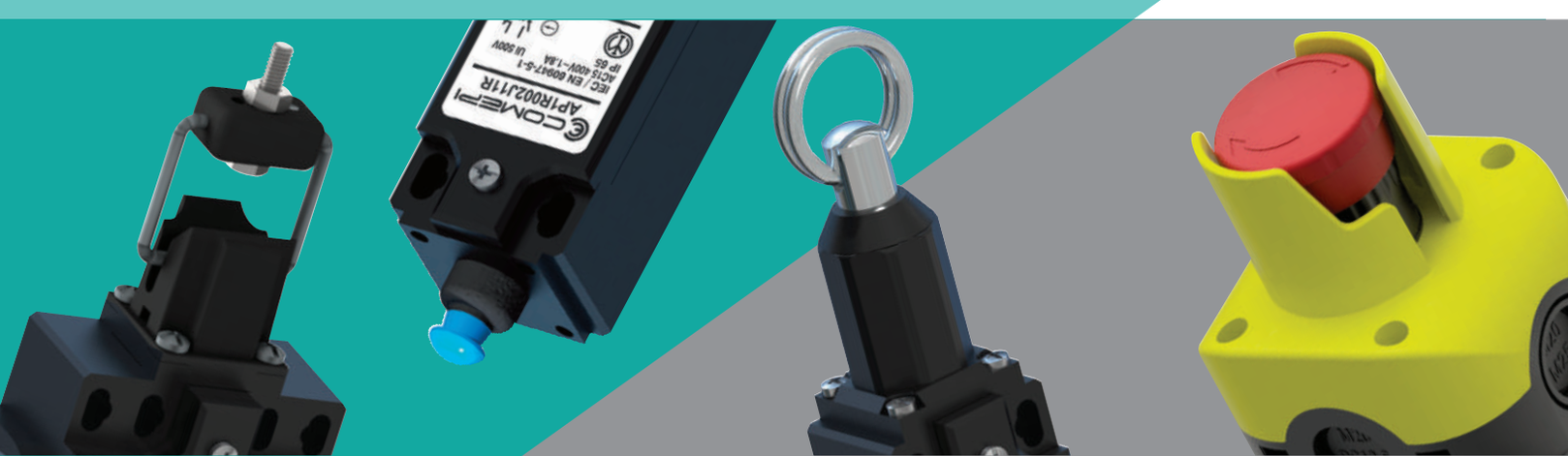


LIFT DEVICES

2026

COMEPI

Lift Devices

Index

Lift Devices
Introduction

APPROVALS:

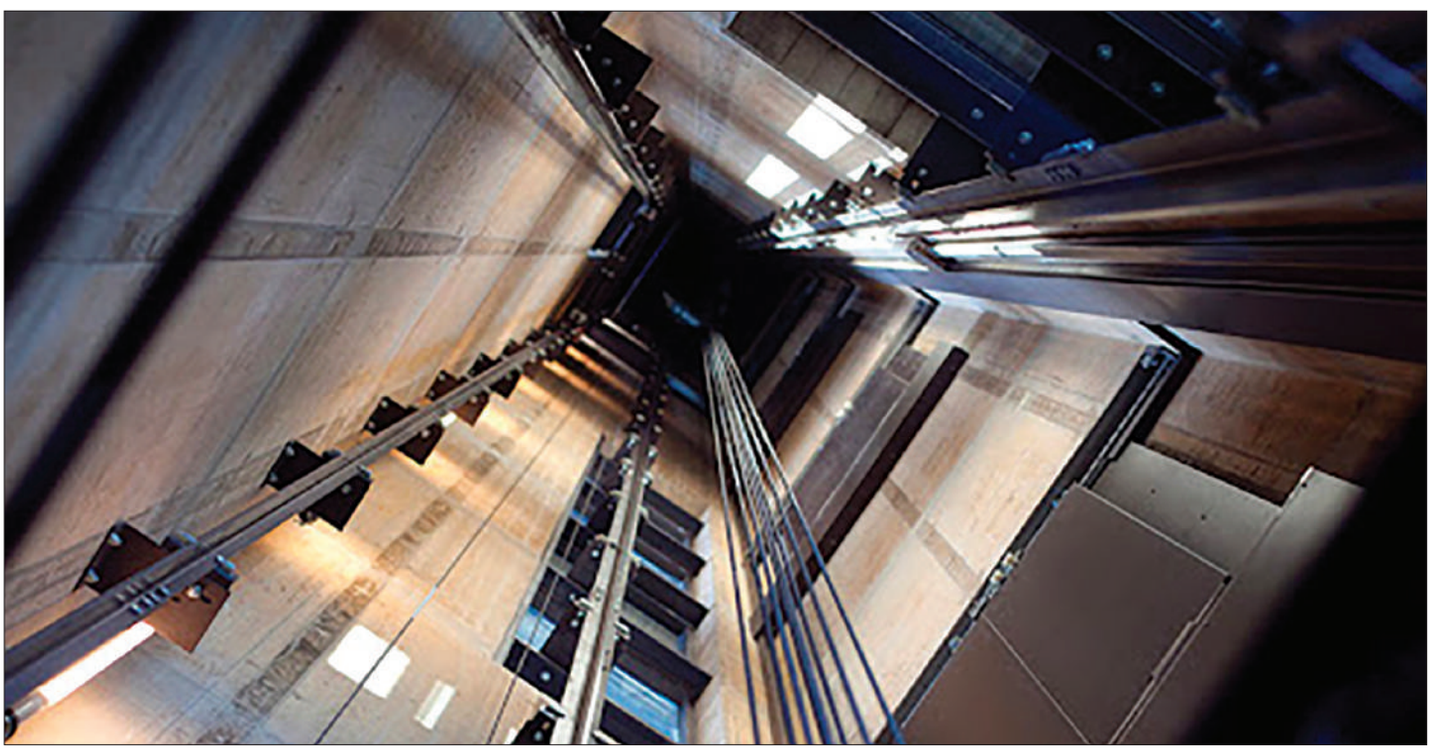
STANDARDS: EN 81-20 EN 81-50
IEC 60947-5-1
IEC 60947-5-5
EN ISO 13849-1
EN ISO 13849-2

Download
Instruction sheet – CE declaration

COMEPI Srl has long been manufacturing and marketing products that are widely used in the lift industry.
Our high-quality products are the result of over fifty years of expertise and production efficiency that make COMEPI one of the top-performing and strongest realities on the international scene. The MADE IN ITALY spirit has always characterized the company, which designs, manufactures, and assembles their devices, while relying on local suppliers who guarantee quality raw materials suitable for all kinds of applications.
Our designers and engineers' expertise and skill result in the unceasing innovation of our products and support to our customers while studying and realizing customized solutions.
This catalog combines a selection of historical products, largely deployed in the lift industry, and an array of specific devices of recent development. This mix of tradition and innovation makes the COMEPI range one of the richest and most important on the market. However, the product selection in this catalog does not cover all that COMEPI has to offer. Hence, we invite you to refer to our General Catalog and browse our website to learn more.

NEW EUROPEAN LIFT STANDARDS EN 81-20 / EN 81-50

Two new European Standards were released in 2014 to regulate both the construction of lifts and the manufacturing of components to be used in passenger and goods passenger lifts.
Standard EN 81-20 sets out the technical requirements. Standard EN 81-50 sets out design rules, calculations and the tests of lift components.
The aforesaid two standards came into effect as of 1st September 2017 and remain in force.
The COMEPI products described in this catalog have all been validated and certified according to the current product standards, with special attention to their compliance and requirements concerning applications in passenger and goods passenger lifts.



Lift Devices

Positioning

SPEED
LIMITERS

LIMIT SWITCHES
AP, DP Series

ROPE-OPERATED
Limit Switches

ACCESSORIES

DOOR
CONTACTS

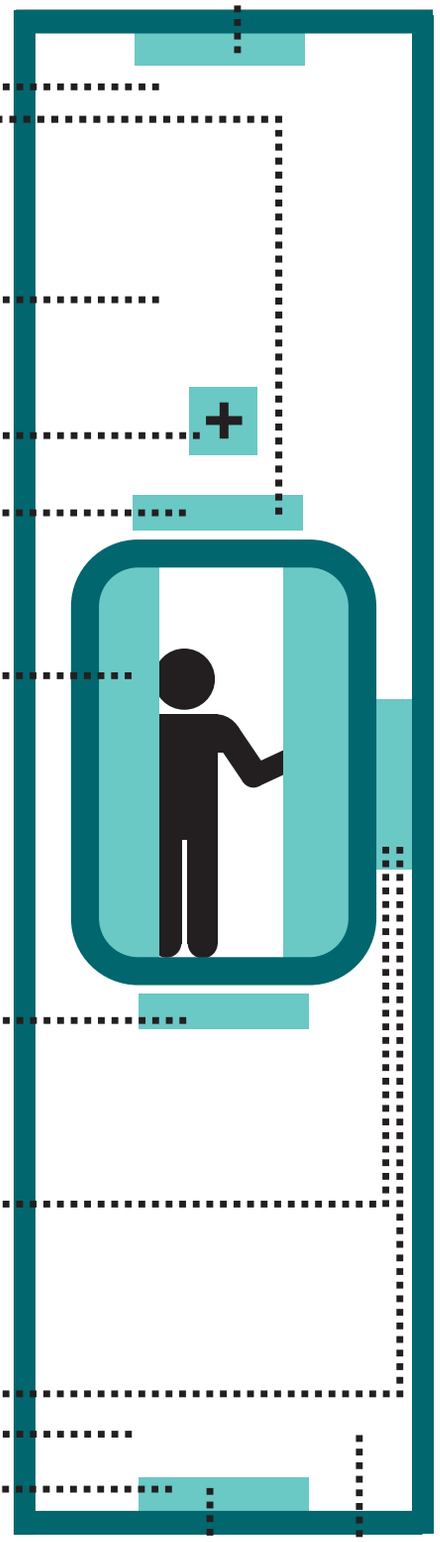
PROXIMITY
SENSORS

ENCLOSURES
WITH
PUSHBUTTONS
SL SERIES

SAFETY
MODULES

LED
LAMPS

LIMIT SWITCHES
WITH MANUAL RESET



CAR TOP
DEVICES

UNDER CAR
DEVICES

PIT BOTTOM
DEVICES

SHAFT LIFT
DEVICES

DOOR
SWITCHES

SPEED
LIMITERS

ALARM AND
CONTROL DEVICES

ACCESSORIES

Lift Devices

Products

1

Limit switches with thermoplastic enclosures and sized to conform to the EN 50047 standard or with multiple cable inlets. Series AP and DP are definitely an excellent solution in terms of both cost and customization thanks to the wide selection of actuators and contact configurations.

2

Devices to safety check the door position of passanger and goods passanger lifts. Equipped with positive opening and protected operation mechanisms with the IP67 protection degree to ensure reliability and safety in any type of application.

3

Safety devices with separated actuator available in different sizes and with plastic or metal enclosures. They can also be configured with a number of contact versions. These products are the simplest and cheapest solution to safely monitor the condition of doors and guards.

4

Limit switches with plastic casing equipped with a remote reset system made by a solenoid very useful in many applications where the manual consent is required to reset the circuit, but may can be difficult to manually unlock the device.

5

A specific limit switch for application in lift speed limiters. It complies with the market size standards. Configuration 1NO+1NC o 2NC. Manual reset.

6

Limit switches with plastic or metal enclosure, equipped with manual reset and diverse configuration for contact and actuator. These devices are ideal whenever applications require manual consent before resetting the control circuit that was cut off following the limit switch actuation.

Limit Switches
30mm - AP Series
50mm - DP Series
1

Limit Switches
AP_T80 Series
DP_T80 Series
2

Limit Switches with Separate Actuator
SP_K10 Series
SM_K10 Series
3

Limit Switches
HP Series
4

Limit Switches
AP1R002 Series
5

Limit Switches
AP_R / AM_R Series
AP_R / DM_R Series
6

COMEPI

Lift Devices
Products

7

Rope-operated limit switches that are ideal to ensure the lighting control in the lift car across its whole length.

8

A wide range of inductive sensors, made accordiong the most used market standards. ICS inductive sensors are suitable for many applications, including elevators and escalators.

9

From 40 years of experience in command units and emergency stops, the new growing product series, with new enclosures and pushbuttons made for the specific lift market .

10

Safety module designed to be used in the lift industry for car leveling with the floor and to control both limit switches and emergency stops.
Compliant with the requirements of the LIFT Directive 2014/33/EU and the EN 81-20 and EN 81-50 Standards.

11

LED lamps with clip or magnetic fixing and universal feed.

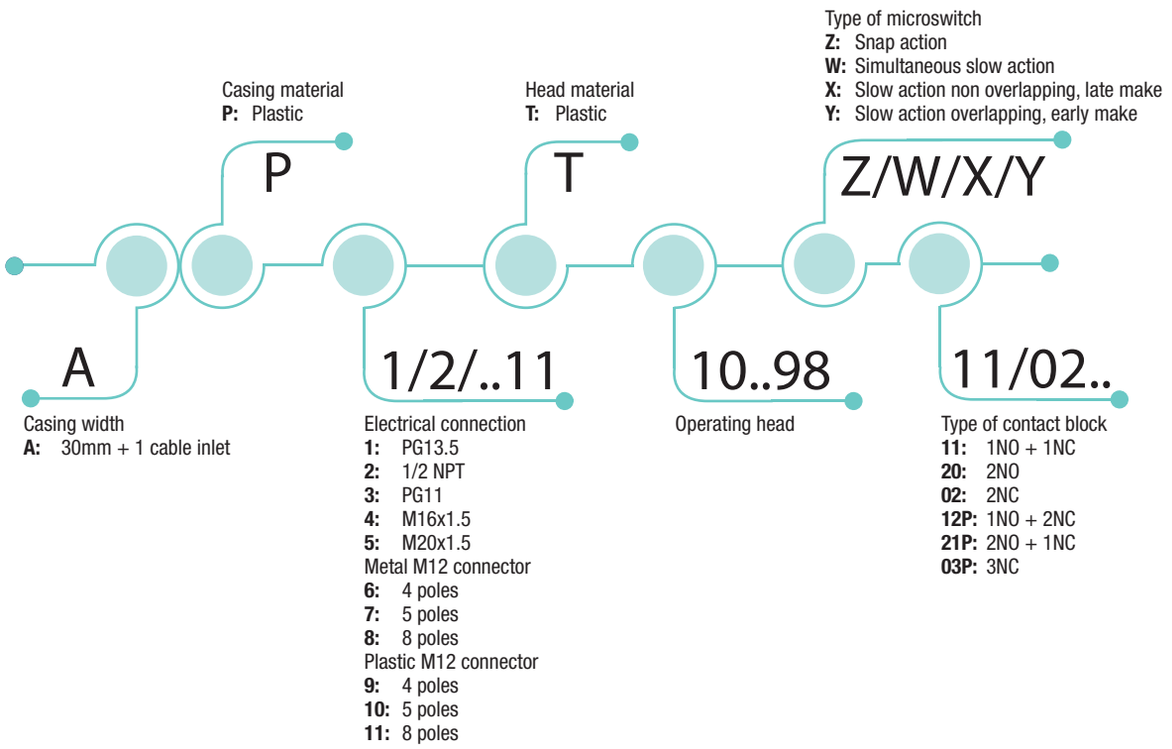
12

Thermoplastic adaptor to fix 22 mm control units on a DIN bar. It's the ideal solution to use pushbuttons and operating selector switches inside the electrical panels.

Limit Switches **AP series**
Summary

For more information:

APPROVALS: UL 508 / CSA C22-2 N. 14 / 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 4 x ∅3 screws

03 Casing:
- 30 mm. width with standardized dimensions acc. to EN 50047

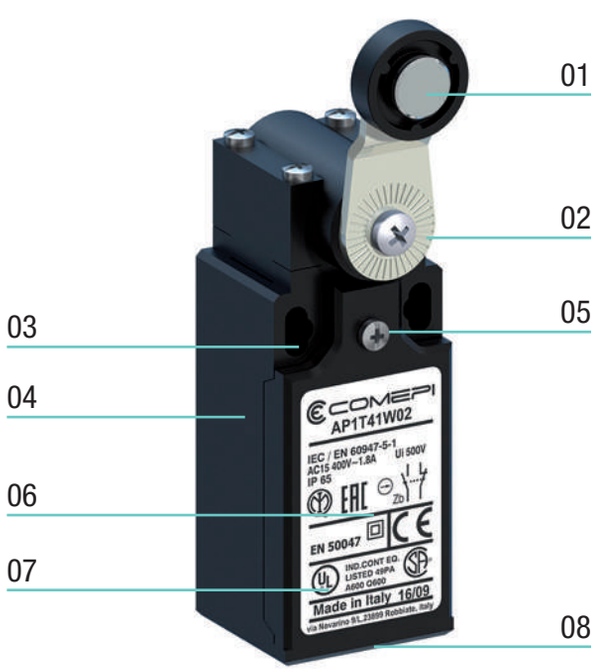
04 Mounting screws
- 2 x M4 screws on top part

05 Cover
- 1 screw ∅3 pozidriv 1

06 Contact Block
- Positive opening operation
- Snap action or slow action
- Electrically separated contacts

07 Connecting terminals
- Block of 2 contacts: M3.5 (+, –) pozidriv 2 screw
- Block of 3 contacts: M3 (+, –) screw
- Screw head with captive cable clamp
- Markings conform with IEC 60947-1, IEC 60947-5-1 standards

08 Electrical connection
- 1 x threaded cable entry suitable for cable gland, M12 connector or DEUTSCH connector



Limit Switches **AP series**
Description

APPLICATIONS

Easy to use, electromechanical limit switches offer specific qualities:

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

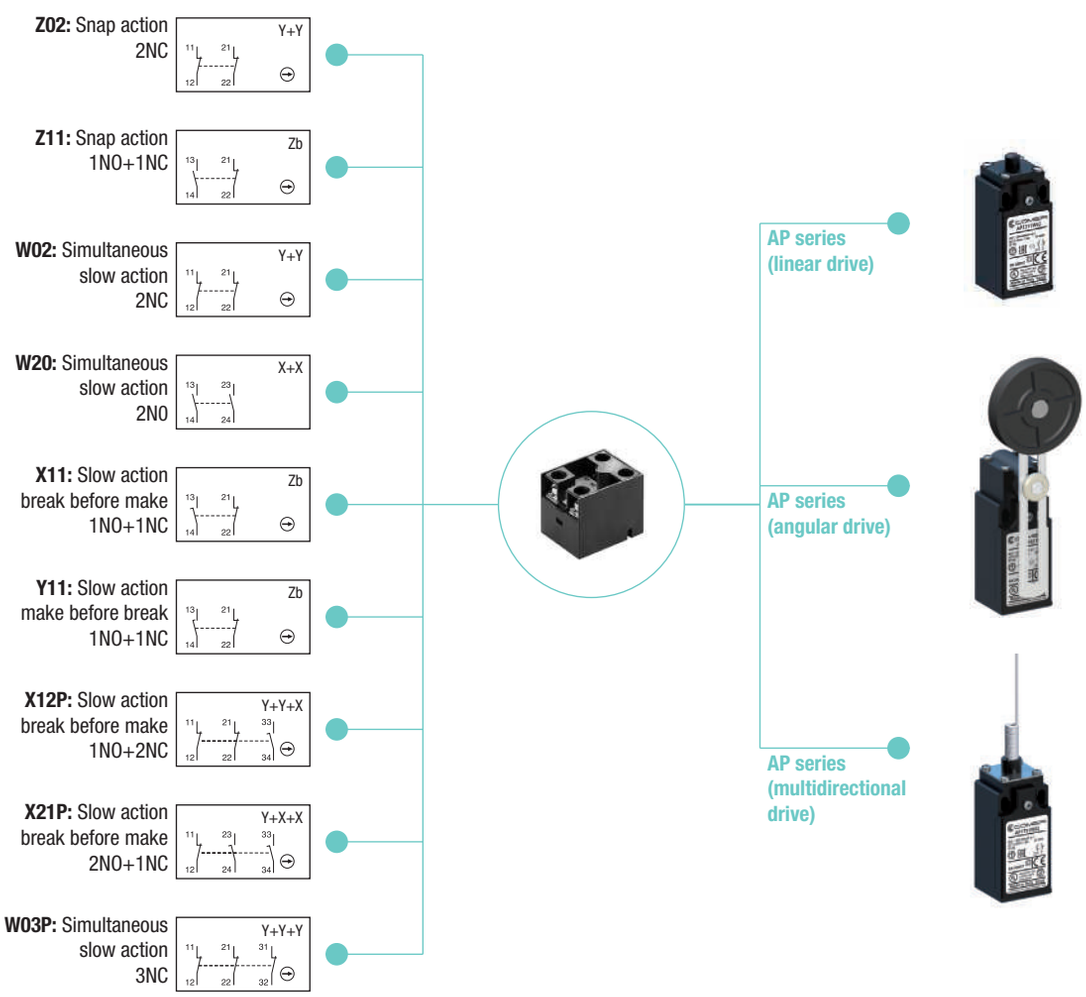
They are in conformity with EN 81-20 and EN 81-50 standards:

- Safety contacts with positive opening operations according to IEC 60947-5-1 annex K
- Mecanical durability > 10M operations
- IP protection degree > IP 4X

DESCRIPTION

Limit switches, which are made of reinforced UL-VO thermoplastic fiber-glass, offer double insulation ⧈ and a degree of protection of IP65.

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.

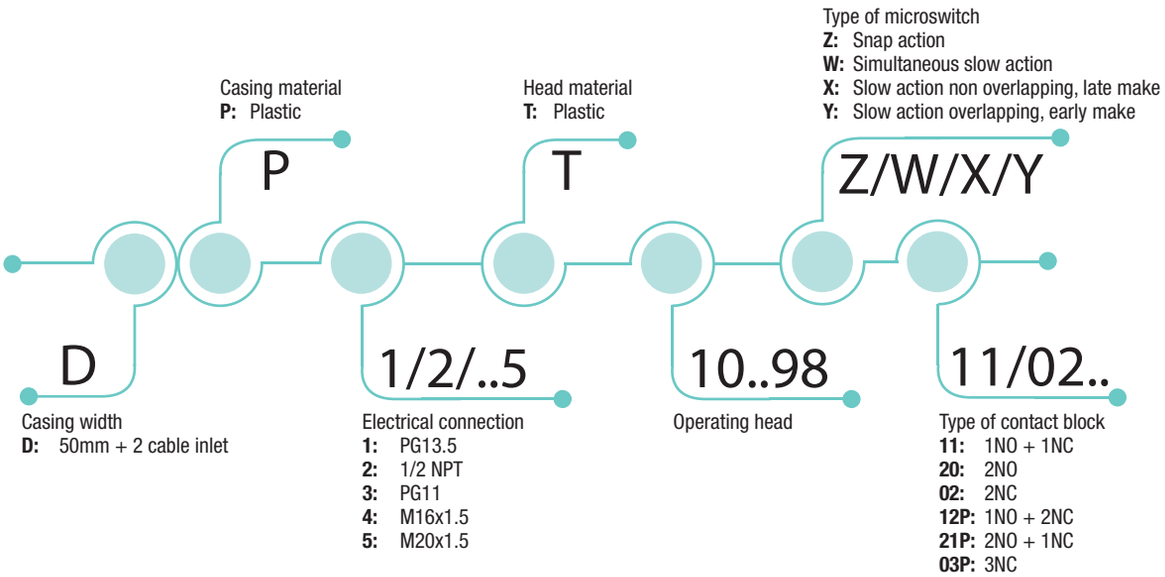


Limit Switches **DP series**

Summary

For more information:

APPROVALS: UL 508 / CSA C22-2 N. 14 / 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 4 x ∅3 screws

03 Casing:
- 50 mm. width

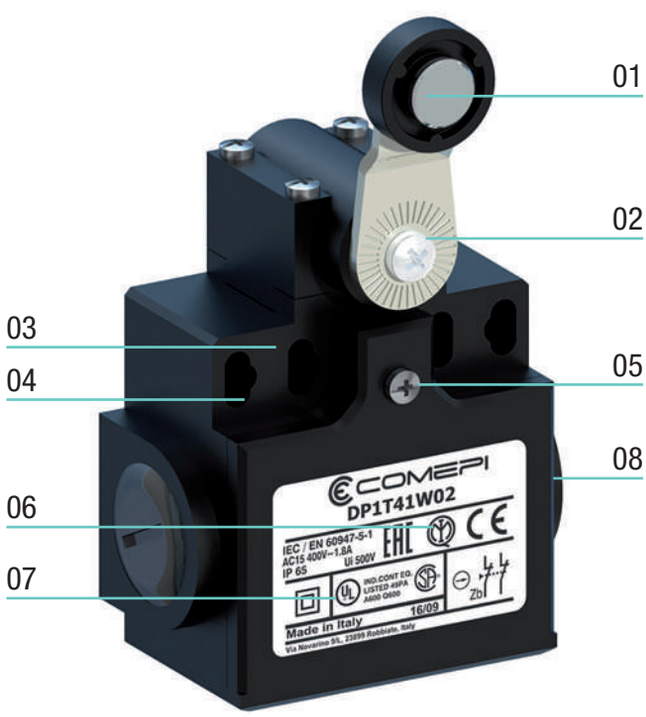
04 Mounting screws
- 2 or 4 x M4 screws on top part

05 Cover
- 1 screw ∅3 pozidriv 1

06 Contact Block
- Positive opening operation
- Snap action or slow action
- Electrically separated contacts

07 Connecting terminals
- Block of 2 contacts: M3.5 (+, –) pozidriv 2 screw
- Block of 3 contacts: M3 (+, –) screw
- Screw head with captive cable clamp
- Markings conform with IEC 60947-1, IEC 60947-5-1 standards

08 Electrical connection
- 2 x threaded cable inlets suitable for cable gland



Limit Switches **DP series**
Description

APPLICATIONS

Easy to use, electromechanical limit switches offer specific qualities:

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

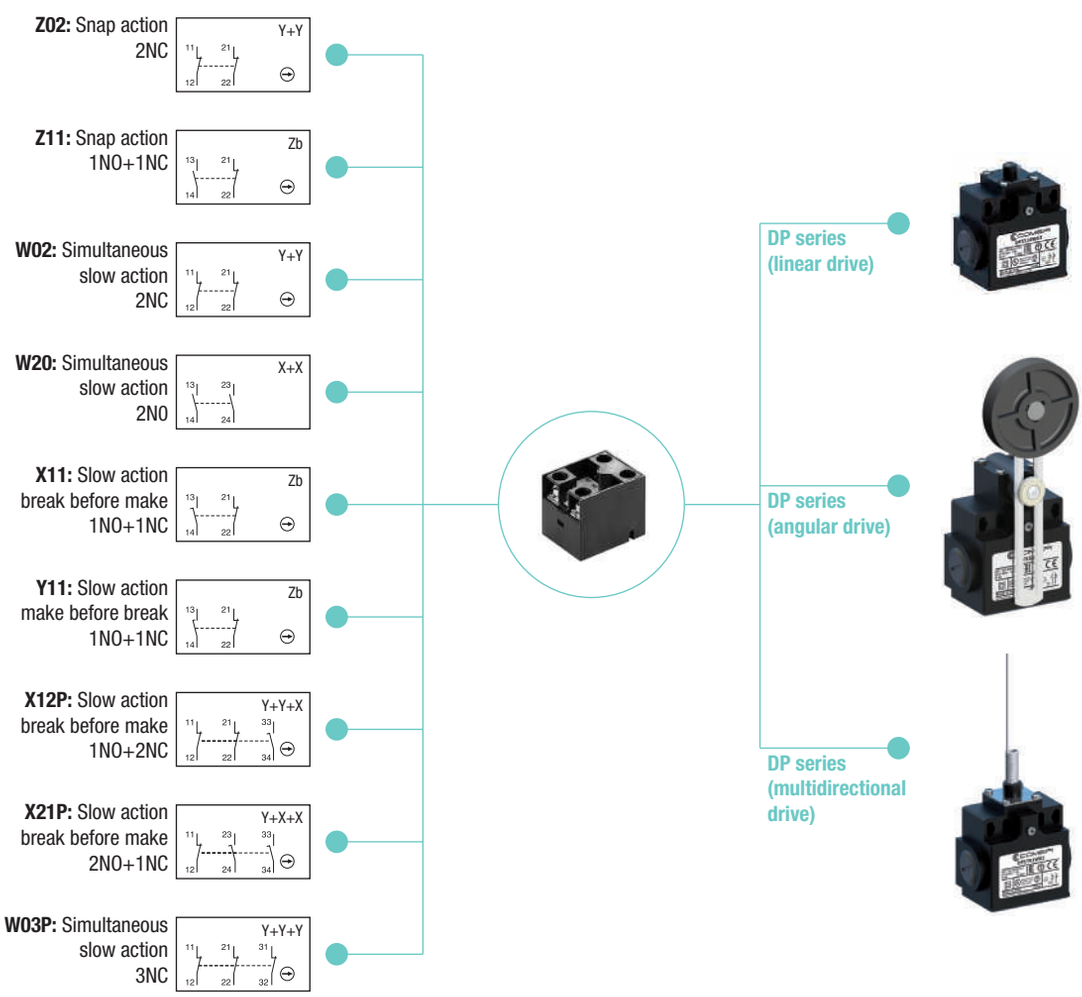
They are in conformity with EN 81-20 and EN 81-50 standards:

- Safety contacts with positive opening operations according to IEC 60947-5-1 annex K
- Mecanical durability > 10M operations
- IP protection degree > IP 4X

DESCRIPTION

Limit switches, which are made of reinforced UL-VO thermoplastic fiber-glass, offer double insulation ⧈ and a degree of protection of IP65.

