø12 vertical roller
 Code PS31L-□▲SV-M00

		S11 0 3.7 5.9 8.8 10.2 mm	T11 0 4.6 7.5 10.2 mm	O11 0 6.6 9.5 10.2 mm	T02 0 4.3 7.2 10.2 mm
		T20 0 4.1 10.2 mm	S02 0 3.5 5.7 8.6 10.2 mm	T12 0 3.5 6.1 10.2 mm	T21 0 3.6 6.2 10.2 mm
		T03 0 3.5 6.1 10.2 mm	T30 0 4.0 10.2 mm		

Conformity / (NC) EN 50041 / (NC)
 Max. Actuation speed 0.5ms
 Min. force or torque 30N / 50Nm
 Weight 265g

Stainless steel lateral plunger with Ø12 horizontal roller
 Code PS31L-□▲SH-M00

		S11 0 3.1 6.3 10.8 15.5 mm	T11 0 4.5 9.0 15.5 mm	O11 0 7.2 11.7 15.5 mm	T02 0 4.0 9.5 15.5 mm
		T20 0 3.6 15.5 mm	S02 0 3.1 6.1 10.6 15.5 mm	T12 0 4.6 8.4 15.5 mm	T21 0 4.7 8.5 15.5 mm
		T03 0 4.6 8.4 15.5 mm	T30 0 4.9 15.5 mm		

Conformity / (NC) EN 50041 / (NC)
 Max. Actuation speed 1.5ms
 Min. force or torque 12N / 40Nm
 Weight 280g

One way lever
 Code Ø22 nylon roller
 Ø22 stainless steel roller
 Ø22 steel ball bearing

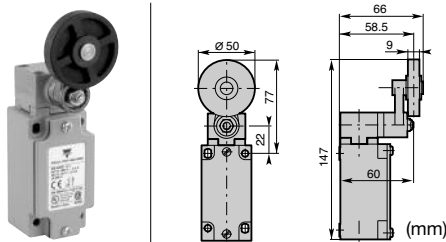
PS31L-□▲RH-M00
 PS31L-□▲RK-M00
 PS31L-□▲RB-M00

		S11 0 20×33 49 78	T11 0 22×38 78	O11 0 37 53 78	T02 0 21 37 78
		T20 0 20 78	S02 0 20×32 48 78	T12 0 18 35 78	T21 0 19 36 78
		T03 0 18 35 78	T30 0 23 78		

Conformity / (NC) EN 50041 / (NC)
 Max. Actuation speed 1.5ms
 Min. force or torque 0.15N / 0.30Nm
 Weight 300g

Ø22 Roller lever
 Code nylon roller
 stainless steel roller
 steel ball bearing

PS31L-□▲RT-M00
 PS31L-□▲RS-M00
 PS31L-□▲RO-M00



S11 0 20×33 49 78 21-22 13-14 21-22 13-14	T11 0 22×38 78 21-22 13-14 33	O11 0 37×53 78 21-22 13-14 21	T02 0 21×37 78 11-12 21-22
T20 0 20 78 13-14 23-24	S02 0 20×32 48 78 11-12 21-22 11-12 21-22	T12 0 18×35 78 21-22 13-14 37	T21 0 19×36 78 31-32 13-14 23-24 37
T03 0 18×35 78 11-12 21-22 31-32	T30 0 23 78 13-14 23-24 33-34		

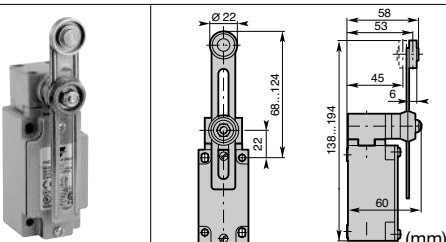
Conformity / (NC) /

Max. Actuation speed 1.5ms

Min. force or torque 0.15N / 0.30Nm

Weight 315g

Ø50 Rubber roller lever
Code **PS31L- [] [] W0-M00**



S11 0 20×33 49 78 21-22 13-14 21-22 13-14	T11 0 22×38 78 21-22 13-14 33	O11 0 37×53 78 21-22 13-14 21	T02 0 21×37 78 11-12 21-22
T20 0 20 78 13-14 23-24	S02 0 20×32 48 78 11-12 21-22 11-12 21-22	T12 0 18×35 78 21-22 13-14 37	T21 0 19×36 78 31-32 13-14 23-24 37
T03 0 18×35 78 11-12 21-22 31-32	T30 0 23 78 13-14 23-24 33-34		

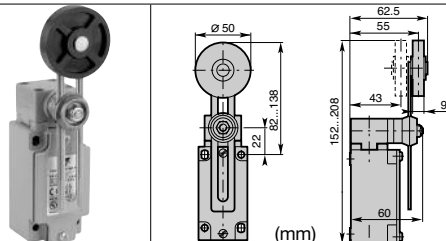
Conformity / (NC) /

Max. Actuation speed 1.5ms

Min. force or torque 0.15N / 0.30Nm

Weight 320g

Adjustable Ø22 roller lever
Code nylon lever stainless steel roller steel ball bearing **PS31L- [] [] R1-M00**
PS31L- [] [] R2-M00
PS31L- [] [] R3-M00



S11 0 20×33 49 78 21-22 13-14 21-22 13-14	T11 0 22×38 78 21-22 13-14 33	O11 0 37×53 78 21-22 13-14 21	T02 0 21×37 78 11-12 21-22
T20 0 20 78 13-14 23-24	S02 0 20×32 48 78 11-12 21-22 11-12 21-22	T12 0 18×35 78 21-22 13-14 37	T21 0 19×36 78 31-32 13-14 23-24 37
T03 0 18×35 78 11-12 21-22 31-32	T30 0 23 78 13-14 23-24 33-34		

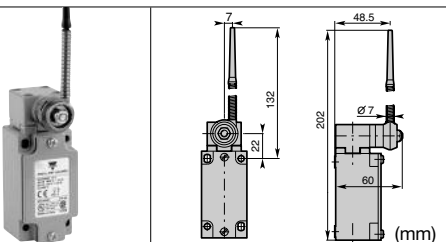
Conformity / (NC) /

Max. Actuation speed 1.5ms

Min. force or torque 0.15N / 0.30Nm

Weight 325g

Adjustable Ø50 rubber roller lever
Code **PS31L- [] [] W1-M00**



S11 0 20×33 49 78 21-22 13-14 21-22 13-14	T11 0 22×38 78 21-22 13-14 33	O11 0 37×53 78 21-22 13-14 21	T02 0 21×37 78 11-12 21-22
T20 0 20 78 13-14 23-24	S02 0 20×32 48 78 11-12 21-22 11-12 21-22	T12 0 18×35 78 21-22 13-14 37	T21 0 19×36 78 31-32 13-14 23-24 37
T03 0 18×35 78 11-12 21-22 31-32	T30 0 23 78 13-14 23-24 33-34		

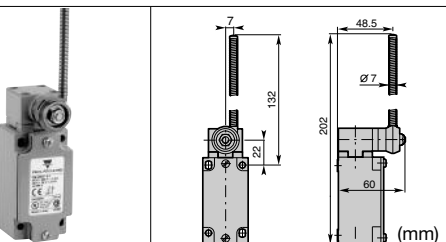
Conformity / (NC) /

Max. Actuation speed 1.5ms

Min. force or torque 0.15N / -

Weight 305g

Nylon actuator with stainless steel spring
Code **PS31L- [] [] LB-M00**



S11 0 20×33 49 78 21-22 13-14 21-22 13-14	T11 0 22×38 78 21-22 13-14 33	O11 0 37×53 78 21-22 13-14 21	T02 0 21×37 78 11-12 21-22
T20 0 20 78 13-14 23-24	S02 0 20×32 48 78 11-12 21-22 11-12 21-22	T12 0 18×35 78 21-22 13-14 37	T21 0 19×36 78 31-32 13-14 23-24 37
T03 0 18×35 78 11-12 21-22 31-32	T30 0 23 78 13-14 23-24 33-34		

Conformity / (NC) /

Max. Actuation speed 1.5ms

Min. force or torque 0.15N / -

Weight 310g

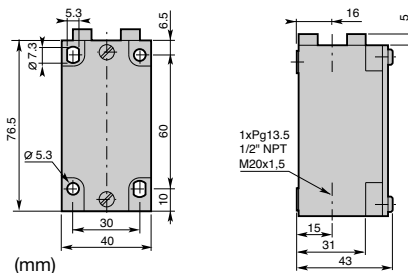
Stainless steel spring actuator
Code **PS31L- [] [] LZ-M00**

Limit Switches - Limit Type (PS31) Metal Body IP66



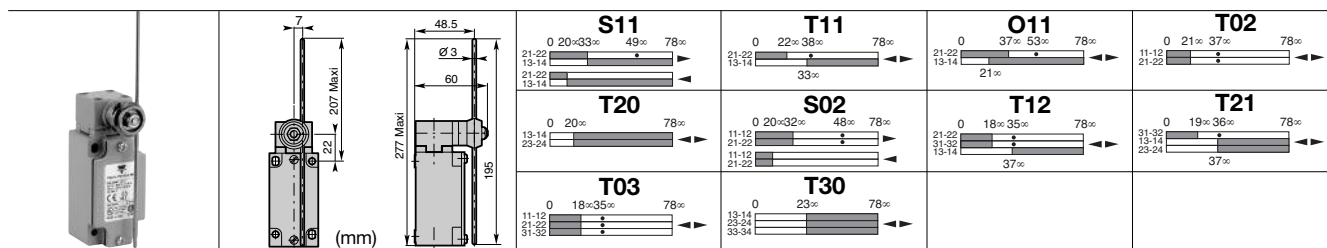
□ Cable Gland

- P** = one cable inlet PG13.5 cable gland
- M** = one cable inlet M20x1.5 cable gland
- N** = one cable inlet 1/2" NPT cable gland



▲ Contact block (Zb type)

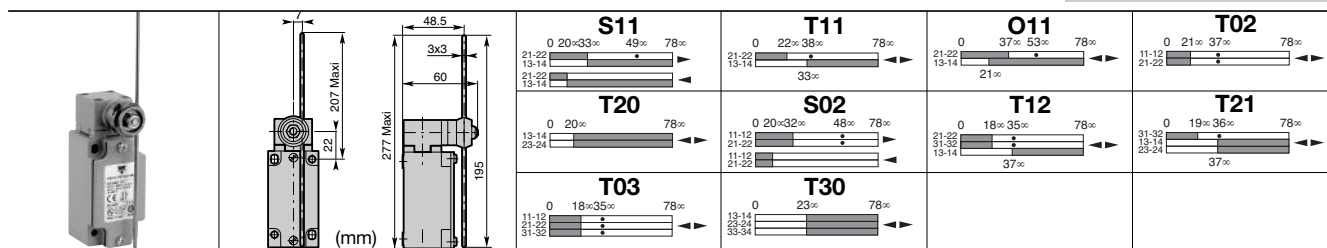
S11 (1NO+1NC) Snap action	T11 (1NO+1NC) Non overlapping Slow action	O11 (1NO+1NC) Overlapping Slow action	T02 (2NC) Slow Action	T20 (2NO) Slow action
S02 (2NC) Snap action	T12 (1NO+2NC) Non overlapping Slow action	T21 (2NO+1NC) Non overlapping Slow action	T03 (3NC) Simultaneous Slow action	T30 (3NO) Simultaneous Slow action



Conformity / (NC) EN50041 / (NC)
Max. Actuation speed 1.5ms
Min. force or torque 0.15N / 0.30
Weight 305g

Adjustable rod lever
Code stainless steel rod Ø3
 fiberglass rod Ø3

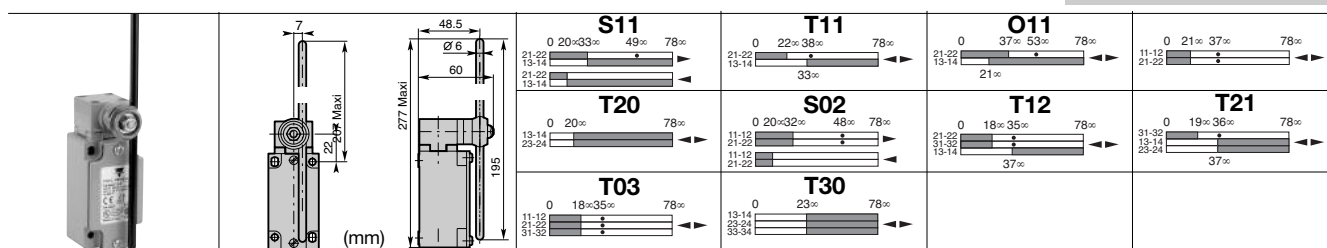
PS31L- () () () LA-M00
PS31L- () () () LF-M00



Conformity / (NC) EN50041 / (NC)
Max. Actuation speed 1.5ms
Min. force or torque 0.15N / 0.30
Weight 305g

Adjustable rod lever
Code square steel rod 3x3

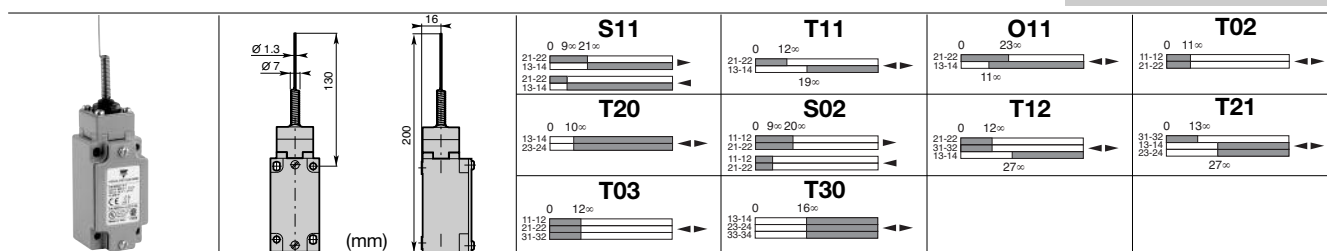
PS31L- () () () L3-M00



Conformity / (NC) EN50041 / (NC)
Max. Actuation speed 1.5ms
Min. force or torque 0.15N / 0.30Nm
Weight 300g

Adjustable rod lever
Code nylon rod
 fiberglass rod

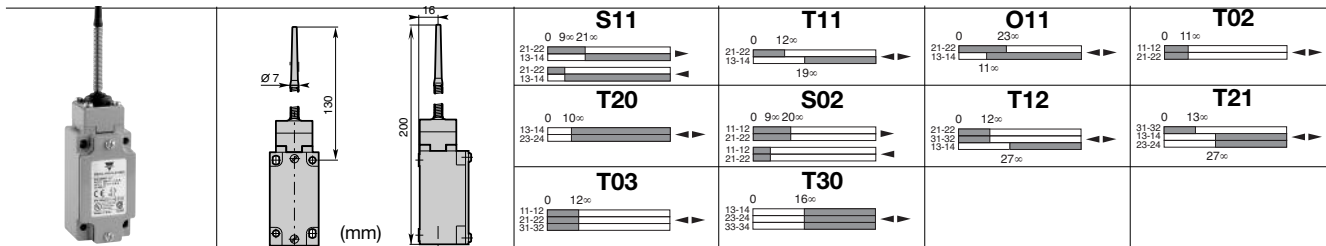
PS31L- () () () LN-M00
PS31L- () () () LG-M00



Conformity / () /
Max. Actuation speed 1.0ms
Min. force or torque 0.18N / -
Weight 230g

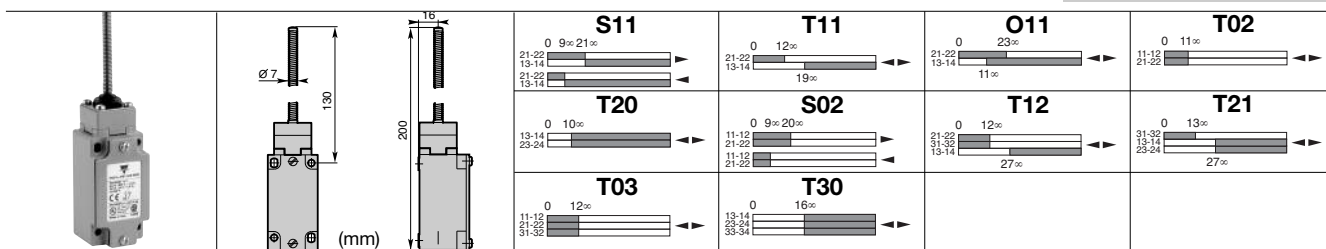
Stainless steel spring multidirectional actuator
Code

PS31L- () () () LW-M00



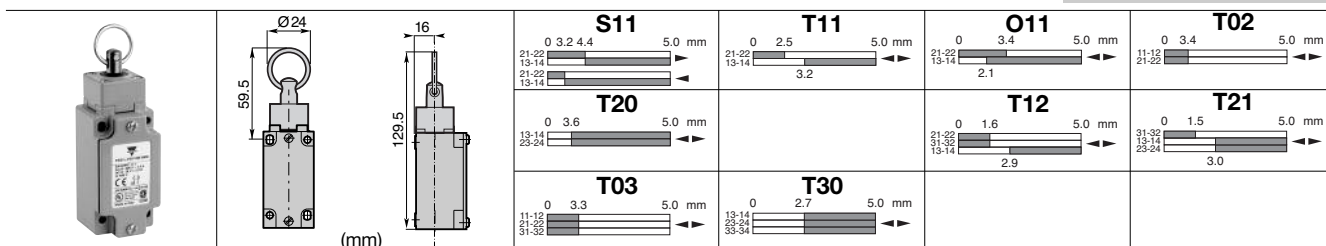
Conformity / \Rightarrow (NC) /
 Max. Actuation speed 1.0ms
 Min. force or torque 0.18N / -
 Weight 230g

Multidirectional nylon actuator with stainless steel spring
 Code PS31L- \square \bullet \blacktriangle LP-M00



Conformity / \Rightarrow (NC) /
 Max. Actuation speed 1.0ms
 Min. force or torque 0.18N / -
 Weight 235g

