

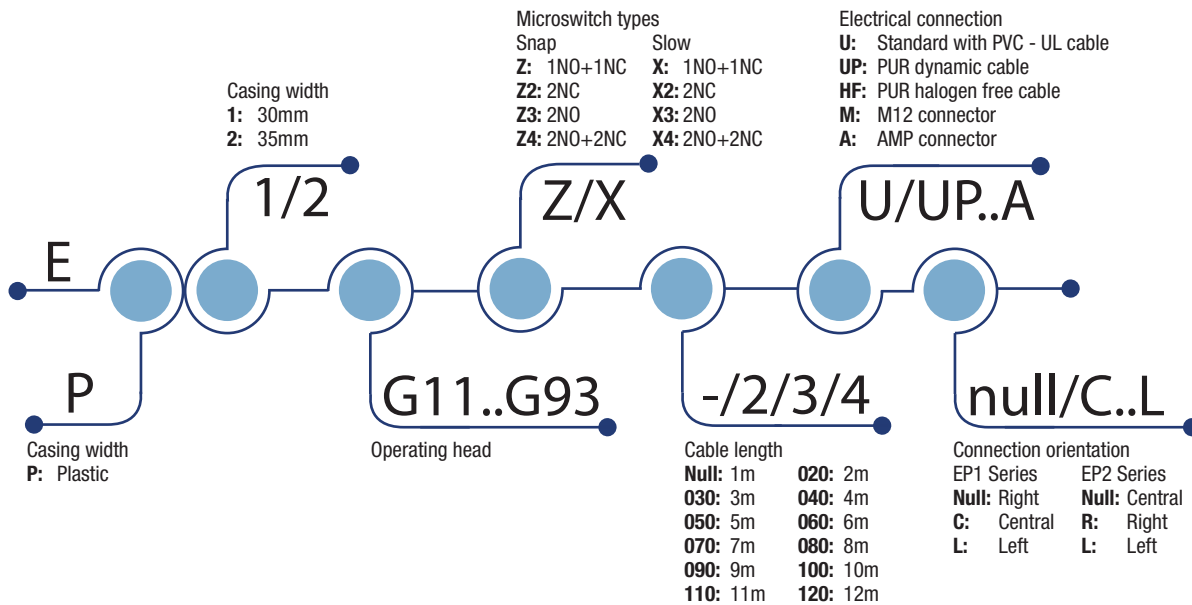
Limit Switches EP series

Summary

APPROVALS: UL 508 / CSA C22-2 N. 14 / IEC 60947-5-1



CB-SCHEME certification according to IEC 60947-5-1



HOW IS IT MADE?

01 A variety of actuators

- Plain plunger
- Roller plunger
- Roller lever, adjustable or not, etc.

02 Wide range of heads

- Assembled using 2 x Ø3 screws or 2 plug

03 Casing:

- 30 or 35 mm. width

04 Mounting screws

- 2 x M4 screws on top part

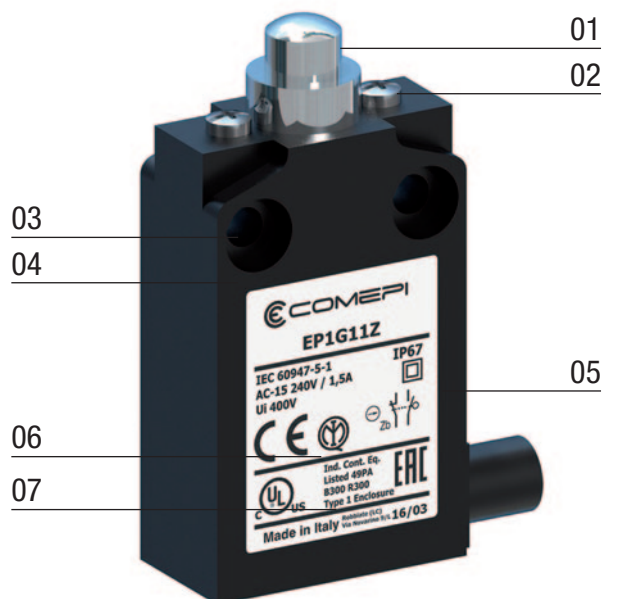
05 Epoxy resin for IP67 protection degree

06 Contact Block

- Positive opening operation
- Snap action or slow action
- Electrically separated contacts

07 Connecting terminals

- Cable: PVC 4 x 0,75 mm²
- Special cables: Halogen Free or Dynamic PUR
- M12 connector
- AMP connector



Limit Switches **EP series**

Description

APPLICATIONS

Easy to use, electromechanical limit switches offer specific qualities:

- Visible operation.
- Able to switch strong currents (up to 10 A conventional thermal current).
- Electrically separated contacts.
- Precise operating points (consistency).
- Immune to electromagnetic disturbances.

They are purpose-built detection devices thanks to these characteristics:

- Presence/absence.
- Positioning and travel limit.
- Objects passing/counting.