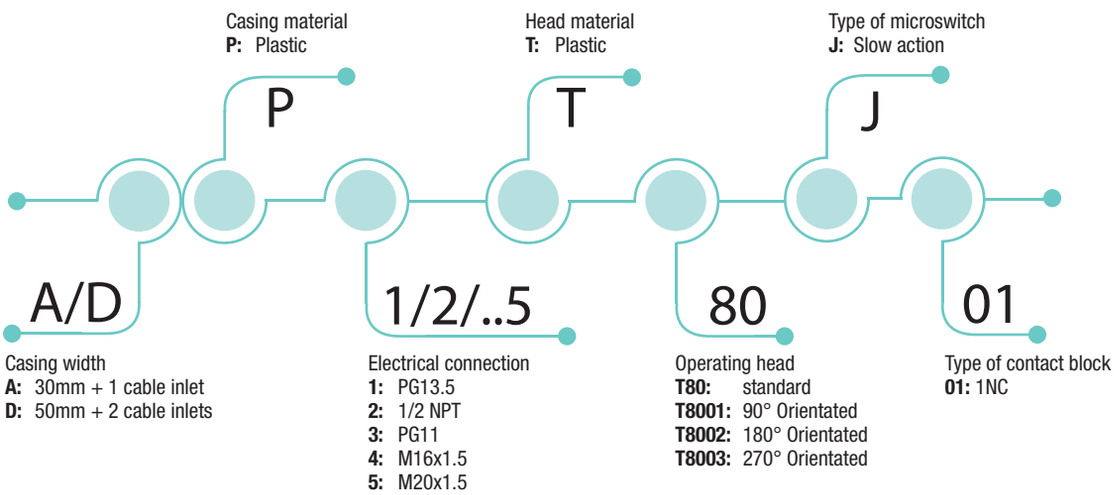
They comply with the requirements of European Directives (Low Voltage and RoHS) and are conform to European and International Standards.
The CE declaration of these products are available in the download section of website www.comepi.it or by writing to the following email address: tecnico@comepi.it
DDC02 - Limit Switches.



Door Switches **T_80 Series**
Summary

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

CB Scheme according to IEC 60947-5-1 - Certificate number DK-114686-UL
UL Certification for FQMW Product category (elevator control and accessories) FILE E518918



example: AP1T80J01
The feasibility of a code number does not mean the effective actuability of a product. Please contact our sales office.

HOW IS IT MADE?

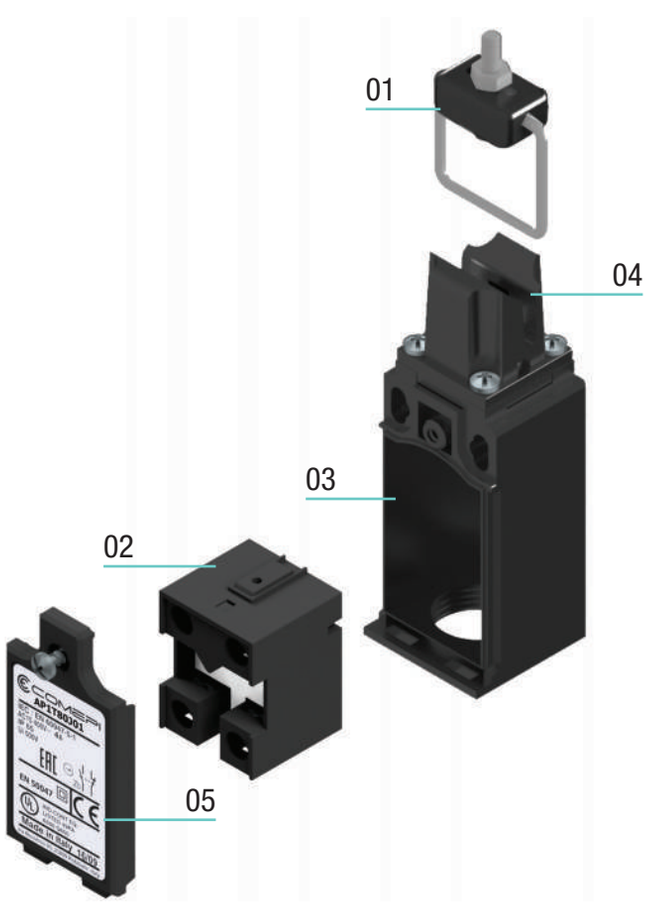
01 Actuator
- Adjustable actuator included

02 Contact block
- Positive opening 1NC

03 Casing
- Thermoplastic body
- Size conform to dimensional market standards

04 Operating head
- 90° orientable

05 Label



DOOR SWITCH

– Suitable for lift applications
– Conform to EN 81-20 and EN 81-50
– Positive opening operations
– 1M operations mechanical durability
– P67
– Suitable for harsh conditions

Door Switches **T_80 Series**

Description

The T80 device is a door contact particularly indicated for external lifts or emergency lifts, thanks to its high IP67 protection degree. It is conform to EN 81-20 and EN 81-50 standards, also thanks to positive opening, that guarantees the possibility of safely controlling the automatic elevator doors. Easily orientable and highly customizable, this T80 door switch is the best solution for every kind of installation. The adjustable actuator is included with the main device.

They are in conformity with EN 81-20 and EN 81-50 standards:

- Safety contacts with positive opening operations according to IEC 60947-5-1 annex K
- Mecanical durability > 10M operations
- IP protection degree > IP 4X

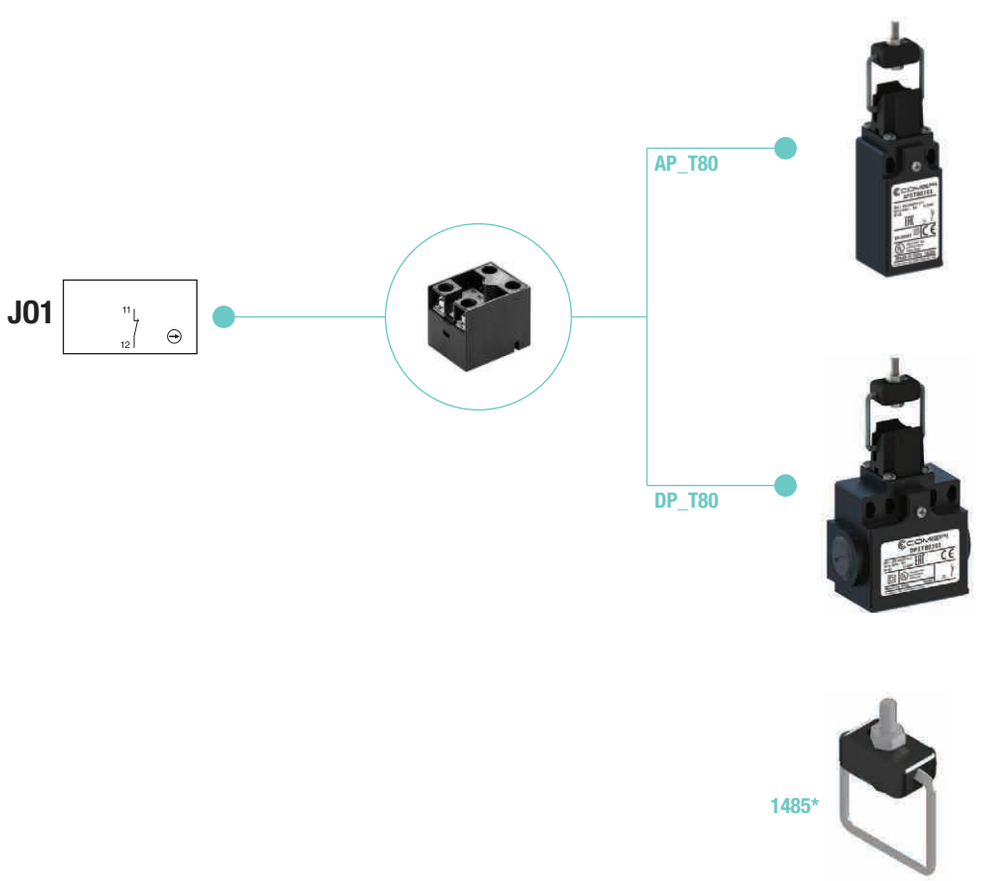
MAIN APPLICATIONS

- Emergency lifts
- Fire lifts
- External lifts

DESCRIPTION

Door switch, which are made of reinforced UL-VO thermoplastic fiber-glass, offer double insulation ⧈ and a degree of protection of IP67.

They comply with the requirements of European Directives (Low Voltage, Lift 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
DDC30 - Limit switches for lift applications.



*The actuator is included with the limit switch

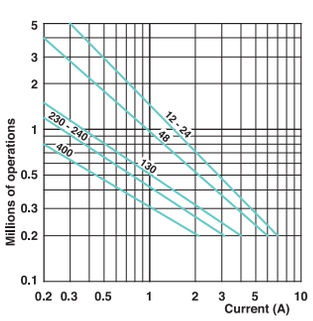
Door Switches **T_80 Series**
Technical Data

			Lift door switch
Standards			IEC 60947-5-1 EN 60947-5-1
Certifications - Approvals			CE - UL - EAC
Air temperature near the device			
– during operation		°C	– 25 ... + 70
– for storage		°C	– 30 ... + 80
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)			IP67

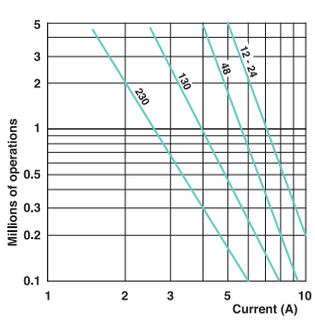
Electrical Data

Rated insulation voltage U_i - according to IEC 60947-1 and EN 60947-1 - according to UL 508 and CSA C22-2 n° 14			500V (pollution degree 3) 415Vac 4A Pilot Duty / 24Vdc 3A Pilot Duty
Rated impulse withstand voltage U_{imp} (according to IEC 60947-1 and EN 60947-1)		kV	6
Conventional free air thermal current I_{th} (according to IEC 60947-5-1) $\theta < 40$ °C		A	10
Short-circuit protection U_e < 500 V a.c. - gG (gl) type fuses		A	10
Rated operational current			
I_e / AC-15 (according to IEC 60947-5-1)	24 V - 50/60 Hz	A	10
	120 V - 50/60 Hz	A	6
	400 V - 50/60 Hz	A	4
I_e / DC-13 (according to IEC 60947-5-1)	24 V - d.c.	A	6
	125 V - d.c.	A	0.55
	250 V - d.c.	A	0.4
Switching frequency		Cycles/h	3600
Load factor			0.5
Resistance between contacts		mΩ	25
Connecting terminals			M3.5 (+, –) pozidriv 2 screw with cable clamp (M3 for 3 poles contacts type)
Terminal for protective conductor			–
Recommended tightening torque			**Plastic**
Cover			0,5Nm, max 0,8
Head			0,5Nm, max 0,8
Microswitch			0,8Nm, max 0,9
Connecting capacity		1 or 2 x mm^2	0.34 ... 2.5 (0.34... 1.5 for 3 poles contacts type)
Terminal marking			According to IEC 60947-5-1
Mechanical durability			1 millions of operations
Electrical durability (according to IEC 60947-5-1)			Utilization categories AC-15 and DC-13 (Load factor of 0.5 according to curves below)

AC-15 - Snap action



AC-15 - Slow action



DC-13		**Snap action**	**Slow action**
		Power breaking for a durability of 5 million operating cycles	
Voltage	24 V	9.5 W	12 W
Voltage	48 V	6.8 W	9 W
Voltage	110 V	3.6 W	6 W

Door Switches **T_80 Series**
Technical Data

IMPLEMENTATION

Operating head orientation
The head can be rotated each 90°. Recommended tightening torque 0,5 Nm (max 0,8 Nm).

AP•T80J01
DP•T80J01

AP•T8001J01
DP•T8001J01

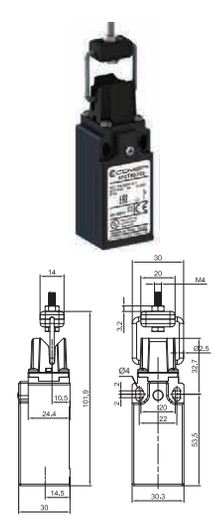
AP•T8002J01
DP•T8002J01

AP•T8003J01
DP•T8003J01

Electrical connection:
AP1: one cable inlet for PG 13,5 Cable Gland
AP2: one cable inlet by 1/2" NPT Plastic Adapter
AP3: one cable inlet for PG11 Cable Gland
AP4: one cable inlet for M16 x 1,5 Cable Gland
AP5: one cable inlet for M20 x 1,5 Cable Gland

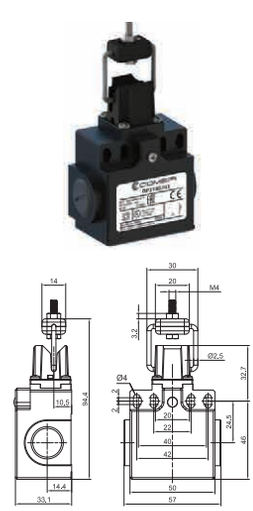
DP1: two cable inlet for PG 13,5 Cable Gland
DP2: two cable inlet by 1/2" NPT Plastic Adapter
DP3: two cable inlet for PG11 Cable Gland
DP4: two cable inlet for M16 x 1,5 Cable Gland
DP5: two cable inlet for M20 x 1,5 Cable Gland

AP - Plastic 30mm



Conformity EN50047
Min. actuating force 10N (20N ⊖)
Weight 70 g

DP - Plastic 50mm



Min. actuating force 10N (20N ⊖)
Weight 75 g

Contact Blocks

J01	(1NC)	AP•T80J01	DP•T80J01

Limit Switches with separate actuator

Summary

For more information:

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

S

Casing material
P: Plastic
M: Metal
M/P

null/D
Casing width
null: 30mm + 1 cable inlet
D: 50mm + 2 cable inlets /SDP), 3 cable inlets (SDM)

1/2/..8
Threaded cable entry
1: PG13.5
2: 1/2 NPT
3: PG11
4: M16x1.5
5: M20x1.5
M12 connector
6: 4 poles
7: 5 poles
8: 8 poles
Plastic M12 connector
9: 4 poles
10: 5 poles
11: 8 poles

K: Plastic head
K

10-80
Operating head
10: Adjustable head
80: Fully turnable head

Microswitch type
Z: Snap action
W: Simultaneous slow action
X: Slow action non overlapping, late make
Y: Slow action overlapping early make
Z/W/X/Y

11/02..
Type of contact block
11: 1NO + 1NC
02: 2NC
12P: 1NO + 2NC
21P: 2NO + 1NC
03P: 3NC

HOW IS IT MADE?

01 A variety of operating inox keys:
- Flat / Bent
- Shock absorbing
- Adjustable

02 Fixed or turnable head

03 Casing:
- SP/SM with dimensions acc. to EN 50047

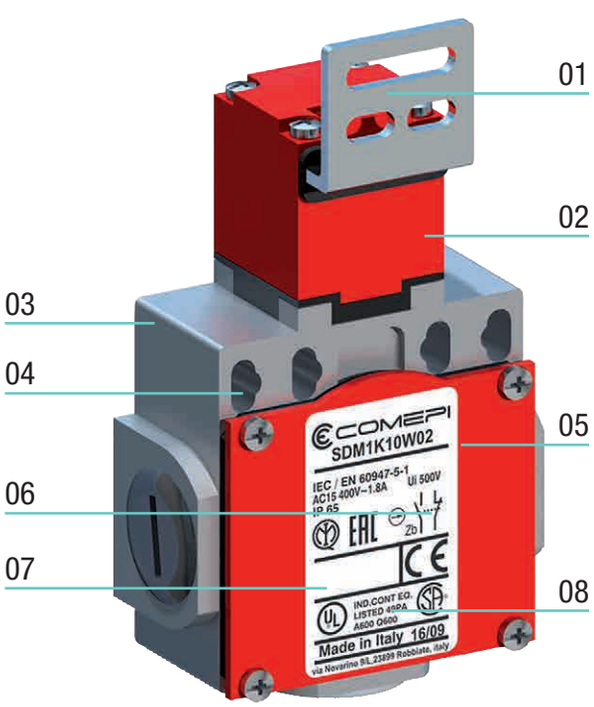
04 Mounting screws
- 2 x M4 screws on top part for SP/SM series
- 2 or 4 x M4 screws on top part for SDP/SDM series

05 Cover
- 1 screw ∅3 pozidriv 1 for SP/SDP series
- 3 screws ∅3 pozidriv 1 for SM series
- 4 screws ∅3 pozidriv 1 for SDM series

06 Contact Block
- Positive opening operation
- Snap action or slow action
- Electrically separated contacts

07 Connecting terminals
- 2 poles microswitch: M3.5 (+, –) pozidriv 2 screws
- 3 poles microswitch: M3 (+, –) screws
- Screw head with captive cable clamp
- Markings conform with IEC 60947-1, IEC 60947-5-1 standard

08 Electrical connection
- 1 x threaded cable inlet suitable for cable gland (SP/SM)
- 2 x threaded cable inlets suitable for cable gland (SDP)
- 3 x threaded cable inlets suitable for cable gland (SDM)
- 1 x M12 connector for pre-wired solutions (SP/SM)



example: SDM1K10W02. The feasibility of a code number does not mean the effective actuability of a product. Please contact our sales office.

Limit Switches with separate actuator
Description

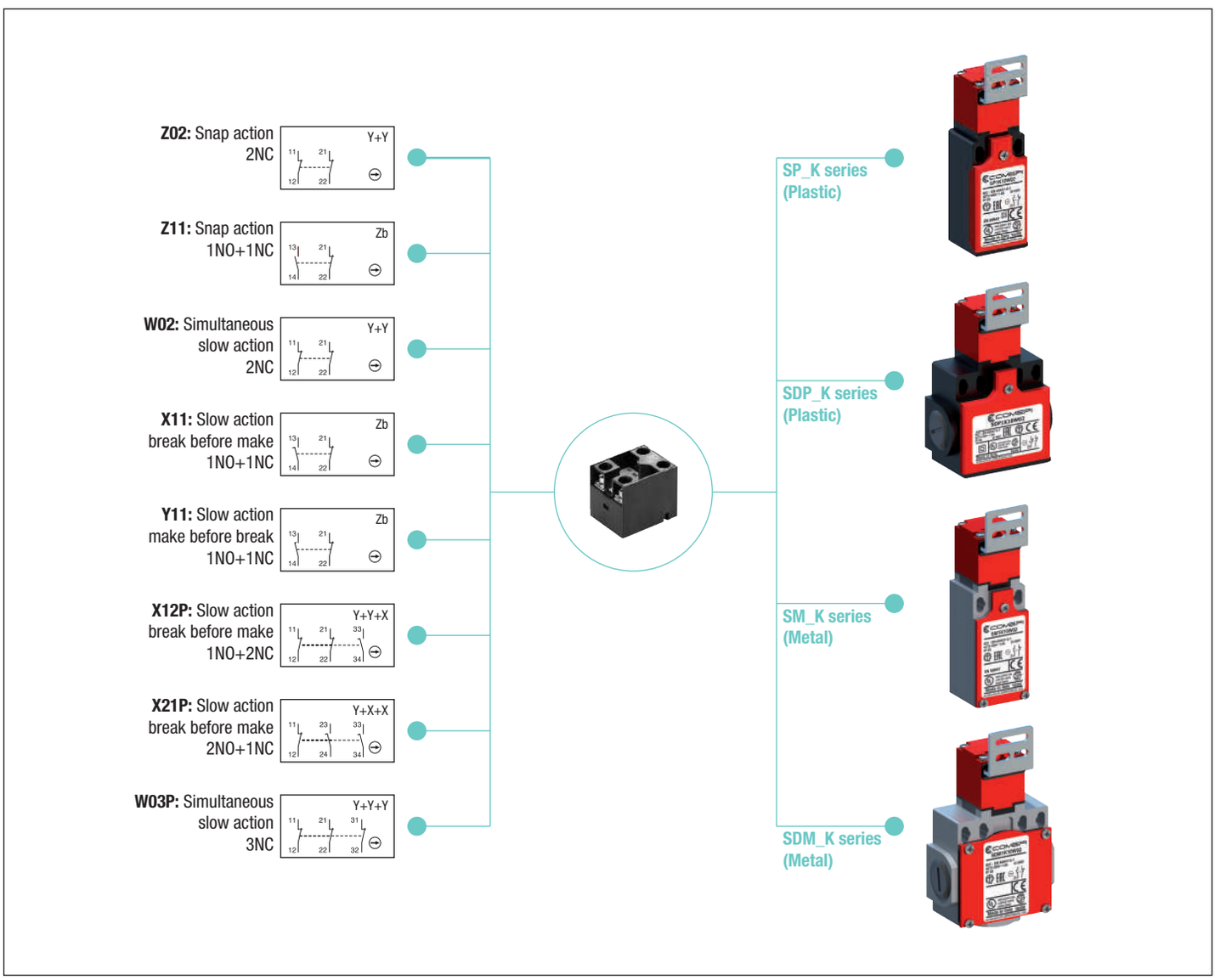
APPLICATIONS
Easy to use, the limit switches with small latch (key) offer specific qualities:
- Capability for strong current switching (conventional thermal current 10 A).
- Opening guaranteed of the "N.C." contact(s) when the small latch is withdrawn from the limit switch.
- Contact blocks with dependent action and positive opening operation of the "N.C." normally closed contact(s) (symbol ⊖).
- Electrically separated contacts.
- Precision on operation positions (consistency).
- Immunity to electromagnetic disturbances.

These specific features make the limit switches ideal for monitoring and protection of industrial machines without inertia in which downtime is less than access time to the dangerous area. Use on sliding or pivoting protectors (covers, cases, doors, grids, etc.).
- They contribute to protection of operators working on dangerous machines, by opening the control circuit. Withdrawal of the small latch (key) by opening the mobile protector causes immediate stopping of the machine drive.
- They comply with the requirements of European Directives (Low Voltage and Machines Directive) and are conform to European and international standards.

They are in conformity with EN 81-20 and EN 81-50 standards:
- Safety contacts with positive opening operations according to IEC 60947-5-1 annex K
- Mecanical durability > 10M operations
- IP protection degree > IP 4X

DESCRIPTION
Safety limit switches with small latch (key) of SP/SDP series are made of fibre-glass reinforced UL-V0 thermoplastic material, and they offer double insulation ⧈ and a degree of protection IP65. Safety limit switches of SM/SDM series are made of painted zamack and have a degree of protection IP66. All models are equipped with 1NO+1NC, 2NC, 1NO+2NC, 2NO+1NC or 3NC contact blocks with positive opening operation of the "N.C." contact(s).

They comply with the requirements of European Directives (Low Voltage, Machinery 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
DDC 03 - Safety Limit Switches.

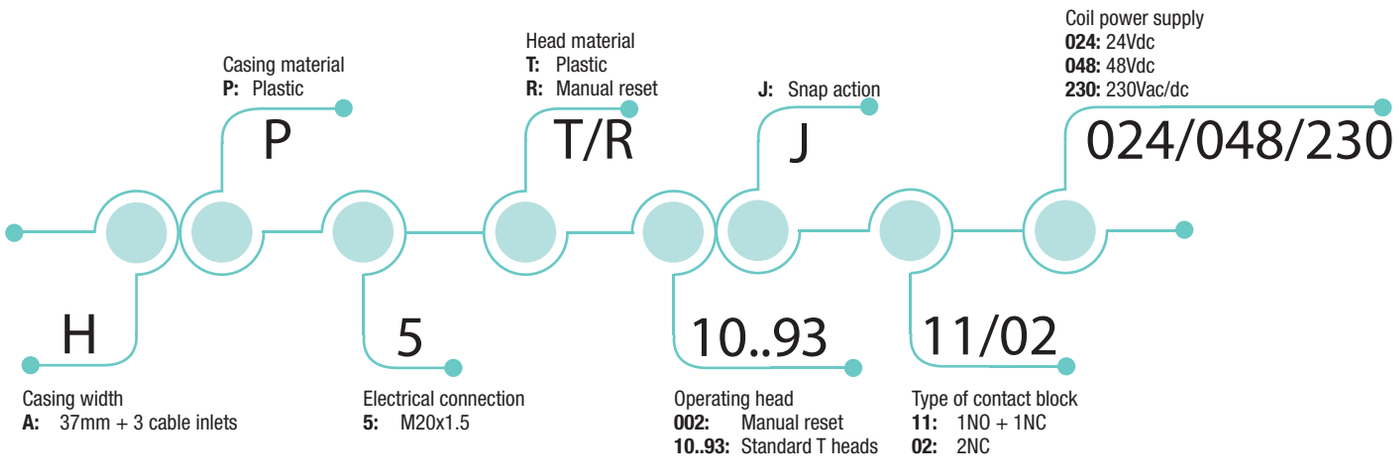


Speed Limiter Devices **HP series**

Summary

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

CB Scheme according to IEC 60947-5-1
UL Certification for FQMW Product category (elevator control and accessories) FILE E518918



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 4 x ∅3 screws

03 Casing:
- 37 mm. width with standardized dimensions acc. to EN 50047

04 Mounting screws
- 2 x M4 screws on top part

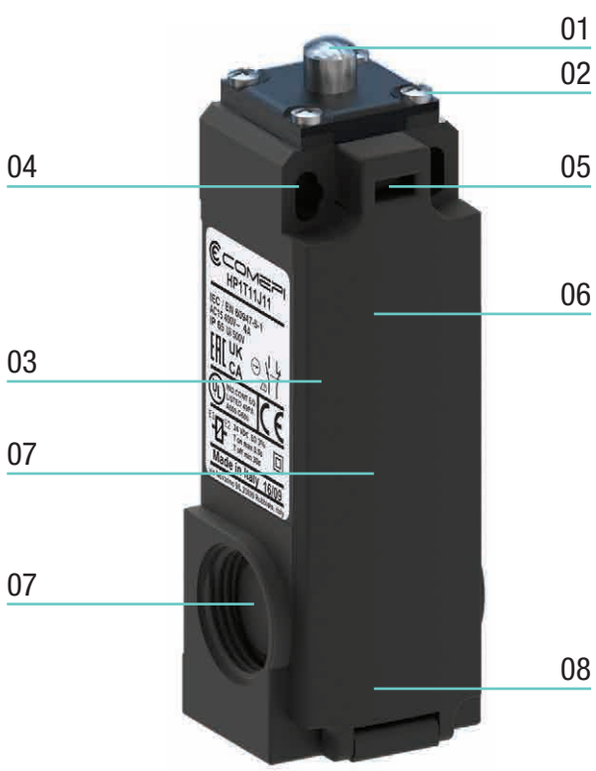
05 Cover
- latch closure

06 Coil
- the limit switch is equipped with an electromagnet that allows it to be re-enabled remotely

07 Contact Block
- Positive opening operation
- Snap action or slow action
- Electrically separated contacts

08 Connecting terminals
- Block of 2 contacts: M3.5 (+, –) pozidriv 2 screw
- Screw head with captive cable clamp
- Markings conform with IEC 60947-1, IEC 60947-5-1 standards

09 Electrical connection
- 3 x threaded cable entry M20x1.5 suitable for cable gland or M12 connector



Speed Limiter Devices **HP series**
Description

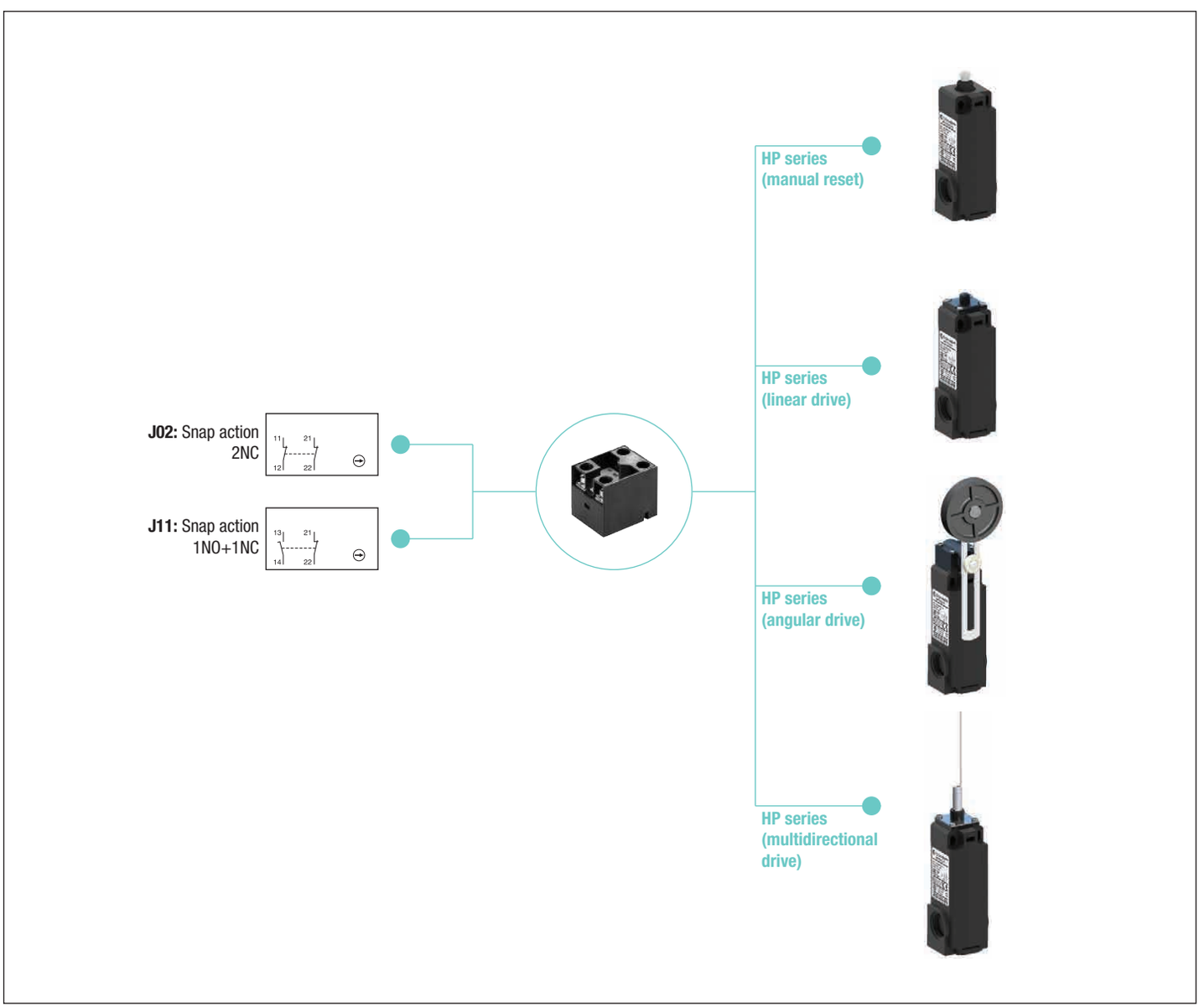
APPLICATIONS
Limit switches with plastic casing equipped with a remote reset system made by a solenoid very useful in many applications where the manual consent is required to reset the circuit, but may can be difficult to manually unlock the device

Easy to use, electromechanical limit switches offer specific qualities:
- Visible operation.
- Able to switch strong currents (10 A conventional thermal current).
- Electrically separated contacts.
- Precise operating points (consistency).
- Immune to electromagnetic disturbances.