Stainless steel spring multidirectional actuator
 Code PS31L- \square \bullet \blacktriangle LS-M00



Conformity / \Rightarrow (NC) /
 Max. Actuation speed 0.5ms
 Min. force or torque 25N / -
 Weight 245g

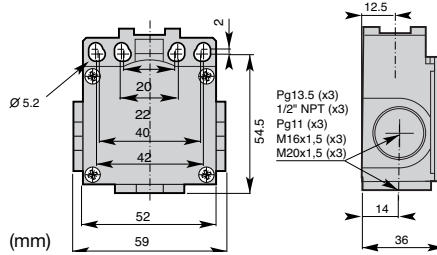
Pull action with ring
 Code PS31L- \square \bullet \blacktriangle N6-M00

Limit Switches - Limit Type (PS42) Metal Body IP66

CARLO GAVAZZI

• Cable Gland

- P** = three cable inlet PG13.5 cable gland
- M** = three cable inlet M20x1.5 cable gland
- N** = three cable inlet 1/2" NPT cable gland
- B** = three cable inlet PG11 cable gland
- A** = three cable inlet M16x1.5 cable gland



▲ Contact block (Zb type)

S11 (1NO+1NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action		O11 (1NO+1NC) Overlapping Slow Action	
T02 (2NC) Slow Action		T20 (2NO) Slow Action		S02 (2NC) Snap Action	

			S11	T11	O11
			T02	T20	S02

Conformity / (NC) / (NC)

Max. Actuation speed 0.5ms
Min. force or torque 15N / 30Nm
Weight 270g

Plain Metal Plunger
Code

PS42L-□□□P0-M00

			S11	T11	O11
			T02	T20	S02

Conformity / (NC) / (NC)

Max. Actuation speed 0.3ms
Min. force or torque 12N / 30Nm
Weight 280g

Metal roller Plunger
Code

PS42L-□□□PR-M00

			S11	T11	O11
			T02	T20	S02

Conformity / (NC) / (NC)

Max. Actuation speed 1.5ms
Min. force or torque 0.10N / 0.32Nm
Weight 325g

Ø 18 Nylon roller lever
Code nylon roller
metal roller

PS42L-□□□RT-M00
PS42L-□□□RM-M00

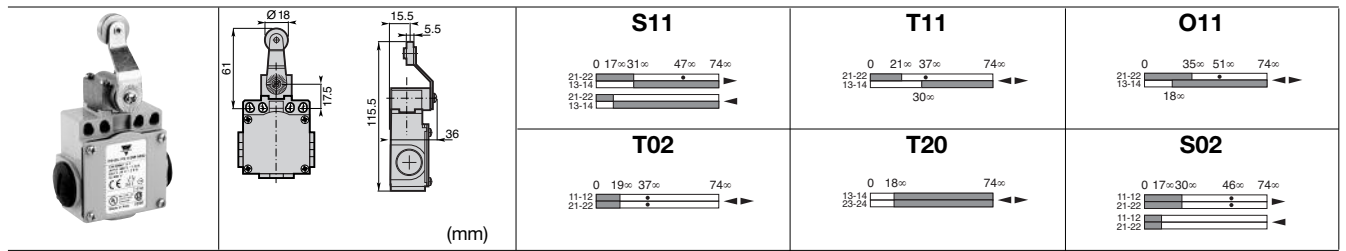
			S11	T11	O11
			T02	T20	S02

Conformity / (NC) / (NC)

Max. Actuation speed 1.5ms
Min. force or torque 0.10N / 0.32Nm
Weight 345g

Ø 50 Rubber roller lever
Code

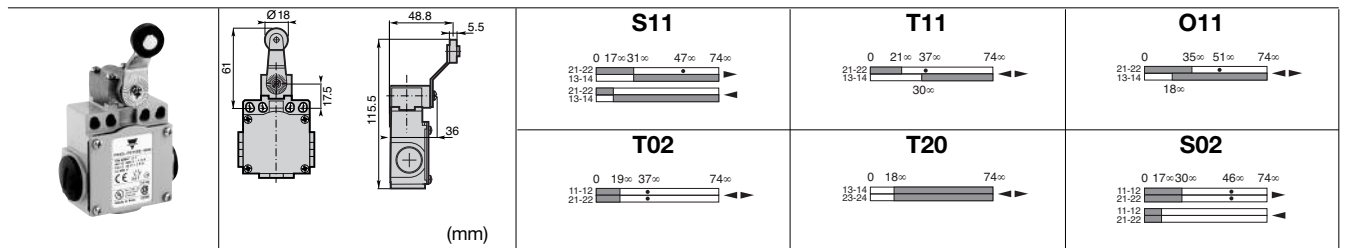
PS42L-□□□W0-M00



Conformity / (NC) / (C)
Max. Actuation speed 1.5ms
Min. force or torque 0.10N / 0.32Nm
Weight 340g

Ø 18 Roller lever
Code nylon roller
 metal roller

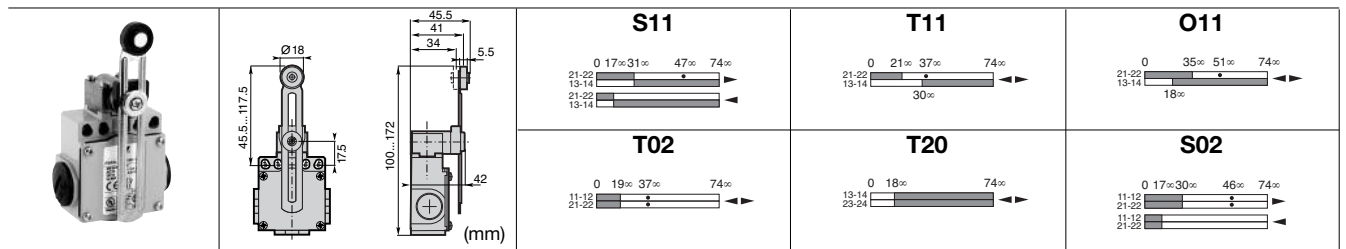
PS42L- (C) (NC) BR-M00
 PS42L- (C) (NC) BM-M00



Conformity / (NC) / (C)
Max. Actuation speed 1.5ms
Min. force or torque 0.10N / 0.32Nm
Weight 340g

Ø 18 Nylon roller lever
Code

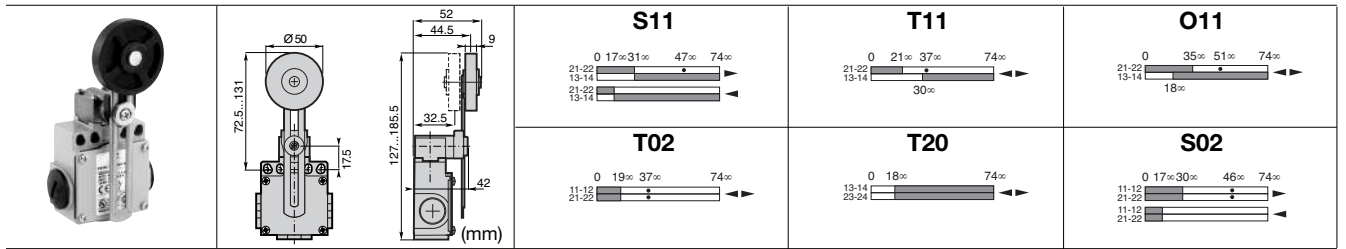
PS42L- (C) (NC) BE-M00



Conformity / (NC) / (C)
Max. Actuation speed 1.5ms
Min. force or torque 0.10N / 0.32Nm
Weight 335g

Adjustable lever with Ø 18 nylon roller
Code

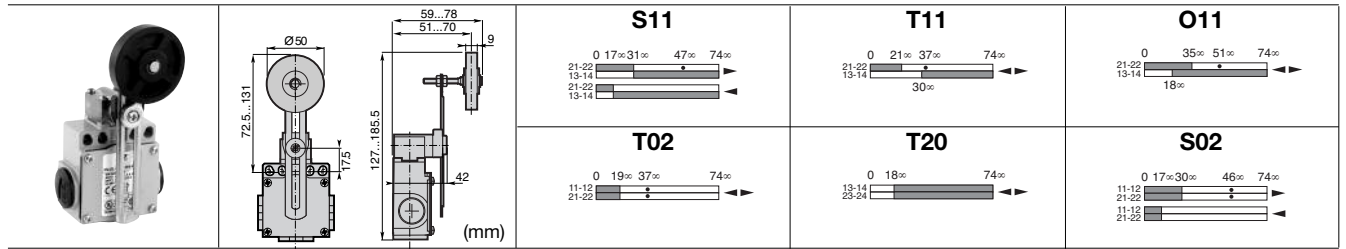
PS42L- (C) (NC) R1-M00



Conformity / (NC) / (C)
Max. Actuation speed 1.5ms
Min. force or torque 0.10N / 0.32Nm
Weight 355g

Adjustable lever with Ø 50 rubber roller
Code

PS42L- (C) (NC) W1-M00



Conformity / (NC) / (C)
Max. Actuation speed 1.5ms
Min. force or torque 0.10N / 0.32Nm
Weight 355g

Adjustable lever with adjustable Ø 50 rubber roller
Code

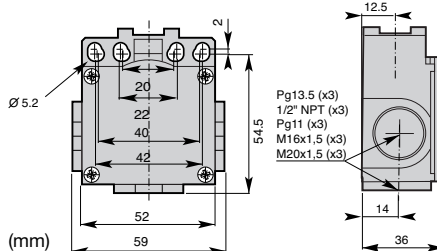
PS42L- (C) (NC) W2-M00

Limit Switches - Limit Type (PS42) Metal Body IP66

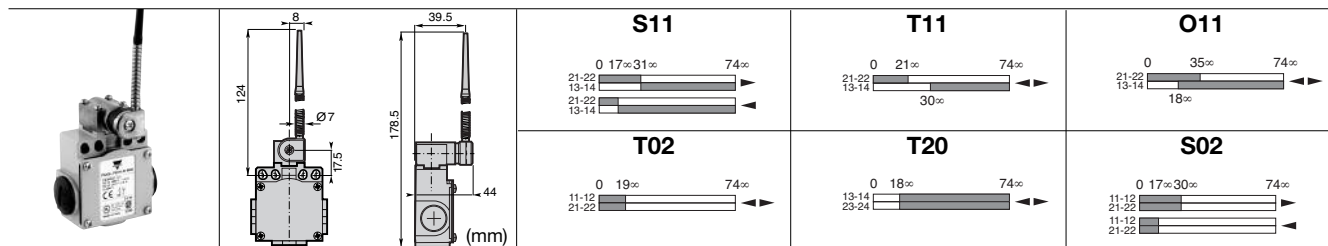
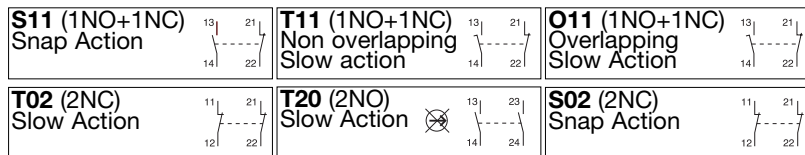


• Cable Gland

- P** = three cable inlet PG13.5 cable gland
- M** = three cable inlet M20x1.5 cable gland
- N** = three cable inlet 1/2" NPT cable gland
- B** = three cable inlet PG11 cable gland
- A** = three cable inlet M16x1.5 cable gland



▲ Contact block (Zb type)

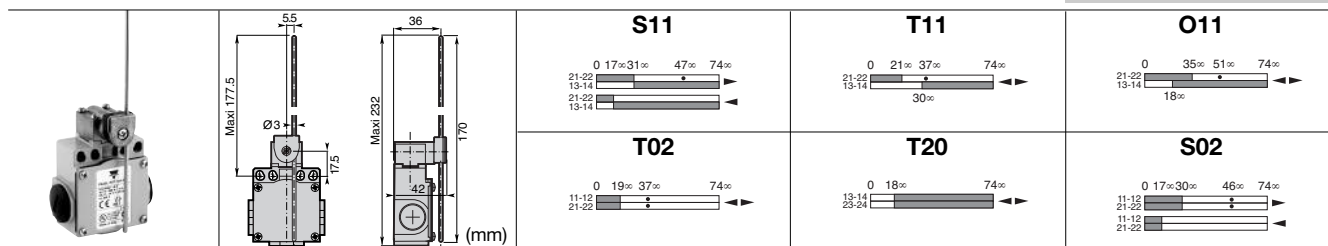


Conformity / (NC)

Max. Actuation speed	1.5ms
Min. force or torque	0.10N / -
Weight	305g

Nylon actuator with stainless steel spring

Code PS42L-▲LB-M00



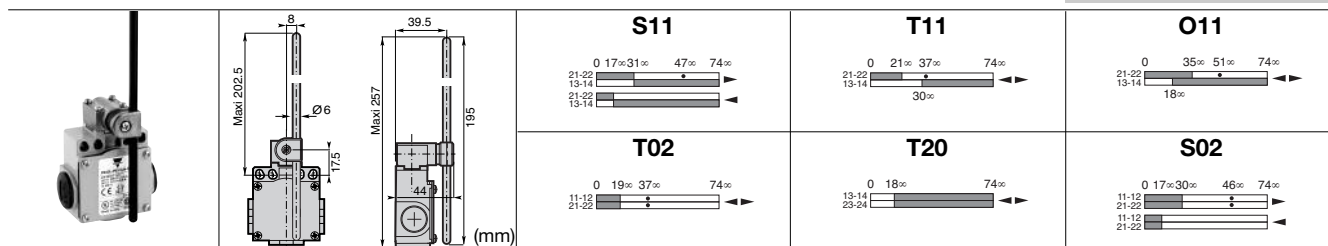
Conformity / (NC)

Max. Actuation speed	1.5ms
Min. force or torque	0.10N / 0.32
Weight	380g

Adjustable rod lever

Code stainless steel rod Ø3
fiberglass rod Ø3
square steel rod 3x3

PS42L-▲LA-M00
PS42L-▲LF-M00
PS42L-▲L3-M00



Conformity / (NC)

Max. Actuation speed	1.5ms
Min. force or torque	0.10N / 0.32Nm
Weight	390g

Adjustable Ø 6 rod lever

Code nylon rod
fiberglass rod

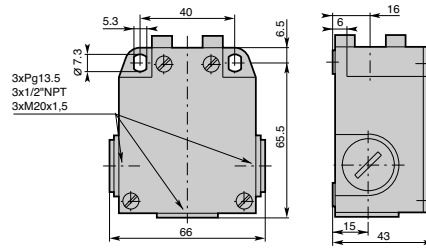
PS42L-▲LN-M00
PS42L-▲LG-M00

Limit Switches - Limit Type (PS43) Metal Body IP66



▣ Cable Gland

- P** = Three cable inlet PG13.5 cable gland
- M** = Three cable inlet M20x1.5 cable gland
- N** = Three cable inlet 1/2" NPT cable gland



▴ Contact block (Zb type)

S11 (1NO+1NC) Snap action	T11 (1NO+1NC) Non overlapping Slow action	O11 (1NO+1NC) Overlapping Slow action	T02 (2NC) Slow Action	T20 (2NO) Slow action
S02 (2NC) Snap action	T12 (1NO+2NC) Non overlapping Slow action	T21 (2NO+1NC) Non overlapping Slow action	T03 (3NC) Simultaneous Slow action	T30 (3NO) Simultaneous Slow action

			S11 0 1.8 3.0 4.6 6.0 mm	T11 0 2.1 3.7 6.0 mm	O11 0 3.4 5.0 6.0 mm	T02 0 2.0 3.6 6.0 mm
			T20 0 1.9 6.0 mm	S02 0 1.8 2.9 4.5 6.0 mm	T12 0 2.0 3.5 6.0 mm	T21 0 2.1 3.6 6.0 mm
			T03 0 2.0 3.5 6.0 mm	T30 0 2.3 6.0 mm		

Conformity / (NC) / (C)
Max. Actuation speed 0.5ms
Min. force or torque 30N / 45Nm
Weight 265g

Stainless steel plain plunger
Code PS43L-▣▴P0-M00

			S11 0 1.8 3.0 4.6 6.0 mm	T11 0 2.1 3.7 6.0 mm	O11 0 3.4 5.0 6.0 mm	T02 0 2.0 3.6 6.0 mm
			T20 0 1.9 6.0 mm	S02 0 1.8 2.9 4.5 6.0 mm	T12 0 2.0 3.5 6.0 mm	T21 0 2.1 3.6 6.0 mm
			T03 0 2.0 3.5 6.0 mm	T30 0 2.3 6.0 mm		

Conformity / (NC) / (C)
Max. Actuation speed 0.5ms
Min. force or torque 30N / 45Nm
Weight 265g

Stainless steel ball plunger
Code PS43L-▣▴PB-M00

			S11 0 3.1 5.3 8.2 10.5 mm	T11 0 4.0 6.9 10.5 mm	O11 0 6.0 8.9 10.5 mm	T02 0 3.7 6.6 10.5 mm
			T20 0 3.5 10.5 mm	S02 0 3.1 5.1 8.0 10.5 mm	T12 0 3.8 6.3 10.5 mm	T21 0 3.9 6.4 10.5 mm
			T03 0 3.8 6.3 10.5 mm	T30 0 4.3 10.5 mm		

Conformity / (NC) / (C)
Max. Actuation speed 0.5ms
Min. force or torque 22N / 40Nm
Weight 270g

Stainless steel Ø12 roller plunger
Code PS43L-▣▴PR-M00

			S11 0 2.0 3.2 4.8 6.0 mm	T11 0 2.3 3.9 6.0 mm	O11 0 3.6 5.2 6.0 mm	T02 0 2.2 3.8 6.0 mm
			T20 0 2.1 6.0 mm	S02 0 2.0 3.1 4.7 6.0 mm	T12 0 1.4 2.9 6.0 mm	T21 0 1.5 3.0 6.0 mm
			T03 0 1.4 2.9 6.0 mm	T30 0 1.9 6.0 mm		

Conformity / (NC) / (C)
Max. Actuation speed 0.5ms
Min. force or torque 30N / 50Nm
Weight 285g

Stainless steel lateral plain plunger
Code PS43L-▣▴SP-M00

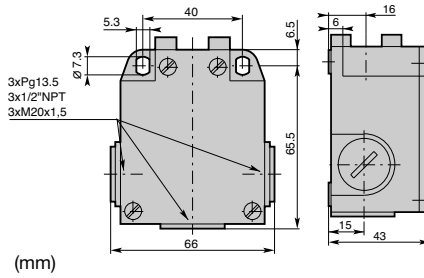
Specifications are subject to change without notice. Pictures are just an example. For special features and/or customization, please ask to our sales network.