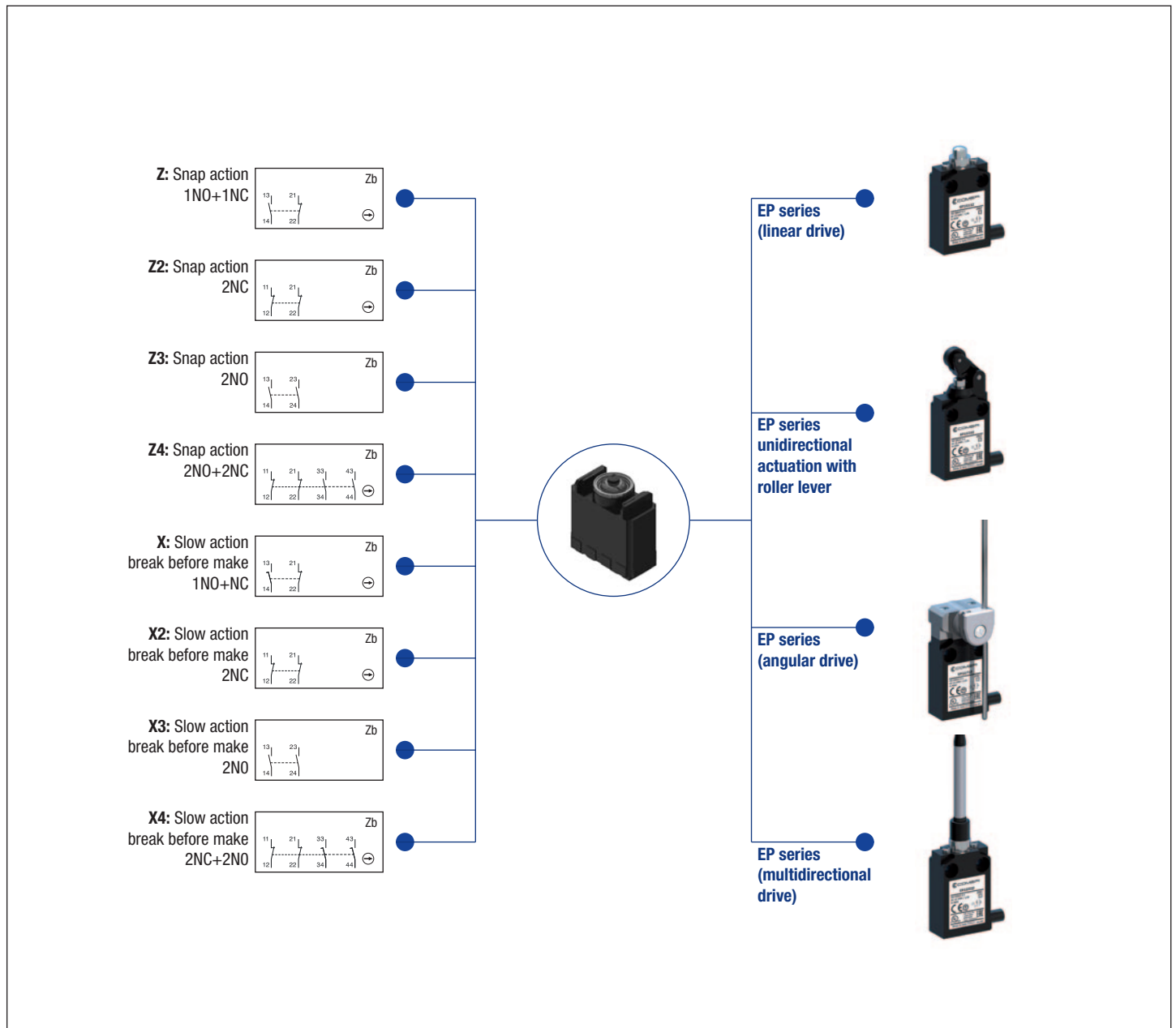
DESCRIPTION

These limit switches, made in thermoplastic material, sealed with epoxy resin at the base on the box, offer a degree of protection IP67.

The casing come in 2 dimensions: – EP1... 30 mm. width – EP2... 35 mm. width

They comply with the requirements of European Directives (Low Voltage and RoHS) and are conform to European and International Standards.

The CE declaration of these products are available in the download section of website www.comepi.it or by writing to the following email address: tecnico@comepi.it
DDC02 - Limit Switches.



Limit Switches EP series

Technical Data

	EP Series	
Standards	IEC 60947-5-1 EN 60947-5-1	
Air temperature near the device		
– during operation	°C	– 25 ... + 70
– for storage	°C	– 40 ... + 70
Mounting positions	All positions are authorised	
Protection against electrical shocks (acc. to IEC 61140)	Class II	
Degree of protection (according to IEC 60529 and EN 60529)	IP 67	
Degree of protection (according to UL50)	Type 1 enclosure (“indoor use only”)	
Switching frequency	Cycles/h	3600
Mechanical durability	10 millions of operations	

Electrical data - Electrical connections

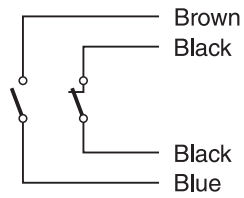
Code	EP_U	EP_UP	EP_HF	EP_M	EP_A
Connection type	4xAWG18 0,75mm ² PVC Style 2517	4xAWG18 dynamic 0,75mm ² PUR style 20668	4xAWG18 0,75mm ² Halogen Free PUR style 20668	M12 connector integrated 4x0,25mm ²	AMP connector integrated
Min. bend radius	49mm	49mm	49mm	–	–
Rated insulation voltage U _i	400V	300V	300V	250V	250V
Pollution degree	3	3	3	3	3
Rated impulse withstand voltage U _{imp}	4kV	4kV	4kV	2.5kV	2.5kV
Conventional free air thermal current I _{th}	10A	10A	10A	4A	4A
Short circuit current I _{cc}	1kA	1kA	1kA	1kA	1kA
Short-circuit protection	10A 500V type gG	10A 500V type gG	10A 500V type gG	4A 500V type gG	4A 500V type gG
AC15	24V 120V 240V	10A 6A 3A	10A 6A 3A	10A 6A 3A	4A 4A 3A
DC13	24V 125V 250V	2.8A 0.55A 0.27A	2.8A 0.55A 0.27A	2.8A 0.55A 0.27A	2.8A 0.55A 0.27A
Approvals	cULus EAC CCC UKCA	cULus EAC CCC UKCA	cULus EAC CCC UKCA	cULus IMQ EAC CCC UKCA	EAC UKCA

Code	X2/X3	X4	Z2/Z3	Z4
Connection type	4xAWG18 0,75mm ² PVC Style 2517	8xAWG22 0,5mm ² PVC Style 2517	4xAWG18 0,75mm ² PVC Style 2517	8xAWG22 0,5mm ² PVC Style 2517
Min. bend radius	49mm	49mm	49mm	49mm
Rated insulation voltage U _i	250V	250V	250V	250V
Pollution degree	3	3	3	3
Rated impulse withstand voltage U _{imp}	2.5kV	2.5kV	2.5kV	2.5kV
Conventional free air thermal current I _{th}	4A	4A	4A	4A
Short-circuit protection	4A 500V type gG	4A 500V type gG	4A 500V type gG	4A 500V Type gG
AC15	24V 240V	4A 3A	4A 3A	4A 3A
DC13	24V 250V	2A 0.4A	2A 0.4A	2A /
Approvals	cULus EAC CCC UKCA	cULus EAC CCC UKCA	cULus EAC CCC UKCA	cULus EAC CCC UKCA

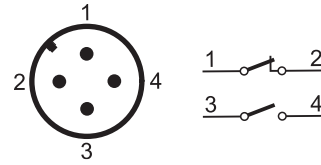
Limit Switches **EP series**

Wiring Diagram

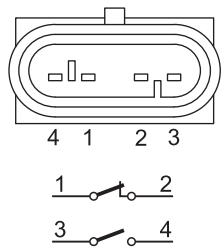
Serie EP_U / EP_UP / EP_HF



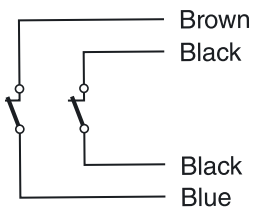
Serie EP_M



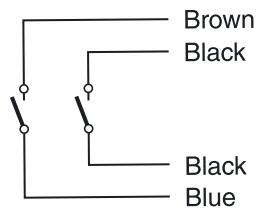
Serie EP_A



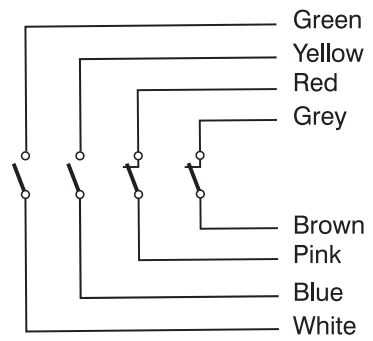
Serie EP_X2 / Z2



Serie EP_X3 / Z3



Serie EP_X4 / Z4



Limit Switches **EP series**

Technical Data



Standard PVC UL cable

All models can be supplied with a standard PVC UL cable.
To order, keep the suffix "U" of the standard
Example: EP1G11ZU