They are in conformity with EN 81-20 and EN 81-50 standards:
- Safety contacts with positive opening operations according to IEC 60947-5-1 annex K
- Mecanical durability > 10M operations
- IP protection degree > IP 4X

DESCRIPTION
Limit switches, which are made of reinforced UL-V0 thermoplastic fiber-glass, offer double insulation ⧈ and a degree of protection of IP65.
They comply with the requirements of European Directives (Low Voltage, Lift 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
DDC31 - Remote Reset Limit Switches.



Speed Limiter Devices **HP series**
Technical Data

			HP Series
Standards			IEC 60947-5-1 - EN 60945-5-1 EN 81-20 EN 81-50
Certifications - Approvals			CE - UL
Air temperature near the device			
– during operation		°C	– 25 ... + 70
– for storage		°C	– 30 ... + 80
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 65

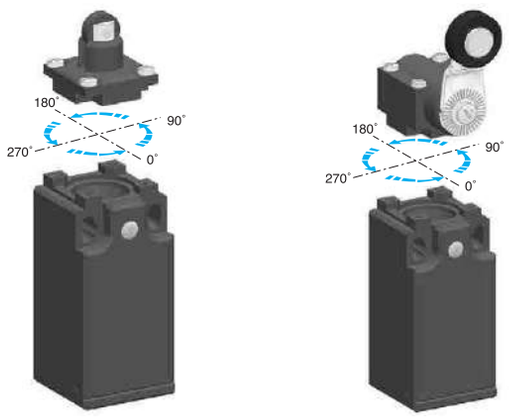
Electrical Data

Rated insulation voltage U_i			
- according to IEC 60947-1 and EN 60947-1			500V (J11) – 400V (J02)
- according to UL 508 and CSA C22-2 n° 14			A600 Q600 (J11) – A300 Q300 (J02)
Pollution degree			3
Rated impulse withstand voltage U_{imp} (according to IEC 60947-1 and EN 60947-1)		kV	6
Conventional free air thermal current I_{th} (according to IEC 60947-5-1) $\theta < 40$ °C		A	10
Short-circuit protection U_e < 500 V a.c. - gG (gl) type fuses		A	4
Rated conditional short-circuit current (according to IEC 60947-5-1)		kA	1
Rated operational current			
I_e / AC-15 (according to IEC 60947-5-1)	400 V - 50/60 Hz	A	4
I_e / DC-13 (according to IEC 60947-5-1)	24 V - 50/60 Hz	A	3
Solenoid supply voltage	24Vac/dc or 230Vac		+/-10%
Solenoid ON time			Min. 0,2s – Max. 0,5s WARNING: do not supply the solenoid for an higher time than 0,5s
Solenoid OFF time			Min. 30s
Switching frequency			Max. 119 operations/hour
Resistance between contacts		mΩ	25
Connecting terminals			M3.5 (+,-) pozidriv 2 screws with cable clamp
Recommended tightening torque			**Plastic**
Head			0,5Nm – max. 0,8Nm
Microswitch and solenoid			0,8Nm – max. 0,9Nm
Connecting capacity	1 or 2 x mm²		0,75 … 2,5
Terminal markings			According to IEC 60947-5-1
Mechanical durability			50.000 operations
B10d			100.000 operations (NC contacts)

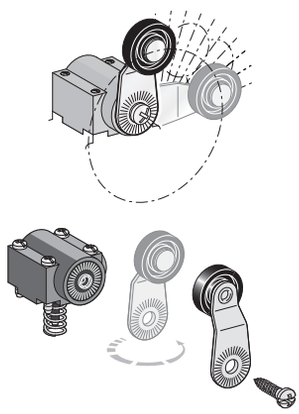
Speed Limiter Devices **HP series**
Technical Data

IMPLEMENTATION

Operating head orientation
The head can be rotated each 90°.
Recommended tightening torque 0,5 Nm (max 0,8 Nm).

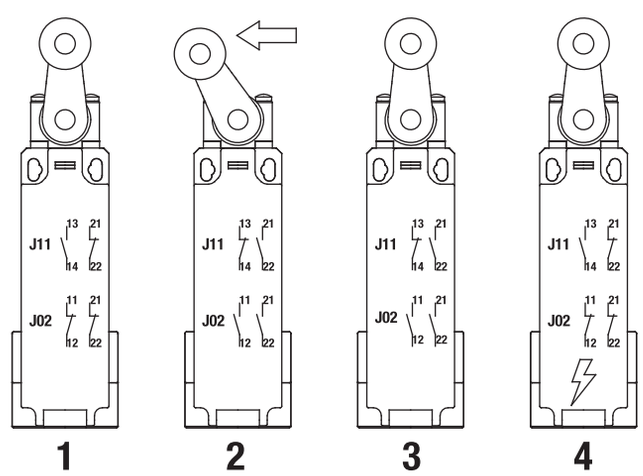


Lever adjustment
The lever of the angular actuators can be adjusted every 10° and round turned in order to obtain the maximum flexibility on the working plan.
Recommended tightening torque 0,5 Nm (max 0,8 Nm).



OPERATING PRINCIPLE

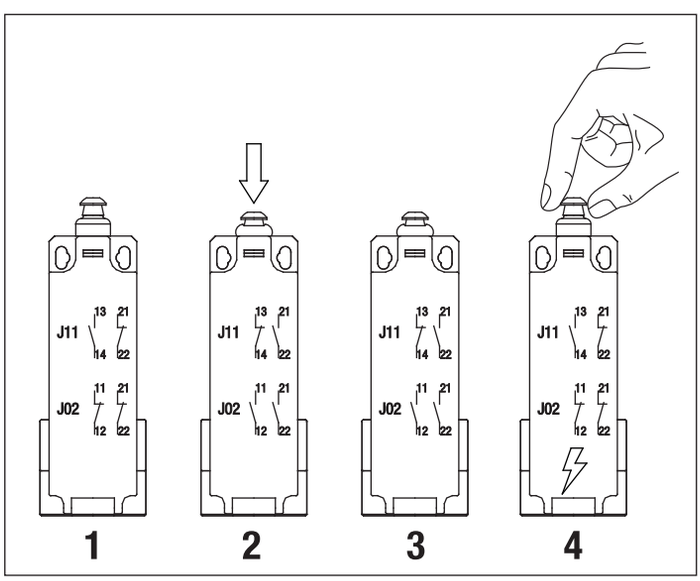
Standard versions



1. Limit switch not actuated
2. Activation
3. Limit switch actuated and comutation*
4. Reset by solenoid

* NC contact with positive opening according to IEC 60947-5-1 annex K

MANUAL RESET R002



1. Limit switch not actuated
2. Activation
3. Limit switch actuated and comutation*
4. Reset by solenoid or manual

For further informations, please contact our technical department.

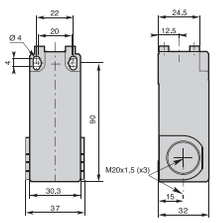
Limit Switches **HP series**

Double insulation - Plastic casing IP65 - 37 mm. width

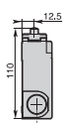
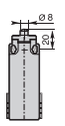
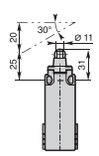
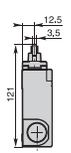
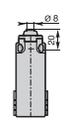
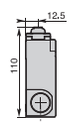
Electrical connection:

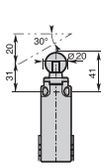
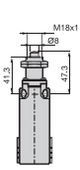
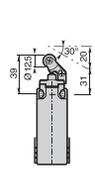
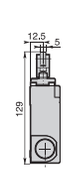
HP5: Three cable inlet for M20 x 1,5 Cable Gland

N.B. solenoid supply voltage must be added at the end of each item code
Example: HP5T14J11-024



Contact Blocks

		T1• - Plain plunger T10: nylon plunger	T11: metal plunger	T1• - Roller plunger T12: metal roller	T13: nylon roller	T14 - Metal plunger with dust protection cup
						
						 
	Conformity EN50047					
	Min. actuating force	15N (30N →)		12N (30N →)		15N (30N →)
	Weight	70 g		75 g		70 g
J11	(1NO + 1NC)	HP•T10J11	HP•T11J11	HP•T12J11	HP•T13J11	HP•T14J11
J02	(2NC)	HP•T10J02	HP•T11J02	HP•T12J02	HP•T13J02	HP•T14J02

		T16 - Nylon roller plunger	T21• - Plain plunger T21: M18x1 fixing nuts	T2101: M12x1 fixing nuts	T3• - Plastic roller lever T30: on plastic plunger	T31: on metal plunger
						
						
	Min. actuating force	15N (30N →)			Conformity EN50047 Min. actuating force	7N (24N →)
	Weight	80 g			Weight	75 g
J11	(1NO+1NC)	HP•T16J11	HP•T21J11	HP•T2101J11	HP•T30J11	HP•T31J11
J02	(2NC)	HP•T16J02	HP•T21J02	HP•T2101J02	HP•T30J02	HP•T31J02

Operation diagrams: page 80 - All dimensions are in mm

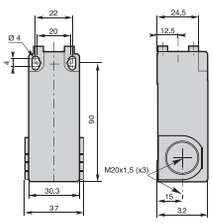
Limit Switches **HP series**

Double insulation - Plastic casing IP65 - 37 mm. width

Electrical connection:

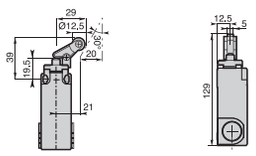
HP5: Three cable inlet for M20 x 1,5 Cable Gland

N.B. solenoid supply voltage must be added at the end of each item code
Example: HP5T14J11-024



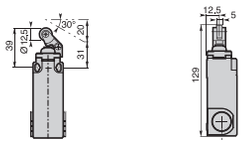
T3• - Plastic roller lever

T32: on metal plunger T34: on plastic plunger



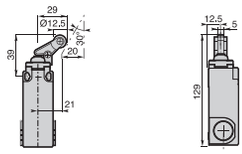
Min. actuating force 7N (24N ⇾)
Weight 80 g

T35 - Plastic roller lever on metal plunger with dust protection cup



Conformity EN50047
Min. actuating force 7N (24N ⇾)
Weight 75 g

T36 - Plastic roller lever on metal plunger with dust protection cup

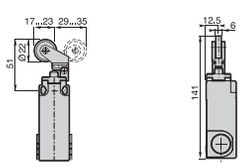


Min. actuating force 7N (24N ⇾)
Weight 80 g

Contact Blocks

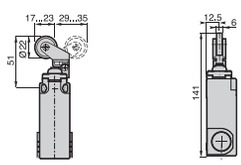
J11	(1NO + 1NC)	HP•T32J11	HP•T34J11	HP•T35J11	HP•T36J11
J02	(2NC)	HP•T32J02	HP•T34J02	HP•T35J02	HP•T36J02

T38 - Adjustable plastic roller lever on metal plunger



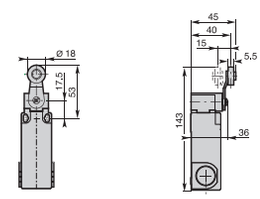
Conformity EN50047
Min. actuating force 7N (24N ⇾)
Weight 80 g

T39 - Adjustable plastic roller lever on metal plunger with dust protection cup



Conformity EN50047
Min. actuating force 7N (24N ⇾)
Weight 80 g

T41 - Ø 18 nylon roller lever



Conformity EN50047
Min. actuating torque 0,10Nm (0,32Nm ⇾)
Weight 95 g

Contact Blocks

J11	(1NO+1NC)	HP•T38J11	HP•T39J11	HP•T41J11	
J02	(2NC)	HP•T38J02	HP•T39J02	HP•T41J02	

Operation diagrams: page 80 - All dimensions are in mm

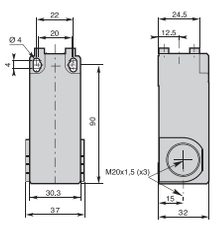
Limit Switches **HP series**

Double insulation - Plastic casing IP65 - 37 mm. width

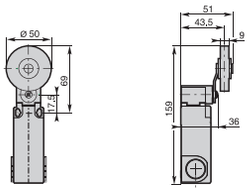
Electrical connection:

HP5: Three cable inlet for M20 x 1,5 Cable Gland

N.B. solenoid supply voltage must be added at the end of each item code
Example: HP5T14J11-024

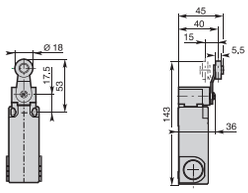


T42 - Ø 50 rubber roller lever



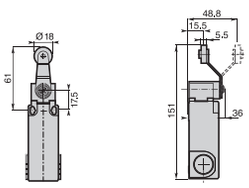
Min. actuating torque 0,10Nm (0,32Nm ⇾)
Weight 115 g

T43 - Ø 18 metal roller lever



Conformity EN50047
Min. actuating torque 0,10Nm (0,32Nm ⇾)
Weight 100 g

T45 - Ø 18 nylon roller lever

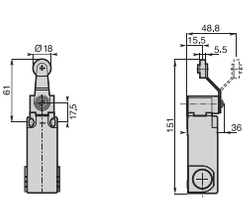


Min. actuating torque 0,10Nm (0,32Nm ⇾)
Weight 95 g

Contact Blocks

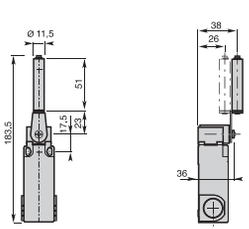
J11	(1NO+1NC)	HP•T42J11	HP•T43J11	HP•T45J11
J02	(2NC)	HP•T42J02	HP•T43J02	HP•T45J02

T46 - Ø 18 metal roller lever



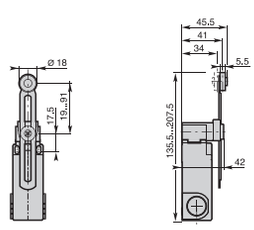
Min. actuating torque 0,10Nm (0,32Nm ⇾)
Weight 100 g

T48 - Ceramic rod lever



Min. actuating torque 0,10Nm (0,32Nm ⇾)
Weight 100 g

T51 - Adjustable lever with Ø 18 nylon roller



Min. actuating torque 0,10Nm (0,32Nm ⇾)
Weight 100 g

Contact Blocks

J11	(1NO+1NC)	HP•T46J11	HP•T48J11	HP•T51J11
J02	(2NC)	HP•T46J02	HP•T48J02	HP•T51J02

Operation diagrams: page 80 - All dimensions are in mm

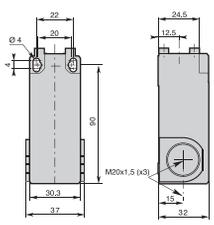
Limit Switches **HP series**

Double insulation - Plastic casing IP65 - 37 mm. width

Electrical connection:

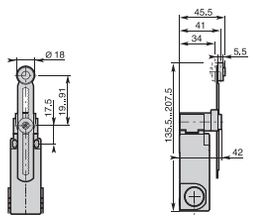
HP5: Three cable inlet for M20 x 1,5 Cable Gland

N.B. solenoid supply voltage must be added at the end of each item code
Example: HP5T14J11-024



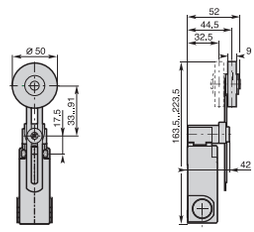
Contact Blocks

T5100 - Adjustable toothed lever (step 2 mm) with Ø 18 nylon roller



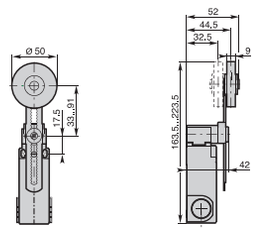
Min. actuating torque 0,10Nm (0,32Nm ⊖)
Weight 105 g

T52 - Adjustable lever with Ø 50 rubber roller



Min. actuating torque 0,10Nm (0,32Nm ⊖)
Weight 125 g

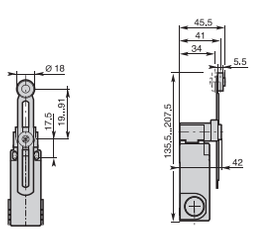
T5200 - Adjustable toothed lever (step 2 mm) with Ø 50 rubber roller



Min. actuating torque 0,10Nm (0,32Nm ⊖)
Weight 125 g

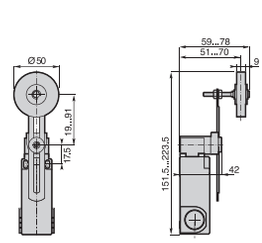
Contact Blocks				
J11	(1NO+1NC)	HP•T5100J11	HP•T52J11	HP•T5200J11
J02	(2NC)	HP•T5100J02	HP•T52J02	HP•T5200J02

T53 - Adjustable lever with Ø 18 metal roller



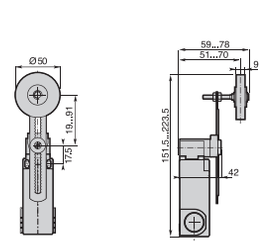
Min. actuating torque 0,10Nm (0,32Nm ⊖)
Weight 110 g

T55 - Adjustable lever with adjustable Ø 50 rubber roller



Min. actuating torque 0,10Nm (0,32Nm ⊖)
Weight 130 g

T5500 - Adjustable toothed lever (step 2 mm) with adjustable Ø 50 rubber roller



Min. actuating torque 0,10Nm (0,32Nm ⊖)
Weight 130 g

Contact Blocks				
J11	(1NO+1NC)	HP•T53J11	HP•T55J11	HP•T5500J11
J02	(2NC)	HP•T53J02	HP•T55J02	HP•T5500J02

Operation diagrams: page 80 - All dimensions are in mm

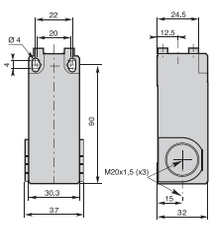
Limit Switches **HP series**

Double insulation - Plastic casing IP65 - 37 mm. width

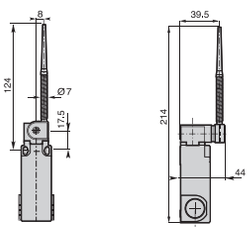
Electrical connection:

HP5: Three cable inlet for M20 x 1,5 Cable Gland

N.B. solenoid supply voltage must be added at the end of each item code
Example: HP5T14J11-024

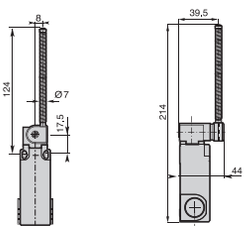


T61 - Nylon actuator with stainless steel spring



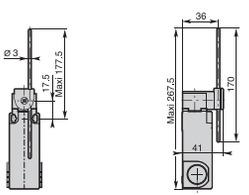
Min. actuating torque 0,10Nm
Weight 105 g

T62 - Stainless steel spring actuator



Min. actuating torque 0,10Nm
Weight 105 g

T71 - Adjustable Ø 3 rod lever with stainless steel rod

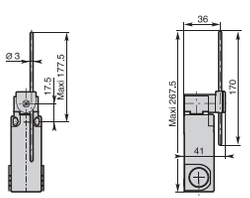


Min. actuating torque 0,10Nm (0,32Nm ⊖)
Weight 105 g

Contact Blocks

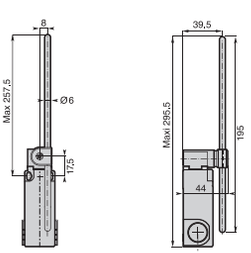
J11	(1NO+1NC)	HP•T61J11	HP•T62J11	HP•T71J11
J02	(2NC)	HP•T61J02	HP•T62J02	HP•T71J02

T72 - Adjustable Ø 3 rod lever with fiberglass rod



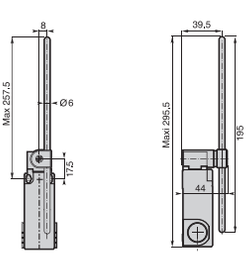
Min. actuating torque 0,10Nm (0,32Nm ⊖)
Weight 105 g

T73 - Adjustable Ø 6 rod lever with nylon rod



Min. actuating torque 0,10Nm (0,32Nm ⊖)
Weight 115 g

T74 - Adjustable Ø 6 rod lever with fiberglass rod



Min. actuating torque 0,10Nm (0,32Nm ⊖)
Weight 115 g

Contact Blocks

J11	(1NO+1NC)	HP•T72J11	HP•T73J11	HP•T74J11
J02	(2NC)	HP•T72J02	HP•T73J02	HP•T74J02

Operation diagrams: page 80 - All dimensions are in mm

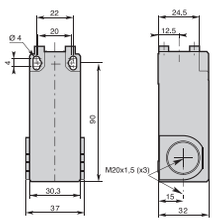
Limit Switches **HP series**

Double insulation - Plastic casing IP65 - 37 mm. width

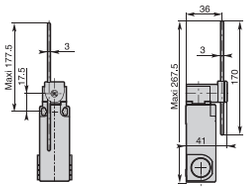
Electrical connection:

HP5: Three cable inlet for M20 x 1,5 Cable Gland

N.B. solenoid supply voltage must be added at the end of each item code
Example: HP5T14J11-024

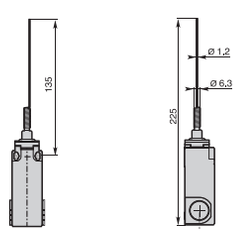


T75 - Adjustable 3x3 square steel rod lever



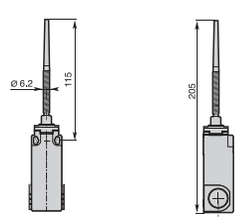
Min. actuating torque 0,10Nm (0,32Nm ⊖)
Weight 105 g

T91 - Stainless steel spring multidirectional actuator



Min. actuating torque 0,12Nm
Weight 80 g

T92 - Multidirectional nylon actuator with stainless steel spring

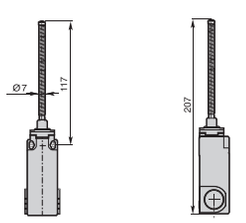


Min. actuating torque 0,12Nm
Weight 85 g

Contact Blocks

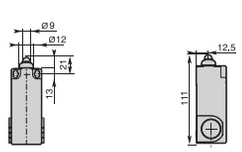
J11	(1NO+1NC)	HP•T75J11	HP•T91J11	HP•T92J11
J02	(2NC)	HP•T75J02	HP•T91J02	HP•T92J02

T93 - Stainless steel spring multidirectional actuator



Min. actuating torque 0,12Nm
Weight 90 g

R002 - Nylon plain plunger with manual reset



Min. actuating force 15N
Weight 115 g

Contact Blocks

J11	(1NO+1NC)	HP•T93J11	HP•R002J11
J02	(2NC)	HP•T93J02	HP•R002J02

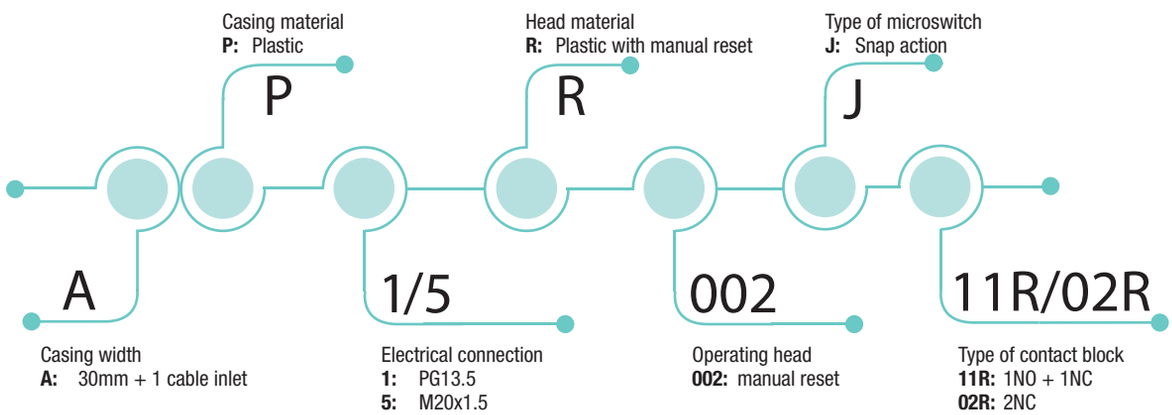
Operation diagrams: page 80 - All dimensions are in mm

Speed Limiter Devices **R002 series**

Summary

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

CB Scheme according to IEC 60947-5-1
UL Certification for FQMW Product category (elevator control and accessories)
CB scheme according IEC 60947-5-1



HOW IS IT MADE?