Limit Switches - Limit Type (PS43) Metal Body IP66

CARLO GAVAZZI

□ Cable Gland

- P** = Three cable inlet PG13.5 cable gland
- M** = Three cable inlet M20x1.5 cable gland
- N** = Three cable inlet 1/2" NPT cable gland



▲ Contact block (Zb type)

S11 (1NO+1NC) Snap action	T11 (1NO+1NC) Non overlapping Slow action	O11 (1NO+1NC) Overlapping Slow action	T02 (2NC) Slow Action	T20 (2NO) Slow action
S02 (2NC) Snap action	T12 (1NO+2NC) Non overlapping Slow action	T21 (2NO+1NC) Non overlapping Slow action	T03 (3NC) Simultaneous Slow action	T30 (3NO) Simultaneous Slow action

		S11 0 3.7 5.9 8.8 10.2 mm	T11 0 4.6 7.5 10.2 mm	O11 0 6.6 9.5 10.2 mm	T02 0 4.3 7.2 10.2 mm
		T20 0 4.1 10.2 mm	S02 0 3.5 5.7 8.6 10.2 mm	T12 0 3.5 6.1 10.2 mm	T21 0 3.6 6.2 10.2 mm
		T03 0 3.5 6.1 10.2 mm	T30 0 4.0 10.2 mm		

Conformity / (NC)

Max. Actuation speed	0.5ms
Min. force or torque	30N / 50Nm
Weight	290g

Stainless steel lateral plunger with Ø12 vertical roller
Code PS43L-SV-M00

		S11 0 3.7 5.9 8.8 10.2 mm	T11 0 4.6 7.5 10.2 mm	O11 0 6.6 9.5 10.2 mm	T02 0 4.3 7.2 10.2 mm
		T20 0 4.1 10.2 mm	S02 0 3.5 5.7 8.6 10.2 mm	T12 0 3.5 6.1 10.2 mm	T21 0 3.6 6.2 10.2 mm
		T03 0 3.5 6.1 10.2 mm	T30 0 4.0 10.2 mm		

Conformity / (NC)

Max. Actuation speed	0.5ms
Min. force or torque	30N / 50Nm
Weight	290g

Stainless steel lateral plunger with Ø12 horizontal roller
Code PS43L-SH-M00

		S11 0 3.1 6.3 10.8 15.5 mm	T11 0 4.5 9.0 15.5 mm	O11 0 7.2 11.7 15.5 mm	T02 0 4.0 9.5 15.5 mm
		T20 0 3.6 15.5 mm	S02 0 3.1 6.1 10.6 15.5 mm	T12 0 4.6 8.4 15.5 mm	T21 0 4.7 8.5 15.5 mm
		T03 0 4.6 8.4 15.5 mm	T30 0 4.9 15.5 mm		

Conformity / (NC)

Max. Actuation speed	1.5ms
Min. force or torque	12N / 40Nm
Weight	305g

One way lever

- Code Ø22 nylon roller
- Ø22 stainless steel roller
- Ø22 steel ball bearing

PS43L-RH-M00
PS43L-RK-M00
PS43L-RB-M00

		S11 0 20x33 ∞ 49 ∞ 78 ∞	T11 0 22x38 ∞ 78 ∞	O11 0 37 ∞ 53 ∞ 78 ∞	T02 0 21 ∞ 37 ∞ 78 ∞
		T20 0 20 ∞ 78 ∞	S02 0 20x32 ∞ 48 ∞ 78 ∞	T12 0 18x35 ∞ 78 ∞	T21 0 19x36 ∞ 78 ∞
		T03 0 18x35 ∞ 78 ∞	T30 0 23 ∞ 78 ∞		

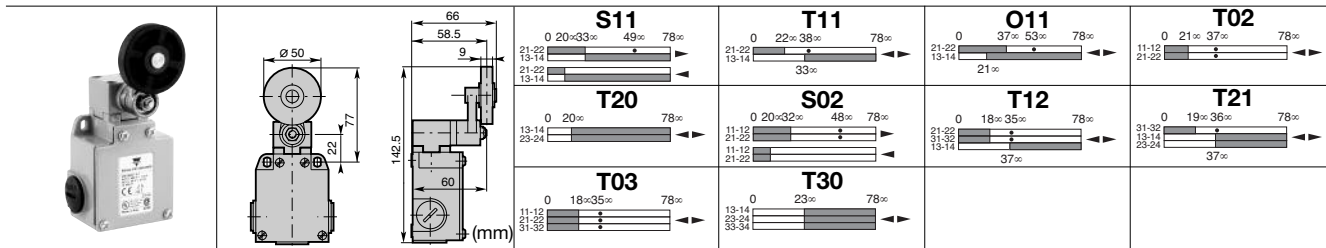
Conformity / (NC)

Max. Actuation speed	1.5ms
Min. force or torque	0.15N / 0.30Nm
Weight	305g

Ø22 Roller lever

- Code nylon roller
- stainless steel roller
- steel ball bearing

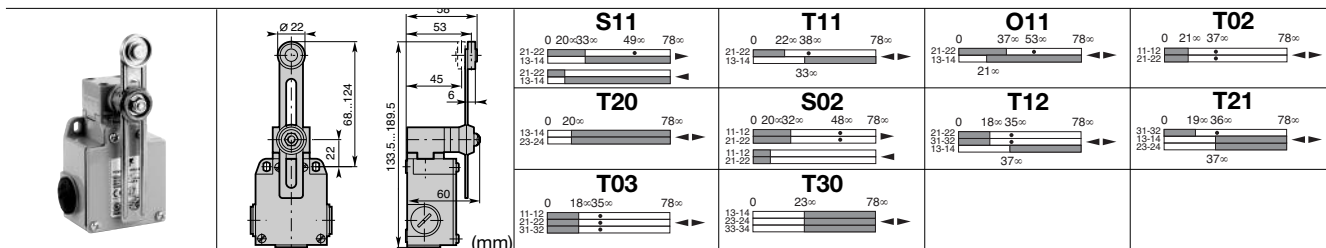
PS43L-RT-M00
PS43L-RS-M00
PS43L-RO-M00



Conformity / \rightarrow (NC) / \rightarrow
 Max. Actuation speed 1.5ms
 Min. force or torque 0.15N / 0.30Nm
 Weight 315g

Ø50 Rubber roller lever
 Code

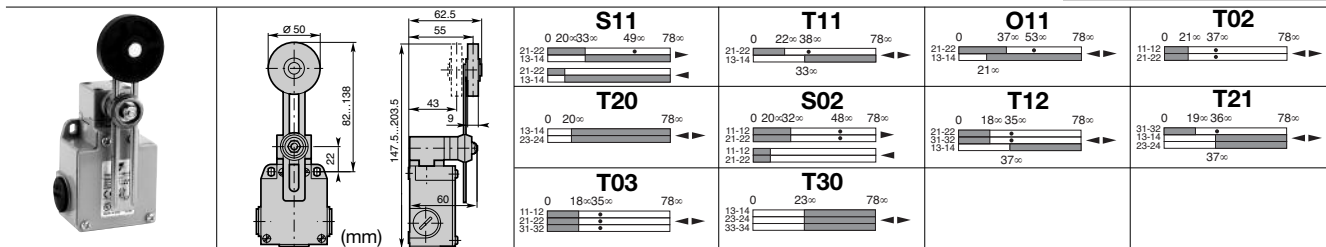
PS43L- W0-M00



Conformity / \rightarrow (NC) / \rightarrow
 Max. Actuation speed 1.5ms
 Min. force or torque 0.15N / 0.30Nm
 Weight 325g

Adjustable Ø22 roller lever
 Code nylon lever
 stainless steel roller
 steel ball bearing

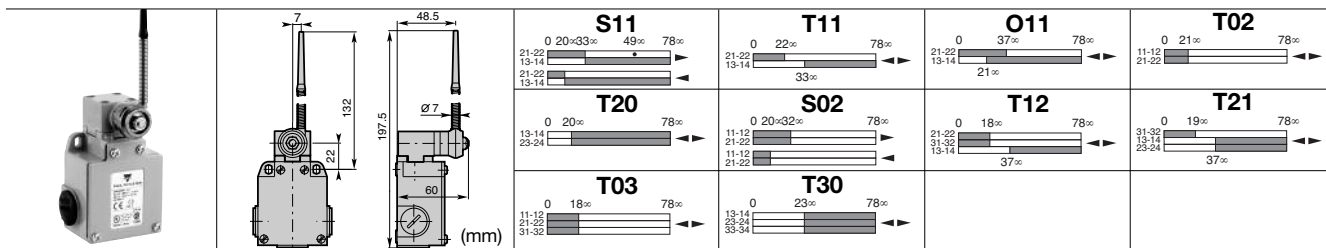
PS43L- R1-M00
 PS43L- R2-M00
 PS43L- R3-M00



Conformity / \rightarrow (NC) / \rightarrow
 Max. Actuation speed 1.5ms
 Min. force or torque 0.15N / 0.30Nm
 Weight 330g

Adjustable Ø50 rubber roller lever
 Code

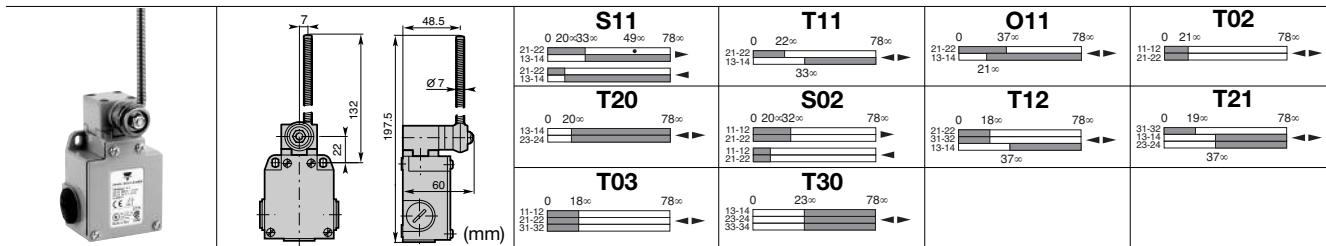
PS43L- W1-M00



Conformity / \rightarrow (NC) / \rightarrow
 Max. Actuation speed 1.5ms
 Min. force or torque 0.15N / -
 Weight 330g

Nylon actuator with stainless steel spring
 Code

PS43L- LB-M00



Conformity / \rightarrow (NC) / \rightarrow
 Max. Actuation speed 1.5ms
 Min. force or torque 0.15N / -
 Weight 330g

Stainless steel spring actuator
 Code

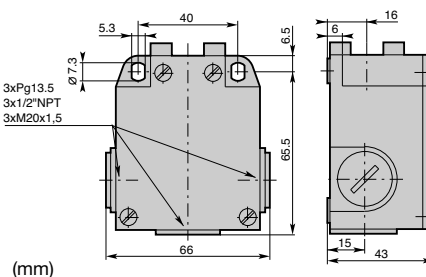
PS43L- LZ-M00

Limit Switches - Limit Type (PS43) Metal Body IP66



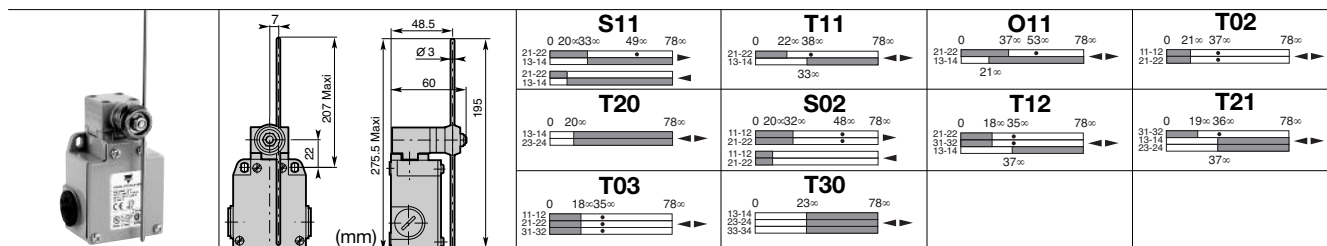
□ Cable Gland

- P** = Three cable inlet PG13.5 cable gland
- M** = Three cable inlet M20x1.5 cable gland
- N** = Three cable inlet 1/2" NPT cable gland



▲ Contact block (Zb type)

S11 (1NO+1NC) Snap action	T11 (1NO+1NC) Non overlapping Slow action	O11 (1NO+1NC) Overlapping Slow action	T02 (2NC) Slow Action	T20 (2NO) Slow action
S02 (2NC) Snap action	T12 (1NO+2NC) Non overlapping Slow action	T21 (2NO+1NC) Non overlapping Slow action	T03 (3NC) Simultaneous Slow action	T30 (3NO) Simultaneous Slow action



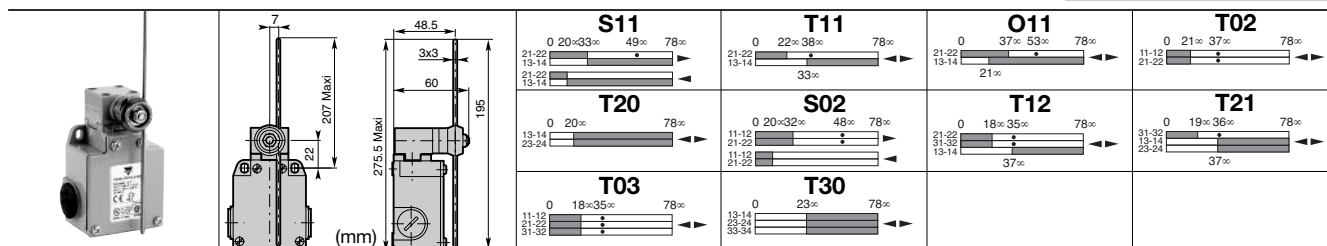
Conformity / (NC)

Max. Actuation speed	1.5ms
Min. force or torque	0.15N / 0.30
Weight	330g

Adjustable rod lever

Code stainless steel rod Ø3
fiberglass rod Ø3

PS43L-●▲LA-M00
PS43L-●▲LF-M00



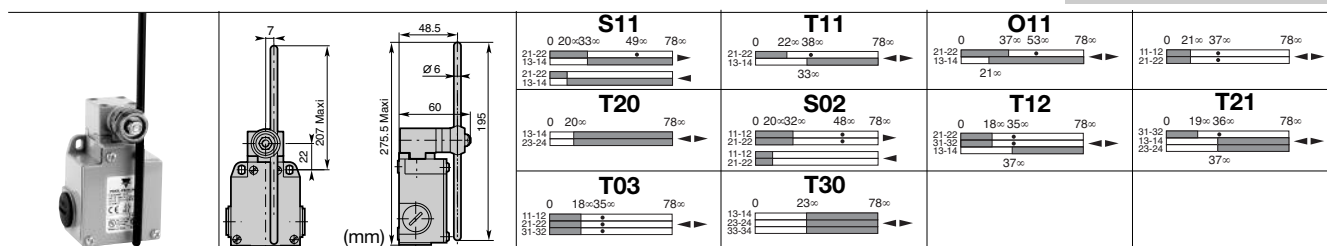
Conformity / (NC)

Max. Actuation speed	1.5ms
Min. force or torque	0.15N / 0.30
Weight	330g

Adjustable rod lever

Code square steel rod 3x3

PS43L-●▲L3-M00



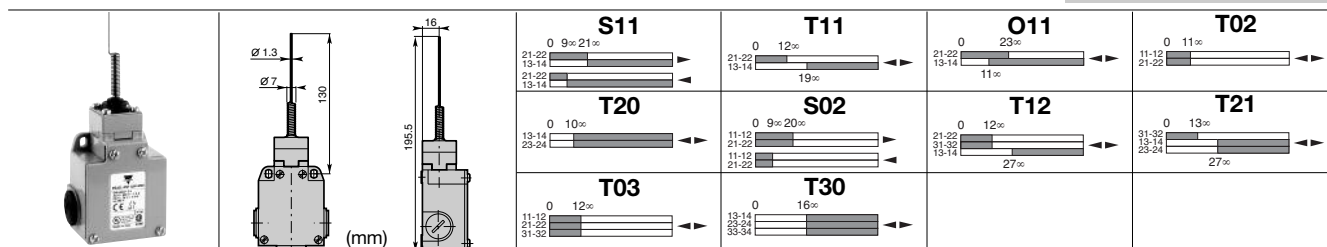
Conformity / (NC)

Max. Actuation speed	1.5ms
Min. force or torque	0.15N / 0.30Nm
Weight	330g

Adjustable Ø6 rod lever

Code nylon rod
fiberglass rod

PS43L-●▲LN-M00
PS43L-●▲LG-M00



Conformity / (NC)

Max. Actuation speed	1.0ms
Min. force or torque	0.18N / -
Weight	265g

Stainless steel spring multidirectional actuator

Code

PS43L-●▲LW-M00

S11 0 9×21∞ 21-22 13-14 21-22 13-14	T11 0 12∞ 21-22 13-14 19∞	O11 0 23∞ 21-22 13-14 11∞	T02 0 11∞ 11-12 21-22
T20 0 10∞ 13-14 23-24	S02 0 9×20∞ 11-12 21-22 11-12 21-22	T12 0 12∞ 21-22 13-14 27∞	T21 0 13∞ 31-32 13-14 23-24 27∞
T03 0 12∞ 11-12 21-22 31-32	T30 0 16∞ 13-14 23-24 33-34		

Conformity / (NC) /

Max. Actuation speed 1.0ms

Min. force or torque 0.18N / -

Weight 265g

Multidirectional nylon actuator with stainless steel spring
Code **PS43L-•▲LP-M00**