Dynamic PUR cable

A greater flexibility characterize these models compared to the UL standard, while maintaining the same features and the same electrical ratings. Moreover, the external sheath, polyurethane made, guarantees more resistance in stern working environments.
To order add the digit "P" at the end of the UL standard part number.
Example: EP1G11ZU ➔ EP1G11ZUP



Halogen free PUR cable

The absence of halogens guarantees less fumes and toxic gases released in case of fire. Moreover, the external sheath, polyurethane made, guarantees more resistance in stern working environments.
To order add the digit "HF" at the end of the part number.
Example: EP1G11ZHF



M12 connector

All the models can be supplied with M12 connector.
To order replace the "U" suffix of the standard UL version with suffix "M".
Example: EP1G11ZU ➔ EP1G11ZM



AMP connector

All the models can be supplied with AMP connector.
To order replace the "U" suffix of the standard UL version with suffix "A".
Example: EP1G11ZU ➔ EP1G11ZA

Cable connection orientation



Cable connection orientation

For EP1 Series, standard version is supplied with right electrical connection exit.
Available version with left or central exit: add respectively digit "L" or "C" at the end of the complete part number.
Example: EP1G11ZU ➔ EP1G11ZUL



For EP2 Series, standard version is supplied with central electrical connection exit.
Available version with left or right exit: add respectively digit "L" or "R" at the end of the complete part number.
Example: EP2G11ZU ➔ EP2G11ZUR

Limit Switches EP series

Technical Data

Technical data approved by IMQ

Standards	Devices conform with international IEC 60947-5-1 and European EN 60947-5-1 standards	
Degree of protection	IP 67	
Rated insulation voltage U_i	400 V (degree of pollution 3) (250V for M12 connector)	
Rated impulse withstand voltage U_{imp}	4 kV (2.5 kV for M12 connector)	
Conventional free air thermal current I_{th}	10 A (4A for M12 connector)	
Short-circuit protection - gG (gl) type fuses	10 A (4A for M12 connector)	
Rated operational current		
I_e / AC-15	24 V - 50/60 Hz	10 A (except M12 connector)
	400 V - 50/60 Hz	3 A (except M12 connector)
I_e / DC-13	24 V - d.c.	2.8 A
	250 V - d.c.	0.27 A

Technical data approved by UL

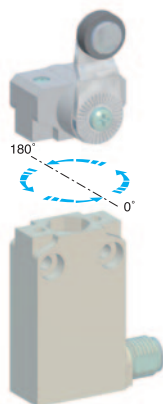
Standards	Devices conform with UL 508
Degree of protection:	
EP Series	Type 1 enclosure ("indoor use only")
EM Series	Type 4 - 4X - 6 enclosure ("outdoor use raintight - watertight - corrosion resistant")
Utilization categories:	
Cable versions	B300 - R300 (C300-R300)
M12 connector versions	Class-2

For the complete list of approved products, contact our technical department

IMPLEMENTATION

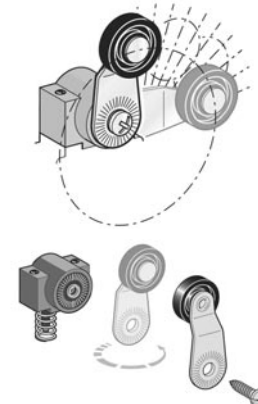
Operating head orientation

The head can be rotated each 180° (90° for special version with fixing pins).



Lever adjustment

The lever of the angular actuators can be adjusted every 10° and round turned in order to obtain the maximum flexibility on the working plan. Recommended tightening torque 0,5 Nm (max 0,8 Nm).



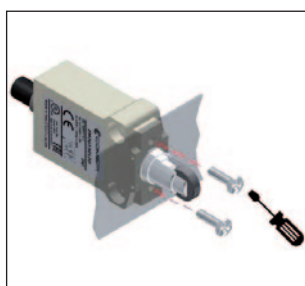
Special Versions



Head installation

Two different solutions are available to fix the head to the body of the switch. The standard solution is made by means of two $\varnothing 3$ screws. On some models it is possible to order the switch with head fixation by means of two pins. This solution will allow a greater resistance to vibrations when needed and it makes it possible for the end user to install the limit switch directly on a panel as shown in the picture on the side.

Please contact our technical department for further details.



Limit Switches **EP1G series**

Pre-wired - Plastic Casing IP67 - 30 mm. width

Electrical connection:

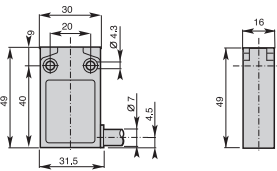
Pre-Wired

Cable: PVC 4 x 0,75 mm²

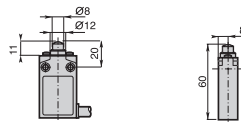
Length: 1 m.

Pre-wired

See page 78 for all the available connection variants



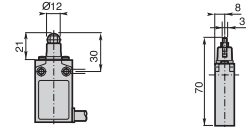
G11 - Plain plunger



Min. actuating force
Weight **15N (30N ⊖)**
125 g

G1• - Roller plunger

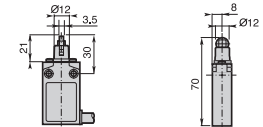
G12: metal roller G13: nylon roller



Min. actuating force
Weight **10N (30N ⊖)**
130 g

G1• - Cross roller plunger

G14: metal roller G15: nylon roller

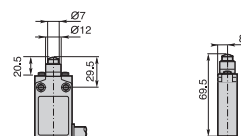


Min. actuating force
Weight **10N (30N ⊖)**
130 g

Contact Blocks

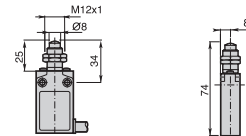
Z Snap action contacts (1NO + 1NC)	EP1G11ZU	EP1G12ZU	EP1G13ZU	EP1G14ZU	EP1G15ZU
Z2 Snap action contacts (2NC)	EP1G11Z2U	EP1G12Z2U	EP1G13Z2U	EP1G14Z2U	EP1G15Z2U
Z3 Snap action contacts (2NO)	EP1G11Z3U	EP1G12Z3U	EP1G13Z3U	EP1G14Z3U	EP1G15Z3U
Z4 Snap action contacts (2NC + 2NO)	EP1G11Z4U	EP1G12Z4U	EP1G13Z4U	EP1G14Z4U	EP1G15Z4U
X Non overlapping slow action contacts (1NO + 1NC)	EP1G11XU	EP1G12XU	EP1G13XU	EP1G14XU	EP1G15XU
X2 Slow action contacts (2NC)	EP1G11X2U	EP1G12X2U	EP1G13X2U	EP1G14X2U	EP1G15X2U
X3 Slow action contacts (2NO)	EP1G11X3U	EP1G12X3U	EP1G13X3U	EP1G14X3U	EP1G15X3U
X4 Non overlapping slow action contacts (2NO + 2NC)	EP1G11X4U	EP1G12X4U	EP1G13X4U	EP1G14X4U	EP1G15X4U