01 A variety of actuators
- Plain plunger with manual reset

02 Wide range of heads
- Assembled using 4 x ∅3 screws

03 Casing:
- 30 mm. width with standardized dimensions acc. to EN 50047

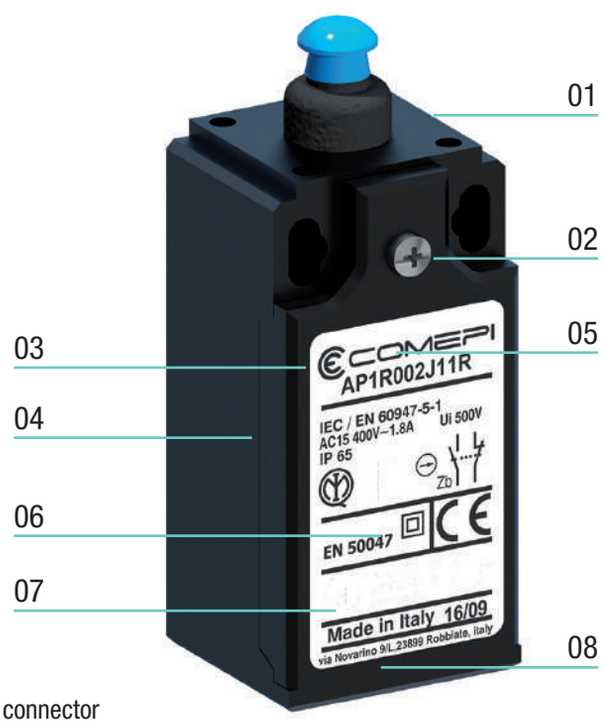
04 Mounting screws
- 2 x M4 screws on top part

05 Cover
- 1 screw ∅3 pozidriv 1

06 Contact Block
- Positive opening operation
- Snap action or slow action
- Electrically separated contacts

07 Connecting terminals
- Block of 2 contacts: M3.5 (+, –) pozidriv 2 screw
- Screw head with captive cable clamp
- Markings conform with IEC 60947-1, IEC 60947-5-1 standards

08 Electrical connection
- 1 x threaded cable entry suitable for cable gland, M12 connector or DEUTSCH connector



Speed Limiter Devices **R002 series**

Summary

APPLICATIONS

A specific limit switch for application in lift speed limiters. It complis with the market size standards. Configuration 1NO+1NC o 2NC. Manual reset.

Easy to use, electromechanical limit switches offer specific qualities:

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

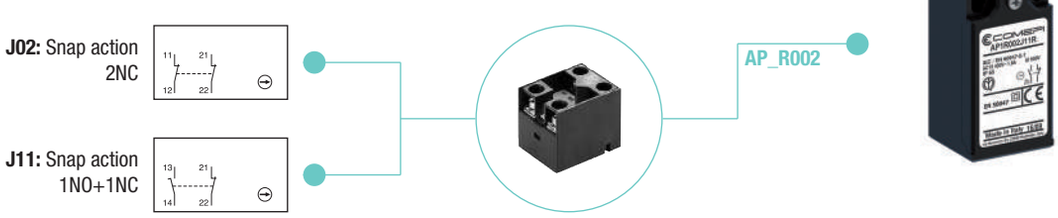
They are in conformity with EN 81-20 and EN 81-50 standards:

- Safety contacts with positive opening operations according to IEC 60947-5-1 annex K
- Mecanical durability > 10M operations
- IP protection degree > IP 4X

DESCRIPTION

The switch has been designed specifically for applications on over-speed devices; by actuating the plunger until the operating position P1, the electrical contacts switch and simultaneously the plunger reaches position P2 automatically.
The device is restored by pulling the blue plunger until the free position P0. The switch can be supplied with 1NO + 1NC contacts (AP.R002J11R) or with 2NC contacts (AP.R002J02R); all the NC contacts have positive opening operation.

They comply with the requirements of European Directives (Low Voltage, Lift 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.



Speed Limiter Devices **R002 series**
Technical Data

			R002 Series
Standards			IEC 60947-5-1 - EN 60945-5-1 EN 81-20 EN 81-50
Certifications - Approvals			CE - UL
Air temperature near the device			
– during operation		°C	– 25 ... + 70
– for storage		°C	– 30 ... + 80
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 65

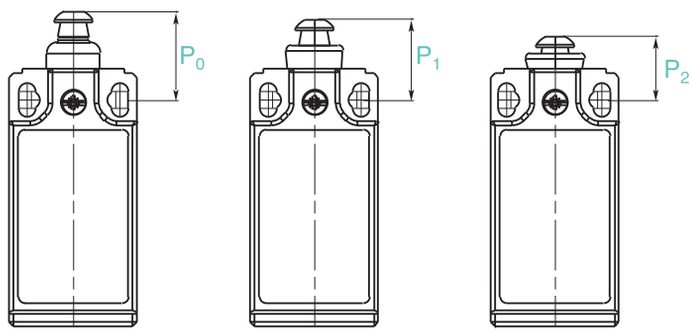
Electrical Data

Rated insulation voltage U_i			
- according to IEC 60947-1 and EN 60947-1			500V (J11R) – 400V (J02R)
- according to UL 508 and CSA C22-2 n° 14			A600 Q600 (J11R) – A300 Q300 (J02R)
Pollution degree			3
Rated impulse withstand voltage U_{imp} (according to IEC 60947-1 and EN 60947-1)		kV	6
Conventional free air thermal current I_{th} (according to IEC 60947-5-1) $\theta < 40$ °C		A	10
Short-circuit protection U_e < 500 V a.c. - gG (gl) type fuses		A	4
Rated conditional short-circuit current (according to IEC 60947-5-1)		kA	1
Rated operational current			
I_e / AC-15 (according to IEC 60947-5-1)	400 V - 50/60 Hz	A	4
I_e / DC-13 (according to IEC 60947-5-1)	24 V - 50/60 Hz	A	3
Switching frequency			Max. 3600 operations/hour
Resistance between contacts		mΩ	25
Connecting terminals			M3.5 (+,-) pozidriv 2 screws with cable clamp
Recommended tightening torque			**Plastic**
Head and cover			0,5Nm – max. 0,8Nm
Microswitch and solenoid			0,8Nm – max. 0,9Nm
Connecting capacity	1 or 2 x mm²		0,75 … 2,5
Terminal markings			According to IEC 60947-5-1
Mechanical durability			1.000.000 operations
B10d			2.000.000 operations (NC contacts)

Speed Limiter Devices **R002 series**
Technical Data

OPERATING SCHEME

Description
The switch has been designed specifically for applications on over-speed devices; by actuating the plunger until the operating position P1, the electrical contacts switch and simultaneously the plunger reaches position P2 automatically. The device is restored by pulling the blue plunger until the free position P0. The switch can be supplied with 1NO+1NC contacts (AP•R002J11R) or with 2NC contacts (AP•R002J02R); all the NC contacts have positive opening operation.



For further informations, please contact our technical department.

Safety Limit Switches with reset

Summary

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

Casing material
P: Plastic
M: Metal

R: Actuator with reset

Microswitch types
Z: Snap action
W: Simultaneous slow action
X: Slow action non overlapping, late make
Y: Slow action overlapping, early make

M/P — R — Z/W/X/Y

A/D — 1/2/..8 — 11/13.. — 11/02..

Casing width
- **A:** 30mm + 1 cable inlet
- **D:** 50mm + 2 cable inlets (DP), 3 cable inlets (DM)

Threaded cable entry
1: PG13.5
2: 1/2 NPT
3: PG11
4: M16x1.5
5: M20x1.5
M12 connector
6: 4 poles
7: 5 poles
8: 8 poles

Operating head:
11: Steel plunger
13: Steel plunger with roller
31: Steel plunger with roller
32: Steel plunger with roller
38: Steel plunger with roller
41: Lever with roller
51: Adjustable lever with roller

Type of contact block:
11: 1NO + 1NC
20: 2NO
02: 2NC
12P: 1NO + 2NC
21P: 2NO + 1NC
03P: 3NC

HOW IS IT MADE?

01 Casing
- AP/AM with dimensions acc. to EN 50047

02 Mounting the casing
- 2 x M4 screws on top part for AP/AM series
- 2 or 4 x M4 screws on top part for DP/DM series

03 Contact Block
- Positive opening operation
- Snap action or slow action
- Contacts are electrically separated

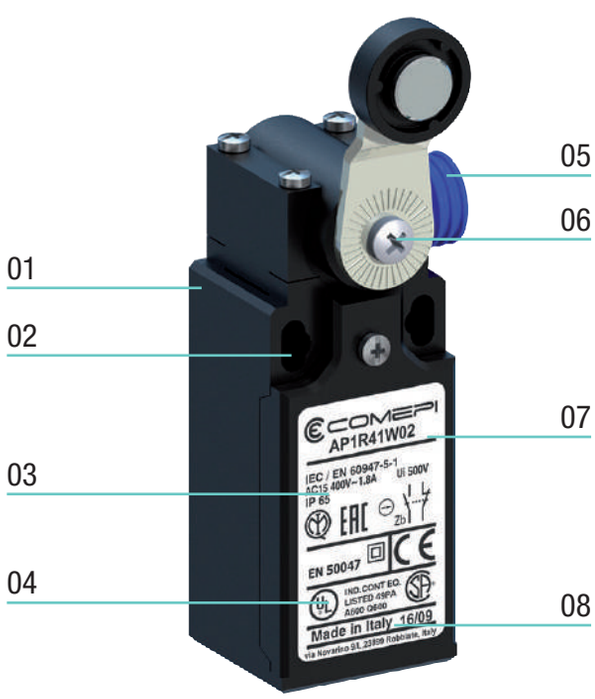
04 Connecting terminals
- Block of 2 contacts: M3.5 (+, –) pozidriv 2 screws
- Block of 3 contacts: M3 (+, –) screws
- Screw head with captive cable clamp
- Markings conform with IEC 60947-1, IEC 60947-5-1 standard

05 Reset
- Manual reset button

06 A variety of operating heads
- Metal plunger
- Metal plunger and nylon roller
- Nylon roller lever
- Other levers available upon request

07 Cover
- 1 screw 3 pozidriv 1 for AP/DP series
- 3 screws 3 pozidriv 1 for AM series
- 4 screws 3 pozidriv 1 for DM series

08 Electrical connection
- 1 x threaded cable inlet suitable for cable gland (SP/SM)
- 2 x threaded cable inlets suitable for cable gland (SDP)
- 3 x threaded cable inlets suitable for cable gland (SDM)
- 1 x M12 connector for pre-wired solutions (SP/SM)



Safety Limit Switches with reset
Description

APPLICATIONS

Easy to use, the limit switches for safety applications with latch and manual reset offer specific qualities:

- Visible operation (fault memorisation).
- Capability for strong current switching (conventional thermal current 10 A).
- Contact blocks with positive opening operation of the "N.C." normally closed contact(s) (symbol ⊖).
- Electrically separated contacts.
- Precision on operating positions (consistency).
- Immunity to electromagnetic disturbances.

They are in conformity with EN 81-20 and EN 81-50 standards:

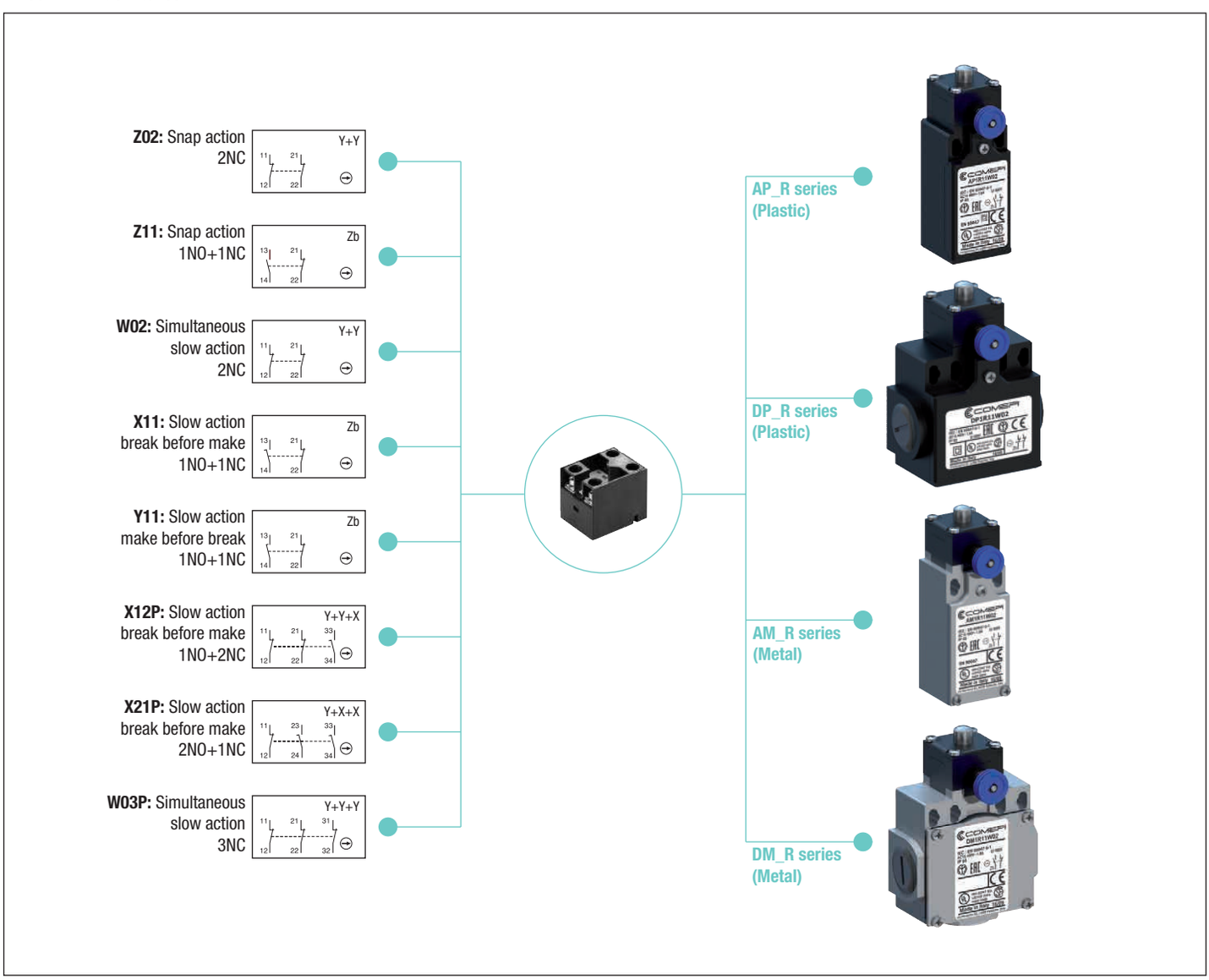
- Safety contacts with positive opening operations according to IEC 60947-5-1 annex K
- Mecanical durability > 10M operations
- IP protection degree > IP 4X

These specific features make the limit switches ideal for detection and monitoring of faults in hoisting machines, electric lifts, freight elevators, escalators, conveyor belts, etc. They comply with the requirements of European Directives (Low Voltage and Machines Directives) and are conform to European and international standards.

DESCRIPTION

Limit switches with latch and manual reset are equipped with operating heads with plunger, roller plunger or roller lever, used to detect rectilinear or angular movements. AP/DP series are made of fibre-glass reinforced UL-V0 thermoplastic material, they offer double insulation and a degree of protection IP65. AM/DM series are made of zinc alloy (zamack) and have a degree of protection IP66. Limit switches with latch and manual reset are equipped with 1NO+1NC, 2NC, 1NO+2NC, 2NO+1NC or 3NC contact blocks with positive opening operation of the "N.C." contact(s). 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 reset button.

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.



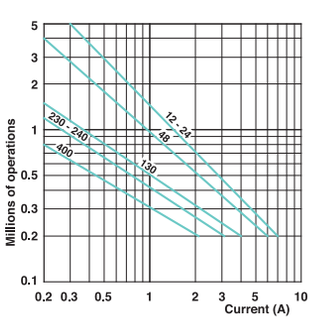
Safety Limit Switches with reset
Technical Data

			AP / DP Series	AM / DM Series
Standards			IEC 60947-5-1 EN 60947-5-1	
Certifications - Approvals			UL - CSA - IMQ - EAC - CCC	
Air temperature near the device				
– during operation		°C	– 25 ... + 70	
– for storage		°C	– 30 ... + 80	
Mounting positions			All positions are authorized	
Protection against electrical shocks (acc. to IEC 61140)			Class II	Class I
Degree of protection (according to IEC 60529 and EN 60529)			IP 65	IP 66

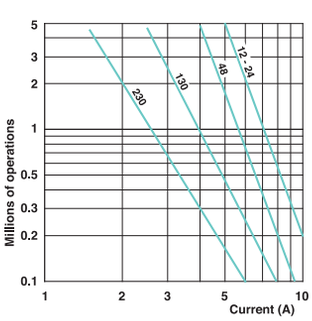
Electrical Data

Rated insulation voltage U_i - according to IEC 60947-1 and EN 60947-1 - according to UL 508 and CSA C22-2 n° 14			500 V (degree of pollution 3) (400 V for contacts type Z02, X12P, X21P, W03P) A 600, Q 600 (A 300, Q 300 for AM/DM series and contacts type X12P, X21P, W03P)
Rated impulse withstand voltage U_{imp} (according to IEC 60947-1 and EN 60947-1)		kV	6
Conventional free air thermal current I_{th} (according to IEC 60947-5-1) $\theta < 40$ °C		A	10
Short-circuit protection U_e < 500 V a.c. - gG (gl) type fuses		A	10
Rated operational current			
I_e / AC-15 (according to IEC 60947-5-1)	24 V - 50/60 Hz	A	10
	120 V - 50/60 Hz	A	6
	400 V - 50/60 Hz	A	4
I_e / DC-13 (according to IEC 60947-5-1)	24 V - d.c.	A	6
	125 V - d.c.	A	0.55
	250 V - d.c.	A	0.4
Switching frequency		Cycles/h	3600
Load factor			0.5
Resistance between contacts		m	25
Connecting terminals			M3.5 (+, –) pozidriv 2 screw with cable clamp (M3 for 3 poles contacts type)
Terminal for protective conductor			– / M3.5 (+, –) pozidriv 2 screw with cable clamp
Recommended tightening torque			**Plastic** / **Metal**
Cover			0,5Nm, max 0,8 / 0,8Nm, max 0,9
Head			0,5Nm, max 0,8 / 0,8Nm, max 0,9
Microswitch			0,8Nm, max 0,9 / 0,8Nm, max 0,9
Connecting capacity		1 or 2 x mm²	0.34 ... 2.5 (0.34... 1.5 for 3 poles contacts type)
Terminal marking			According to IEC 60947-5-1
Mechanical durability			1 million of operations
Electrical durability (according to IEC 60947-5-1)			Utilization categories AC-15 and DC-13 (Load factor of 0.5 according to curves below)
B10d			1 million of operations

AC-15 - Snap action



AC-15 - Slow action



DC-13		**Snap action**	**Slow action**
		Power breaking for a durability of 5 million operating cycles	
Voltage	24 V	9.5 W	12 W
Voltage	48 V	6.8 W	9 W
Voltage	110 V	3.6 W	6 W

For further informations, please contact our technical department.

Safety Limit Switches with reset
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 65 (AP/DP series) , IP 66 (AM/DM series)
Rated insulation voltage U_i		500 V (degree of pollution 3) (400V for type Z02, X12P, X21P, W03P)
Rated impulse withstand voltage U_{imp}		6 kV
Conventional free air thermal current I_{th}		10 A
Short-circuit protection - gG (gl) type fuses		10 A
Rated operational current		
I_e / AC-15	24 V - 50/60 Hz	10 A
	400 V - 50/60 Hz	4 A
I_e / DC-13	24 V - d.c.	6 A
	125 V - d.c.	0.55 A
	250 V - d.c.	0.4 A

Technical data approved by UL

Standards	Devices conform with UL 508
Contact blocks type Z11, X11, Y11, W02 and Z02	
Utilization categories	A600, Q600 (A300, Q300 when installed in AM/DM series)
Contact blocks type X12P, X21P and W03P	
Utilization categories	A300, Q300

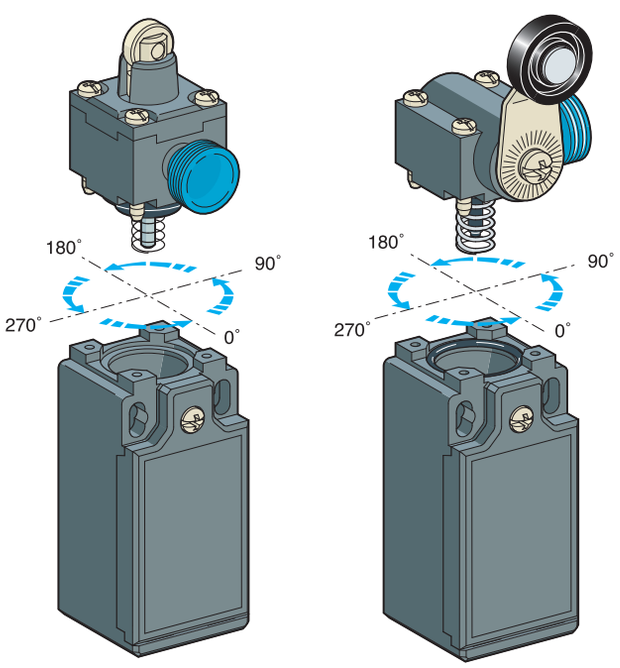
Use 60/75°C copper (Cu) conductor only. Wire rages 14-18 AWG stranded or solid. The terminal tightening torque of 7 lbs-in / 0.78 Nm. Suitable for conduit connection only with use of adapter sleeve optionally provided or recommended by the manufacturer.

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

IMPLEMENTATION

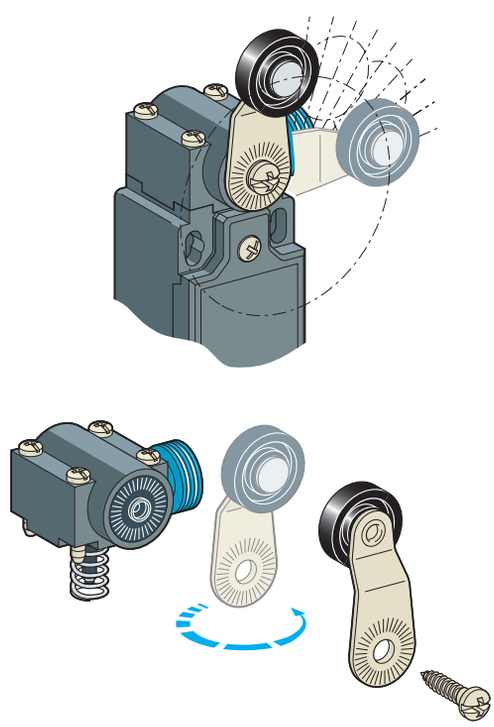
Operating head orientation

The head can be rotated each 90°.
Recommended tightening torque 0,5 Nm (max 0,8 Nm).



Lever adjustment

The lever of the head model R41 can ber 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).

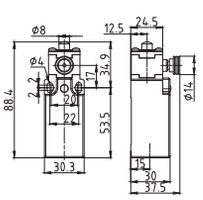


Safety Limit Switches with reset **AP_R series**

Polymeric casing. Polymer head. 30 mm width. 1 cable inlet - IP65 ▣

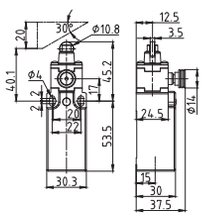
Electrical connection:
Replace the symbol "•" with the number of the thread desired
1: Cable gland PG 13.5
2: Cable gland 1/2" NPT (with adapter)
3: Cable gland PG 11
4: Cable gland M16 x 1,5
5: Cable gland M20 x 1,5
6: M12 4 poles connector
7: M12 5 poles connector
8: M12 8 poles connector

R11 Steel plunger with reset



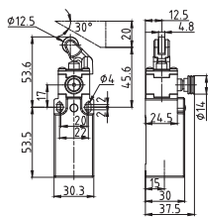
Min. actuating force	15 N (30N ⊖)
Weight	90 g
Operating diagram	Page 102

R13 Steel plunger with nylon roller with reset



Min. actuating force	12 N (30N ⊖)
Weight	90 g
Operating diagram	Page 102

R31 Steel plunger with nylon roller with reset



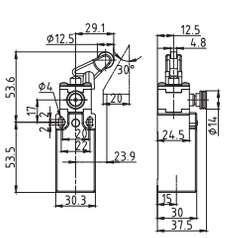
Min. actuating force	7 N (24N ⊖)
Weight	95 g
Operating diagram	Page 102

Contact Blocks

Z11	(1NO+1NC)	AP•R11Z11	AP•R13Z11	AP•R31Z11
X11	(1NO+1NC)	AP•R11X11	AP•R13X11	AP•R31X11
Y11	(1NO+1NC)	AP•R11Y11	AP•R13Y11	AP•R31Y11
W02	(2NC)	AP•R11W02	AP•R13W02	AP•R31W02
Z02	(2NC)	AP•R11Z02	AP•R13Z02	AP•R31Z02
X12P	(1NO+2NC)	AP•R11X12P	AP•R13X12P	AP•R31X12P
X21P	(2NO+1NC)	AP•R11X21P	AP•R13X21P	AP•R31X21P
W03P	(3NC)	AP•R11W03P	AP•R13W03P	AP•R31W03P

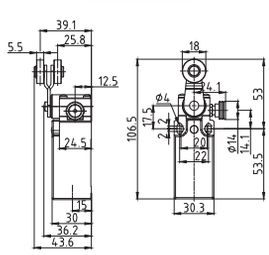
Electrical connection:
Replace the symbol "•" with the number of the thread desired
1: Cable gland PG 13.5
2: Cable gland 1/2" NPT (with adapter)
3: Cable gland PG 11
4: Cable gland M16 x 1,5
5: Cable gland M20 x 1,5
6: M12 4 poles connector
7: M12 5 poles connector
8: M12 8 poles connector

R32 Steel plunger with nylon roller with reset



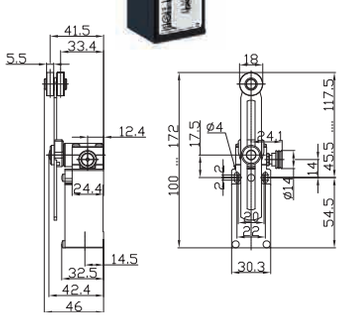
Min. actuating force	7 N (24N ⊖)
Weight	95 g
Operating diagram	Page 102

R41 Lever with nylon roller with reset



Min. actuating torque	0,10 Nm (0,32 Nm ⊖)
Weight	95 g
Operating diagram	Page 102

R51 Adjustable lever with nylon roller with reset



Min. actuating torque	0,10 Nm (0,32 Nm ⊖)
Weight	105 g
Operating diagram	Page 102

Contact Blocks

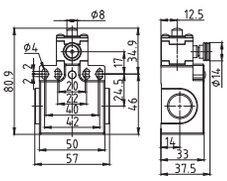
Z11	(1NO+1NC)	AP•R32Z11	AP•R41Z11	AP•R51Z11
X11	(1NO+1NC)	AP•R32X11	AP•R41X11	AP•R51X11
Y11	(1NO+1NC)	AP•R32Y11	AP•R41Y11	AP•R51Y11
W02	(2NC)	AP•R32W02	AP•R41W02	AP•R51W02
Z02	(2NC)	AP•R32Z02	AP•R41Z02	AP•R51Z02
X12P	(1NO+2NC)	AP•R32X12P	AP•R41X12P	AP•R51X12P
X21P	(2NO+1NC)	AP•R32X21P	AP•R41X21P	AP•R51X21P
W03P	(3NC)	AP•R32W03P	AP•R41W03P	AP•R51W03P

Safety Limit Switches with reset **DP_R series**

Polymeric casing. Polymer head. 50 mm width. 2 cable inlets - IP65 ⧈

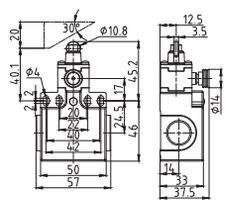
Electrical connection:
Replace the symbol "•" with the number of the thread desired
1: Cable gland PG 13.5
2: Cable gland 1/2" NPT (with adapter)
3: Cable gland PG 11
4: Cable gland M16 x 1,5
5: Cable gland M20 x 1,5