S11 0 9×21∞ 21-22 13-14 21-22 13-14	T11 0 12∞ 21-22 13-14 19∞	O11 0 23∞ 21-22 13-14 11∞	T02 0 11∞ 11-12 21-22
T20 0 10∞ 13-14 23-24	S02 0 9×20∞ 11-12 21-22 11-12 21-22	T12 0 12∞ 21-22 13-14 27∞	T21 0 13∞ 31-32 13-14 23-24 27∞
T03 0 12∞ 11-12 21-22 31-32	T30 0 16∞ 13-14 23-24 33-34		

Conformity / (NC) /

Max. Actuation speed 1.0ms

Min. force or torque 0.18N / -

Weight 270g

Stainless steel spring multidirectional actuator
Code **PS43L-•▲LS-M00**

S11 0 3.2 4.4 5.0 mm 21-22 13-14 21-22 13-14	T11 0 2.5 5.0 mm 21-22 13-14 3.2	O11 0 3.4 5.0 mm 21-22 13-14 2.1	T02 0 3.4 5.0 mm 11-12 21-22
T20 0 3.6 5.0 mm 13-14 23-24		T12 0 1.6 5.0 mm 21-22 13-14 2.9	T21 0 1.5 5.0 mm 31-32 13-14 23-24 3.0
T03 0 3.3 5.0 mm 11-12 21-22 31-32	T30 0 2.7 5.0 mm 13-14 23-24 33-34		

Conformity / (NC) /

Max. Actuation speed 0.5ms

Min. force or torque 25N / -

Weight 270g

Pull action with ring
Code **PS43L-•▲N6-M00**

Limit Switch - Safety Type Plastic Body IP65 and Metal Body IP66

- Double Insulation □ (for thermoplastic type)
- High mechanical resistant
- Degree of protection IP65 (thermoplastic) IP66 (metal)
- Reinforced UL-V0 thermoplastic fiber-glass body
- Zinc alloy (Zamack) or aluminium 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
- UL, CSA, CE
- Conform with IEC 947-5-1 (EN 60947-5-1)

They are developed in order to be used for following operations:

- For monitoring and protection of industrial machines, without inertia, in which down-time is less than access time to the dangerous area.
- Use on sliding or pivoting protectors (covers, cases, doors, grids, etc.).
- To protect operators working on dangerous machines, by opening the control circuit. Withdrawal of key by opening the mobile protector, causes immediate stopping of the machine drive.
- Specific limit switches ideal for monitoring and protection of light industrial machines without inertia, equipped with angular movement protectors (doors, hinges, rotative covers, grid, etc.).
- Detection by the rotative axis or by means of a lever. Opening of the mobile protector guarantees operator protection by immediately stopping the machine drive.
- To control the access point of the hazardous area.

HEAD

Available with different heads, depending on travel movement:

- with key actuator
- for hinge (pin or shaft)
- for pull wire/rope

Assembled using 4 screws

BODY

Three different width:

- 30mm (fixing interaxe 20/22mm) 1 cable inlet
- 40mm (fixing interaxe 30mm) 1 cable inlet
- 50mm (fixing interaxe 40/42mm) 2 cable inlet (Plastic) 3 cable inlet (Metal)
- 60mm (fixing interaxe 40/42mm) 3 cable inlet (Only Metal)

CONTACT BLOCK

- NO and NC Contact type
- Snap and slow action
- Two moving contact electrically separated (Zb shape)
- Positive opening operation (NC)

CABLE INLET

Available with 5 cable inlet for:

- PG13.5 cable gland
- PG11 cable gland
- M20x1.5 cable gland
- M16x1.5 cable gland
- 1/2" NPT cable gland



Technical Data

Standards

Certifications – Approvals

Air temperature near the device

- during operation °C
- for storage °C

Climatic withstand

Mounting positions

Shock withstand (according to IEC 68-2-27 and 60068-2-27) g

(1/2sinusoidal shock for 11 ms) no change in contact position

Resistance to vibrations (acc.to IEC 68-2-6 and EN 60068-2-6) g

Protection against electrical shocks (acc.to IEC 536)

Degree of protection (according to IEC 529 and EN 60529)

Plastic Body

IEC 60947-1, IEC 60947-5-1, EN 60947-1, EN 60947-5-1,
UL508 and CSA C22-2 n°14
UL – CSA

-25 ... +70

-30 ... +80

According to IEC 68-2-3 and salty mist according to IEC 68-2-11

All positions are authorized

10g Limit switch with **key actuator**

40g Limit switch for **hinge (pin/shaft) or pull wire (rope)**

5g (10 ... 500Hz) no change in position of contacts $\geq 100\mu\text{s}$

Class II

Class I

IP65

IP66

Electrical Data

Rated insulation voltage U_i

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

-according to UL 508, CSA C22-2 n°14

Rated impulse withstand voltage U_{imp}

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

Conventional enclosed thermal current I_{the}

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

Short-circuit protection - gG type fuses A

Rated operational current

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

24Vac (50/60 Hz)	A
130Vac (50/60 Hz)	A
230Vac (50/60 Hz)	A
240Vac (50/60 Hz)	A
400Vac (50/60 Hz)	A

- acc.to UL 508, CSA C22 n°14

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

24Vdc	A
110Vdc	A
250Vdc	A

- acc.to UL 508, CSA C22 n°14

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

- max. switching frequency Cycles/h
- load factor

Connecting data of contact blocks

Connecting terminals

Connecting capacity 1 or 2 x mm² / AWG

Terminal marking

Positivity

Diagram for snap action contact:

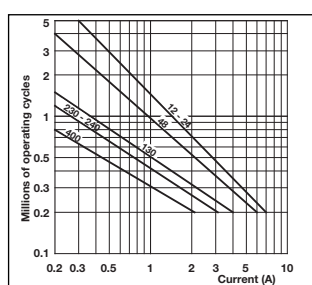
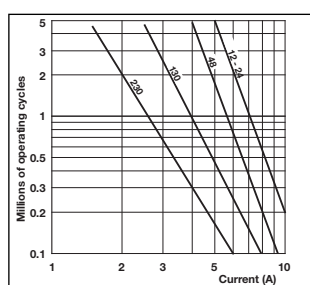


Diagram for slow action contact:



500V (degree of pollution 3)

400V (PS21,PS42), **500V** (PS31,PS43)
(degree of pollution 3)

A 600 Q 600

A 300 Q 300 (PS21, PS42)

A 600 Q 600 (PS31, PS43)

6

10

10

10

5.5

3.1

3

1.8

A 600

A 300 (PS21/42) **A 600** (PS31/43)

2.8

0.6

0,27

Q 600

Q 300 (PS21/42) **Q 600** (PS31/43)

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

3600

0.5

M3,5 (+,-) pozidriv 2 screw with cable clamp

0,5mm² / AWG 20 to 2,5mm² / AWG 14

According to EN 50013

Contacts with positive opening operation as per IEC 60947-5-1 chapter 3

Electrical durability for DC-13 utilization category

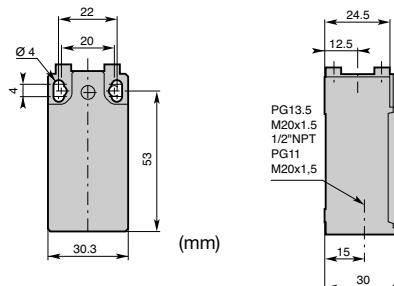
Power breaking for a durability of 5 million operating cycles		
	Snap action	Slow action
Voltage 24V	9,5W	12W
Voltage 48V	6,8W	9W
Voltage 110V	3,6W	6W

Limit Switches - Safety Type (PS21) Plastic Body IP65



• Cable Gland

- P** = one cable inlet PG13.5 cable gland
- M** = one cable inlet M20x1.5 cable gland
- N** = one cable inlet 1/2" NPT cable gland
- B** = one cable inlet PG11 cable gland
- A** = one cable inlet M16x1.5 cable gland



▲ Contact block (Zb type)

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
		O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC)	EN 50047 / (NC)	90° adjustable head	
Max. Actuation speed	0.5ms	Code	PS21S-05-T00
Min. force or torque	15N / 30Nm		
Weight	78g		

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
		O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC)	EN 50047 / (NC)	Fully turnable head	
Max. Actuation speed	0.5ms	Code	PS21S-09-T00
Min. force or torque	15N / 30Nm		
Weight	99g		

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
		O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC)	EN 50047 / (NC)	Shaft for hinge	
Max. Actuation speed	0.5ms	Code	Zinc plated steel Stainless steel
Min. force or torque	0.12Nm / 0.60Nm		
Weight	98g		PS21H-00-HZ-T00 PS21H-00-HS-T00

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
		O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC)	EN 50047 / (NC)	Zinc plated steel lever	
Max. Actuation speed	0.5ms	Code	PS21H-00-HC-T00
Min. force or torque	0.12Nm / 0.60Nm		
Weight	117g		

	S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
	O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC)	/ (NC)
Max. Actuation speed	-
Max wire length	6m
Weight	130g

Pull wire without reset for simple stop
Code **PS21R-06-N6-T00**

	S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
	O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC)	EN 50047 / (NC)
Max. Actuation speed	-
Max wire length	6m
Weight	135g

Pull wire with reset for emergency stop
Code **PS21R-07-N7-TK0**

Operating Key



K13
Bent Key
22mm



K14
Flat Key
22mm



K15
Bent Key
13mm



K16
Flat Key
13mm



K17
Shock absorbing
bent key



K18
Shock absorbing
flat key



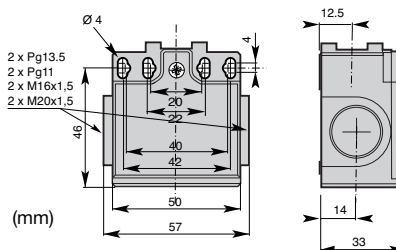
K19
Adjustable joint
key

Limit Switches - Safety Type (PS42) Plastic Body IP65



▣ Cable Gland

- P** = two cable inlet PG13.5 cable gland
- M** = two cable inlet M20x1.5 cable gland
- N** = two cable inlet 1/2" NPT cable gland
- B** = two cable inlet PG11 cable gland
- A** = two cable inlet M16x1.5 cable gland



▲ Contact block (Zb type)

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
		O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC) EN 50047 / (NC)	90° adjustable head Code	PS42S-05-T00
Max. Actuation speed 0.5ms		
Min. force or torque 15N / 30Nm		
Weight 114g		

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
		O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC) EN 50047 / (NC)	Fully turnable head Code	PS42S-09-T00
Max. Actuation speed 0.5ms		
Min. force or torque 15N / 30Nm		
Weight 125g		

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
		O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC) EN 50047 / (NC)	Shaft for hinge Code	PS42H-HZ-T00 PS42H-HS-T00
Max. Actuation speed 0.5ms	Zinc plated steel Stainless steel	
Min. force or torque 0.12Nm / 0.60Nm		
Weight 128g		

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
		O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC) EN 50047 / (NC)	Zinc plated steel lever Code	PS42H-HC-T00
Max. Actuation speed 0.5ms		
Min. force or torque 0.12Nm / 0.60Nm		
Weight 152g		

	S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
	O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC) / (NC)
Max. Actuation speed -
Max wire length 6m
Weight 158g

Pull wire without reset for simple stop
Code PS42R-●▲N6-T00

	S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
	O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC) EN 50047 / (NC)
Max. Actuation speed -
Max wire length 6m
Weight 163g

Pull wire with reset for emergency stop
Code PS42R-●▲N7-TK0

Operating Key

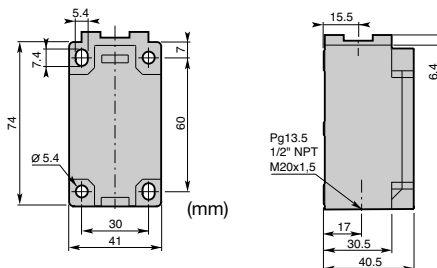


Limit Switches - Safety Type (PS31) plastic Body IP65



▣ Cable Gland

- P** = one cable inlet PG13.5 cable gland
- M** = one cable inlet M20x1.5 cable gland
- N** = one cable inlet 1/2" NPT cable gland



▲ Contact block (Zb type)

		S11 (1NO+1NC) Snap action	S02 (2NC) Snap action	T11 (1NO+1NC) Non overlapping Slow action	O11 (1NO+1NC) Overlapping Slow action
		T02 (2NC) Slow Action	T21 (2NO+1NC) Non overlapping Slow action	T12 (1NO+2NC) Non overlapping Slow action	T03 (3NC) Simultaneous Slow action

Conformity / (NC)	EN 50041 / (NC)
Max. Actuation speed	0.5ms
Min. force or torque	30N / 45Nm
Weight	158g

Key operated 90° adjustable head
Code **PS31S-▣▲05-T00**

Operating Key

- K35**
 Bent Key
 13mm
- K36**
 Flat Key
 13mm
- K39**
 Adjustable Joint
 Key

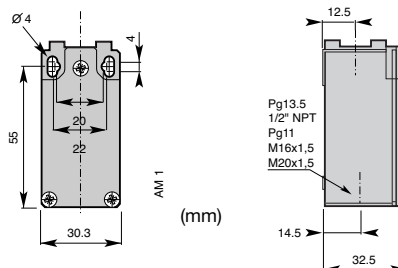


Limit Switches - Safety Type (PS21) Metal Body IP66



• Cable Gland

- P** = one cable inlet PG13.5 cable gland
- M** = one cable inlet M20x1.5 cable gland
- N** = one cable inlet 1/2" NPT cable gland
- B** = one cable inlet PG11 cable gland
- A** = one cable inlet M16x1.5 cable gland



▲ Contact block (Zb type)

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
		O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC) EN 50047 / (NC) **90° adjustable head**
Max. Actuation speed 0.5ms **Code**
Min. force or torque 15N / 30Nm **PS21S-**
Weight 177g

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
		O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			


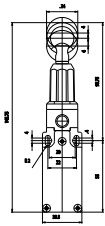
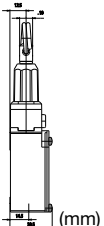





Conformity / (NC) EN 50047 / (NC) **Fully turnable head**
Max. Actuation speed 0.5ms **Code**
Min. force or torque 15N / 30Nm **PS21S-**
Weight 195g

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
		O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC) EN 50047 / (NC) **Shaft for hinge**
Max. Actuation speed 0.5ms **Code** Zinc plated steel
Min. force or torque 0.12Nm / 0.60Nm Stainless steel **PS21H-**
Weight 195g **PS21H-**


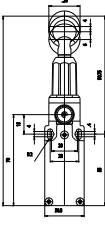
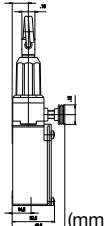





		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
		O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC) EN 50047 / (NC) **Zinc plated steel lever**
Max. Actuation speed 0.5ms **Code**
Min. force or torque 0.12Nm / 0.60Nm **PS21H-**
Weight 213g

		 (mm)	S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
			O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC)	/
Max. Actuation speed	-
Max wire length	6m
Weight	226g

Pull wire without reset for simple stop
Code **PS21R-06N6-Y00**

		 (mm)	S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
			O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC)	EN 50047 /
Max. Actuation speed	-
Max wire length	6m
Weight	231g

Pull wire with reset for emergency stop
Code **PS21R-07N7-YK0**

Operating Key



K13
Bent Key
22mm



K14
Flat Key
22mm



K15
Bent Key
13mm



K16
Flat Key
13mm



K17
Shock absorbing
bent key



K18
Shock absorbing
flat key



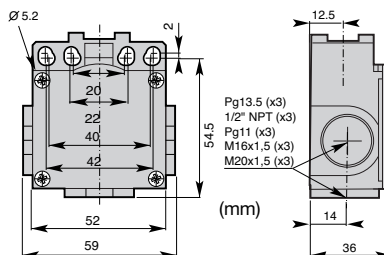
K19
Adjustable joint
key

Limit Switches - Safety Type (PS42) Metal Body IP66


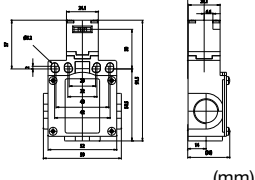







• Cable Gland

- P** = three cable inlet PG13.5 cable gland
- M** = three cable inlet M20x1.5 cable gland
- N** = three cable inlet 1/2" NPT cable gland
- B** = three cable inlet PG11 cable gland
- A** = three cable inlet M16x1.5 cable gland




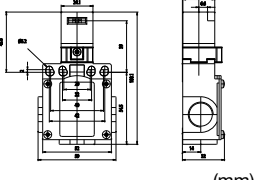





▲ Contact block (Zb type)

 	S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
	O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC) EN 50047 / (NC)
Max. Actuation speed 0.5ms
Min. force or torque 15N / 30Nm
Weight 285g

90° adjustable head
Code


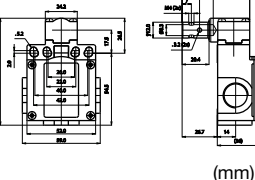





PS42S-05-Y00

 	S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
	O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC) EN 50047 / (NC)
Max. Actuation speed 0.5ms
Min. force or torque 15N / 30Nm
Weight 296g

Fully turnable head
Code


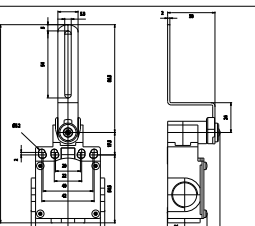





PS42S-09-Y00

 	S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
	O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC) EN 50047 / (NC)
Max. Actuation speed 0.5ms
Min. force or torque 0.12Nm / 0.60Nm
Weight 297g

Shaft for hinge
Code Zinc plated steel
 Stainless steel

PS42H-00-HZ-Y00
PS42H-00-HS-Y00

 	S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
	O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC) EN 50047 / (NC)
Max. Actuation speed 0.5ms
Min. force or torque 0.12Nm / 0.60Nm
Weight 297g

Zinc plated steel lever
Code

PS42H-00-HC-Y00

	S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
	O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC) /
Max. Actuation speed -
Max wire length 6m
Weight 297g