G16 - Plain plunger with dust protection cup



Min. actuating force
Weight **15N (30N ⊖)**
130 g

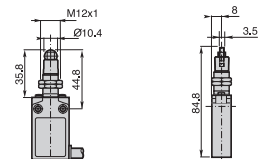
G21 - Plain plunger with fixing nuts



Min. actuating force
Weight **15N (30N ⊖)**
140 g

G2• - Roller plunger with fixing nuts

G22: metal roller G23: nylon roller



Min. actuating force
Weight **10N (30N ⊖)**
145 g

Contact Blocks

Z Snap action contacts (1NO + 1NC)	EP1G16ZU	EP1G21ZU	EP1G22ZU	EP1G23ZU
Z2 Snap action contacts (2NC)	EP1G16Z2U	EP1G21Z2U	EP1G22Z2U	EP1G23Z2U
Z3 Snap action contacts (2NO)	EP1G16Z3U	EP1G21Z3U	EP1G22Z3U	EP1G23Z3U
Z4 Snap action contacts (2NC + 2NO)	EP1G16Z4U	EP1G21Z4U	EP1G22Z4U	EP1G23Z4U
X Non overlapping slow action contacts (1NO + 1NC)	EP1G16XU	EP1G21XU	EP1G22XU	EP1G23XU
X2 Slow action contacts (2NC)	EP1G16X2U	EP1G21X2U	EP1G22X2U	EP1G23X2U
X3 Slow action contacts (2NO)	EP1G16X3U	EP1G21X3U	EP1G22X3U	EP1G23X3U
X4 Non overlapping slow action contacts (2NO + 2NC)	EP1G16X4U	EP1G21X4U	EP1G22X4U	EP1G23X4U

Operation diagrams: page 126 - All dimensions are in mm

Limit Switches **EP1G series**

Pre-wired - Plastic Casing IP67 - 30 mm. width

Electrical connection:

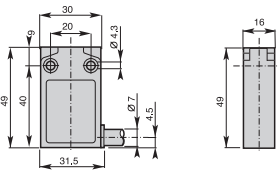
Pre-Wired

Cable: PVC 4 x 0,75 mm²

Length: 1 m.

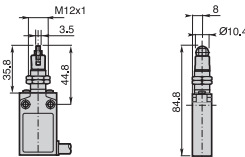
Pre-wired

See page 78 for all the available connection variants



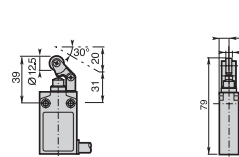
G2• - Cross roller plunger with fixing nuts

G24: metal roller G25: nylon roller



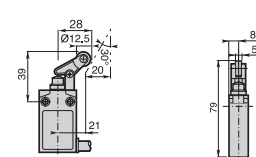
Min. actuating force **10N (30N ⇄)**
Weight **145 g**

G31 - Nylon roller lever



Min. actuating force **7N (24N ⇄)**
Weight **130 g**

G32 - Nylon roller lever

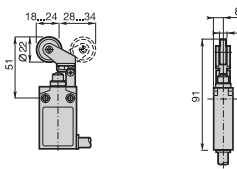


Min. actuating force **7N (24N ⇄)**
Weight **130 g**

Contact Blocks

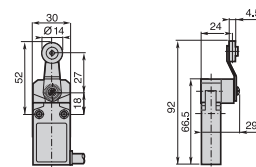
Z Snap action contacts (1NO + 1NC)	EP1G24ZU	EP1G25ZU	EP1G31ZU	EP1G32ZU
Z2 Snap action contacts (2NC)	EP1G24Z2U	EP1G25Z2U	EP1G31Z2U	EP1G32Z2U
Z3 Snap action contacts (2NO)	EP1G24Z3U	EP1G25Z3U	EP1G31Z3U	EP1G32Z3U
Z4 Snap action contacts (2NC + 2NO)	EP1G24Z4U	EP1G25Z4U	EP1G31Z4U	EP1G32Z4U
X Non overlapping slow action contacts (1NO + 1NC)	EP1G24XU	EP1G25XU	EP1G31XU	EP1G32XU
X2 Slow action contacts (2NC)	EP1G24X2U	EP1G25X2U	EP1G31X2U	EP1G32X2U
X3 Slow action contacts (2NO)	EP1G24X3U	EP1G25X3U	EP1G31X3U	EP1G32X3U
X4 Non overlapping slow action contacts (2NO + 2NC)	EP1G24X4U	EP1G25X4U	EP1G31X4U	EP1G32X4U

G38 - Adjustable nylon roller lever



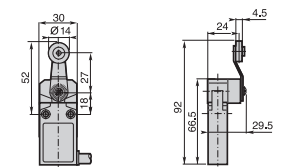
Min. actuating force **7N (24N ⇄)**
Weight **135 g**

G41 - Ø14 nylon roller lever



Min. actuating torque **0,08Nm (0,28Nm ⇄)**
Weight **175 g**

G42 - Ø14 metal roller lever



Min. actuating torque **0,08Nm (0,28Nm ⇄)**
Weight **175 g**

Contact Blocks

Z Snap action contacts (1NO + 1NC)	EP1G38ZU	EP1G41ZU	EP1G42ZU
Z2 Snap action contacts (2NC)	EP1G38Z2U	EP1G41Z2U	EP1G42Z2U
Z3 Snap action contacts (2NO)	EP1G38Z3U	EP1G41Z3U	EP1G42Z3U
Z4 Snap action contacts (2NC + 2NO)	EP1G38Z4U	EP1G41Z4U	EP1G42Z4U
X Non overlapping slow action contacts (1NO + 1NC)	EP1G38XU	EP1G41XU	EP1G42XU
X2 Slow action contacts (2NC)	EP1G38X2U	EP1G41X2U	EP1G42X2U
X3 Slow action contacts (2NO)	EP1G38X3U	EP1G41X3U	EP1G42X3U
X4 Non overlapping slow action contacts (2NO + 2NC)	EP1G38X4U	EP1G41X4U	EP1G42X4U

Operation diagrams: page 126 - All dimensions are in mm

Limit Switches **EP1G series**

Pre-wired - Plastic Casing IP67 - 30 mm. width

Electrical connection:

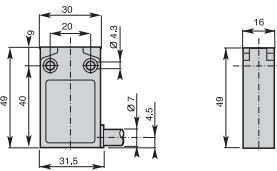
Pre-Wired

Cable: PVC 4 x 0,75 mm²

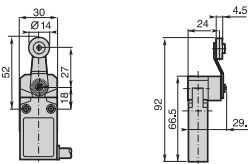
Length: 1 m.