R11 Steel plunger with reset



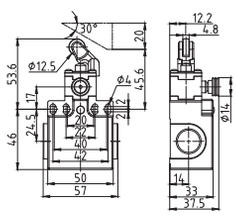
Min. actuating force	15 N (30N ⊖)
Weight	120 g
Operating diagram	Page 102

R13 Steel plunger with nylon roller with reset



Min. actuating force	12 N (30N ⊖)
Weight	120 g
Operating diagram	Page 102

R31 Steel plunger with nylon roller with reset



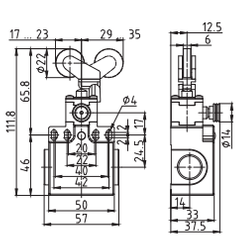
Min. actuating force	7 N (24N ⊖)
Weight	125 g
Operating diagram	Page 102

Contact Blocks

Z11	(1NO+1NC)	DP•R11Z11	DP•R13Z11	DP•R31Z11
X11	(1NO+1NC)	DP•R11X11	DP•R13X11	DP•R31X11
Y11	(1NO+1NC)	DP•R11Y11	DP•R13Y11	DP•R31Y11
W02	(2NC)	DP•R11W02	DP•R13W02	DP•R31W02
Z02	(2NC)	DP•R11Z02	DP•R13Z02	DP•R31Z02
X12P	(1NO+2NC)	DP•R11X12P	DP•R13X12P	DP•R31X12P
X21P	(2NO+1NC)	DP•R11X21P	DP•R13X21P	DP•R31X21P
W03P	(3NC)	DP•R11W03P	DP•R13W03P	DP•R31W03P

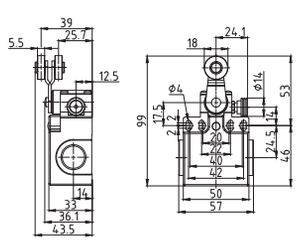
Electrical connection:
Replace the symbol "•" with the number of the thread desired
1: Cable gland PG 13.5
2: Cable gland 1/2" NPT (with adapter)
3: Cable gland PG 11
4: Cable gland M16 x 1,5
5: Cable gland M20 x 1,5

R38 Steel plunger with nylon roller with reset



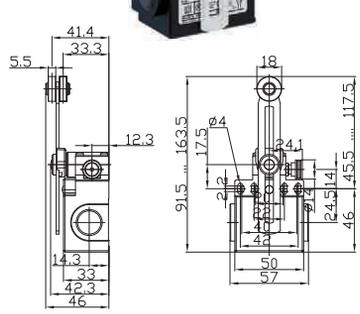
Min. actuating force	7 N (24N ⊖)
Weight	125 g
Operating diagram	Page 102

R41 Lever with nylon roller with reset



Min. actuating torque	0,10 Nm (0,32 Nm ⊖)
Weight	125 g
Operating diagram	Page 102

R51 Adjustable lever with nylon roller with reset



Min. actuating torque	0,10 Nm (0,32 Nm ⊖)
Weight	125 g
Operating diagram	Page 102

Contact Blocks

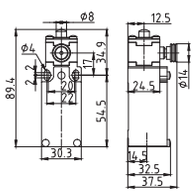
Z11	(1NO+1NC)	DP•R38Z11	DP•R41Z11	DP•R51Z11
X11	(1NO+1NC)	DP•R38X11	DP•R41X11	DP•R51X11
Y11	(1NO+1NC)	DP•R38Y11	DP•R41Y11	DP•R51Y11
W02	(2NC)	DP•R38W02	DP•R41W02	DP•R51W02
Z02	(2NC)	DP•R38Z02	DP•R41Z02	DP•R51Z02
X12P	(1NO+2NC)	DP•R38X12P	DP•R41X12P	DP•R51X12P
X21P	(2NO+1NC)	DP•R38X21P	DP•R41X21P	DP•R51X21P
W03P	(3NC)	DP•R38W03P	DP•R41W03P	DP•R51W03P

Safety Limit Switches with reset **AM_R series**

Metal casing. Polymer head. 30 mm width. 1 cable inlet - IP66

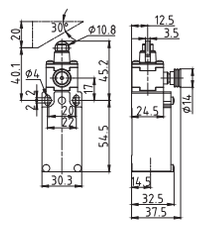
Electrical connection:
Replace the symbol "•" with the number of the thread desired
1: Cable gland PG 13.5
2: Cable gland 1/2" NPT (with adapter)
3: Cable gland PG 11
4: Cable gland M16 x 1,5
5: Cable gland M20 x 1,5
7: M12 5 poles connector
8: M12 8 poles connector

R11 Steel plunger with reset



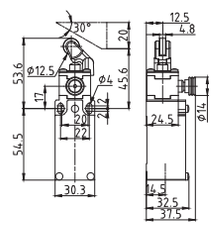
Min. actuating force	**15 N (30N ⊖)**
Weight	**185 g**
Operating diagram	**Page 102**

R13 Steel plunger with nylon roller with reset



Min. actuating force	**12 N (30N ⊖)**
Weight	**185 g**
Operating diagram	**Page 102**

R31 Steel plunger with nylon roller with reset



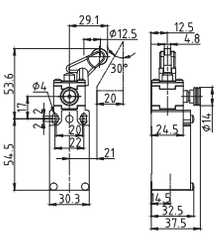
Min. actuating force	**7 N (24N ⊖)**
Weight	**190 g**
Operating diagram	**Page 102**

Contact Blocks

Z11	(1NO+1NC)	AM•R11Z11	AM•R13Z11	AM•R31Z11
X11	(1NO+1NC)	AM•R11X11	AM•R13X11	AM•R31X11
Y11	(1NO+1NC)	AM•R11Y11	AM•R13Y11	AM•R31Y11
W02	(2NC)	AM•R11W02	AM•R13W02	AM•R31W02
Z02	(2NC)	AM•R11Z02	AM•R13Z02	AM•R31Z02
X12P	(1NO+2NC)	AM•R11X12P	AM•R13X12P	AM•R31X12P
X21P	(2NO+1NC)	AM•R11X21P	AM•R13X21P	AM•R31X21P
W03P	(3NC)	AM•R11W03P	AM•R13W03P	AM•R31W03P

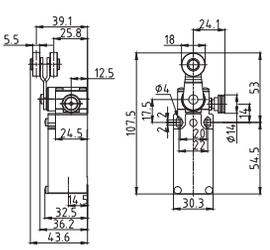
Electrical connection:
Replace the symbol "•" with the number of the thread desired
1: Cable gland PG 13.5
2: Cable gland 1/2" NPT (with adapter)
3: Cable gland PG 11
4: Cable gland M16 x 1,5
5: Cable gland M20 x 1,5
7: M12 5 poles connector
8: M12 8 poles connector

R32 Steel plunger with nylon roller with reset



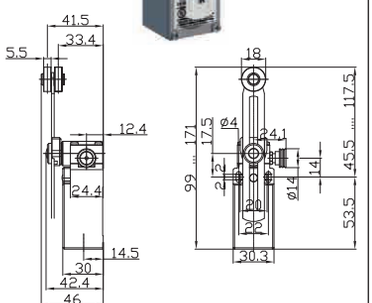
Min. actuating force	**7 N (24N ⊖)**
Weight	**190 g**
Operating diagram	**Page 102**

R41 Lever with nylon roller with reset



Min. actuating torque	**0,10 Nm (0,32 Nm ⊖)**
Weight	**190 g**
Operating diagram	**Page 102**

R51 Adjustable lever with nylon roller with reset



Min. actuating torque	**0,10 Nm (0,32 Nm ⊖)**
Weight	**190 g**
Operating diagram	**Page 102**

Contact Blocks

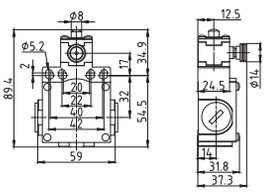
Z11	(1NO+1NC)	AM•R32Z11	AM•R41Z11	AM•R51Z11
X11	(1NO+1NC)	AM•R32X11	AM•R41X11	AM•R51X11
Y11	(1NO+1NC)	AM•R32Y11	AM•R41Y11	AM•R51Y11
W02	(2NC)	AM•R32W02	AM•R41W02	AM•R51W02
Z02	(2NC)	AM•R32Z02	AM•R41Z02	AM•R51Z02
X12P	(1NO+2NC)	AM•R32X12P	AM•R41X12P	AM•R51X12P
X21P	(2NO+1NC)	AM•R32X21P	AM•R41X21P	AM•R51X21P
W03P	(3NC)	AM•R32W03P	AM•R41W03P	AM•R51W03P

Safety Limit Switches with reset **DM_R series**

Metal casing. Polymer head. 50 mm width. 3 cable inlets - IP66

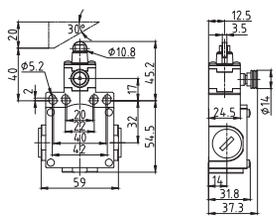
Electrical connection:
Replace the symbol "•" with the number of the thread desired
1: Cable gland PG 13.5
2: Cable gland 1/2" NPT (with adapter)
3: Cable gland PG 11
4: Cable gland M16 x 1,5
5: Cable gland M20 x 1,5

R11 Steel plunger with reset



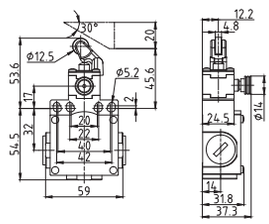
Min. actuating force	15 N (30N ⊖)
Weight	245 g
Operating diagram	Page 102

R13 Steel plunger with nylon roller with reset



Min. actuating force	12 N (30N ⊖)
Weight	245 g
Operating diagram	Page 102

R31 Steel plunger with nylon roller with reset



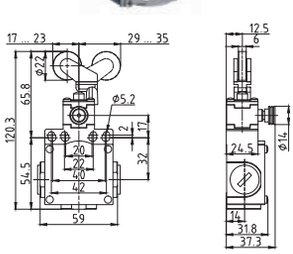
Min. actuating force	7 N (24N ⊖)
Weight	250 g
Operating diagram	Page 102

Contact Blocks

Z11	(1NO+1NC)	DM•R11Z11	DM•R13Z11	DM•R31Z11
X11	(1NO+1NC)	DM•R11X11	DM•R13X11	DM•R31X11
Y11	(1NO+1NC)	DM•R11Y11	DM•R13Y11	DM•R31Y11
W02	(2NC)	DM•R11W02	DM•R13W02	DM•R31W02
Z02	(2NC)	DM•R11Z02	DM•R13Z02	DM•R31Z02
X12P	(1NO+2NC)	DM•R11X12P	DM•R13X12P	DM•R31X12P
X21P	(2NO+1NC)	DM•R11X21P	DM•R13X21P	DM•R31X21P
W03P	(3NC)	DM•R11W03P	DM•R13W03P	DM•R31W03P

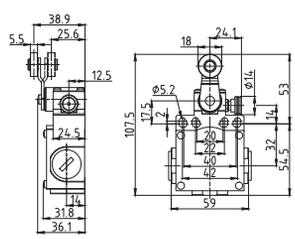
Electrical connection:
Replace the symbol "•" with the number of the thread desired
1: Cable gland PG 13.5
2: Cable gland 1/2" NPT (with adapter)
3: Cable gland PG 11
4: Cable gland M16 x 1,5
5: Cable gland M20 x 1,5

R38 Steel plunger with nylon roller with reset



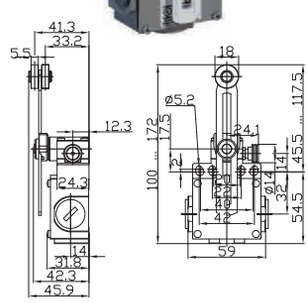
Min. actuating force	7 N (24N ⊖)
Weight	250 g
Operating diagram	Page 102

R41 Lever with nylon roller with reset



Min. actuating torque	0,10 Nm (0,32 Nm ⊖)
Weight	250 g
Operating diagram	Page 102

R51 Adjustable lever with nylon roller with reset



Min. actuating torque	0,10 Nm (0,32 Nm ⊖)
Weight	250 g
Operating diagram	Page 102

Contact Blocks

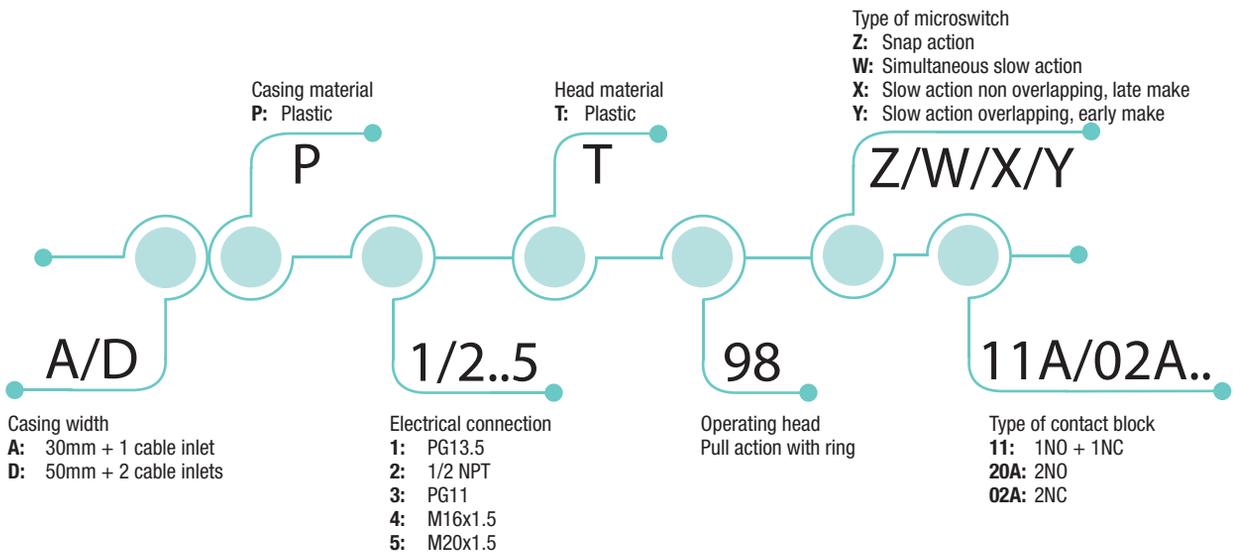
Z11	(1NO+1NC)	DM•R38Z11	DM•R41Z11	DM•R51Z11
X11	(1NO+1NC)	DM•R38X11	DM•R41X11	DM•R51X11
Y11	(1NO+1NC)	DM•R38Y11	DM•R41Y11	DM•R51Y11
W02	(2NC)	DM•R38W02	DM•R41W02	DM•R51W02
Z02	(2NC)	DM•R38Z02	DM•R41Z02	DM•R51Z02
X12P	(1NO+2NC)	DM•R38X12P	DM•R41X12P	DM•R51X12P
X21P	(2NO+1NC)	DM•R38X21P	DM•R41X21P	DM•R51X21P
W03P	(3NC)	DM•R38W03P	DM•R41W03P	DM•R51W03P

Rope-operated Limit Switches **T98 series**

Summary

For more information:

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



HOW IS IT MADE?

01 A variety of actuators
- Pull action with ring

02 Wide range of heads
- Assembled using 4 x ∅3 screws

03 Casing:
- 30 mm. width with standardized dimensions acc. to EN 50047 (AP)
- 50 mm. width (DP)

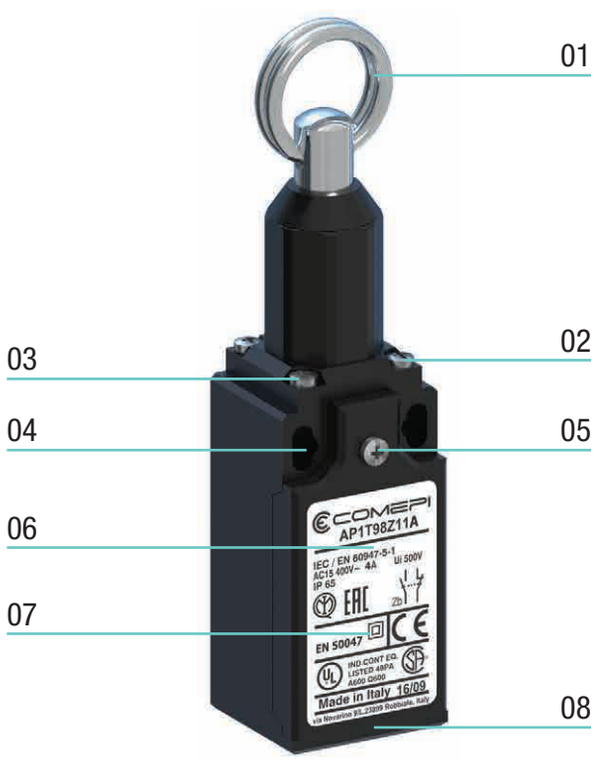
04 Mounting screws
- 2 x M4 screws on top part (AP)
- 2 or 4 x M4 screws on top part (DP)

05 Cover
- 1 screw ∅3 pozidriv 1

06 Contact Block
- Positive opening operation
- Snap action or slow action
- Electrically separated contacts

07 Connecting terminals
- Block of 2 contacts: M3.5 (+, –) pozidriv 2 screw
- Screw head with captive cable clamp
- Markings conform with IEC 60947-1, IEC 60947-5-1 standards

08 Electrical connection
- 1 x threaded cable entry suitable for cable gland or M12 connector (AP)
- 2 x threaded cable entry suitable for cable gland (DP)



Rope-operated Limit Switches **T98 series**
Description

APPLICATIONS

Easy to use, electromechanical limit switches offer specific qualities:

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

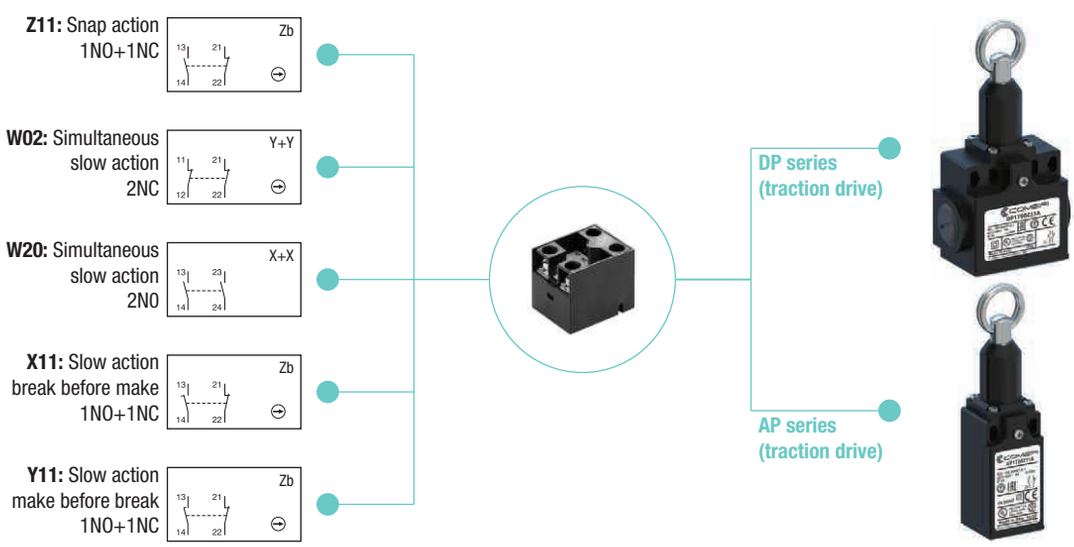
They are purpose-built detection devices thanks to these characteristics:

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

DESCRIPTION

Limit switches, which are made of reinforced UL-VO thermoplastic fiber-glass, offer double insulation ⧈ and a degree of protection of IP65.

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.



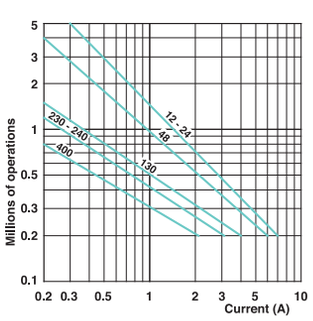
Rope-operated Limit Switches **T98 series**
Technical Data

			AP-DP_T98 Series
Standards			IEC 60947-5-1 EN 60947-5-1
Certifications - Approvals			UL - CSA - IMQ - EAC - CCC
Air temperature near the device			
– during operation		°C	– 25 ... + 70
– for storage		°C	– 30 ... + 80
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 65

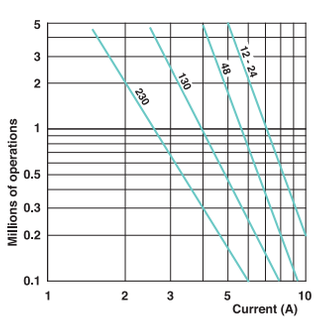
Electrical Data

Rated insulation voltage U_i - according to IEC 60947-1 and EN 60947-1 - according to UL 508 and CSA C22-2 n° 14			500 V (degree of pollution 3) (400 V for contacts type Z02, X12P, X21P, W03P) A 600, Q 600 (A 300, Q 300 for contacts type X12P, X21P, W03P)
Rated impulse withstand voltage U_{imp} (according to IEC 60947-1 and EN 60947-1)		kV	6
Conventional free air thermal current I_{th} (according to IEC 60947-5-1) $\theta < 40$ °C		A	10
Short-circuit protection U_e < 500 V a.c. - gG (gl) type fuses		A	10
Rated operational current			
I_e / AC-15 (according to IEC 60947-5-1)	24 V - 50/60 Hz	A	10
	120 V - 50/60 Hz	A	6
	400 V - 50/60 Hz	A	4
I_e / DC-13 (according to IEC 60947-5-1)	24 V - d.c.	A	6
	125 V - d.c.	A	0.55
	250 V - d.c.	A	0.4
Switching frequency		Cycles/h	3600
Load factor			0.5
Resistance between contacts		mΩ	25
Connecting terminals			M3.5 (+, –) pozidriv 2 screw with cable clamp (M3 for 3 poles contacts type)
Terminal for protective conductor			–
Recommended tightening torque			**Plastic**
Cover			0,5Nm, max 0,8
Head			0,5Nm, max 0,8
Microswitch			0,8Nm, max 0,9
Connecting capacity		1 or 2 x mm^2	0.34 ... 2.5 (0.34... 1.5 for 3 poles contacts type)
Terminal marking			According to IEC 60947-5-1
Mechanical durability			15 millions of operations T10...12; T21; T2101; T30...34; T38 10 millions of operations T13; T41...48; T51...55; T61...75 >5 millions of operations T14; T35; T36; T39; T91...93; T98
Electrical durability (according to IEC 60947-5-1)			Utilization categories AC-15 and DC-13 (Load factor of 0.5 according to curves below)

AC-15 - Snap action



AC-15 - Slow action



DC-13		Snap action	Slow action
		Power breaking for a durability of 5 million operating cycles	
Voltage	24 V	9.5 W	12 W
Voltage	48 V	6.8 W	9 W
Voltage	110 V	3.6 W	6 W

COMEPI

Rope-operated Limit Switches **T98 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 65
Rated insulation voltage U_i		500 V (degree of pollution 3) (400V for type Z02, X12P, X21P, W03P)
Rated impulse withstand voltage U_{imp}		6 kV
Conventional free air thermal current I_{th}		10 A
Short-circuit protection - gG (gl) type fuses		10 A
Rated operational current		
I_e / AC-15	24 V - 50/60 Hz	10 A
	400 V - 50/60 Hz	4 A
I_e / DC-13	24 V - d.c.	6 A
	125 V - d.c.	0.55 A
	250 V - d.c.	0.4 A

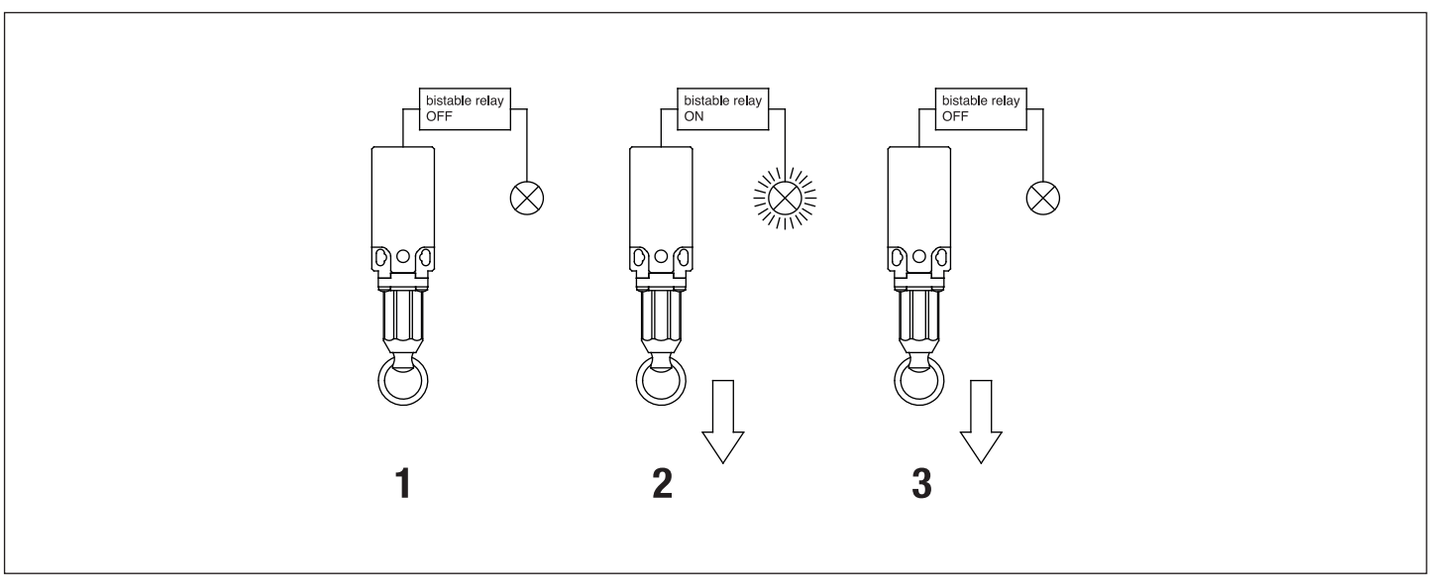
Technical data approved by UL

Standards	Devices conform with UL 508
Contact blocks type Z11, X11, Y11, W02 and Z02	
Utilization categories	A600, Q600
Contact blocks type X12P, X21P and W03P	
Utilization categories	A300, Q300

Use 60/75°C copper (Cu) conductor only. Wire rages 14-18 AWG stranded or solid. The terminal tightening torque of 7 lbs-in / 0.78 Nm. Suitable for conduit connection only with use of adapter sleeve optionally provided or recommended by the manufacturer.

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

OPERATING PRINCIPLE



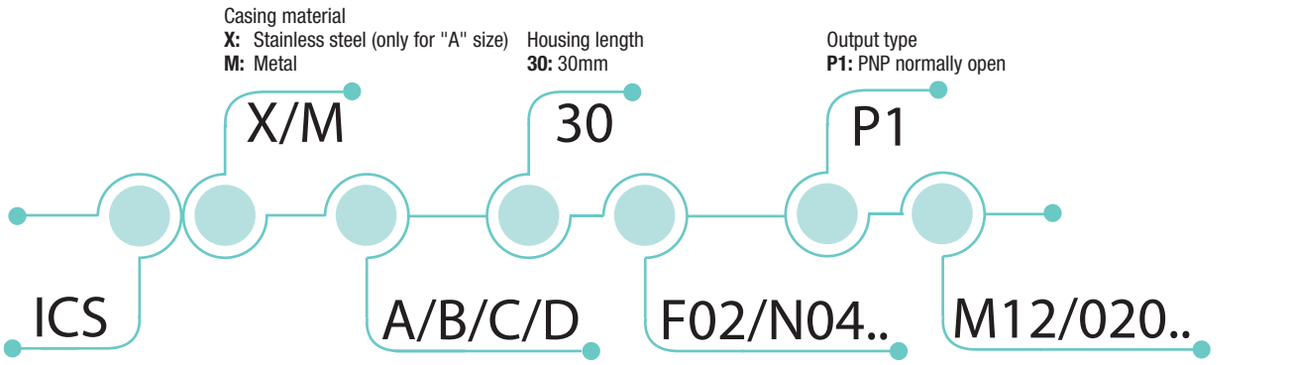
1. Limit switch not actuated, light off
2. Pull the rope to activate the light
3. Pull again the rope to switch the light off

For further informations, please contact our technical department.