Pull wire without reset for simple stop
Code PS42R-06▲N6-Y00

	S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action		T11 (1NO+1NC) Non overlapping Slow action	
	O11 (1NO+1NC) Overlapping Slow Action		T02 (2NC) Slow Action			

Conformity / (NC) EN 50047 /
Max. Actuation speed -
Max wire length 6m
Weight 297g

Pull wire with reset for emergency stop
Code PS42R-07▲N7-YK0

Operating Key



K13
Bent Key
22mm



K14
Flat Key
22mm



K15
Bent Key
13mm



K16
Flat Key
13mm



K17
Shock absorbing
bent key



K18
Shock absorbing
flat key



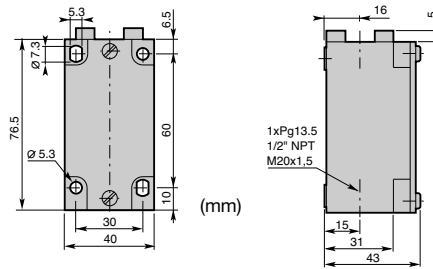
K19
Adjustable joint
key

Limit Switches - Safety Type (PS31) Metal Body IP66


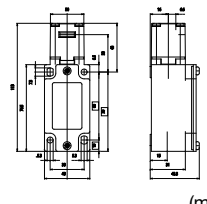
CARLO GAVAZZI

• Cable Gland


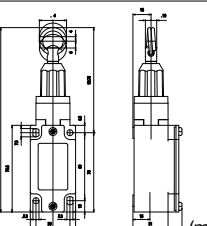
- P** = one cable inlet PG13.5 cable gland
- M** = one cable inlet M20x1.5 cable gland
- N** = one cable inlet 1/2" NPT cable gland




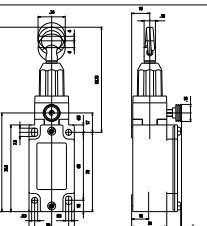
▲ Contact block (Zb type)

		S11 (1NO+1NC) Snap action	S02 (2NC) Snap action	T11 (1NO+1NC) Non overlapping Slow action	O11 (1NO+1NC) Overlapping Slow action
		T02 (2NC) Slow Action	T21 (2NO+1NC) Non overlapping Slow action	T12 (1NO+2NC) Non overlapping Slow action	T03 (3NC) Simultaneous Slow action

Conformity / (NC)	EN 50041 / (NC)	Key operated 90° adjustable head	Code	PS31S-05-Y00
Max. Actuation speed	0.5ms			
Min. force or torque	30N / 45Nm			
Weight	210g			

		S11 (1NO+1NC) Snap action	S02 (2NC) Snap action	T11 (1NO+1NC) Non overlapping Slow action	O11 (1NO+1NC) Overlapping Slow action
		T02 (2NC) Slow Action	T21 (2NO+1NC) Non overlapping Slow action	T12 (1NO+2NC) Non overlapping Slow action	T03 (3NC) Simultaneous Slow action

Conformity / (NC)	EN 50041 / (NC)	Pull wire without reset for simple stop	Code	PS31R-07-Y00
Max. Actuation speed	0.5ms			
Max wire length	16m ÷ 25m			
Weight	268g			

		S11 (1NO+1NC) Snap action	S02 (2NC) Snap action	T11 (1NO+1NC) Non overlapping Slow action	O11 (1NO+1NC) Overlapping Slow action
		T02 (2NC) Slow Action	T21 (2NO+1NC) Non overlapping Slow action	T12 (1NO+2NC) Non overlapping Slow action	T03 (3NC) Simultaneous Slow action

Conformity / (NC)	EN 50041 / (NC)	Pull wire with reset for emergency stop	Code	PS31R-07-YK0
Max. Actuation speed	0.5ms			
Max wire length	16m ÷ 25m			
Weight	270g			

Operating Key



K35
Bent Key
13mm



K36
Flat Key
13mm



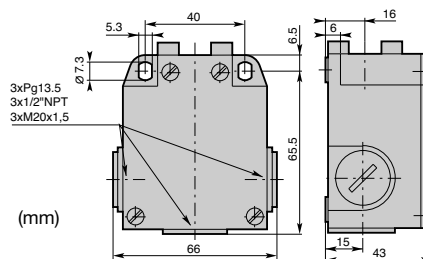
K39
Adjustable Joint
Key

Limit Switches - Safety Type (PS43) Metal Body IP66



■ Cable Gland

- P = three cable inlet PG13.5 cable gland
- M = three cable inlet M20x1.5 cable gland
- N = three cable inlet 1/2" NPT cable gland



▲ Contact block (Zb type)

		S11 (1NO+1NC) Snap action	S02 (2NC) Snap action	T11 (1NO+1NC) Non overlapping Slow action	O11 (1NO+1NC) Overlapping Slow action
		T02 (2NC) Slow Action	T21 (2NO+1NC) Non overlapping Slow action	T12 (1NO+2NC) Non overlapping Slow action	T03 (3NC) Simultaneous Slow action

Conformity / (NC)	EN 50041 / (NC)	Key operated 90° adjustable head	PS43S-05-Y00
Max. Actuation speed	0.5ms	Code	
Min. force or torque	14N / 40Nm		
Weight	227g		

		S11 (1NO+1NC) Snap action	S02 (2NC) Snap action	T11 (1NO+1NC) Non overlapping Slow action	O11 (1NO+1NC) Overlapping Slow action
		T02 (2NC) Slow Action	T21 (2NO+1NC) Non overlapping Slow action	T12 (1NO+2NC) Non overlapping Slow action	T03 (3NC) Simultaneous Slow action

Conformity / (NC)	EN 50041 / (NC)	Pull wire without reset for simple stop	PS43R-07-Y00
Max. Actuation speed	0.5ms	Code	
Max wire length	16m ÷ 25m		
Weight	270g		

		S11 (1NO+1NC) Snap action	S02 (2NC) Snap action	T11 (1NO+1NC) Non overlapping Slow action	O11 (1NO+1NC) Overlapping Slow action
		T02 (2NC) Slow Action	T21 (2NO+1NC) Non overlapping Slow action	T12 (1NO+2NC) Non overlapping Slow action	T03 (3NC) Simultaneous Slow action

Conformity / (NC)	EN 50041 / (NC)	Pull wire with reset for emergency stop	PS43R-07-YK0
Max. Actuation speed	0.5ms	Code	
Max wire length	16m ÷ 25m		
Weight	274g		

Operating Key



K35
Bent Key
13mm



K36
Flat Key
13mm



K39
Adjustable Joint
Key

Limit Switch - Safety Type with pull button reset Plastic Body IP65 and Metal Body IP66

- Double Insulation (for thermoplastic type)
- High mechanical resistant
- Degree of protection IP65 (thermoplastic) IP66 (metal)
- Reinforced UL-V0 thermoplastic fiber-glass body
- Zinc alloy (Zamack) body
- Positive Opening Operation \rightarrow
- Minimum Actuation Force/Torque
- Minimum Force to achieve Positive Opening Operation
- Precise operating points (consistency)
- Immune to electromagnetic disturbances
- Zb type contact blocks
- Current Ith = 10A
- Rated insulation voltage Ui = 500V
- UL, CSA, CE
- Conform with IEC 947-5-1 (EN 60947-5-1)

They are developed in order to be used for following operations:

- Ideal for detection and monitoring of faults in hoisting machines, electric lifts, freight elevators, escalators, conveyor belts, etc.
- With manual reset comply with the requirements of standard EN 418 (safety of machinery - emergency stop). After actuating the control device and overshooting the latching point, the N.C. safety contact(s) remain in the open position. Return to the initial operating state takes place by voluntary action on the pull button reset.
- To detect or to monitor if a moving part is exceeding its allowed travelling path, and stop the equipment in case of malfunctioning.

HEAD

Available with different heads, depending on travel movement:

- Direct (plunger)
- Angular (lever)

Assembled using 4 screws

BODY

Three different width:

- 30mm (fixing interaxe 20/22mm) 1 cable inlet
- 50mm (fixing interaxe 40/42mm) 2 cable inlet (Plastic)
- 3 cable inlet (Metal)

CONTACT BLOCK

- NO and NC Contact type
- Snap and slow action
- Two moving contact electrically separated (Zb shape)
- Positive opening operation (NC)

CABLE INLET

Available with 5 cable inlet for:

- PG13.5 cable gland
- PG11 cable gland
- M20x1.5 cable gland
- M16x1.5 cable gland
- 1/2" NPT cable gland



Technical Data

Standards

Certifications – Approvals

Air temperature near the device

- during operation °C
- for storage °C

Climatic withstand

Mounting positions

Shock withstand (according to IEC 68-2-27 and 60068-2-27) g

Resistance to vibrations (acc.to IEC 68-2-6 and EN 60068-2-6)g

Protection against electrical shocks (acc.to IEC 536)

Degree of protection (according to IEC 529 and EN 60529)

Consistency (measured over 1 million operations)

Plastic Body

Metal body

IEC 60947-1, IEC 60947-5-1, EN 60947-1, EN 60947-5-1,
UL508 and CSA C22-2 n°14
UL – CSA

-25 ... +70

-30 ... +80

According to IEC 68-2-3 and salty mist according to IEC 68-2-11

All positions are authorized

50g (1/2sinusoidal shock for 11 ms) no change in contact position

25g (10 ... 500Hz) no change in position of contacts > 100µs

Class II

Class I

IP65

IP66

0.1 mm (upon closing point)

Electrical Data

Rated insulation voltage U_i

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

-according to UL 508, CSA C22-2 n°14

Rated impulse withstand voltage U_{imp}

kV

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

Conventional enclosed thermal current I_{the}

A

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

Short-circuit protection - gG type fuses

A

Rated operational current

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

24Vac (50/60 Hz)	A
130Vac (50/60 Hz)	A
230Vac (50/60 Hz)	A
240Vac (50/60 Hz)	A
400Vac (50/60 Hz)	A

- acc.to UL 508, CSA C22 n°14

I_e / DC-13

- acc.to IEC 60947-5-1

24Vdc	A
110Vdc	A
250Vdc	A

- acc.to UL 508, CSA C22 n°14

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

- max. switching frequency Cycles/h

- load factor

Connecting data of contact blocks

Connecting terminals

Connecting capacity 1 or 2 x mm² / AWG

Terminal marking

Positivity

500V (degree of pollution 3)

A 600 Q600

400V (degree of pollution 3)

A 300 Q 300

6

10

10

10

5.5

3.1

3

1.8

A 600

A 300

2.8

0.6

0,27

Q 600

Q 300

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

3600

0.5

M3,5 (+,-) pozidriv 2 screw with cable clamp

0,5mm² / AWG 20 to 2,5mm² / AWG 14

According to EN 50013

Contacts with positive opening operation as per IEC 60947-5-1 chapter 3

Diagram for snap action contact:

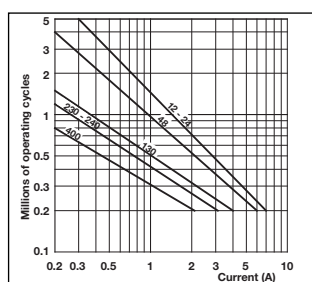
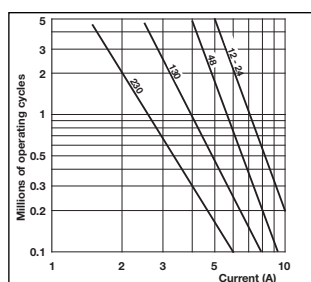


Diagram for slow action contact:



Electrical durability for DC-3 utilization category

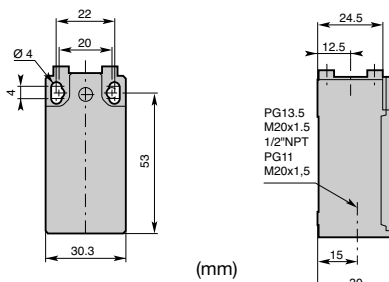
Power breaking for a durability of 5 million operating cycles		
	Snap action	Slow action
Voltage 24V	9,5W	12W
Voltage 48V	6,8W	9W
Voltage 110V	3,6W	6W

Limit Switches - Safety Type (PS21K) Plastic Body IP65



• Cable Gland

- P** = one cable inlet PG13.5 cable gland
- M** = one cable inlet M20x1.5 cable gland
- N** = one cable inlet 1/2" NPT cable gland
- B** = one cable inlet PG11 cable gland
- A** = one cable inlet M16x1.5 cable gland



▲ Contact block (Zb type)

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action	
		T11 (1NO+1NC) Non overlapping Slow action		T02 (2NC) Slow Action	

Conformity / (NC)	EN 50047 / (NC)	Steel plunger with reset	PS21K-●▲P0-T00
Max. Actuation speed	0.5ms	Code	
Min. force or torque	9N / 44Nm		
Weight	97g		

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action	
		T11 (1NO+1NC) Non overlapping Slow action		T02 (2NC) Slow Action	

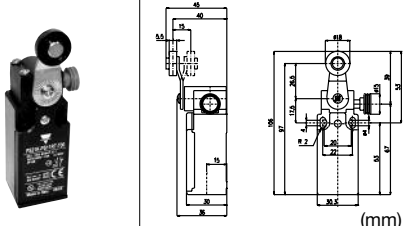




Conformity / (NC)	EN 50047 / (NC)	Steel plunger with nylon roller with reset	PS21K-●▲PR-T00
Max. Actuation speed	0.3ms	Code	
Min. force or torque	12N / 41Nm		
Weight	99g		

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action	
		T11 (1NO+1NC) Non overlapping Slow action		T02 (2NC) Slow Action	

Conformity / (NC)	EN 50047 / (NC)	Plastic roller lever on metal plunger with reset	PS21K-●▲R3-T00
Max. Actuation speed	1.0ms	Code	
Min. force or torque	7Nm / 24Nm		
Weight	102g		

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action	
		T11 (1NO+1NC) Non overlapping Slow action		T02 (2NC) Slow Action	

Conformity / (NC)	EN 50047 / (NC)	Plastic roller lever on metal plunger with reset	PS21K-●▲R4-T00
Max. Actuation speed	1.0ms	Code	
Min. force or torque	7Nm / 24Nm		
Weight	103g		

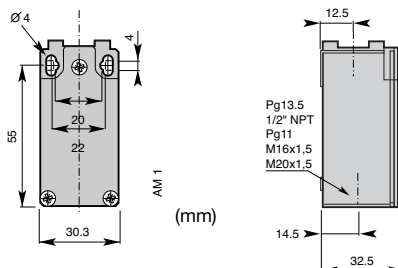
	S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action	
	T11 (1NO+1NC) Non overlapping Slow action		T02 (2NC) Slow Action	
Conformity / (NC) EN 50047 / (NC)		Lever with nylon roller with reset		
Max. Actuation speed 1.5ms		Code		
Min. force or torque 0.10N / 0.32Nm		PS21K-●▲RT-T00		
Weight 102g				

Limit Switches - Safety Type (PS21K) Metal Body IP66



• Cable Gland

- P** = one cable inlet PG13.5 cable gland
- M** = one cable inlet M20x1.5 cable gland
- N** = one cable inlet 1/2" NPT cable gland
- B** = one cable inlet PG11 cable gland
- A** = one cable inlet M16x1.5 cable gland



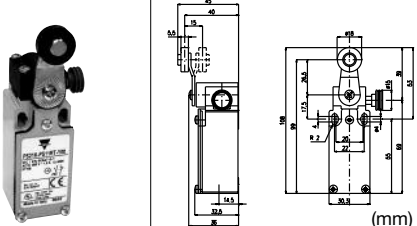




▲ Contact block (Zb type)

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action	
		T11 (1NO+1NC) Non overlapping Slow action		T02 (2NC) Slow Action	
Conformity / (NC) EN 50047 / (NC) Max. Actuation speed 0.5ms Min. force or torque 9N / 44Nm Weight 193g		Steel plunger with reset		Code PS21K-000P0-Y00	

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action	
		T11 (1NO+1NC) Non overlapping Slow action		T02 (2NC) Slow Action	
Conformity / (NC) EN 50047 / (NC) Max. Actuation speed 0.3ms Min. force or torque 12N / 41Nm Weight 196g		Steel plunger with nylon roller with reset		Code PS21K-000PR-Y00	

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action	
		T11 (1NO+1NC) Non overlapping Slow action		T02 (2NC) Slow Action	
Conformity / (NC) EN 50047 / (NC) Max. Actuation speed 1.0ms Min. force or torque 7Nm / 24Nm Weight 199g		Plastic roller lever on metal plunger with reset		Code PS21K-000R3-Y00	

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action	
		T11 (1NO+1NC) Non overlapping Slow action		T02 (2NC) Slow Action	
Conformity / (NC) EN 50047 / (NC) Max. Actuation speed 1.0ms Min. force or torque 7Nm / 24Nm Weight 199g		Plastic roller lever on metal plunger with reset		Code PS21K-000R4-Y00	

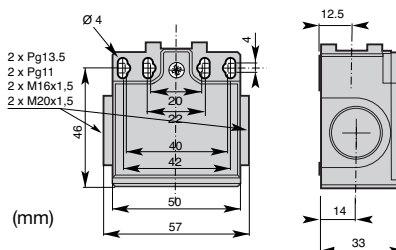
	S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action	
	T11 (1NO+1NC) Non overlapping Slow action		T02 (2NC) Slow Action	
Conformity / (NC) EN 50047 / (NC)		Lever with nylon roller with reset		
Max. Actuation speed 1.5ms		Code		
Min. force or torque 0.10N / 0.32Nm		PS21K-●▲RT-Y00		
Weight 198g				

Limit Switches - Safety Type (PS42K) Plastic Body IP65



▣ Cable Gland

- P** = two cable inlet PG13.5 cable gland
- M** = two cable inlet M20x1.5 cable gland
- N** = two cable inlet 1/2" NPT cable gland
- B** = two cable inlet PG11 cable gland
- A** = two cable inlet M16x1.5 cable gland



▲ Contact block (Zb type)

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action	
		T11 (1NO+1NC) Non overlapping Slow action		T02 (2NC) Slow Action	