Pre-wired

See page 78 for all the available connection variants

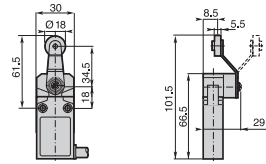


G43 - Ø14 roller lever with ball bearing



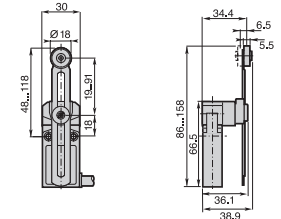
Min. actuating torque **0,08Nm (0,28Nm ⊖)**
Weight **175 g**

G45 - Ø18 nylon roller lever



Min. actuating torque **0,08Nm (0,28Nm ⊖)**
Weight **180 g**

G51 - Adjustable lever with Ø18 nylon roller

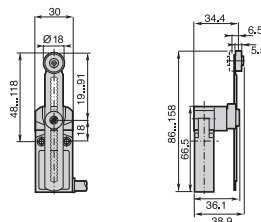


Min. actuating torque **0,08Nm (0,28Nm ⊖)**
Weight **190 g**

Contact Blocks

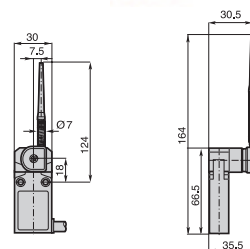
Z Snap action contacts (1NO + 1NC)	EP1G43ZU	EP1G45ZU	EP1G51ZU
Z2 Snap action contacts (2NC)	EP1G43Z2U	EP1G45Z2U	EP1G51Z2U
Z3 Snap action contacts (2NO)	EP1G43Z3U	EP1G45Z3U	EP1G51Z3U
Z4 Snap action contacts (2NC + 2NO)	EP1G43Z4U	EP1G45Z4U	EP1G51Z4U
X Non overlapping slow action contacts (1NO + 1NC)	EP1G43XU	EP1G45XU	EP1G51XU
X2 Slow action contacts (2NC)	EP1G43X2U	EP1G45X2U	EP1G51X2U
X3 Slow action contacts (2NO)	EP1G43X3U	EP1G45X3U	EP1G51X3U
X4 Non overlapping slow action contacts (2NO + 2NC)	EP1G43X4U	EP1G45X4U	EP1G51X4U

G5100 - Adjustable toothed lever (step 2 mm) with Ø18 nylon roller



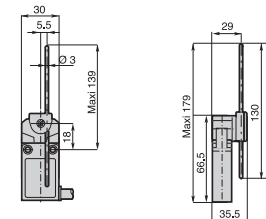
Min. actuating torque **0,08Nm (0,28Nm ⊖)**
Weight **190 g**

G61 - Nylon actuator with stainless steel spring



Min. actuating torque **0,08Nm**
Weight **190 g**

G71 - Adjustable Ø3 stainless steel rod lever



Min. actuating torque **0,08Nm (0,28Nm ⊖)**
Weight **185 g**

Contact Blocks

Z Snap action contacts (1NO + 1NC)	EP1G5100ZU	EP1G61ZU	EP1G71ZU
Z2 Snap action contacts (2NC)	EP1G5100Z2U	EP1G61Z2U	EP1G71Z2U
Z3 Snap action contacts (2NO)	EP1G5100Z3U	EP1G61Z3U	EP1G71Z3U
Z4 Snap action contacts (2NC + 2NO)	EP1G5100Z4U	EP1G61Z4U	EP1G71Z4U
X Non overlapping slow action contacts (1NO + 1NC)	EP1G5100XU	EP1G61XU	EP1G71XU
X2 Slow action contacts (2NC)	EP1G5100X2U	EP1G61X2U	EP1G71X2U
X3 Slow action contacts (2NO)	EP1G5100X3U	EP1G61X3U	EP1G71X3U
X4 Non overlapping slow action contacts (2NO + 2NC)	EP1G5100X4U	EP1G61X4U	EP1G71X4U

Operation diagrams: page 126 - All dimensions are in mm

Limit Switches **EP1G series**

Pre-wired - Plastic Casing IP67 - 30 mm. width

Electrical connection:

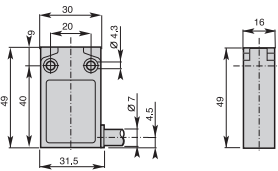
Pre-Wired

Cable: PVC 4 x 0,75 mm²

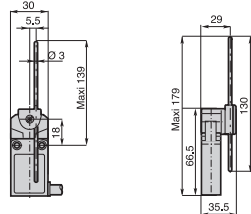
Length: 1 m.

Pre-wired

See page 78 for all the available connection variants

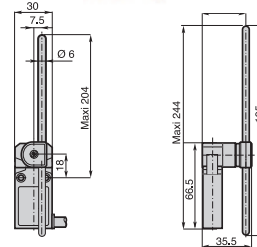


G72 - Adjustable Ø3 fiberglass rod lever



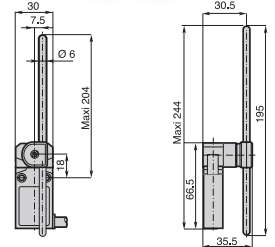
Min. actuating torque **0,08Nm (0,28Nm ⊖)**
Weight **185 g**

G73 - Adjustable Ø6 nylon rod lever



Min. actuating torque **0,08Nm (0,28Nm ⊖)**
Weight **200 g**

G74 - Adjustable Ø6 fiberglass rod lever

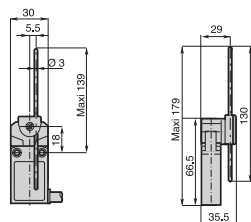


Min. actuating torque **0,08Nm (0,28Nm ⊖)**
Weight **200 g**

Contact Blocks

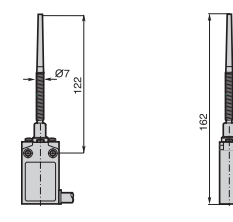
Z Snap action contacts (1NO + 1NC)	EP1G72ZU	EP1G73ZU	EP1G74ZU
Z2 Snap action contacts (2NC)	EP1G72Z2U	EP1G73Z2U	EP1G74Z2U
Z3 Snap action contacts (2NO)	EP1G72Z3U	EP1G73Z3U	EP1G74Z3U
Z4 Snap action contacts (2NC + 2NO)	EP1G72Z4U	EP1G73Z4U	EP1G74Z4U
X Non overlapping slow action contacts (1NO + 1NC)	EP1G72XU	EP1G73XU	EP1G74XU
X2 Slow action contacts (2NC)	EP1G72X2U	EP1G73X2U	EP1G74X2U
X3 Slow action contacts (2NO)	EP1G72X3U	EP1G73X3U	EP1G74X3U
X4 Non overlapping slow action contacts (2NO + 2NC)	EP1G72X4U	EP1G73X4U	EP1G74X4U