Proximity Sensors
Summary

For more information:

APPROVALS: UL 508 | **UL CATEGORY:** NRKH FILE: E506808



Casing material
X: Stainless steel (only for "A" size)
M: Metal

Housing length
30: 30mm

Output type
P1: PNP normally open

Family name
ICS: inductive round sensor

Housing size
A: M8
B: M12
C: M18
D: M30

Sensing principle and distance
Model A
F02: Flush 2mm
N04: Non-Flush 4mm
Model B
F04: Flush 4mm
N08: Non-Flush 8mm
Model C
F08: Flush 8mm
N14: Non-Flush 14mm
Model D
F15: Flush 15mm
N22: Non-Flush 22mm

Connection
M8: M8 connector (only for "A" size)
M12: M12 connector (only for "B-C-D" size)
020: 2m cable PVC

HOW IS IT MADE?

01 Sensing face
- Flush
- Non-flush

02 Fixing
- Easy mounting
- Two nuts for sensor fixing
- Four sizes for sensor: M8, M12, M18, M30

03 Signalling
- Yellow LED visible from every angle
- Flashing output: short circuit or overload indication

04 Connection
- M8 connector
- M12 connector
- 2m cable PVC

05 Main features
- Accurate sensing and suitable for fast speed operations
- Assured traceability and best application control
- Environmentally friendly potting material

Proximity Sensors
Description

APPLICATIONS

Machine tool

- CNC machine tool.
- Drill machine.

Inductive sensors are used to check the tool position when changing the tool or to verify the component moved to the correct location.

Agriculture

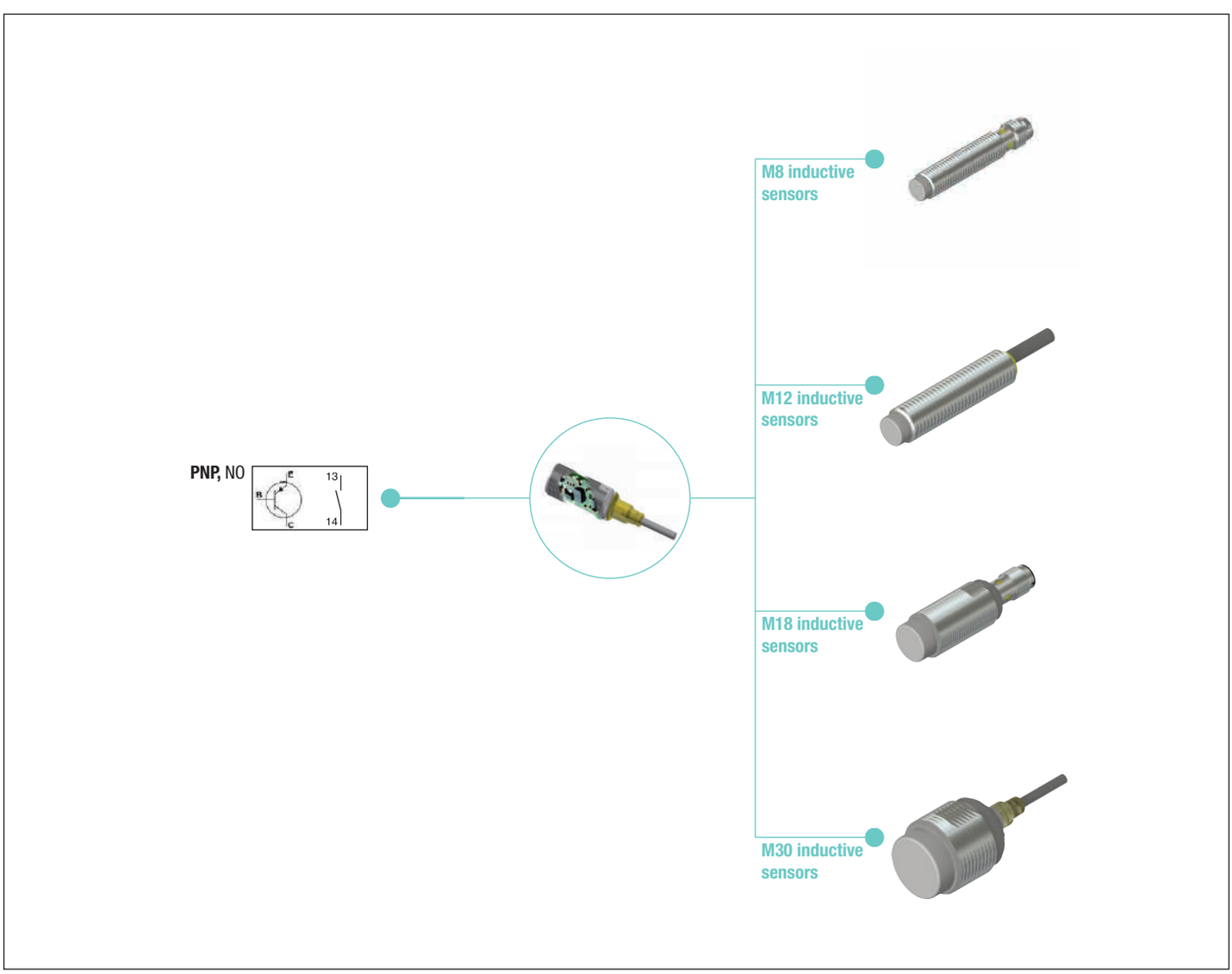
- Thanks to its excellent quality and to the complete product range, ICS series is particularly suitable for the agricultural and earth-moving sectors.

Material handling systems

- In these systems it is mandatory to ensure the automation and reliable ow of goods. Inductive sensors are critical to obtaining the higher productivity and quality from the automated process.

DESCRIPTION

The robust and hig hly reliable ICS series is now available in increased operating distance. In M8, M12, M18 and M30 stainless steel or nickel plated brass housings. These sensors are extremely accurate and represent the best choice for non-contact detection of metallic targets at a distance up to 40 mm, the largest sensing distance available on the market for an inductive sensor. The powerful design of ICS oers the ideal solution in demanding installation conditions typical of industrial environments. The eco-friendly high performance potting material protects the electronic components and provides increased reliability with higher resistance to mechanical stress and vibrations than the traditional proximity sensors. ICS inductive proximity sensors thanks to an operating distance up to 3 times the standard, allows to position the sensor at an higher distance from a metal target. The result is an increased sensor's lifetime especially when the metal target has greater tolerances, being the sensor well protected. A. The sensors are rated to IP67 and the mechanical design of the back part ensures an excellent sealing against water and humidity penetration. Thanks to the built in microcontroller, all sensors are individually compensated to ensure repeatable and highly accurate operation over the whole temperature range, granting the sensing distance between -25 and +70°C (-13° to +158°F).
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
DDC12 - Proximity sensors



Enclosures with pushbuttons

Summary

Per maggiori informazioni

APPROVALS: IEC 60947-5-5 / EN ISO 13850

CE

DESCRIPTION AND APPLICATION

The new SL series of specific enclosures for lift applicatioons, begins with our new E-STOP devices with integrated protection. This device is equipped with our ECX 4580 mushroom pushbutton (twist to release) suitable and certified for emergency stop use according to IEC 60947-5-5 and EN ISO 13850 standards.
The SL E-STOP is also equipped with different contact block configurations, to make available a ready to use solution for every application. This E-STOP box is widely used in lift applications and is usually located car top, under car or pit bottom. The integrated protection allows also the use with foot and protect the pushbutton from damages caused by trampling.
After this one many other specific variant had been added, including new operators and multiple units enclosures.

MAIN FEATURES

- IP65 - IP67 protection degree
- NC contacts with positive opening operations according to IEC 60947-5-1 ANNEX K
- Integrated protection for the emergency stop pushbutton
- Possible to fix the enclosure without open the cover

They comply with the requirements of European Directives (Low Voltage, Machinery 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
DDC 33 - SL series E-STOP devices.

HOW IS IT MADE?

01 Robust cover available with protection

02 Protected against breakage, for 1 to 7 operators

03 IP54 - IP65 - IP67 protection degree

04 Maybe equipped with E-STOP

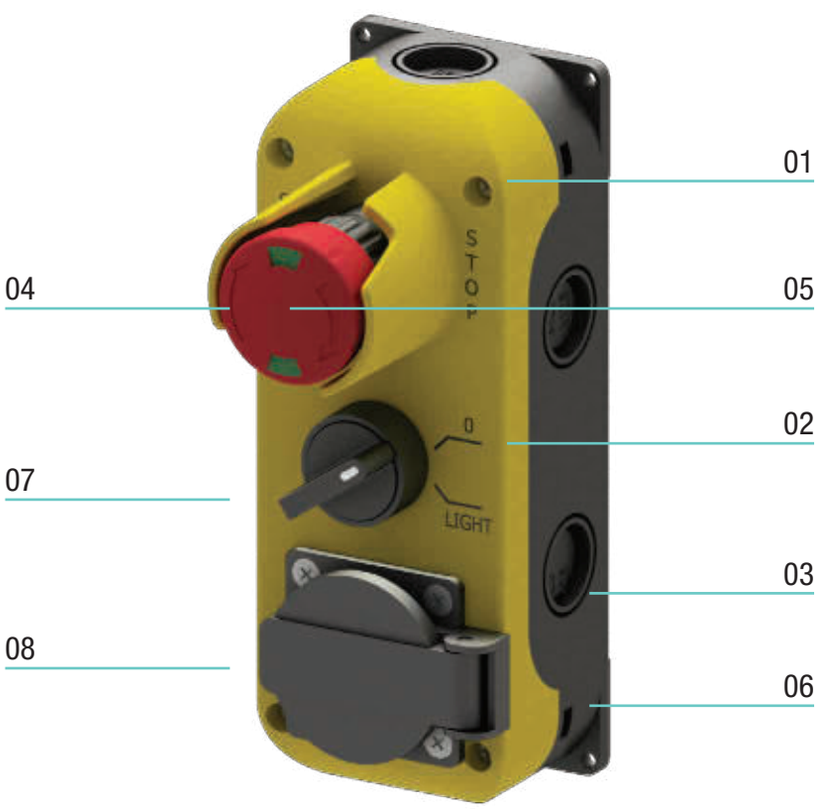
05 In conformity with EN 60947-5-5 standard

06 Possible to fix by scews or magnets *

07 Wide range of operators, including buttons/selectors/switches and pilot light

08 Option to equip it with various types of electrical sockets

* By ordering GRCA001 Fixing Kit



COMEPI

Enclosures with pushbuttons

TECHNICAL FEATURES	
Standards	IEC 60947-5-1 / IEC 60947-5-5
Ambient temperature	– 25 ... + 70 °C
Storage operation	–40 ... + 80 °C
Protection degree (according to IEC 60529 and EN 60529)	Up to IP65 and IP69K
Housing material	V0 Glass-Fiber Polycarbonate PC/ABS
Housing color	Black
Cover color	RAL Yellow/Grey
Number of operators	1-7
Approvals	CE EAC UKCA
Dimensions	Many sizes available
Reference standards	2014/33/EU Lift Directive According to EN 81-20 and EN 81-50

Enclosures with pushbuttons

ABS thermoplastic series V0 - IP65

SL 114-011-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
LIGHT button Non flush, unstable, black		1 NO	**ECX 4110-95**

SL 114-061-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
LIGHT button Flush, unstable, black		1 NO	**4100-91**

SL 115-051-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
LIGHT button Flush, unstable, yellow		1 NO	**ECX 4103-91**

SL 115-091-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
ALARM button Flush, unstable, yellow		1 NO	**4103-92**

SL115-041-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
ALARM button Mushroom ∅33, unstable, yellow		1 NO	**ECX 4169-92**

COMEPI

Enclosures with pushbuttons

ABS thermoplastic series V0 - IP65

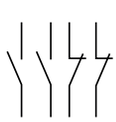
SL 115-031-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
ALARM button Mushroom ∅33, unstable, yellow		1 NO	**ECX 4169-92**

SL 115-104-G

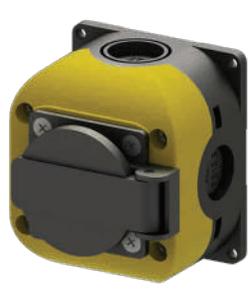
DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
Selector switch 1-0-2, 3 positions with return		1 NO + 1 NC	**ECX 4330**

SL 115-111-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
Changeover switch 0-1, 2 positions		2 NO + 2 NC	**XX1148CO-22**

SL115-12***-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
Italian socket “ITA”			**XX1136CO-ITA**
French socket “FRA”			**XX1136CO-FRA**
US socket “USA”			**XX1136CO-USA**
Swiss socket “CH”			**XX1136CO-CH**
UK standard socket “UK”			**XX1136CO-UK**
Schuko socket “SCH”			**XX1136CO-SCH**
China/Australia socket “CN”			**XX1136CO-CN**



Enclosures with pushbuttons

ABS thermoplastic series V0 - IP65

SL115-02*-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅40 with latch, twist to release, ECX 4580		1 NC	**SL115-022-G**
		1 NO+1 NC	**SL115-023-G**
		2 NC	**SL115-025-G**
		1 NO+2 NC	**SL115-026-G**
		2 NO+1 NC	**SL115-027-G**
		3 NC	**SL115-02A-G**

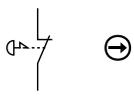
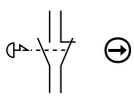
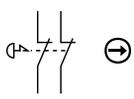
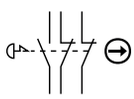
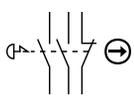
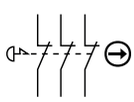
SL115-07*-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅40 with latch, twist to release ECX 4580		1 NC	**SL115-072-G**
		1 NO+1 NC	**SL115-073-G**
		2 NC	**SL115-075-G**
		1 NO+2 NC	**SL115-076-G**
		2 NO+1 NC	**SL115-077-G**
		3 NC	**SL115-07A-G**

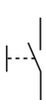
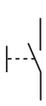
Enclosures with pushbuttons

ABS thermoplastic series V0 - IP65

SL115-08*-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅40 with latch, twist to release, with vision ECX 4581		1 NC	**SL115-082-G**
		1 NO+1 NC	**SL115-083-G**
		2 NC	**SL115-085-G**
		1 NO+2 NC	**SL115-086-G**
		2 NO+1 NC	**SL115-087-G**
		3 NC	**SL115-08A-G**

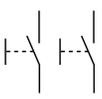
SL215-014-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
UP button Flush, unstable, white		1 NO	**ECX 4108-01/B**
DOWN button Flush, unstable, black		1 NO	**ECX 4108**

Enclosures with pushbuttons

ABS thermoplastic series V0 - IP65

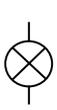
SL215-04B-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
Selector switch 0-1 2 positions		1 NO + 1 NC	**ECX 4300**
UP/DOWN Double pushbutton Flush, unstable, white/black		1NO + 1NO	**ECX 4658/BN**

SL215-0224L-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
Pilot light LED light, red		24V AC/DC	**ECX 2051-24L**
Pilot light LED light, green		24V AC/DC	**ECX 2052-24L**

SL215-0624L-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
Buzzer Non-illuminated, black		24V AC/DC	**ECX 2070-24**
Pilot light LED light, red		24V AC/DC	**ECX 2051-24L**

SL215-073ITA-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
Selector switch 0-1 2 positions		1 NO + 1 NC	**ECX 4300**
Italian socket			**XX1136CO-ITA**

*See page 67 for other variations

Enclosures with pushbuttons

ABS thermoplastic series V0 - IP65

SL215-081ITA-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
LIGHT button Flush, unstable, black		1 NO	**ECX 4100-91**
Italian socket			**XX1136C0-ITA**

*See page 67 for other variations

SL215-033-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅40 with latch, twist to release, with vision		1 NC	**ECX 4581**
LIGHT button Flush, unstable, black		1 NO	**ECX 4100-91**

SL215-053-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅40 with latch, twist to release, with vision		1 NC	**ECX 4581**
LIGHT button Flush, unstable, yellow		1 NO	**ECX 4103-91**

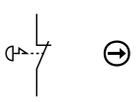
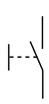
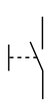
Enclosures with pushbuttons

ABS thermoplastic series V0 - IP65

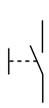
SL315-02A-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
Selector switch 0-1 2 positions		1 NO + 1 NC	**ECX 4300**
UP button Flush, unstable, white		1 NO	**ECX 4108-01/B**
DOWN button Flush, unstable, black		1 NO	**ECX 4108**

SL315-017-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅40 with latch, twist to release			**ECX 4580**
UP button Flush, unstable, white		1 NO	**ECX 4108-01/B**
DOWN button Flush, unstable, black		1 NO	**ECX 4108**

SL315-03124L-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
Buzzer Non-illuminated, black		24V AC/DC	**ECX 2070-24**
Pilot light LED light, red		24V AC/DC	**ECX 2051-24L**
ALARM button Flush, unstable, yellow		1 NO	**ECX 4103-92**

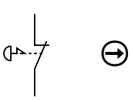
Enclosures with pushbuttons

ABS thermoplastic series V0 - IP65

SL315-0424L-G

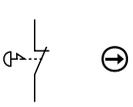
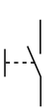
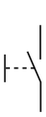
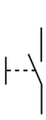
DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
Pilot light LED light, red		24V AC/DC	**ECX 2051-24L**
Pilot light LED light, green		24V AC/DC	**ECX 2052-24L**
Buzzer Non-illuminated, black		24V AC/DC	**ECX 2070-24**

SL 315-052ITA-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅40 with latch, twist to release, with protection		1 NC	**ECX 4580**
Italian socket			**XX1136CO-ITA**

*See page 67 for other variations

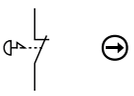
SL415-01B-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅40 with latch, twist to release, with protection		1 NC	**ECX 4580**
UP button Flush, unstable, white		1 NO	**ECX 4108-01/B**
ENABLE button Flush, unstable, blue		1 NO	**ECX 4104-93**
DOWN button Flush, unstable, black		1 NO	**ECX 4108**

Enclosures with pushbuttons

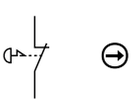
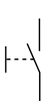
ABS thermoplastic series V0 - IP65

SL415-043ITA-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅40 with latch, twist to release, with protection and vision		1 NC	**ECX 4581**
LIGHT button Flush, unstable, black		1 NO	**ECX 4100-91**
Italian socket			**XX1136CO-ITA**

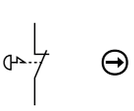
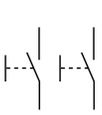
*See page 67 for other variations

SL415-053ITA-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅40 with latch, twist to release, with protection and vision		1 NC	**ECX 4581**
ALARM button Flush, unstable, yellow		1 NO	**ECX 4103-92**
Italian socket			**XX1136CO-ITA**

*See page 67 for other variations

SL415-063ITA-G

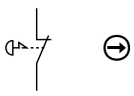
DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅40 with latch, twist to release, with protection and vision		1 NC	**ECX 4581**
ALARM/LIGHT Double pushbutton Flush, unstable, yellow/black		1NO + 1NO	**ECX 4660/NG-90**
Italian socket			**XX1136CO-ITA**

*See page 67 for other variations

Enclosures with pushbuttons

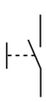
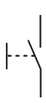
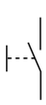
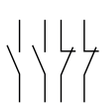
ABS thermoplastic series V0 - IP65

SL415-033ITA-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅40 with latch, twist to release, with protection and vision		1 NC	**ECX 4581**
Selector switch 0-1 2 positions		1 NO	**ECX 4300**
Italian socket			**XX1136CO-ITA**

*See page 67 for other variations

SL415-02P-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
ENABLE button Flush, unstable, blue		1 NO	**ECX 4104-93**
UP button Flush, unstable, white		1 NO	**ECX 4108-01/B**
DOWN button Flush, unstable, black		1 NO	**ECX 4108**
Selector switch 0-1 2 positions		2 NO + 2 NC	**ECX 4300**

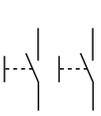
Enclosures with pushbuttons

ABS thermoplastic series V0 - IP65

SL415-03H24L-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
Pilot light LED light, green		24V AC/DC	**ECX 2052-24L**
UP button Flush, unstable, white		1 NO	**ECX 4108-01/B**
DOWN button Flush, unstable, black		1 NO	**ECX 4108**
Selector switch 0-1 2 positions		2 NO + 2 NC	**ECX 4300**

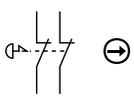
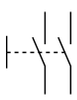
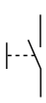
SL415-04H24L-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
Selector switch 0-1 2 positions		1 NO + 1 NC	**ECX 4303**
Selector switch 0-1, red 2 positions		1 NO + 1 NC	**ECX 4303/R**
Pilot light LED light, green		24V AC/DC	**ECX 2052-24L**
UP/DOWN Double pushbutton Flush, unstable, white/black		1NO + 1NO	**ECX 4658/BN**

Enclosures with pushbuttons

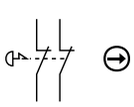
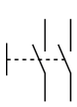
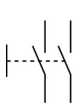
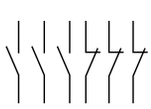
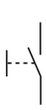
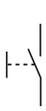
ABS thermoplastic series V0 - IP65

SL515-001ITA-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅40 with latch, twist to release, with protection and vision		2 NC	**ECX 4581**
UP button Flush, unstable, white		2 NO	**ECX 4109/B**
DOWN button Flush, unstable, black		2 NO	**ECX 4109-01**
Selector switch 0-1 2 positions **normal-inspection**		2 NO + 2 NC	**ECX 4303**
ENABLE button Flush, unstable, blue		1 NO	**ECX 4104-03**
Buzzer Non-illuminated, black		24V AC/DC	**ECX 2070-24**
Italian socket			**XX1136CO-ITA**

*See page 67 for other variations

SL515-002ITA-G

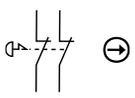
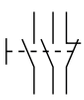
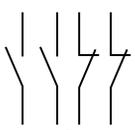
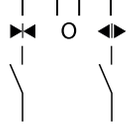
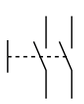
DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅40 with latch, twist to release, with protection and vision		2 NC	**ECX 4581**
UP button Flush, unstable, white		2 NO	**ECX 4109/B**
DOWN button Flush, unstable, black		2 NO	**ECX 4109-01**
Selector switch 0-1 2 positions **normal-inspection**		3 NO + 3 NC	**ECX 4303**
LIGHT button Flush, unstable, black		1 NO	**ECX 4100-01**
ENABLE button Flush, unstable, blue		1 NO	**ECX 4104-03**
Italian socket			**XX1136CO-ITA**

*See page 67 for other variations

Enclosures with pushbuttons

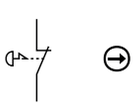
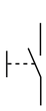
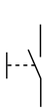
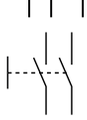
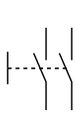
ABS thermoplastic series V0 - IP65

SL515-003ITA-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅40 with latch, twist to release, with protection and vision		2 NC	**ECX 4581**
UP button Flush, unstable, white		2 NO + 1 NC	**ECX 4109/B**
DOWN button Flush, unstable, black		2 NO + 1 NC	**ECX 4109-01**
Selector switch 0-1 2 positions **normal-inspection**		2 NO + 2 NC	**ECX 4303**
Selector switch 1-0-2 3 positions		1 NO + 1 NO	**ECX 4320**
ENABLE button Flush, unstable, blue		2 NO	**ECX 4104-03**
Italian socket			**XX1136CO-ITA**

*See page 67 for other variations

SL515-004ITA-G

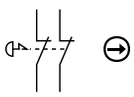
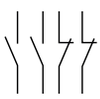
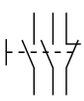
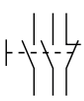
DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅40 with latch, twist to release, with protection and vision		1 NC	**ECX 4581**
ALARM button Flush, unstable, yellow		1 NO	**ECX 4103-02**
ENABLE button Flush, unstable, blue		1 NO	**ECX 4104-03**
Selector switch 0-1 2 positions **normal-inspection**		2 NO + 2 NC	**ECX 4303**
UP button Flush, unstable, white		2 NO	**ECX 4109/B**
DOWN button Flush, unstable, black		2 NO	**ECX 4109-01**
Italian socket			**XX1136CO-ITA**

*See page 67 for other variations

Enclosures with pushbuttons

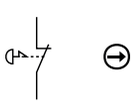
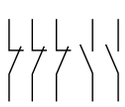
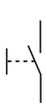
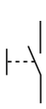
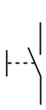
ABS thermoplastic series V0 - IP65

SL515-005ITA-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅40 with latch, twist to release, with protection and vision		2 NC	**ECX 4581**
Pilot light LED light, white		24V AC/DC	**ECX 2055-24L**
ENABLE button Flush, unstable, blue		2 NO	**ECX 4104-03**
Selector switch 0-1 2 positions **normal-inspection**		2 NO + 2 NC	**ECX 4303**
UP button Flush, unstable, white		2 NO + 1 NC	**ECX 4109/B**
DOWN button Flush, unstable, black		2 NO + 1 NC	**ECX 4109-01**
Italian socket			**XX1136C0-ITA**

*See page 67 for other variations

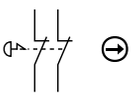
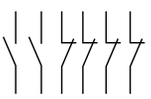
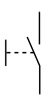
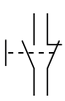
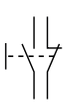
SL515-006-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅40 with latch, twist to release, with protection		1 NC	**ECX 4580**
Selector switch 0-1 2 positions **normal-inspection**		3 NC + 2 NO	**ECX 4303**
ENABLE button Flush, unstable, blue		1 NO	**ECX 4104-93**
Pilot light LED light, white		1 NO	**ECX 4108-01/B**
DOWN button Flush, unstable, black		1 NO	**ECX 4108**

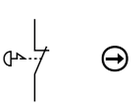
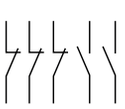
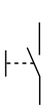
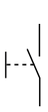
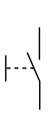
Enclosures with pushbuttons

ABS thermoplastic series V0 - IP65

SL515-007ITA-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅40 with latch, twist to release, with protection and vision		2 NC	**ECX 4581**
Selector switch 0-1 2 positions **normal-inspection**		2 NO + 4 NC	**ECX 4303**
ENABLE button Flush, unstable, blue		1 NO	**ECX 4104-93**
UP button Flush, unstable, white		1 NO + 1 NC	**ECX 4108-01/B**
DOWN button Flush, unstable, black		1NO + 1NC	**ECX 4108**

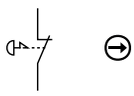
SL515-008-G

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅40 with latch, twist to release, with protection and vision		2 NC	**ECX 4581**
Selector switch 0-1 2 positions **normal-inspection**		2 NO + 4 NC	**ECX 4303**
UP button Flush, unstable, white		1 NO + 1 NC	**ECX 4108-01/B**
ENABLE button Flush, unstable, blue		1 NO	**ECX 4104-93**
DOWN button Flush, unstable, black		1NO + 1NC	**ECX 4108**

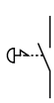
Enclosures with pushbuttons

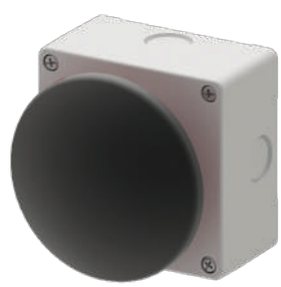
ABS thermoplastic series V0 - IP65

SA 091-01

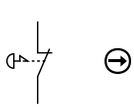
DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅90 with latch, pull to release		1 NC	**ECX 1147**

SA 080-10

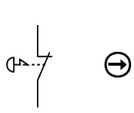
DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
Wooble Mushroom ∅90 black		1 NO	**ECX 4570**



SA 081-01

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
Wooble Mushroom ∅90 red		1 NC	**ECX 4571**

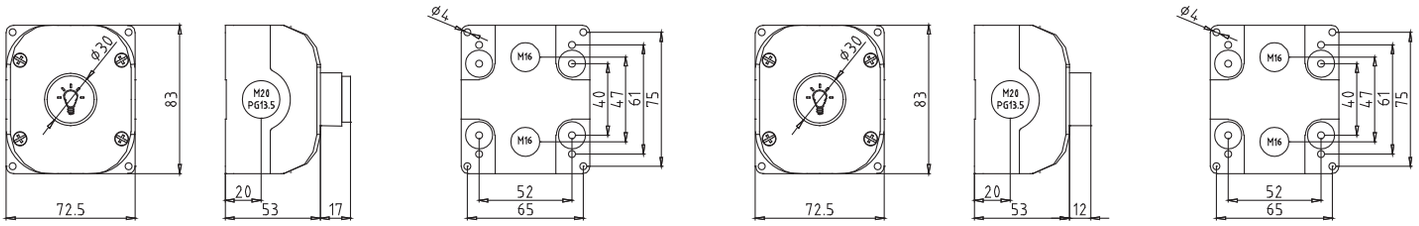
GR SA 091-01

DESCRIPTION	DIAGRAM	CONTACTS	OPERATOR
EN ISO 13850 emergency stop button ∅90 with latch, pull to release, without base for wall application		1 NC	**ECX 1147**