Conformity / (NC)	EN 50047 / (NC)	Steel plunger with reset	PS42K-▣▲P0-T00
Max. Actuation speed	0.5ms	Code	
Min. force or torque	9N / 44Nm		
Weight	126g		

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action	
		T11 (1NO+1NC) Non overlapping Slow action		T02 (2NC) Slow Action	

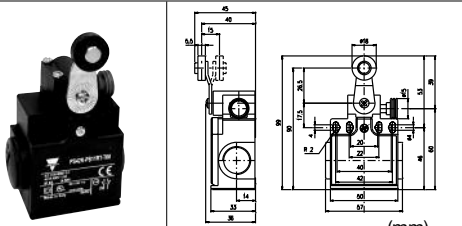




Conformity / (NC)	EN 50047 / (NC)	Steel plunger with nylon roller with reset	PS42K-▣▲PR-T00
Max. Actuation speed	0.3ms	Code	
Min. force or torque	12N / 41Nm		
Weight	128g		

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action	
		T11 (1NO+1NC) Non overlapping Slow action		T02 (2NC) Slow Action	

Conformity / (NC)	EN 50047 / (NC)	Plastic roller lever on metal plunger with reset	PS42K-▣▲R3-T00
Max. Actuation speed	1.0ms	Code	
Min. force or torque	7Nm / 24Nm		
Weight	131g		

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action	
		T11 (1NO+1NC) Non overlapping Slow action		T02 (2NC) Slow Action	

Conformity / (NC)	EN 50047 / (NC)	Plastic roller lever on metal plunger with reset	PS42K-▣▲LR-T00
Max. Actuation speed	1.0ms	Code	
Min. force or torque	7Nm / 24Nm		
Weight	138g		

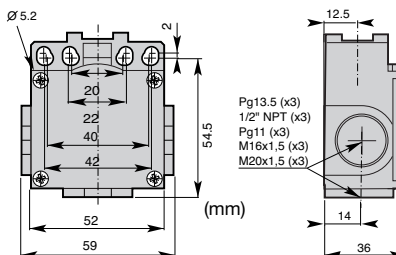
	S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action	
	T11 (1NO+1NC) Non overlapping Slow action		T02 (2NC) Slow Action	
Conformity / (NC) EN 50047 / (NC)		Lever with nylon roller with reset		PS42K-●▲RT-T00
Max. Actuation speed 1.5ms		Code		
Min. force or torque 0.10N / 0.32Nm				
Weight 129g				

Limit Switches - Safety Type (PS42K) Metal Body IP66



▣ Cable Gland

- P** = three cable inlet PG13.5 cable gland
- M** = three cable inlet M20x1.5 cable gland
- N** = three cable inlet 1/2" NPT cable gland
- B** = three cable inlet PG11 cable gland
- A** = three cable inlet M16x1.5 cable gland



▲ Contact block (Zb type)

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action	
		T11 (1NO+1NC) Non overlapping Slow action		T02 (2NC) Slow Action	

Conformity / (NC)	EN 50047 / (NC)	Steel plunger with reset	PS42K-▣▲P0-Y00
Max. Actuation speed	0.5ms	Code	
Min. force or torque	9N / 44Nm		
Weight	295g		

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action	
		T11 (1NO+1NC) Non overlapping Slow action		T02 (2NC) Slow Action	

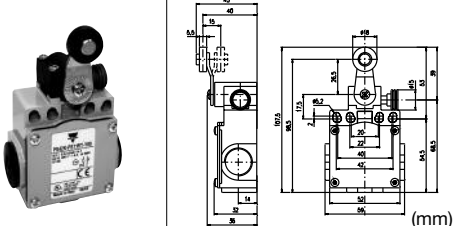




Conformity / (NC)	EN 50047 / (NC)	Steel plunger with nylon roller with reset	PS42K-▣▲PR-Y00
Max. Actuation speed	0.3ms	Code	
Min. force or torque	12N / 41Nm		
Weight	298g		

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action	
		T11 (1NO+1NC) Non overlapping Slow action		T02 (2NC) Slow Action	

Conformity / (NC)	EN 50047 / (NC)	Plastic roller lever on metal plunger with reset	PS42K-▣▲R3-Y00
Max. Actuation speed	1.0ms	Code	
Min. force or torque	7Nm / 24Nm		
Weight	301g		

		S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action	
		T11 (1NO+1NC) Non overlapping Slow action		T02 (2NC) Slow Action	

Conformity / (NC)	EN 50047 / (NC)	Plastic roller lever on metal plunger with reset	PS42K-▣▲LR-Y00
Max. Actuation speed	1.0ms	Code	
Min. force or torque	7Nm / 24Nm		
Weight	307g		

	S11 (1NO+1NC) Snap Action		S02 (2NC) Snap Action	
	T11 (1NO+1NC) Non overlapping Slow action		T02 (2NC) Slow Action	
Conformity / (NC) EN 50047 / (NC)		Lever with nylon roller with reset		PS42K-●▲RT-Y00
Max. Actuation speed 1.5ms		Code		
Min. force or torque 0.10N / 0.32Nm				
Weight 299g				

Limit Switch - Prewired Type Plastic and Metal Body

- Double Insulation □ (for thermoplastic type)
- 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, UL (upon request)
- Conform with IEC 947-5-1 (EN 60947-5-1)

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

HEAD

Available with different heads, depending on travel movement:

- Direct (plunger)
- Direct with fixing nuts (plunger)
- Angular (lever)
- Multidirectional (shaft)

Assembled using 4 screws

BODY

Two different width:

- 30mm (fixing interaxe 20mm) 1 cable
- 35mm (fixing interaxe 25mm) 1 cable

Prewired with cable on lateral or lower side.

CONTACT BLOCK

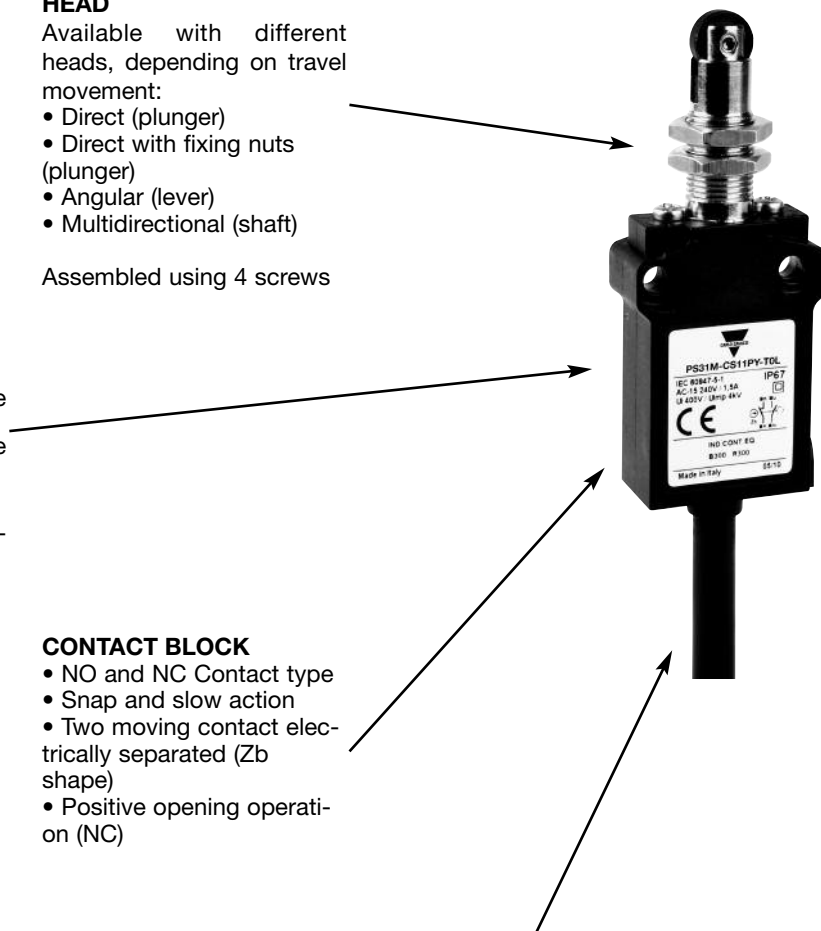
- NO and NC Contact type
- Snap and slow action
- Two moving contact electrically separated (Zb shape)
- Positive opening operation (NC)

CABLE

Prewired with:

- 1m PVC cable 4x0.75mm² (Plastic Type)
- 1m PVC cable 5x0.75mm² (Metal Type)

Available with different cable length.



Technical Data

Standards

Certifications – Approvals

Air temperature near the device

- during operation °C
- for storage °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

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

-according to UL 508, CSA C22-2 n°14

Rated impulse withstand voltage U_{imp} kV

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

Conventional enclosed thermal current I_{th} A

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

Short-circuit protection - gG type fuses A

Rated operational current

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

24Vac (50/60 Hz)	A
120Vac (50/60 Hz)	A
240Vac (50/60 Hz)	A

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

24Vdc	A
110Vdc	A
250Vdc	A

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

- max. switching frequency Cycles/h
- load factor

Mechanical durability

400V (degree of pollution 3)

B 300, R 300

4

5

6

5.0

3.0

1.5

1.1

0.22

0.1

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

3600

0.5

10 millions of operations

Diagram for snap action contact:

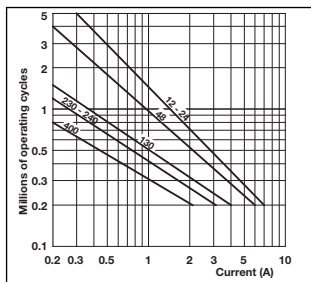
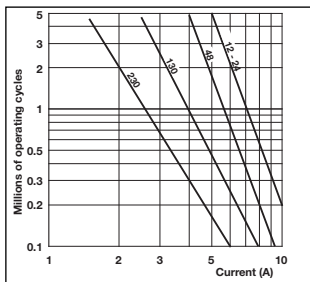


Diagram for slow action contact:



Electrical durability for DC-13 utilization category

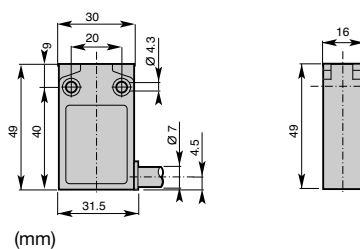
Power breaking for a durability of 5 million operating cycles		
	Snap action	Slow action
Voltage 24V	9,5W	12W
Voltage 48V	6,8W	9W
Voltage 110V	3,6W	6W

Limit Switches - Miniature Type (PS21M) Plastic Body IP67

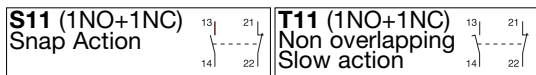


Cable Characteristics

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 125g

Plain Plunger
 Code PS21M-C ▲ P0-T00

		S11 	T11
--	--	----------------	----------------

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

Roller Plunger
 Code Metal roller PS21M-C ▲ PR-T00
 Nylon roller PS21M-C ▲ PY-T00

		S11 	T11
--	--	----------------	----------------

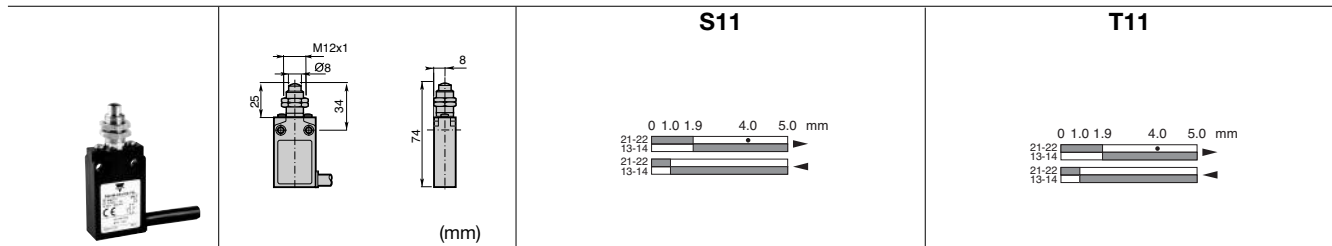
Conformity / (NC) / (NC)
 Max. Actuation speed 0.1ms
 Min. force or torque 10N / 30Nm
 Weight 130g

Cross roller plunger
 Code Metal roller PS21M-C ▲ P9-T00
 Nylon roller PS21M-C ▲ P8-T00

		S11 	T11
--	--	----------------	----------------

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

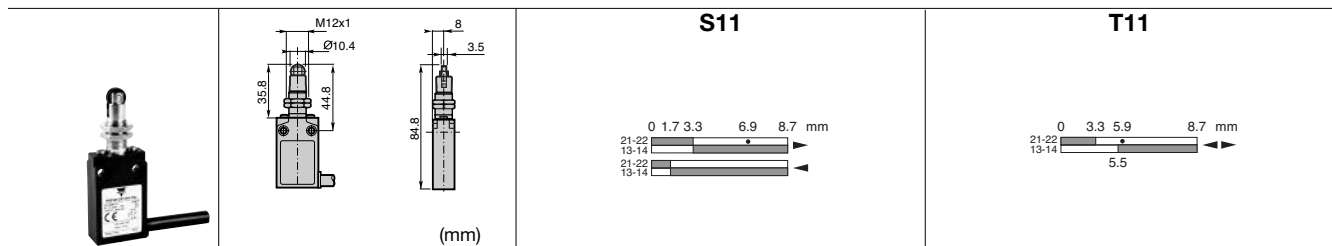
Plain plunger with dust protection cup
 Code PS21M-C ▲ PH-T00



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

S11
 Pain plunger with fixing nuts
 Code

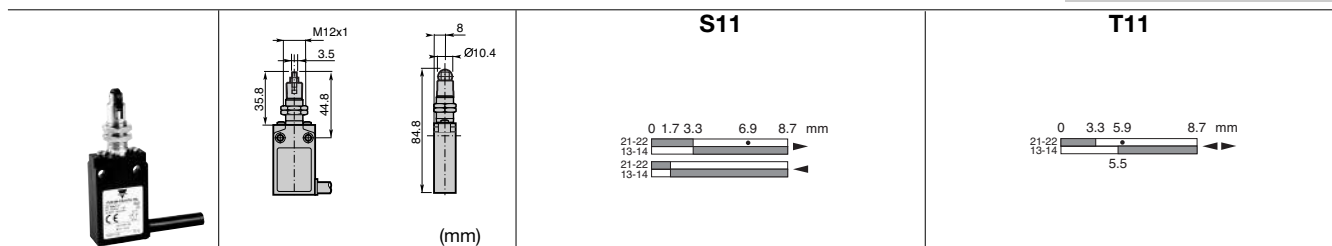
T11
 PS21M-C \blacktriangle P0-T0L



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

S11
 Roller plunger with fixing nuts
 Code metal roller
 nylon roller

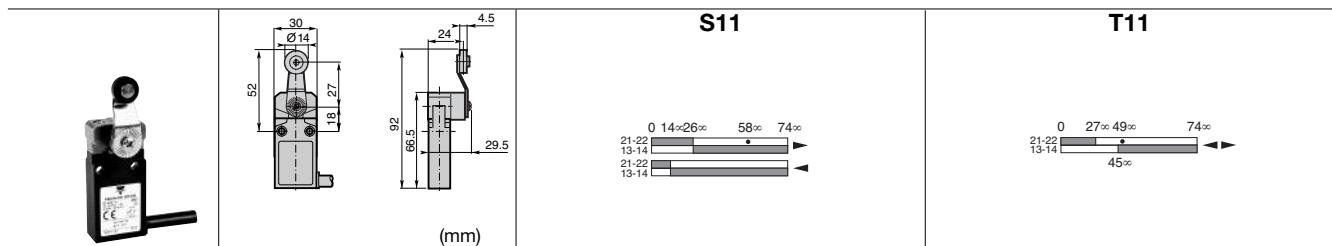
T11
 PS21M-C \blacktriangle PR-T0L
 PS21M-C \blacktriangle PY-T0L



Conformity / \rightarrow / \rightarrow
 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

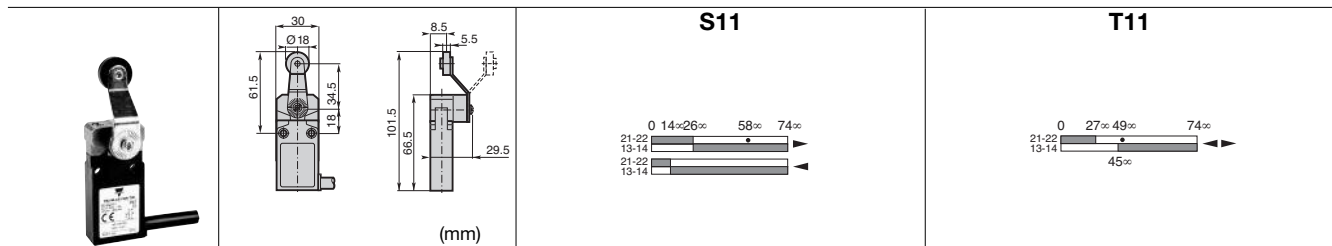
T11
 PS21M-C \blacktriangle P9-T0L
 PS21M-C \blacktriangle P8-T0L



Conformity / \rightarrow (NC) / \rightarrow
 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
 PS21M-C \blacktriangle RT-T00
 PS21M-C \blacktriangle RS-T00
 PS21M-C \blacktriangle RO-T00



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

S11
 Ø18 nylon roller lever
 Code

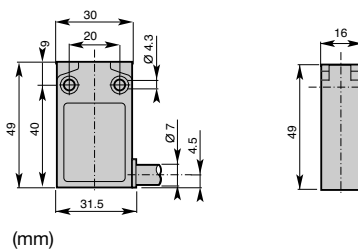
T11
 PS21M-C \blacktriangle BR-T00

Limit Switches - Miniature Type (PS21M) Plastic Body IP67

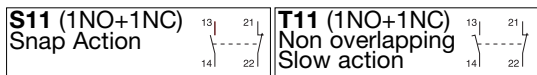


Cable Characteristics

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



▲ Contact block (Zb type)