G75 - Adjustable 3x3 square steel rod lever



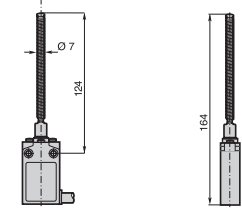
Min. actuating torque **0,08Nm (0,28Nm ⊖)**
Weight **185 g**

G92 - Multidirectional nylon actuator with stainless steel spring



Min. actuating torque **0,10Nm**
Weight **195 g**

G93 - Multidirectional actuator with stainless steel spring



Min. actuating torque **0,10Nm**
Weight **200 g**

Contact Blocks

Z Snap action contacts (1NO + 1NC)	EP1G75ZU	EP1G92ZU	EP1G93ZU
Z2 Snap action contacts (2NC)	EP1G75Z2U	EP1G92Z2U	EP1G93Z2U
Z3 Snap action contacts (2NO)	EP1G75Z3U	EP1G92Z3U	EP1G93Z3U
Z4 Snap action contacts (2NC + 2NO)	EP1G75Z4U	EP1G92Z4U	EP1G93Z4U
X Non overlapping slow action contacts (1NO + 1NC)	EP1G75XU		
X2 Slow action contacts (2NC)	EP1G75X2U		
X3 Slow action contacts (2NO)	EP1G75X3U		
X4 Non overlapping slow action contacts (2NO + 2NC)	EP1G75X4U		

Operation diagrams: page 126 - All dimensions are in mm

Limit Switches **EP2G series**

Pre-wired - Plastic Casing IP67 - 35 mm. width

Electrical connection:

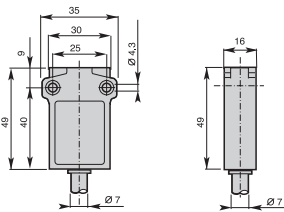
Pre-Wired

Cable: PVC 4 x 0,75 mm²

Length: 1 m.

Pre-wired

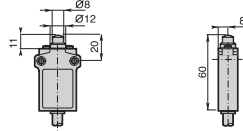
See page 78 for all the available connection variants



Contact Blocks

Z Snap action contacts (1NO + 1NC)	EP2G11ZU	EP2G12ZU	EP2G13ZU	EP2G14ZU	EP2G15ZU
Z2 Snap action contacts (2NC)	EP2G11Z2U	EP2G12Z2U	EP2G13Z2U	EP2G14Z2U	EP2G15Z2U
Z3 Snap action contacts (2NO)	EP2G11Z3U	EP2G12Z3U	EP2G13Z3U	EP2G14Z3U	EP2G15Z3U
Z4 Snap action contacts (2NC + 2NO)	EP2G11Z4U	EP2G12Z4U	EP2G13Z4U	EP2G14Z4U	EP2G15Z4U
X Non overlapping slow action contacts (1NO + 1NC)	EP2G11XU	EP2G12XU	EP2G13XU	EP2G14XU	EP2G15XU
X2 Slow action contacts (2NC)	EP2G11X2U	EP2G12X2U	EP2G13X2U	EP2G14X2U	EP2G15X2U
X3 Slow action contacts (2NO)	EP2G11X3U	EP2G12X3U	EP2G13X3U	EP2G14X3U	EP2G15X3U
X4 Non overlapping slow action contacts (2NO + 2NC)	EP2G11X4U	EP2G12X4U	EP2G13X4U	EP2G14X4U	EP2G15X4U

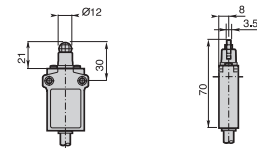
G11 - Plain plunger



Min. actuating force
Weight **15N (30N ⊖)**
125 g

G1 - Roller plunger

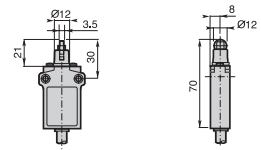
G12: metal roller G13: nylon roller



Min. actuating force
Weight **10N (30N ⊖)**
130 g

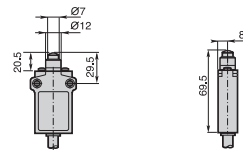
G1 - Cross roller plunger

G14: metal roller G15: nylon roller



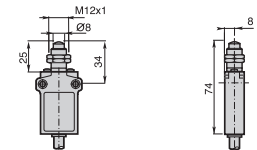
Min. actuating force
Weight **10N (30N ⊖)**
130 g

G16 - Plain plunger with dust protection cup



Min. actuating force
Weight **15N (30N ⊖)**
130 g

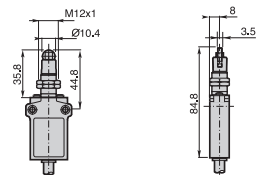
G21 - Plain plunger with fixing nuts



Min. actuating force
Weight **15N (30N ⊖)**
140 g

G2 - Roller plunger with fixing nuts

G22: metal roller G23: nylon roller



Min. actuating force
Weight **10N (30N ⊖)**
145 g

Contact Blocks

Z Snap action contacts (1NO + 1NC)	EP2G16ZU	EP2G21ZU	EP2G22ZU	EP2G23ZU
Z2 Snap action contacts (2NC)	EP2G16Z2U	EP2G21Z2U	EP2G22Z2U	EP2G23Z2U
Z3 Snap action contacts (2NO)	EP2G16Z3U	EP2G21Z3U	EP2G22Z3U	EP2G23Z3U
Z4 Snap action contacts (2NC + 2NO)	EP2G16Z4U	EP2G21Z4U	EP2G22Z4U	EP2G23Z4U
X Non overlapping slow action contacts (1NO + 1NC)	EP2G16XU	EP2G21XU	EP2G22XU	EP2G23XU
X2 Slow action contacts (2NC)	EP2G16X2U	EP2G21X2U	EP2G22X2U	EP2G23X2U
X3 Slow action contacts (2NO)	EP2G16X3U	EP2G21X3U	EP2G22X3U	EP2G23X3U
X4 Non overlapping slow action contacts (2NO + 2NC)	EP2G16X4U	EP2G21X4U	EP2G22X4U	EP2G23X4U

Operation diagrams: page 126 - All dimensions are in mm

Limit Switches **EP2G series**

Pre-wired - Plastic Casing IP67 - 35 mm. width

Electrical connection:

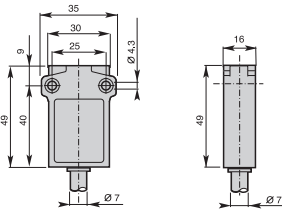
Pre-Wired

Cable: PVC 4 x 0,75 mm²

Length: 1 m.