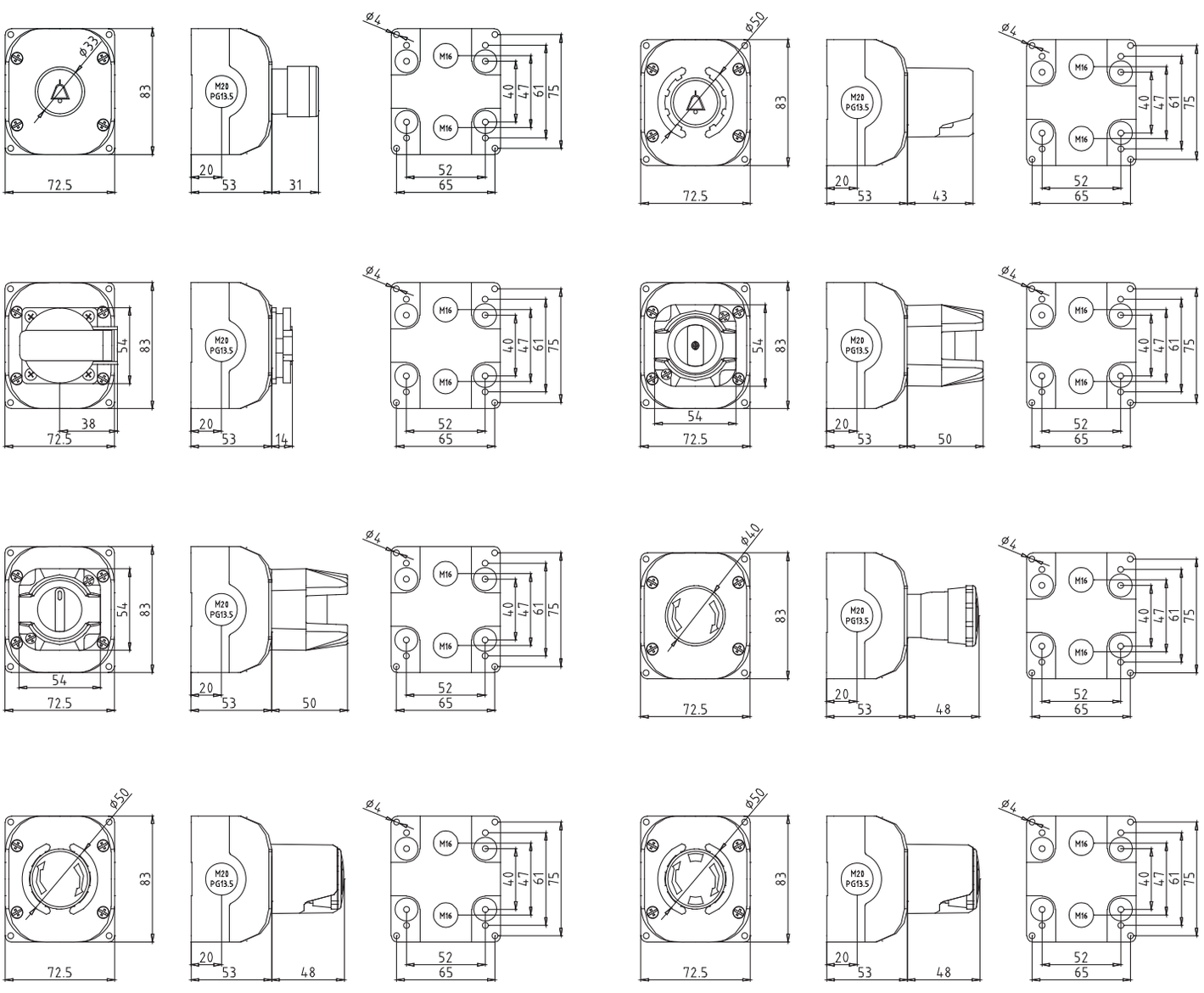
Enclosures with pushbuttons

ABS thermoplastic series V0 - IP65 - Dimensionals

SL 114



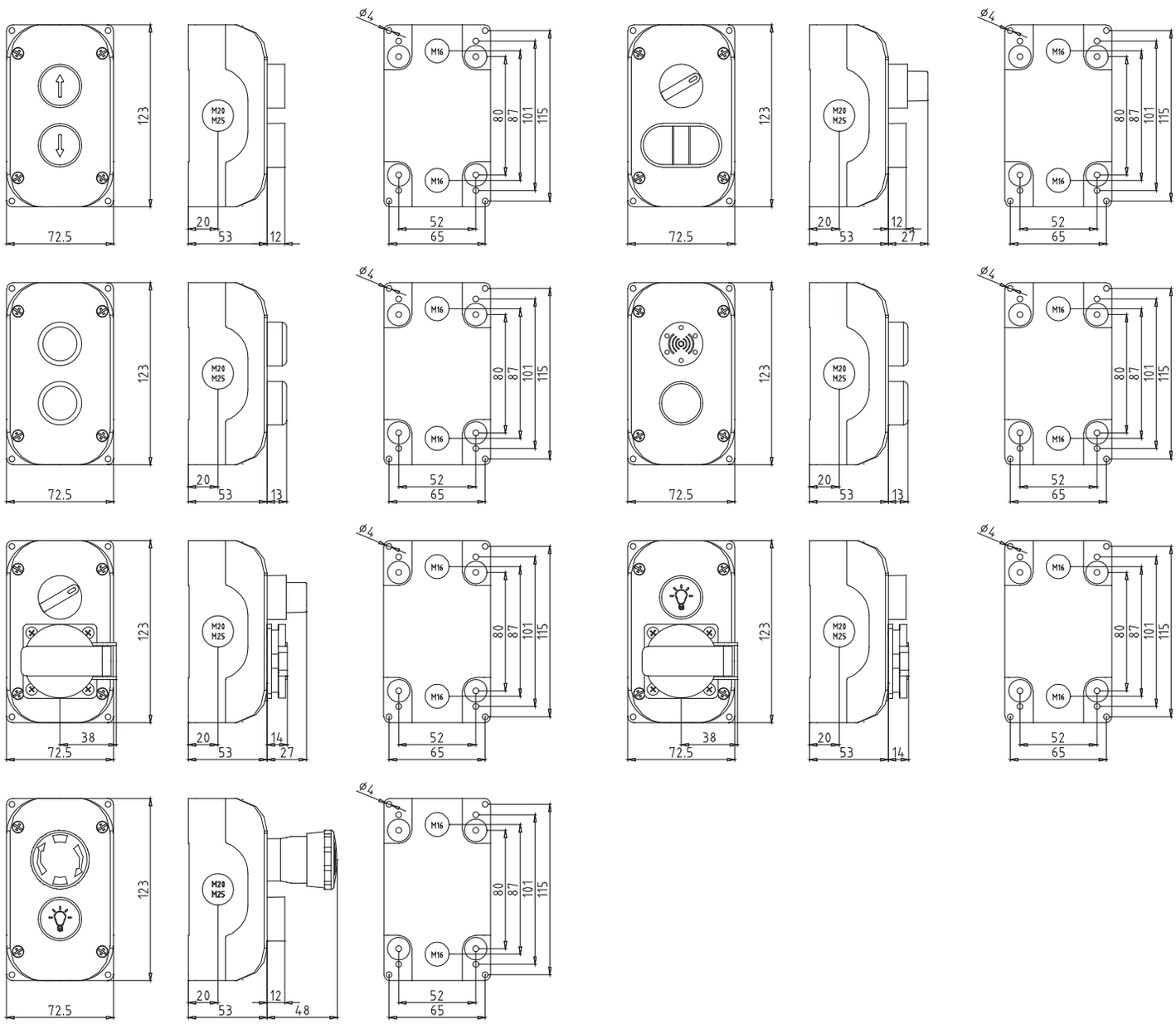
SL 115



Enclosures with pushbuttons

ABS thermoplastic series V0 - IP65 - Dimensionals

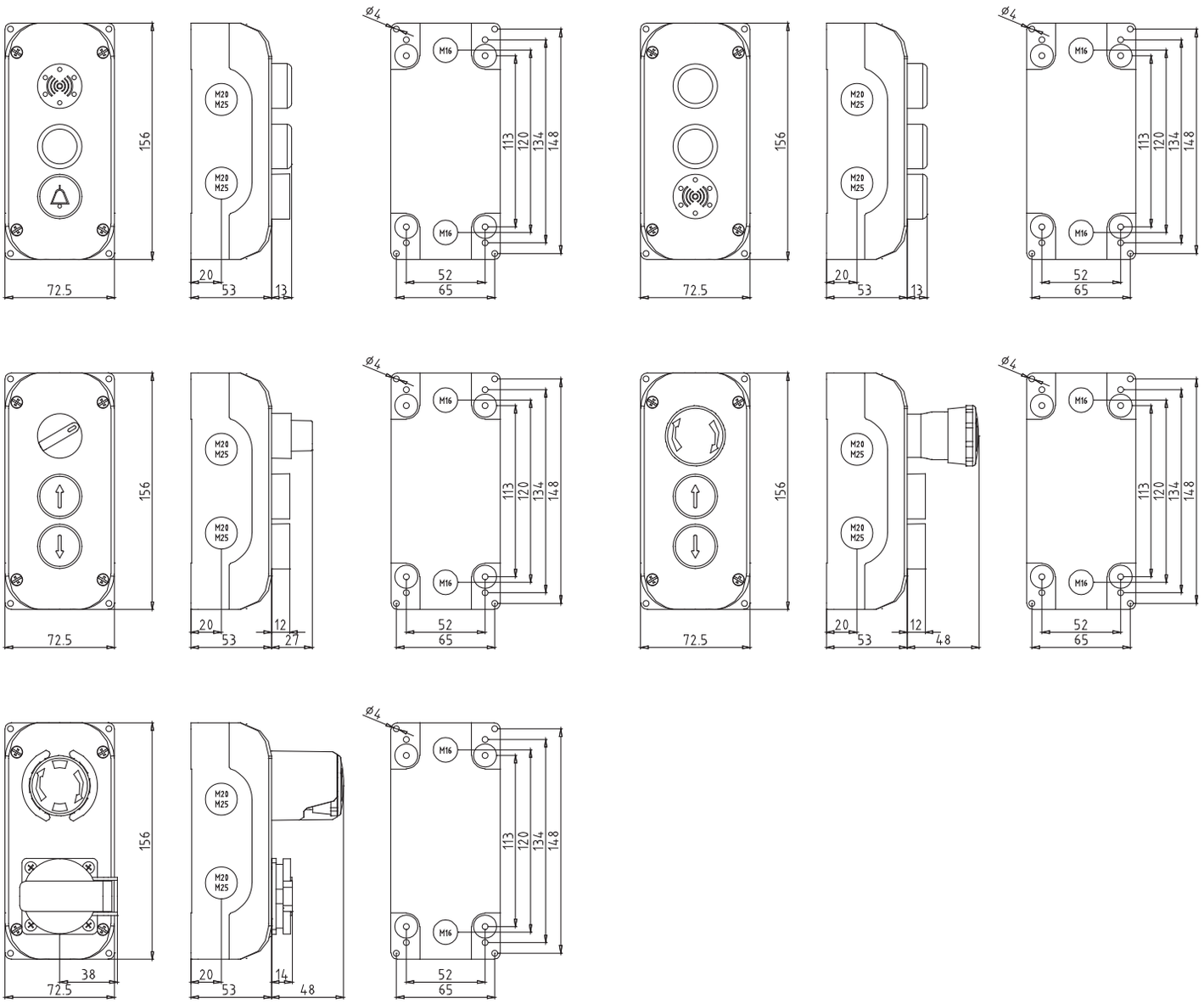
SL 215



Enclosures with pushbuttons

ABS thermoplastic series V0 - IP65 - Dimensionals

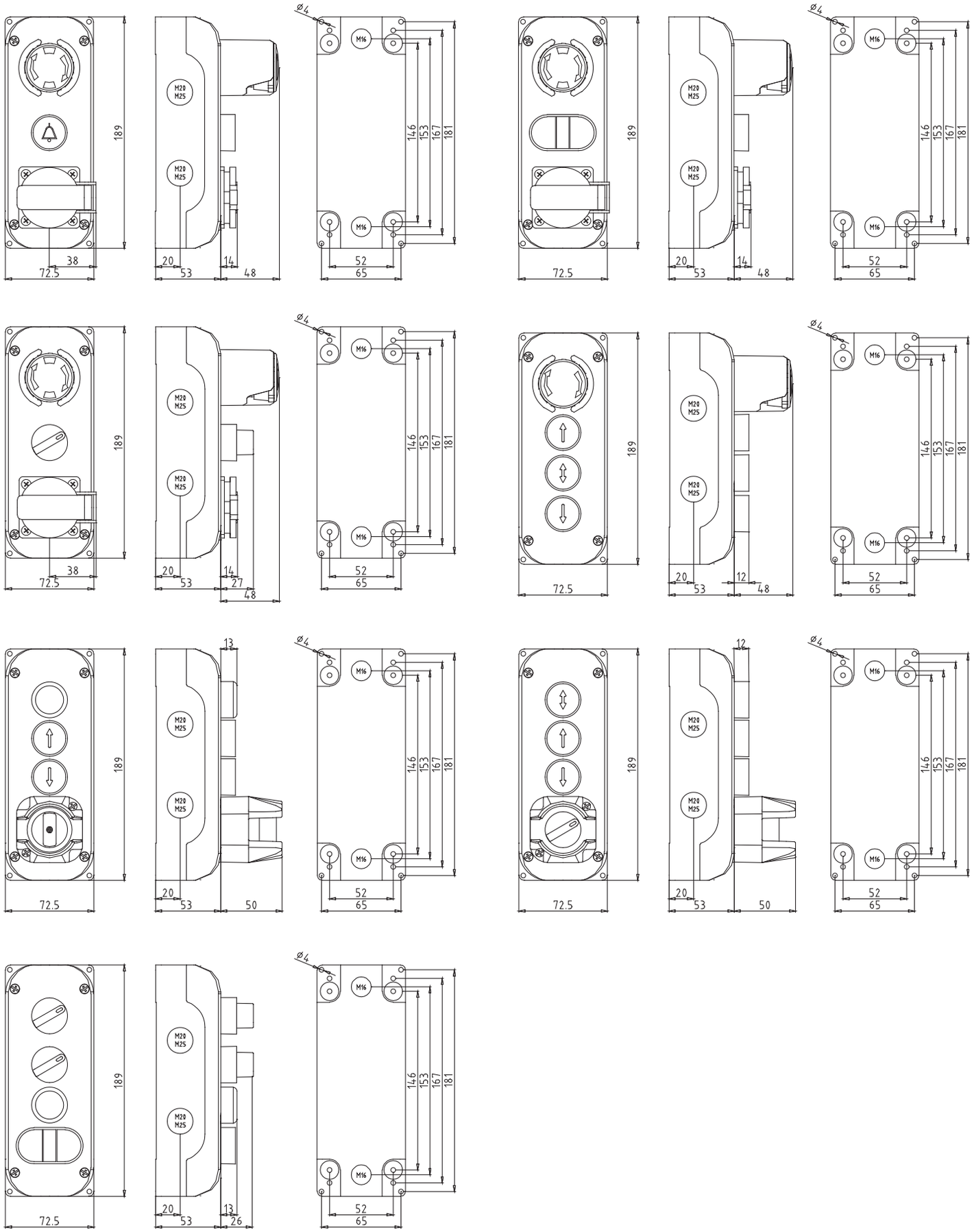
SL 315



Enclosures with pushbuttons

ABS thermoplastic series V0 - IP65 - Dimensionals

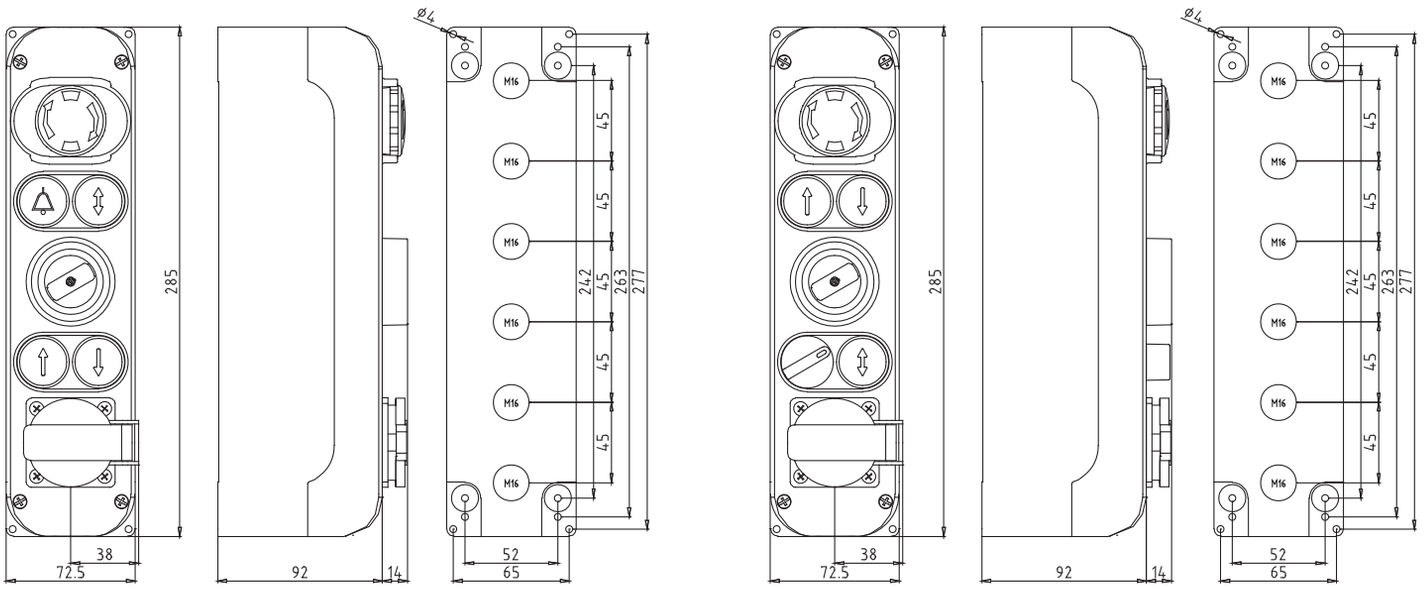
SL 415

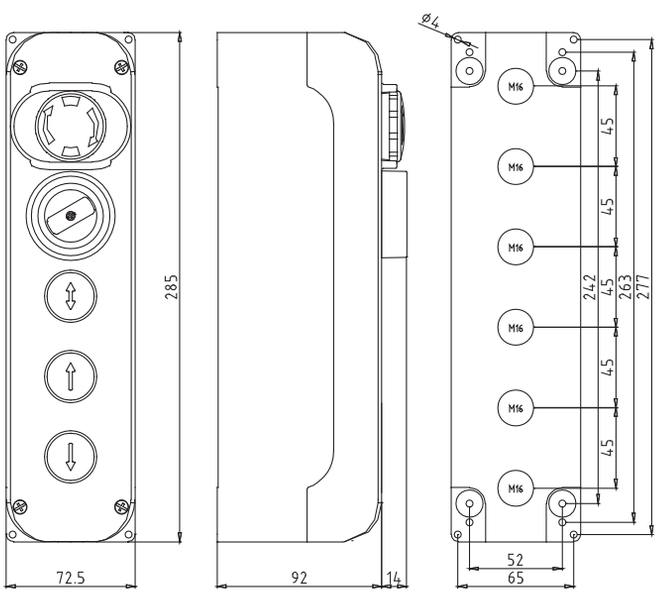


Enclosures with pushbuttons

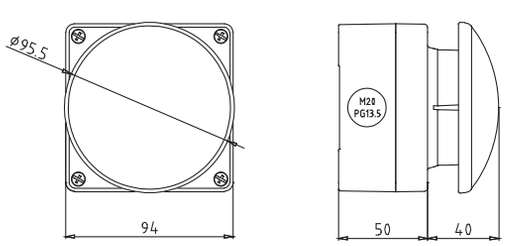
ABS thermoplastic series V0 - IP65 - Dimensionals

SL 515





SA 080



Accessories

Available socket types

DESCRIPTION	CODE
Italian socket “ITA”	XX1136CO-ITA
French socket “FRA”	XX1136CO-FRA
US socket “USA”	XX1136CO-USA
Swiss socket “CH”	XX1136CO-CH
UK standard socket “UK”	XX1136CO-UK
Schuko socket ”SCH”	XX1136CO-SCH
China/Australia socket “CN”	XX1136CO-CN

Types of cable glands available

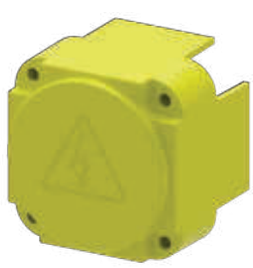
DESCRIPTION	CODE
M16x1.5 technopolymer cable gland	XX1032CO
M20x1.5 technopolymer cable gland	XX1033CO

Free hole cap

DESCRIPTION	CODE
Free hole cap for IP65 boxes	ECX 4490

Cover protection

DESCRIPTION	CODE
Cover to isolate the socket inside the box (only for SL 515)	GR2795



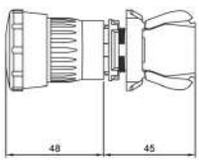
Wall bracket

DESCRIPTION	CODE
Wall bracket case for SL boxes	GR2796

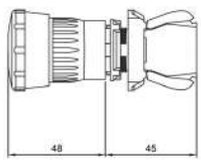
Control unit ∅ 22

Plastic series - emergency mushroom pushbuttons

EN ISO 13850 emergency stop button



EN ISO 13850 emergency stop button with signaling



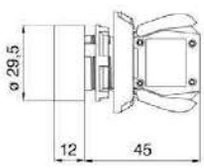
TECHNICAL CHARACTERISTICS		
Mounting diameter	22 mm	22 mm
Operator diameter	40 mm	40 mm
Body material	Thermoplastic	Thermoplastic
Construction form	Mushroom ∅ 40 mm.	Mushroom ∅ 40 mm.
Mounting panel thickness	Minimum thickness 1 mm - maximum 6 mm.	Minimum thickness 1 mm - maximum 6 mm.
Functionality	With latch, twist to release	With latch, twist to release
Operating temperature	-25°....+70°C	-25°....+70°C
Protection level	IP65	IP65
Regulations	IEC 60947-5-1	IEC 60947-5-1 IEC 60947-5-5
Approvals	CE cULus EAC UKCA	CE cULus EAC UKCA
CODE		
	ECX 4580	
		ECX 4581

COMEPI

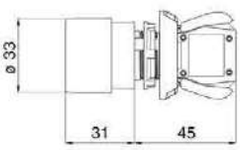
Control unit ∅ 22

Plastic series - emergency mushroom pushbuttons

Pulsante filoghiera



Pulsante a fungo ∅ 33 mm.

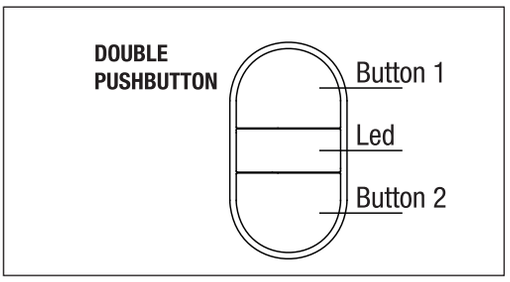


TECHNICAL CHARACTERISTICS		
Mounting diameter	22 mm	22 mm
Operator diameter	29.5 mm	33 mm
Body material	Thermoplastic	Thermoplastic
Construction form	Flush	Mushroom ∅ 33 mm.
Mounting panel thickness	Minimum thickness 1 mm - maximum 6 mm.	Minimum thickness 1 mm - maximum 6 mm.
Functionality	Unstable	Unstable
Operating temperature	-25°....+70°C	-25°....+70°C
Protection level	IP65	IP65
Regulations	IEC 60947-5-1	IEC 60947-5-1
Approvals	CE UL508 EAC UKCA	CE UL508 EAC UKCA

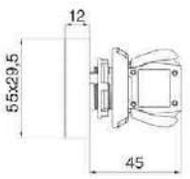
CODE		
UP button	**ECX 4109/B**	
UP button	**ECX 4108-01/B**	
DOWN button	**ECX 4109-01**	
DOWN button	**ECX 4108**	
LIGHT button	**ECX 4100-01**	
LIGHT button	**ECX 4100-91**	
LIGHT button	**ECX 4103-01**	
LIGHT button	**ECX 4103-91**	
ALARM button	**ECX 4103-02**	
ALARM button	**ECX 4103-92**	
ENABLE button	**ECX 4104-01**	
ENABLE button	**ECX 4104-91**	
ENABLE button	**ECX 4104-03**	
ENABLE button	**ECX 4104-93**	
LIGHT button		**ECX 4169-01**
LIGHT button		**ECX 4169-91**
ALARM button		**ECX 4169-02**
ALARM button		**ECX 4169-92**

Control unit ∅ 22

Plastic series - Double buttons



Double buttons

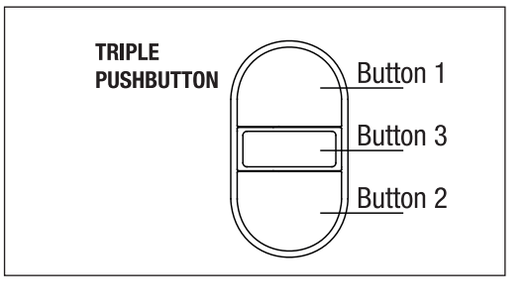


TECHNICAL CHARACTERISTICS	
Mounting diameter	22 mm
Operator diameter	55x29.5
Body material	Thermoplastic
Construction form	Rectangular
Mounting panel thickness	Minimum thickness 1 mm - maximum 6 mm.
Functionality	Unstable
Operating temperature	-25°....+70°C
Protection level	IP65
Regulations	IEC 60947-5-1
Approvals	CE UL508 EAC UKCA
Mechanical life	1M

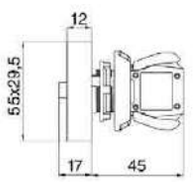
CODE	
Double button: ENABLE/ALARM	**ECX 4659/GBU-90**
Double button: ENABLE/LIGHT	**ECX 4661/NBU-90**
Double button: ALARM/LIGHT	**ECX 4660/NG-90**
Double button: UP/DOWN	**ECX 4658/BN**
Double button: UP/DOWN	**ECX 4658/BN-01**

Control unit ∅ 22

Plastic series - Triple buttons



Triple buttons



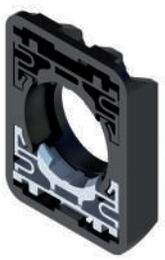
TECHNICAL CHARACTERISTICS	
Mounting diameter	22 mm
Operator diameter	55x29.5
Body material	Thermoplastic
Construction form	Rectangular
Mounting panel thickness	Minimum thickness 1 mm - maximum 6 mm.
Functionality	Unstable
Operating temperature	-25°....+70°C
Protection level	IP65
Regulations	IEC 60947-5-1
Approvals	CE UL508 EAC UKCA
Mechanical life	1M

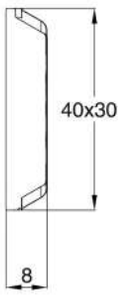
CODE	
Triple button: ENABLE/ALARM/LIGHT	**ECX 4662/NGBU-90**
Triple button: UP/ALARM/DOWN	**ECX 4663/NBG-90**

Command Units ∅ 22

Plastic series - Fixing base, contact elements and quick coupling LED unit

Support base

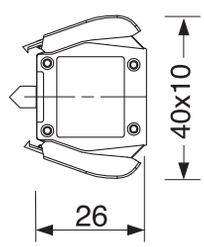




TECHNICAL FEATURES	
Compatibility	with ECX 4000 series operators
Dimension	40x30 mm
Thickness	8 mm
Material	thermoplastic
Ambient temperatures	-25....+70°C
Prescriptions	Manual hooking release by screwdriver
Colors	●
CODI	**ECX 4029**

Assembly and use precautions on page 000

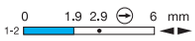
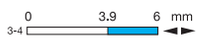
Quick latch contact elements (IP20)



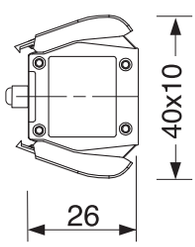
Positive opening	IEC 60947-5-1		Positive opening on all NC contacts
Rated insulation voltage Ui	IEC 60947-1 and EN 60947-1		690V (degree of pollution 3)
	UL 508 and CSA C22-2 n° 14		A600, Q300
Rated impulse withstand voltage Uimp	IEC 60947-1 and EN 60947-1		8 kV
Conditional short-circuit current	IEC 60947-1 and EN 60947-1		1 kA
Conventional free air thermal current Ith	EC 60947-5-1 and EN 60947-5-1 $\theta < 40$ °C		10 A
Short-circuit protection Ue	< 500 V. a.c. – gG (gl) type fuses		10 A
Corrente nominale di funzionamento	IEC 60947-5-1		
	Ie / AC-15:	24 V - 50/60 Hz	10 A
		240 V - 50/60 Hz	6 A
		400 V - 50/60 Hz	4 A
	Ie / DC-13:	24 V - d.c	2,8 A
		125 V - d.c.	0,55 A
		250 V - d.c	0,27 A
Switching frequency	3600 cycles/h		
Resistance between contacts	⩽ 25 mΩ		
Protection degree IEC 60529 and EN 60529	IP 20		
Connecting terminals	On screw with non loosable plate clamp		
	1 or 2 conductors - 0,5 ...2,5 mm^2		

Command Units ∅ 22

Plastic series - Fixing base, contact elements and quick coupling LED unit

DESCRIPTION		
Color	Red	Green
Operation diagram		
Actuation force for positive opening	2,1N / 15N	2,6N
CODE	**ECX 1030N**	**ECX 1040N**

Quick latch led units



COLOR	12V AC/DC	24V AC/DC	110V AC/DC	230V AC/DC
🔴	ECX 3051N-12L	ECX 3051N-24L	ECX 3051N-110L	ECX 3051N-230L
🟢	ECX 3052N-12L	ECX 3052N-24L	ECX 3052N-110L	ECX 3052N-230L
🟡	ECX 3053N-12L	ECX 3053N-24L	ECX 3053N-110L	ECX 3053N-230L
🔵	ECX 3054N-12L	ECX 3054N-24L	ECX 3054N-110L	ECX 3054N-230L
⚪	ECX 3055N-12L	ECX 3055N-24L	ECX 3055N-110L	ECX 3055N-230L

For the SL series the contacts and LED units are fixed directly on the bottom of the case.
To order them replace the digit "N" with the digit "R"
Example: ECX 1040R

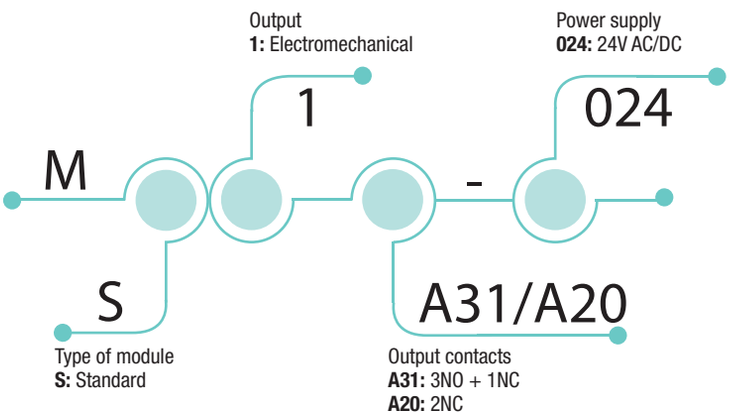
Safety modules **MS1A31 - MS1A20 series**

Summary

For more information:

APPROVALS: UL 508 / CSA C22-2 N. 14 / EN 81-20 EN 81-50 / EN ISO 13849-1

2014/33/UE Lift directive - According EN 81-20 EN 81-50
2006/42/CE Machinery directive - According EN ISO 13849-1



HOW IS IT MADE?