		S11	T11

Conformity / (NC)	/	Adjustable lever with Ø18 nylon roller
Max. Actuation speed	1.5ms	Code
Min. force or torque	0.08N / 0.28Nm	PS21M-C ▲R1-T00
Weight	190g	

		S11	T11

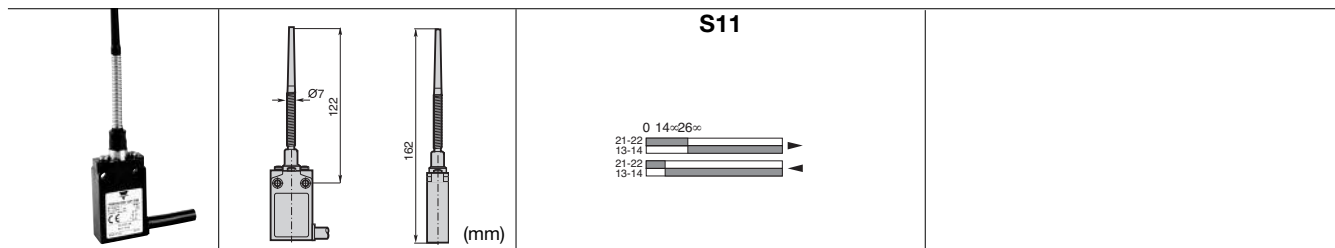
Conformity / (NC)	/	Nylon actuator with stainless steel spring
Max. Actuation speed	1.5ms	Code
Min. force or torque	0.08N / -	PS21M-C ▲LB-T00
Weight	190g	

		S11	T11

Conformity / (NC)	/	Adjustable rod lever
Max. Actuation speed	1.5ms	Code
Min. force or torque	0.08N / 0.28Nm	stainless steel rod Ø3 fiberglass rod Ø3 square steel rod 3x3
Weight	185g	PS21M-C ▲LA-T00 PS21M-C ▲LF-T00 PS21M-C ▲L3-T00

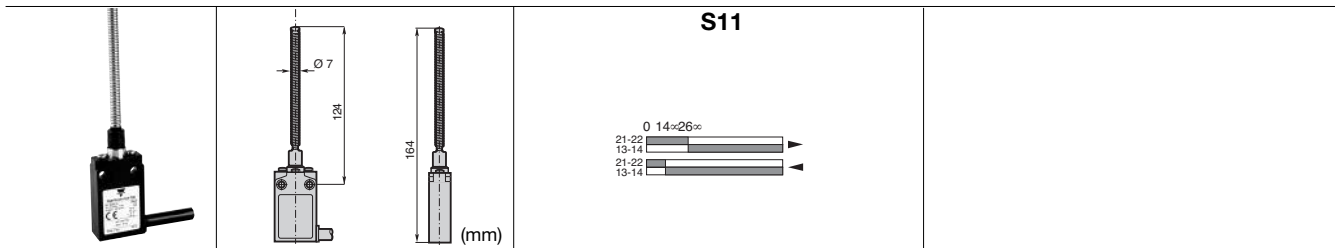
		S11	T11

Conformity / (NC)	/	Adjustable Ø6 rod lever
Max. Actuation speed	1.5ms	Code
Min. force or torque	0.08N / 0.28Nm	Nylon rod fiberglass rod
Weight	200g	PS21M-C ▲LN-T00 PS21M-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 PS21M-C ▲LP-T00



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

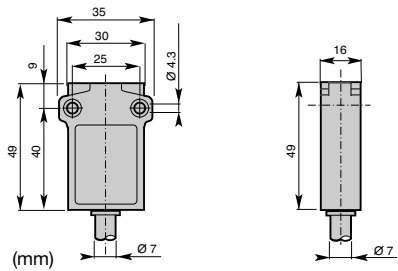
Multidirectional actuator with stainless steel spring
Code PS21M-C ▲LS-T00

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	
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		S11	T11

Conformity / (NC)	/ (NC)	Plain Plunger Code	PS31M-C ▲ P0-T00
Max. Actuation speed	0.5ms		
Min. force or torque	15N / 30Nm		
Weight	125g		

		S11	T11

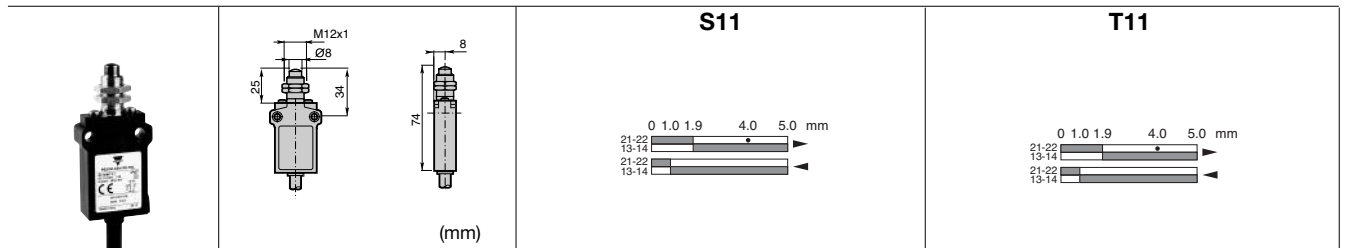
Conformity / (NC)	/ (NC)	Roller Plunger Code	PS31M-C ▲ PR-T00 PS31M-C ▲ PY-T00
Max. Actuation speed	0.1ms		
Min. force or torque	10N / 30Nm		
Weight	130g		

		S11	T11

Conformity / (NC)	/ (NC)	Cross roller plunger Code	PS31M-C ▲ P9-T00 PS31M-C ▲ P8-T00
Max. Actuation speed	0.1ms		
Min. force or torque	10N / 30Nm		
Weight	130g		

		S11	T11

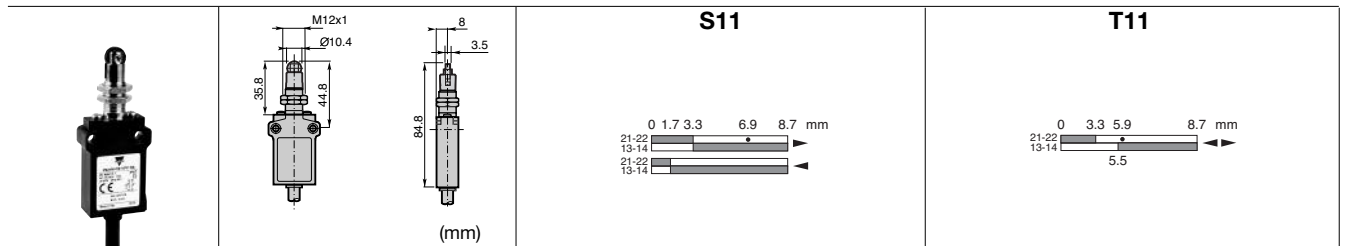
Conformity / (NC)	/ (NC)	Plain plunger with dust protection cup Code	PS31M-C ▲ PH-T00
Max. Actuation speed	0.5ms		
Min. force or torque	15N / 30Nm		
Weight	130g		



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

S11
 Pain plunger with fixing nuts
 Code

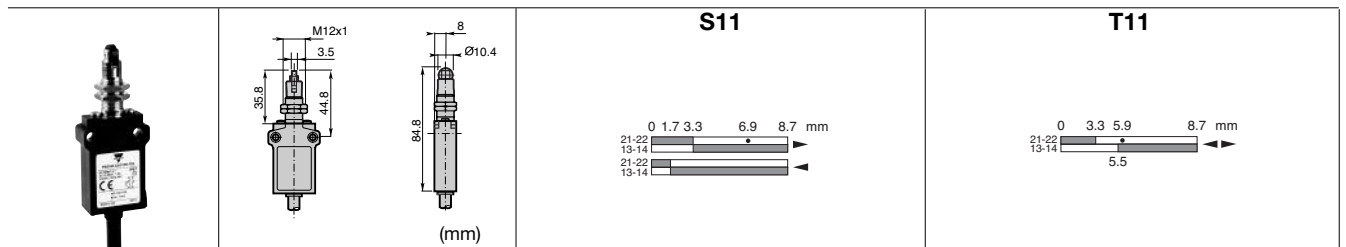
T11
 PS31M-C ▲P0-T0L



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

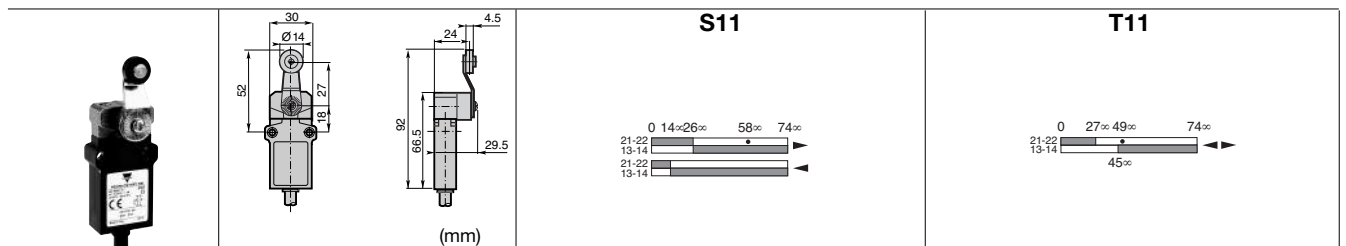
T11
 PS31M-C ▲PR-T0L
 PS31M-C ▲PY-T0L



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

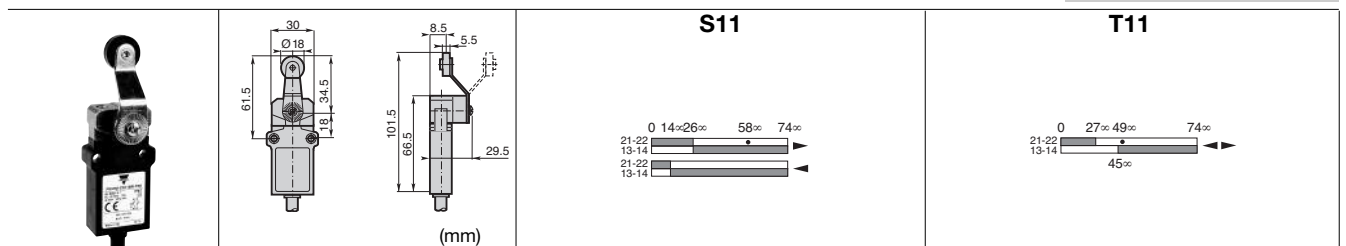
T11
 PS31M-C ▲P9-T0L
 PS31M-C ▲P8-T0L



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

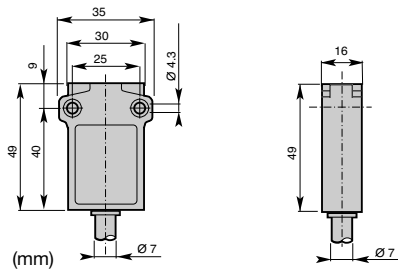
T11
 PS31M-C ▲BR-T00

Limit Switches - Miniature Type (PS31M) Plastic Body IP67

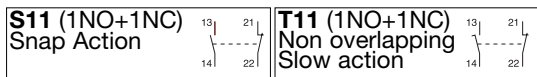


Cable Characteristics

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



▲ Contact block (Zb type)

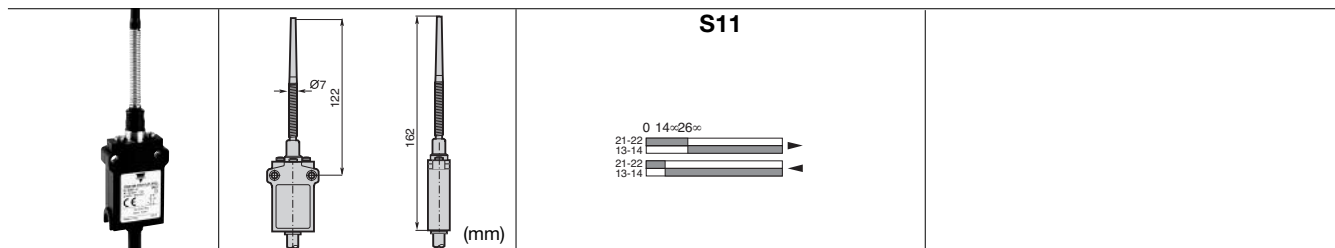


		S11	T11
Conformity / (NC) / (NC) Max. Actuation speed 1.5ms Min. force or torque 0.08N / 0.28Nm Weight 190g		Adjustable lever with Ø18 nylon roller Code PS31M-C ▲R1-T00	

		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	

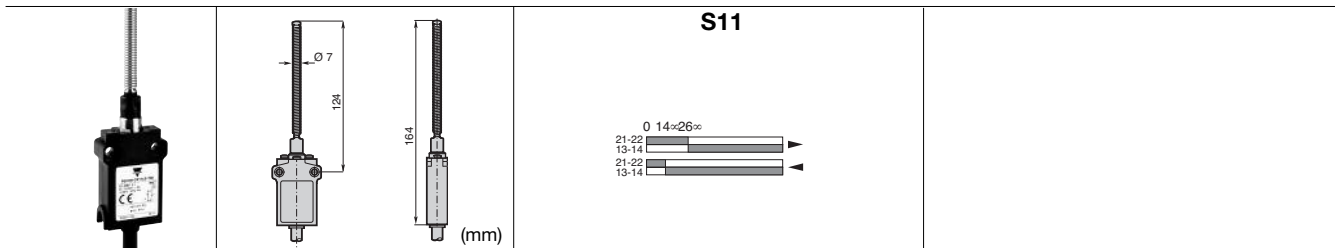
		S11	T11
Conformity / (NC) / (NC) Max. Actuation speed 1.5ms Min. force or torque 0.08N / 0.28Nm Weight 185g		Adjustable rod lever Code stainless steel rod Ø3 fiberglass rod Ø3 square steel rod 3x3	

		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	



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

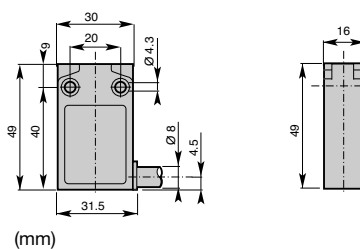
Multidirectional actuator with stainless steel spring
Code PS31M-C ▲LS-T00

Limit Switches - Miniature Type (PS21M) Metal Body IP67

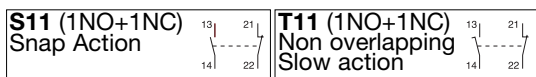


Cable Characteristics

Pre-wired
Cable: PVC 5x0.75 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 175g

Plain Plunger
Code

PS21M-C ▲ P0-M00

		S11	T11

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

Roller Plunger
Code Metal roller
Nylon roller

PS21M-C ▲ PR-M00
PS21M-C ▲ PY-M00

		S11	T11

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

Cross roller plunger
Code Metal roller
Nylon roller

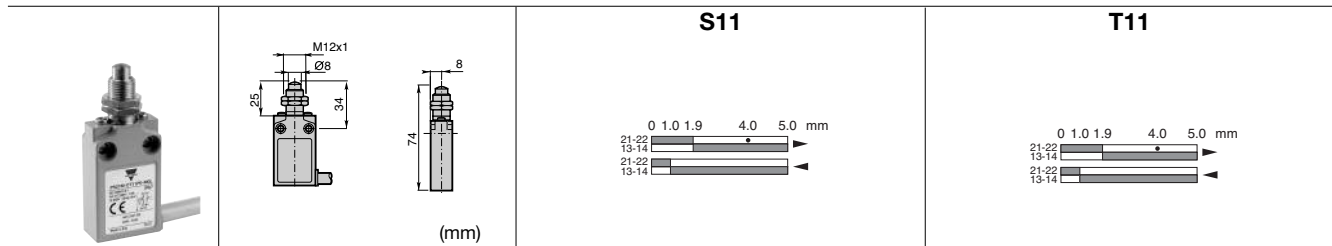
PS21M-C ▲ P9-M00
PS21M-C ▲ P8-M00

		S11	T11

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

Plain plunger with dust protection cup
Code

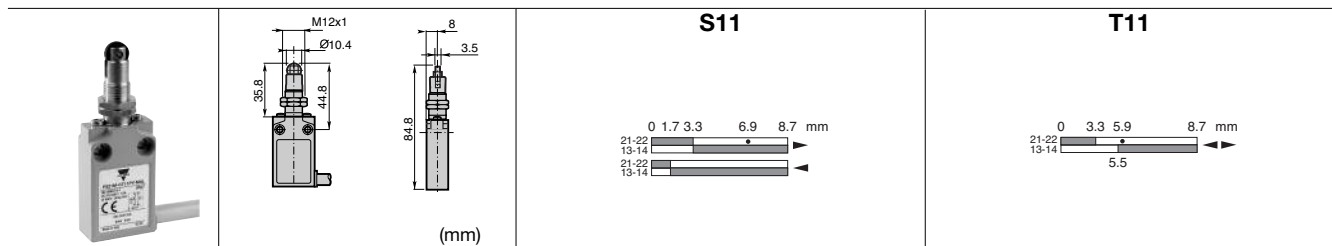
PS21M-C ▲ PH-M00



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

S11
Pain plunger with fixing nuts
Code

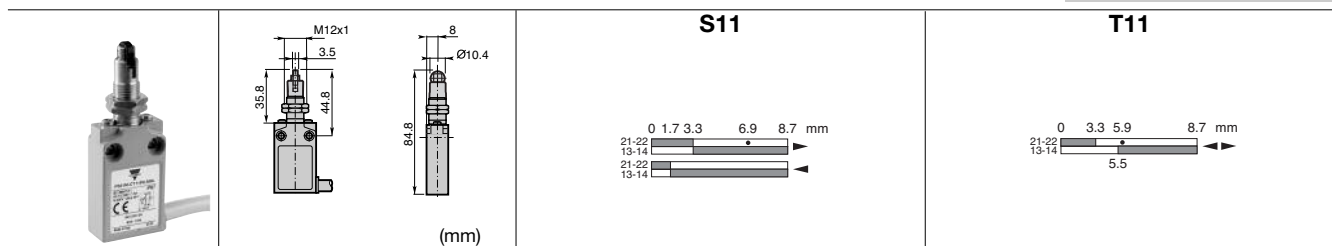
T11
PS21M-C \blacktriangle **P0-M0L**



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

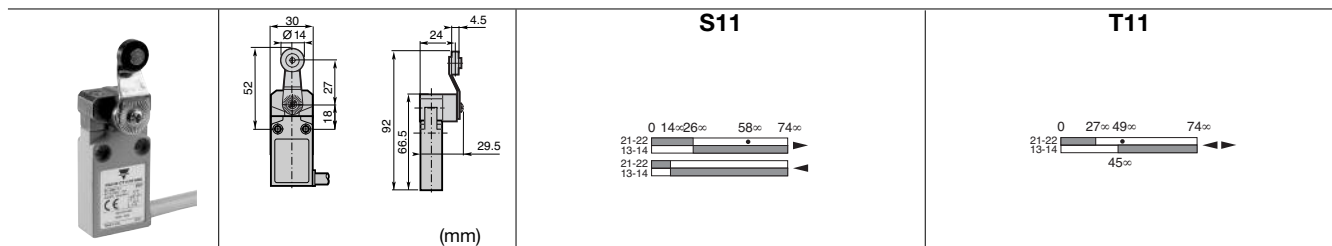
T11
PS21M-C \blacktriangle **PR-M0L**
PS21M-C \blacktriangle **PY-M0L**