Pre-wired

See page 78 for all the available connection variants

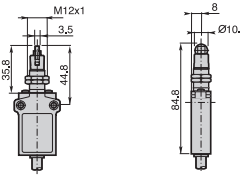


Contact Blocks

Z Snap action contacts (1NO + 1NC)	EP2G24ZU	EP2G25ZU	EP2G31ZU	EP2G32ZU
Z2 Snap action contacts (2NC)	EP2G24Z2U	EP2G25Z2U	EP2G31Z2U	EP2G32Z2U
Z3 Snap action contacts (2NO)	EP2G24Z3U	EP2G25Z3U	EP2G31Z3U	EP2G32Z3U
Z4 Snap action contacts (2NC + 2NO)	EP2G24Z4U	EP2G25Z4U	EP2G31Z4U	EP2G32Z4U
X Non overlapping slow action contacts (1NO + 1NC)	EP2G24XU	EP2G25XU	EP2G31XU	EP2G32XU
X2 Slow action contacts (2NC)	EP2G24X2U	EP2G25X2U	EP2G31X2U	EP2G32X2U
X3 Slow action contacts (2NO)	EP2G24X3U	EP2G25X3U	EP2G31X3U	EP2G32X3U
X4 Non overlapping slow action contacts (2NO + 2NC)	EP2G24X4U	EP2G25X4U	EP2G31X4U	EP2G32X4U

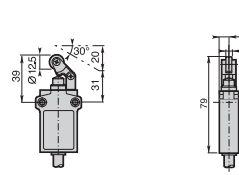
G2• - Cross roller plunger with fixing nuts

G24: metal roller G25: nylon roller



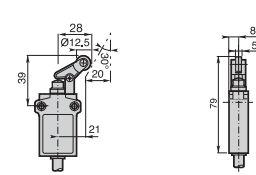
Min. actuating force **10N (30N ⊖)**
Weight **145 g**

G31 - Nylon roller lever



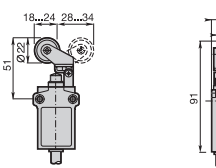
Min. actuating force **7N (24N ⊖)**
Weight **130 g**

G32 - Nylon roller lever



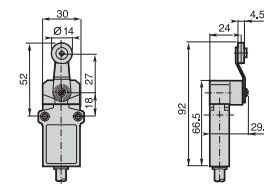
Min. actuating force **7N (24N ⊖)**
Weight **130 g**

G38 - Adjustable nylon roller lever



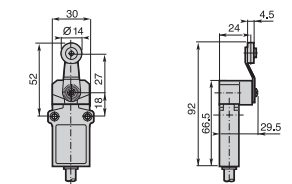
Min. actuating force **7N (24N ⊖)**
Weight **135 g**

G41 - Ø14 nylon roller lever



Min. actuating torque **0,08Nm (0,28Nm ⊖)**
Weight **175 g**

G42 - Ø14 metal roller lever



Min. actuating torque **0,08Nm (0,28Nm ⊖)**
Weight **175 g**

Contact Blocks

Z Snap action contacts (1NO + 1NC)	EP2G38ZU	EP2G41ZU	EP2G42ZU
Z2 Snap action contacts (2NC)	EP2G38Z2U	EP2G41Z2U	EP2G42Z2U
Z3 Snap action contacts (2NO)	EP2G38Z3U	EP2G41Z3U	EP2G42Z3U
Z4 Snap action contacts (2NC + 2NO)	EP2G38Z4U	EP2G41Z4U	EP2G42Z4U
X Non overlapping slow action contacts (1NO + 1NC)	EP2G38XU	EP2G41XU	EP2G42XU
X2 Slow action contacts (2NC)	EP2G38X2U	EP2G41X2U	EP2G42X2U
X3 Slow action contacts (2NO)	EP2G38X3U	EP2G41X3U	EP2G42X3U
X4 Non overlapping slow action contacts (2NO + 2NC)	EP2G38X4U	EP2G41X4U	EP2G42X4U

Operation diagrams: page 126 - All dimensions are in mm

Limit Switches **EP2G series**

Pre-wired - Plastic Casing IP67 - 35 mm. width

Electrical connection:

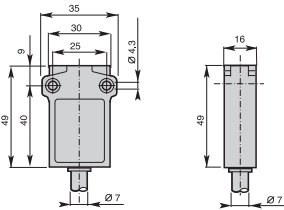
Pre-Wired

Cable: PVC 4 x 0,75 mm²

Length: 1 m.

Pre-wired

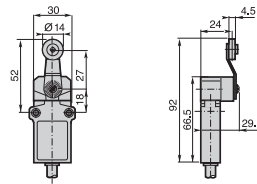
See page 78 for all the available connection variants



Contact Blocks

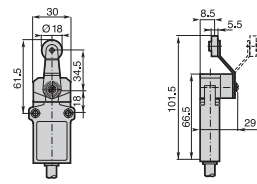
Z Snap action contacts (1NO + 1NC)	EP2G43ZU	EP2G45ZU	EP2G51ZU
Z2 Snap action contacts (2NC)	EP2G43Z2U	EP2G45Z2U	EP2G51Z2U
Z3 Snap action contacts (2NO)	EP2G43Z3U	EP2G45Z3U	EP2G51Z3U
Z4 Snap action contacts (2NC + 2NO)	EP2G43Z4U	EP2G45Z4U	EP2G51Z4U
X Non overlapping slow action contacts (1NO + 1NC)	EP2G43XU	EP2G45XU	EP2G51XU
X2 Slow action contacts (2NC)	EP2G43X2U	EP2G45X2U	EP2G51X2U
X3 Non overlapping slow action contacts (2NO)	EP2G43X3U	EP2G45X3U	EP2G51X3U
X4 Non overlapping slow action contacts (2NO + 2NC)	EP2G43X4U	EP2G45X4U	EP2G51X4U

G43 - Ø14 roller lever with ball bearing



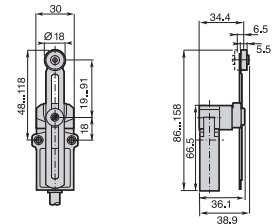
Min. actuating torque **0,08Nm (0,28Nm ⇄)**
Weight **175 g**

G45 - Ø18 nylon roller lever



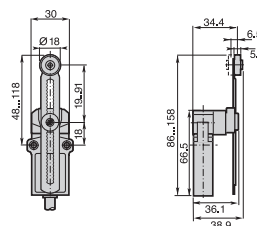
Min. actuating torque **0,08Nm (0,28Nm ⇄)**
Weight **180 g**

G51 - Adjustable lever with Ø18 nylon roller



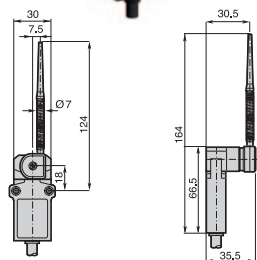
Min. actuating torque **0,08Nm (0,28Nm ⇄)**
Weight **190 g**

G5100 - Adjustable toothed lever (step 2 mm) with Ø18 nylon roller



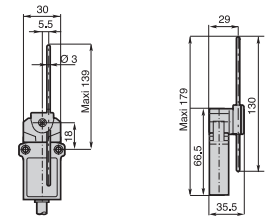
Min. actuating torque **0,08Nm (0,28Nm ⇄)**
Weight **190 g**