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

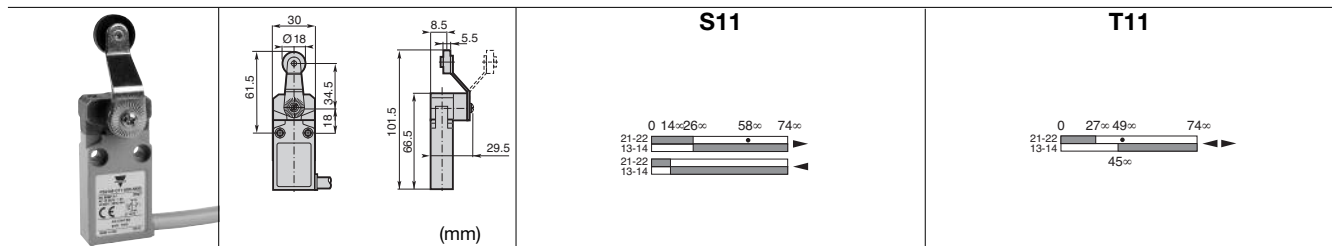
T11
PS21M-C \blacktriangle **P9-M0L**
PS21M-C \blacktriangle **P8-M0L**



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 \blacktriangle **RT-M00**
PS21M-C \blacktriangle **RS-M00**
PS21M-C \blacktriangle **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

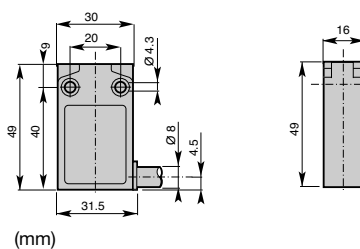
T11
PS21M-C \blacktriangle **BR-M00**

Limit Switches - Miniature Type (PS21M) Metal Body IP67

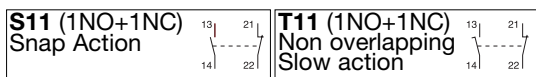


Cable Characteristics

Pre-wired
Cable: PVC 5x0.75 mm²
Length: 1m
(Different lengths available on request)



▲ Contact block (Zb type)

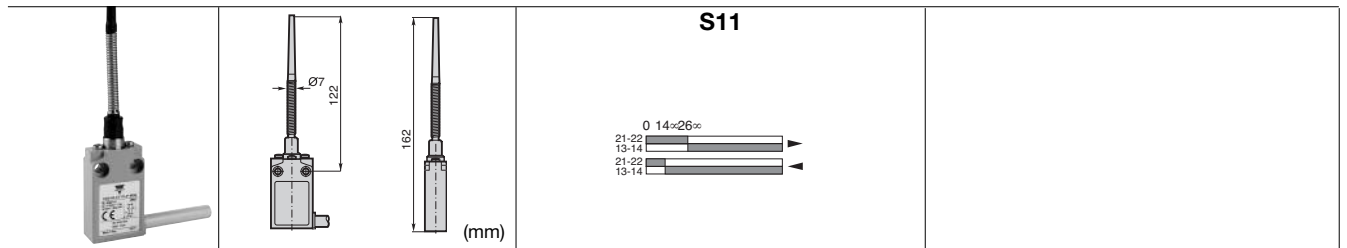


		S11	T11
Conformity / (NC)	Max. Actuation speed 1.5ms		
Min. force or torque 0.08N / 0.28Nm	Weight 240g	Adjustable lever with Ø18 nylon roller	
		Code PS21M-C ▲R1-M00	

		S11	T11
Conformity / (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	

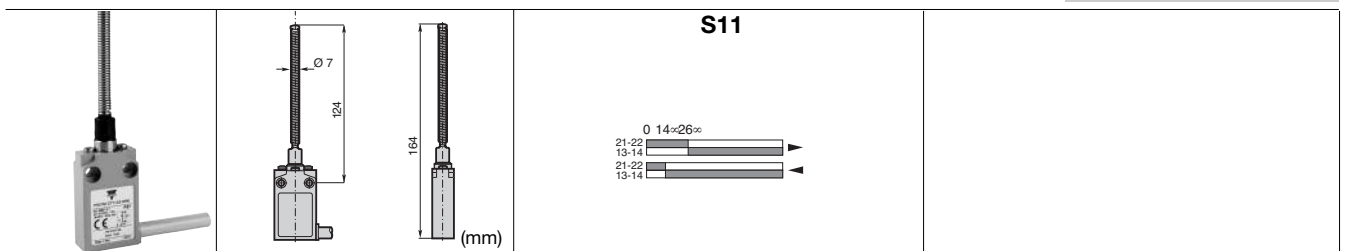
		S11	T11
Conformity / (NC)	Max. Actuation speed 1.5ms		
Min. force or torque 0.08N / 0.28Nm	Weight 235g	Adjustable rod lever	
		Code stainless steel rod Ø3 fiberglass rod Ø3 square steel rod 3x3	
		PS21M-C ▲LA-M00 PS21M-C ▲LF-M00 PS21M-C ▲L3-M00	

		S11	T11
Conformity / (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	



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

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



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

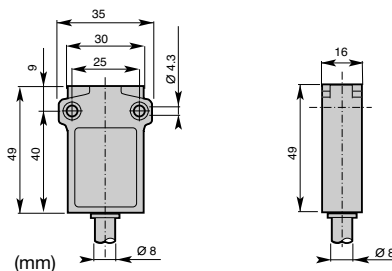
Multidirectional actuator with stainless steel spring
Code PS21M-C ▲LS-M00

Limit Switches - Miniature Type (PS31M) Metal Body IP67



Cable Characteristics

Pre-wired
Cable: PVC 5x0.75 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	0.5ms
Min. force or torque	15N / 30Nm
Weight	180g

Plain Plunger
Code **PS31M-C ▲ P0-M00**

		S11 	T11
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Conformity / (NC)	/ (NC)
Max. Actuation speed	0.1ms
Min. force or torque	10N / 30Nm
Weight	185g

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

		S11 	T11
--	--	----------------	----------------

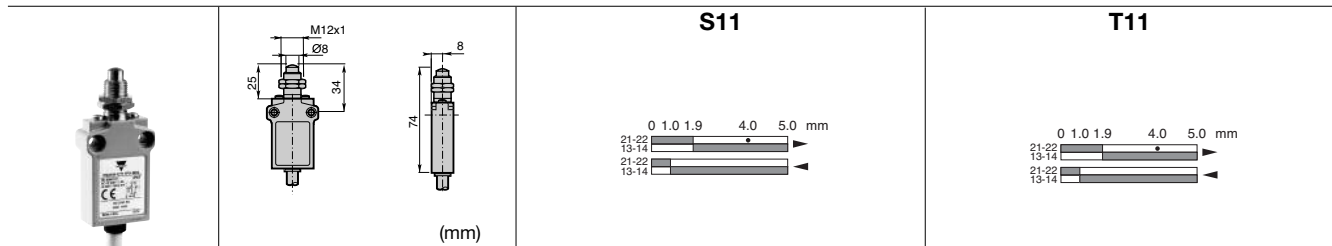
Conformity / (NC)	/ (NC)
Max. Actuation speed	0.1ms
Min. force or torque	10N / 30Nm
Weight	185g

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

		S11 	T11
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Conformity / (NC)	/ (NC)
Max. Actuation speed	0.5ms
Min. force or torque	15N / 30Nm
Weight	185g

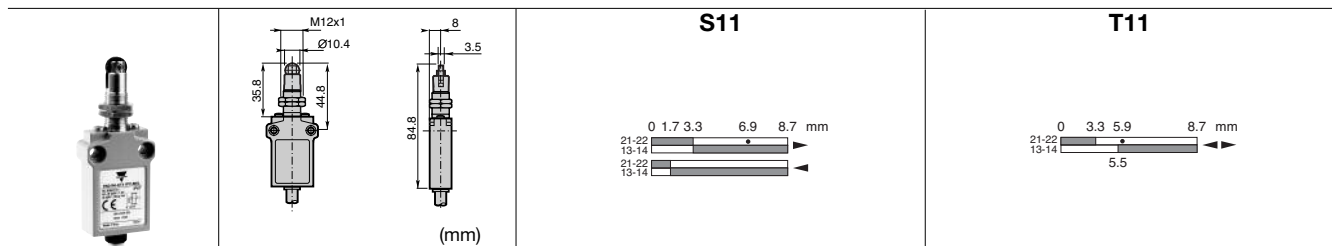
Plain plunger with dust protection cup
Code **PS31M-C ▲ PH-M00**



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

S11
 Pain plunger with fixing nuts
 Code

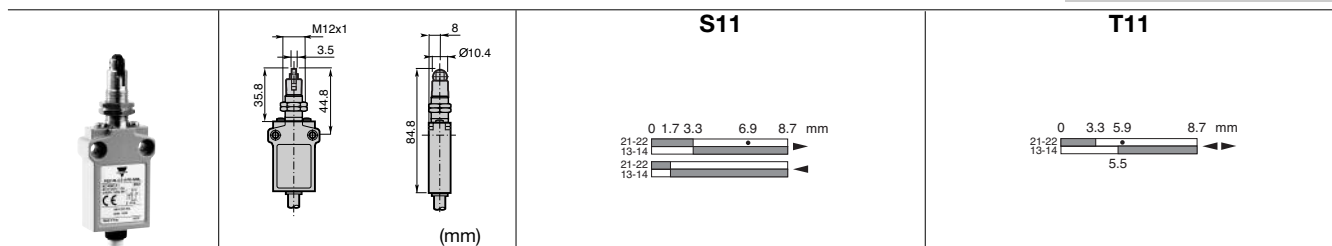
T11
 PS31M-C ▲P0-M0L



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

S11
 Roller plunger with fixing nuts
 Code metal roller
 nylon roller

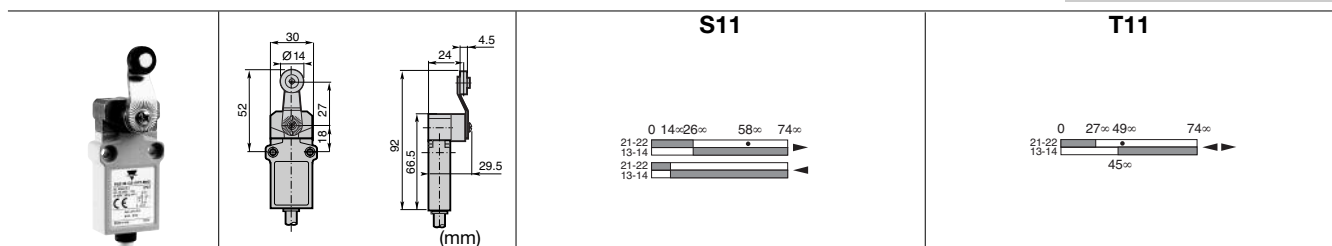
T11
 PS31M-C ▲PR-M0L
 PS31M-C ▲PY-M0L



Conformity / (NC) / (C)
 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

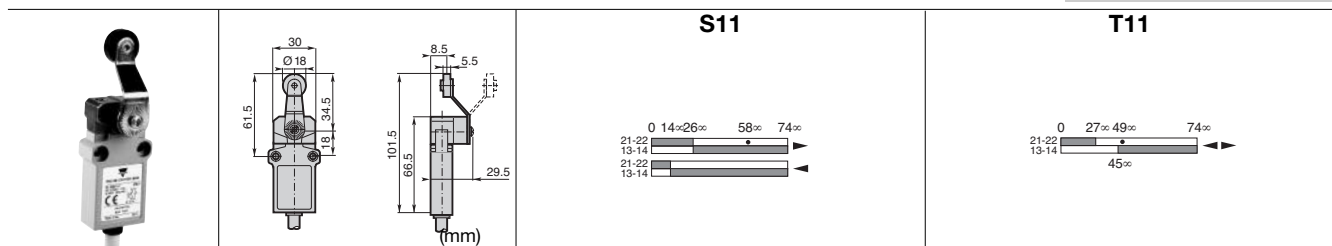
T11
 PS31M-C ▲P9-M0L
 PS31M-C ▲P8-M0L



Conformity / (NC) / (C)
 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 ▲RT-M00
 PS31M-C ▲RS-M00
 PS31M-C ▲RO-M00



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

S11
 Ø18 nylon roller lever
 Code

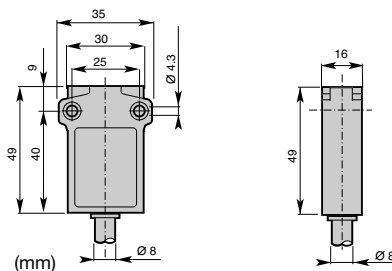
T11
 PS31M-C ▲BR-M00

Limit Switches - Miniature Type (PS31M) Metal Body IP67

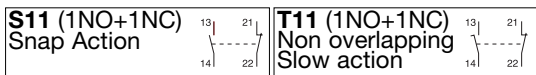


Cable Characteristics

Pre-wired
Cable: PVC 5x0.75 mm²
Length: 1m
(Different lengths available on request)



▲ Contact block (Zb type)

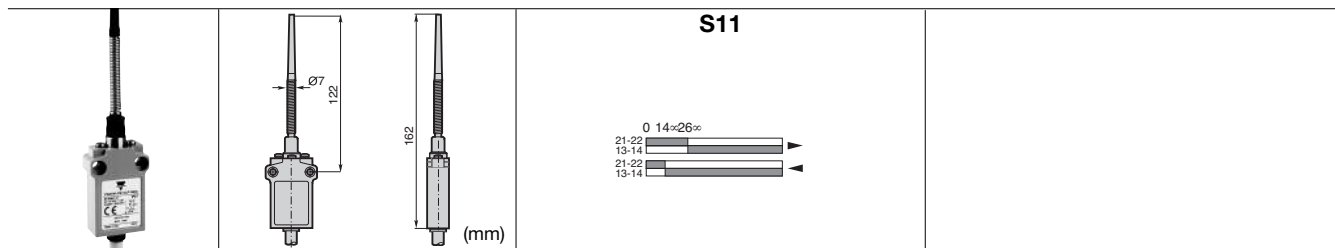


		S11	T11
Conformity / (NC) / (NC) Max. Actuation speed 1.5ms Min. force or torque 0.08N / 0.28Nm Weight 245g			
		Adjustable lever with Ø18 nylon roller Code PS31M-C ▲R1-M00	

		S11	T11
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	

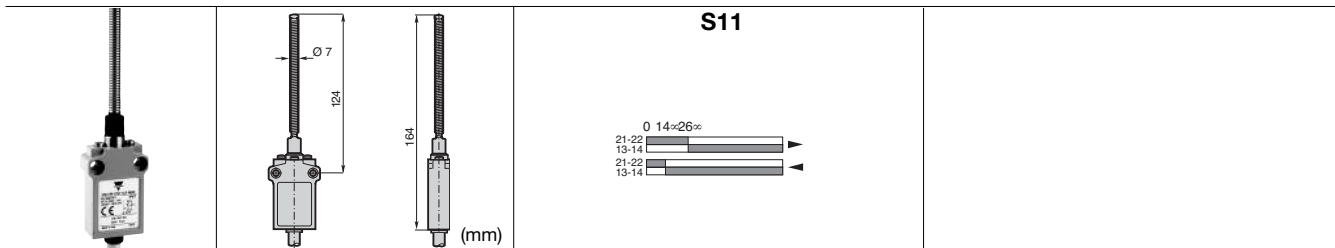
		S11	T11
Conformity / (NC) / (NC) Max. Actuation speed 1.5ms Min. force or torque 0.08N / 0.28Nm Weight 240g			
		Adjustable rod lever Code stainless steel rod Ø3 fiberglass rod Ø3 square steel rod 3x3 PS31M-C ▲LA-M00 PS31M-C ▲LF-M00 PS31M-C ▲L3-M00	

		S11	T11
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

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OUR SALES NETWORK IN ASIA AND PACIFIC

SINGAPORE - Carlo Gavazzi Automation
Singapore Pte. Ltd.
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Fax: +65 67 461 980

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CHINA - Carlo Gavazzi Automation
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No. 1001 Shangbu Middle Road,
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Hong Kong Ltd.
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OUR PRODUCTION SITES

Carlo Gavazzi Industri A/S
Hadsten - **DENMARK**

Carlo Gavazzi Ltd
Zejtun - **MALTA**

Carlo Gavazzi Controls SpA
Controls Division
Belluno - **ITALY**

Carlo Gavazzi Controls SpA
Sensors Division
Castel Maggiore (BO) - **ITALY**

Uab Carlo Gavazzi Industri Kaunas
Kaunas - **LITHUANIA**

Carlo Gavazzi Automation
(Kunshan) Co., Ltd.
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Automation Components

Further information on www.carlogavazzi.com/ac

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