G61 - Nylon actuator with stainless steel spring



Min. actuating torque **0,10Nm**
Weight **190 g**

G71 - Adjustable Ø3 stainless steel rod lever



Min. actuating torque **0,08Nm (0,28Nm ⇄)**
Weight **185 g**

Contact Blocks

Z Snap action contacts (1NO + 1NC)	EP2G5100ZU	EP2G61ZU	EP2G71ZU
Z2 Snap action contacts (2NC)	EP2G5100Z2U	EP2G61Z2U	EP2G71Z2U
Z3 Snap action contacts (2NO)	EP2G5100Z3U	EP2G61Z3U	EP2G71Z3U
Z4 Snap action contacts (2NC + 2NO)	EP2G5100Z4U	EP2G61Z4U	EP2G71Z4U
X Non overlapping slow action contacts (1NO + 1NC)	EP2G5100XU	EP2G61XU	EP2G71XU
X2 Slow action contacts (2NC)	EP2G5100X2U	EP2G61X2U	EP2G71X2U
X3 Slow action contacts (2NO)	EP2G5100X3U	EP2G61X3U	EP2G71X3U
X4 Non overlapping slow action contacts (2NO + 2NC)	EP2G5100X4U	EP2G61X4U	EP2G71X4U

Operation diagrams: page 126 - All dimensions are in mm

Limit Switches **EP2G series**

Pre-wired - Plastic Casing IP67 - 35 mm. width

Electrical connection:

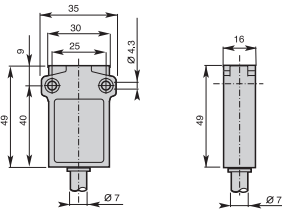
Pre-Wired

Cable: PVC 4 x 0,75 mm²

Length: 1 m.

Pre-wired

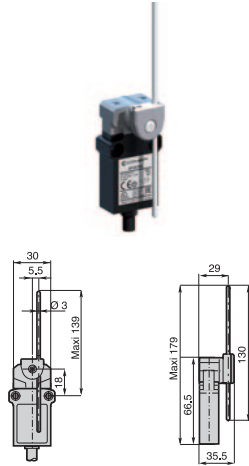
See page 78 for all the available connection variants



Contact Blocks

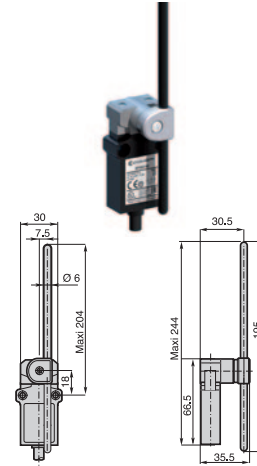
Z Snap action contacts (1NO + 1NC)	EP2G72ZU	EP2G73ZU	EP2G74ZU
Z2 Snap action contacts (2NC)	EP2G72Z2U	EP2G73Z2U	EP2G74Z2U
Z3 Snap action contacts (2NO)	EP2G72Z3U	EP2G73Z3U	EP2G74Z3U
Z4 Snap action contacts (2NC + 2NO)	EP2G72Z4U	EP2G73Z4U	EP2G74Z4U
X Non overlapping slow action contacts (1NO + 1NC)	EP2G72XU	EP2G73XU	EP2G74XU
X2 Slow action contacts (2NC)	EP2G72X2U	EP2G73X2U	EP2G74X2U
X3 Slow action contacts (2NO)	EP2G72X3U	EP2G73X3U	EP2G74X3U
X4 Non overlapping slow action contacts (2NO + 2NC)	EP2G72X4U	EP2G73X4U	EP2G74X4U

G72 - Adjustable Ø3 fiberglass rod lever



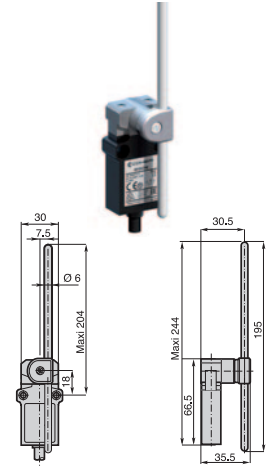
Min. actuating torque **0,08Nm (0,28Nm ⊖)**
Weight **185 g**

G73 - Adjustable Ø6 nylon rod lever



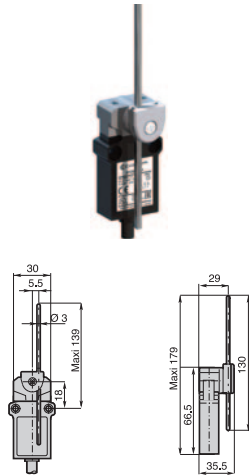
Min. actuating torque **0,08Nm (0,28Nm ⊖)**
Weight **200 g**

G74 - Adjustable Ø6 fiberglass rod lever



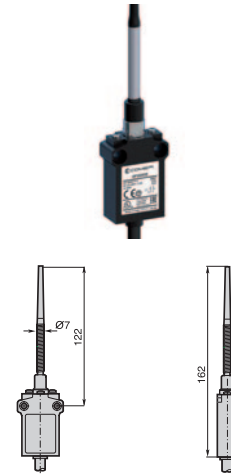
Min. actuating torque **0,08Nm (0,28Nm ⊖)**
Weight **200 g**

G75 - Adjustable 3x3 square steel rod lever



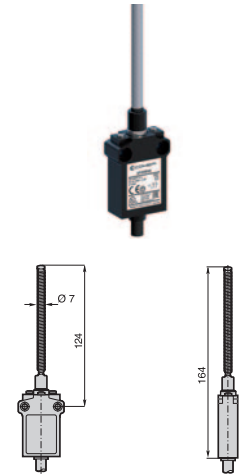
Min. actuating torque **0,08Nm (0,28Nm ⊖)**
Weight **185 g**

G92 - Multidirectional nylon actuator with stainless steel spring



Min. actuating torque **0,12Nm**
Weight **195 g**

G93 - Multidirectional actuator with stainless steel spring



Min. actuating torque **0,12Nm**
Weight **200 g**

Contact Blocks

Z Snap action contacts (1NO + 1NC)	EP2G75ZU	EP2G92ZU	EP2G93ZU
Z2 Snap action contacts (2NC)	EP2G75Z2U	EP2G92Z2U	EP2G93Z2U
Z3 Snap action contacts (2NO)	EP2G75Z3U	EP2G92Z3U	EP2G93Z3U
Z4 Snap action contacts (2NC + 2NO)	EP2G75Z4U	EP2G92Z4U	EP2G93Z4U
X Non overlapping slow action contacts (1NO + 1NC)	EP2G75XU		
X2 Slow action contacts (2NC)	EP2G75X2U		
X2 Slow action contacts (2NO)	EP2G75X3U		
X4 Non overlapping slow action contacts (2NO + 2NC)	EP2G75X4U		

Operation diagrams: page 126 - All dimensions are in mm