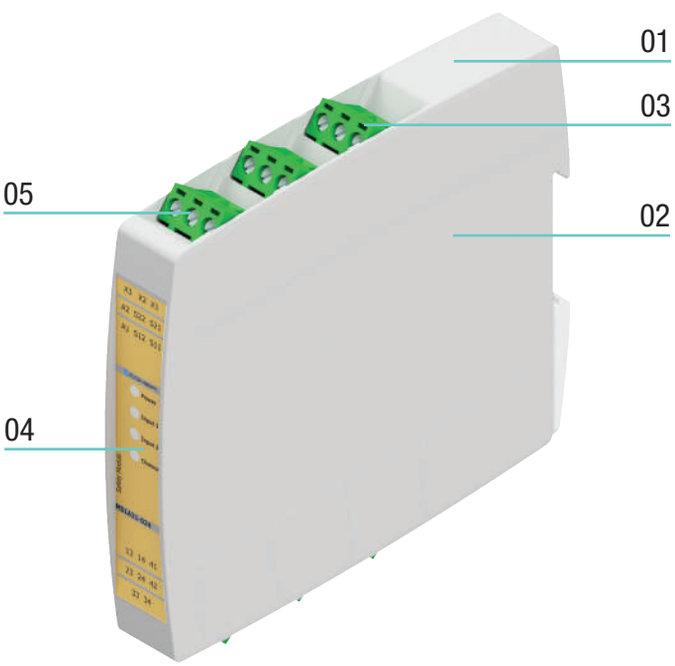
01 Casing
- Indelible laser marking
- Plastic casing (IP40)
- Standard dimension 18 x 90 mm.

02 DIN rail mounting

03 Output contacts
- Electromechanical
- NO for safety purpose
- NC for auxiliary signal

04 LED indicators for status, supply and diagnostic
- Power
- Input 1
- Input 2
- Channels

05 Electrical connection
- IP20 terminal blocks
- 1 or 2 x 0,75... 1,5 mm^2
- detachable coded terminals



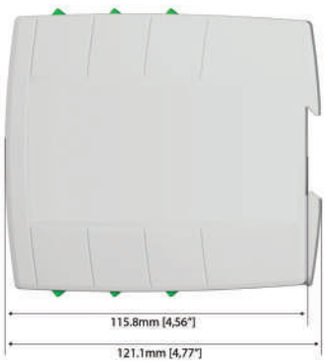
Safety modules **MS1A31 - MS1A20 series**
Description

DESCRIPTION

MS1A31-024 and MS1A20-024 are safety modules approved and designed both for machinery directive and lift directive. These devices are widely used in elevator safety circuits to check the correct position of the cabin within the unlocking area, as required by the standards in forces.

They comply with the requirements of European Directives (Low Voltage, EMC, Lift, Machinery 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 DDC 08 - Safety Modules.

DIMENSIONS



MS1A20-024

X1-X2: manual start / automatic start
X1-X3: monitored manual start S11-
S12: channel 1 NO input
S21-S22: channel 2 NO input
A1: power supply 24 Vdc (+)/Vac(~)
A2: power supply 24 Vdc (-)/Vac(~)
13-14: NO safety output
23-24: NO safety output

MS1A31-024

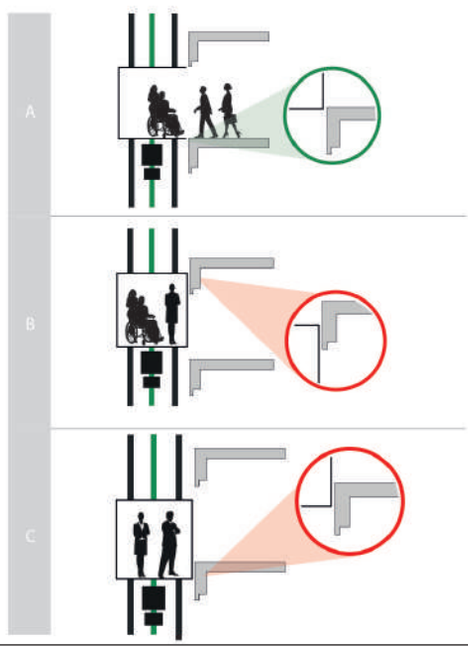
X1-X2: manual start / automatic start
X1-X3: monitored manual start S11-
S12: channel 1 NO input
S21-S22: channel 2 NO input
A1: power supply 24 Vdc (+)/Vac(~)
A2: power supply 24 Vdc (-)/Vac(~)
13-14: NO safety output
23-24: NO safety output
33-34: NO safety output
41-42: NC auxiliary output

OPERATING PRINCIPLE

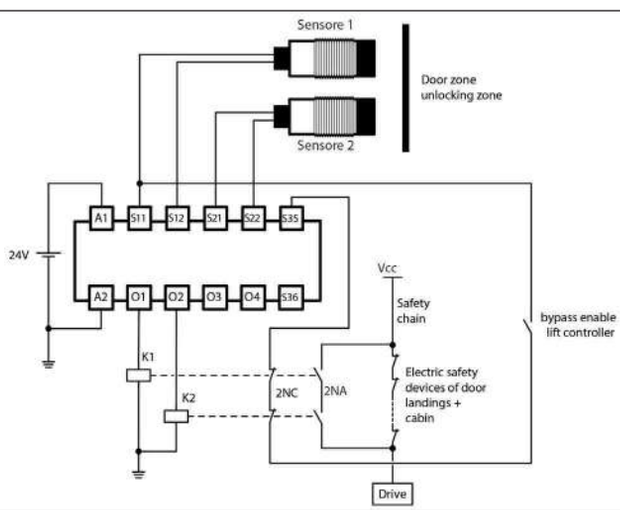
The module checks the correct position of the cabin within the area of unlock.

The emergency exits must be connected to the landing door circuits and at the doors of the cabin, in order to bypass the exits when the lift does located inside the release area

The auxiliary output must be connected to the lift controller board, to check its status when the cabin is located in the unlocking area



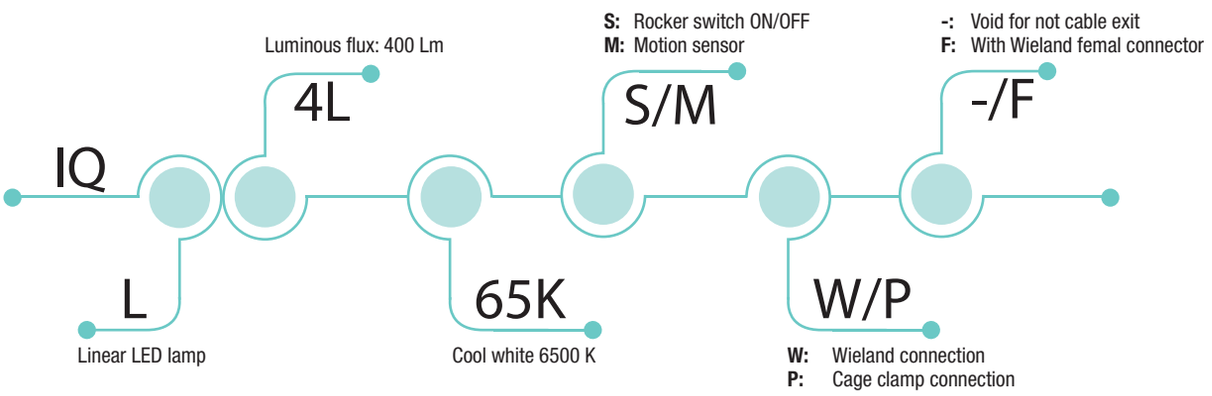
FLOOR LEVELLING CONNECTION SCHEME



Led Lamp **IQL series**

Summary

APPROVALS:



example: IQL4L65KMW

MAIN FEATURES

01 Universal use
- Wide voltage range 24V-265V AC/DC

02 Motion sensor
- Movement sensor with 5 minute setting

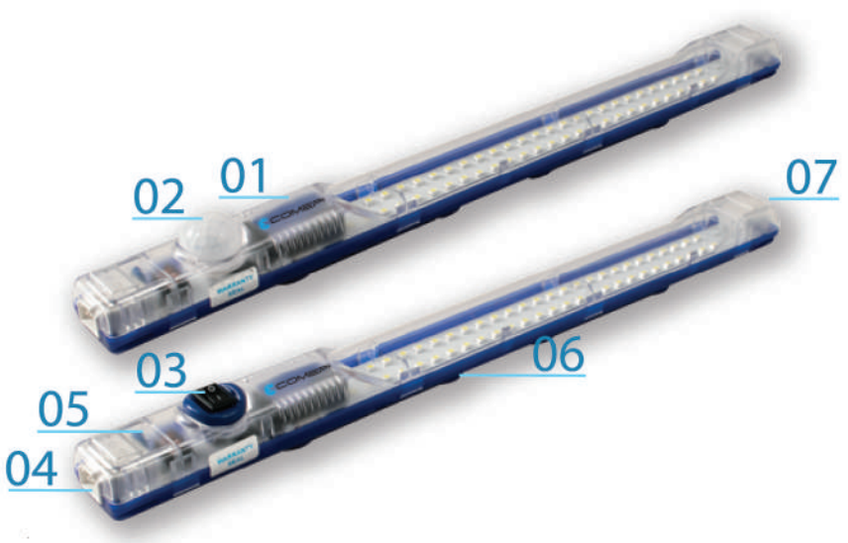
03 Rocker switch on/off

04 Connection options
- Wieland plug or cage clamp connection

05 Push to release
- Applicable to every connection type

06 Mounting
- Integrated magnets or plastic clips (provided)

07 Daisy chain
- Max 16 lamps AC / max 8 lamps DC



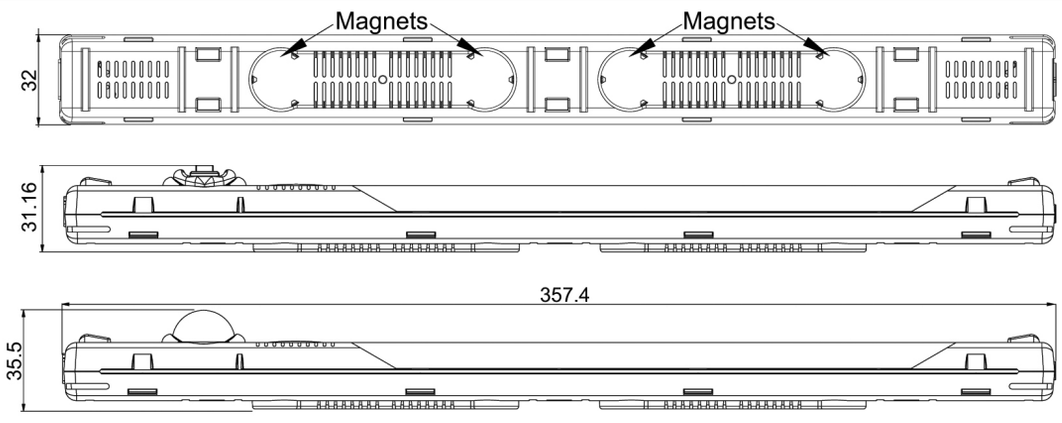
Led Lamp **IQL series**

Description

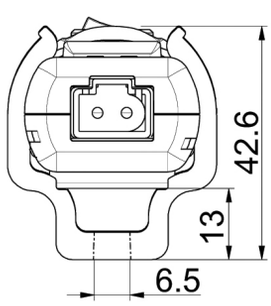
HIGH PERFORMANCE

- Light output 400Lm
- Protection degree IP20
- Operating range fro -30°C to +70°C
- Life time: 40000 hours
- Power consumption: 4W
- Wide voltage range 24V-265V AC/DC
- LED lamp type, 120° angle
- Light color: Cool white
- Temperature: 6500 K

Dimensions

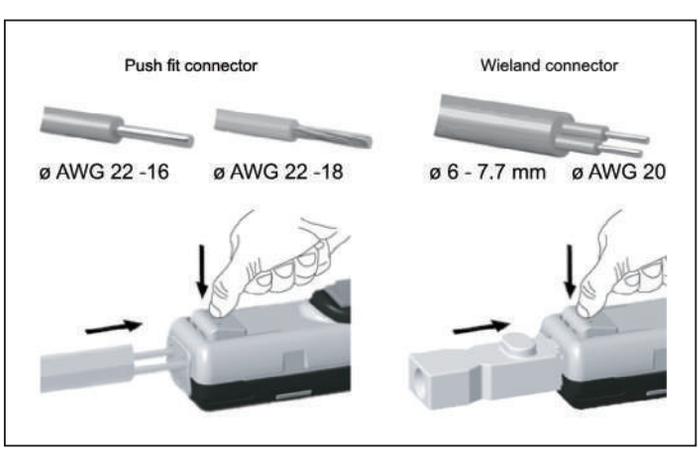


Mounting Accessories

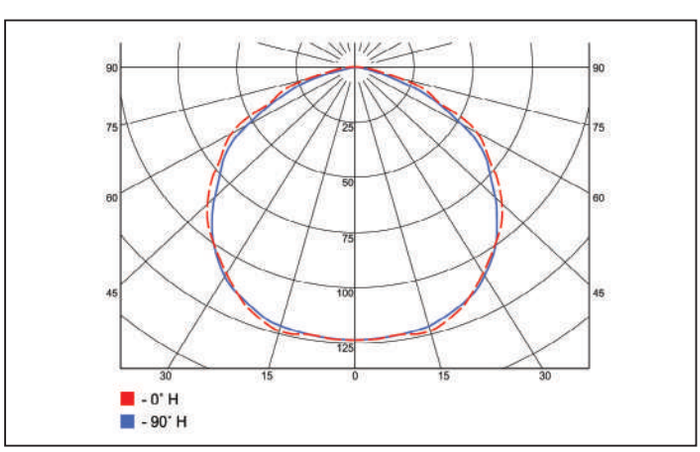


Screw mount clip M6

Mounting



Light distribution curve

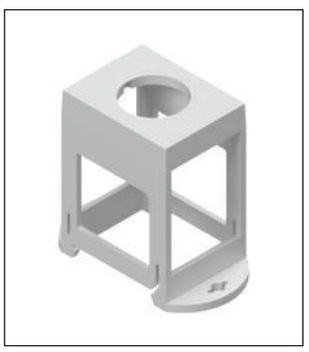


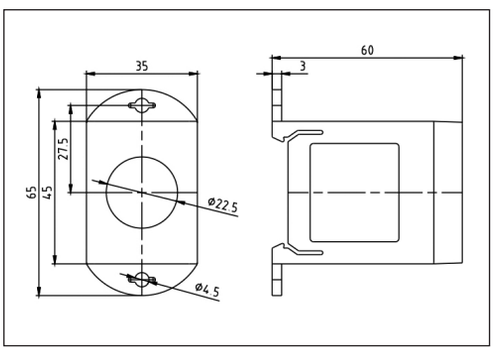
Din Bar Adaptor **ECX 2572**
Description

For more information:

DESCRIPTION
ECX 2572 DIN rail adapter is easy to install and unistall. The quick and reliable hooking makes it possible to mount this accessory directly in the electrical panel. This useful accessory is widely used in electrical panel for lifts and goods lifts.

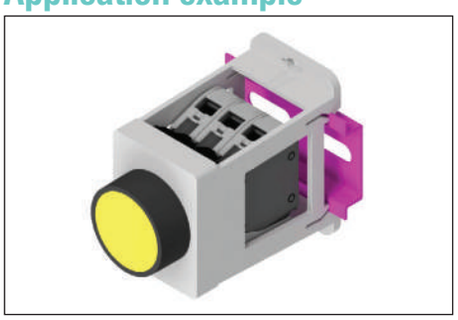
APPLICATION
Adapter for installing 22mm buttons directly on DIN bar.
Compatibility with Comepi ecx 4000 and ecx 1000 series contact blocks.



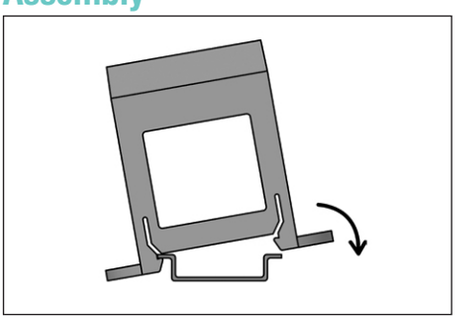


Code
ECX 2572

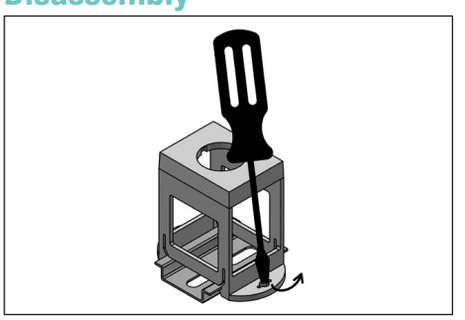
Application example



Assembly

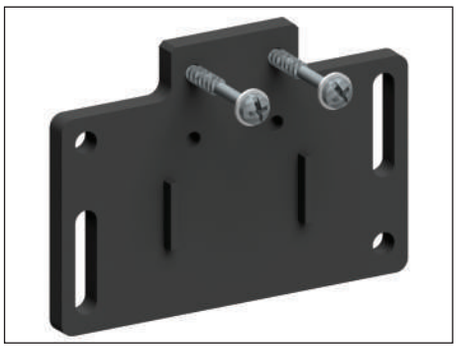


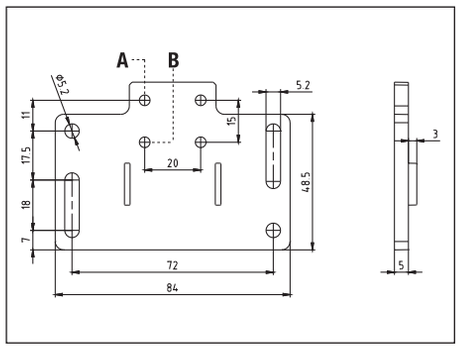
Disassembly



Platelets and Accessories

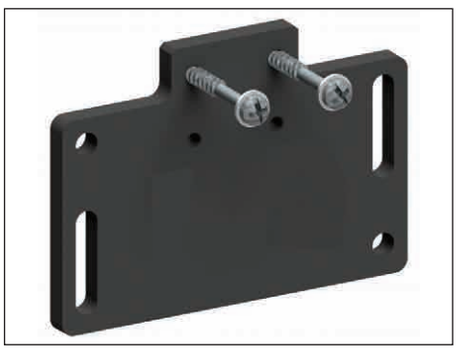
Description

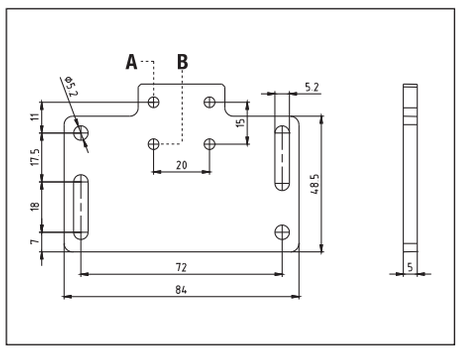




Code

GR2149





Code

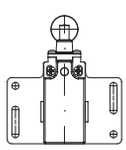
GR2150

- for heads "T" use holes "A", for heads "R" use holes "B"
- screws and washers included in the kit

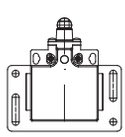
COMPLETE KIT

To order the complete kit (limit switch + fixing plate), add digits -001 to the limit switch code

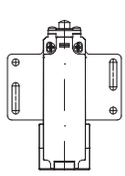
Fixing holes A



AP Series:
es: AP1T16Z11-001

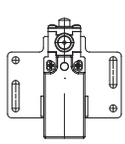


DP Series:
es: DP1T12Z11-001

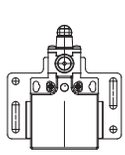


HP Series:
es: HP1T11Z11-001

Fixing holes B



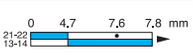
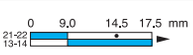
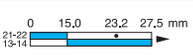
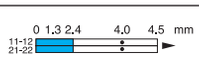
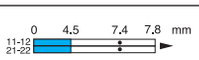
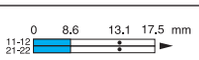
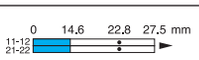
AP_R Series:
es: AP1R11Z11-001

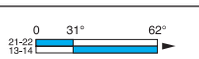
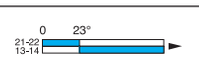
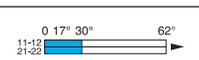


DP_R Series:
es: DP1R12Z11-001

Limit Switches **HP series**

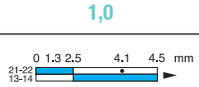
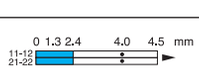
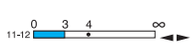
Diagrams

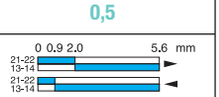
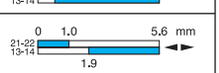
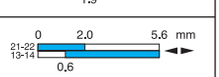
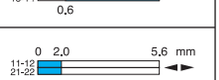
	Actuator with end plunger	Actuator with end roller plunger	Actuator with roller lever for 1 direction	Actuator with adjustable roller lever	Actuator with roller/rod lever
					
Operating head types	T10 - T11 - T14 T21 - T2101	T12 - T13 - T16	T30 - T31 - T32 T34 - T35 - T36	T38 - T39	T41÷46 T51÷55 T5100÷5500 T71÷75
Max actuation speed [m/s]	0,5	0,3	1,0	1,0	1,5
J11 SNAP ACTION (1NO + 1NC)					
J02 SNAP ACTION (2NC)					

	Actuator with steel spring	Actuator with multidirectional spring	Plain plunger with manual reset
			
Operating head types	T61 - T62	T91 - T92 - T93	R002
Max actuation speed [m/s]	1,5	1,0	
J11 SNAP ACTION (1NO + 1NC)			
J02 SNAP ACTION (2NC)			

Limit Switches **AP series**

Diagrams

	Plain plunger with manual reset	Actuator with multidirectional spring
		
Operating head types	R002	T80
Max actuation speed [m/s]	1,0	0,5
J11 SNAP ACTION (1NO + 1NC)		
J02 SNAP ACTION (2NC)		
J01 SNAP ACTION (1NC)		

	Pull action with ring
	
Operating head types	T98
Max actuation speed [m/s]	0,5
Z11 SNAP ACTION (1NO + 1NC)	
X11 SLOW ACTION (1NO + 1NC)	
Y11 SLOW ACTION (1NO + 1NC)	
W02 SLOW ACTION (2NC)	
W20 SLOW ACTION (2NO)	

Safety Devices
Diagrams

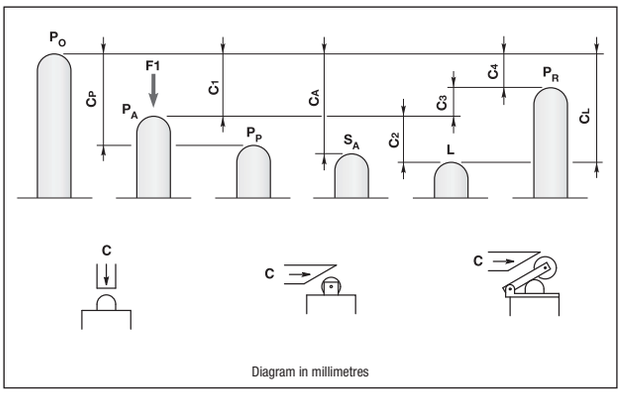


Diagram in millimetres

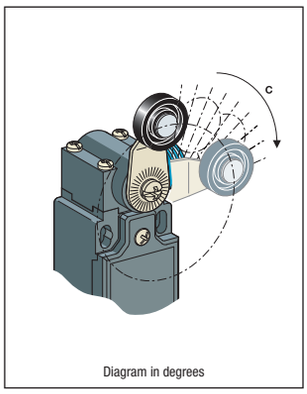


Diagram in degrees

Diagram for snap action contacts:

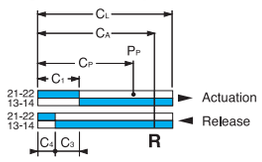
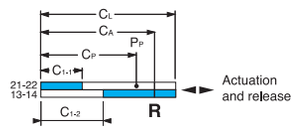


Diagram for non-overlapping slow action contacts:



P_0 Free position: position of the switch actuator when no external force is exerted on it.
P_A Operating position: position of the switch actuator, under the effect of force F1, when the contacts leave their initial free position.
P_P Positive opening position: position of the switch actuator from which positive opening is ensured.
S_A Latching point: point of no return of the switch actuator beyond which the opened status of the NC contacts is maintained. Unlocking will only occur after deliberate action on the reset button.
L Max. travel position: maximum acceptable travel position of the switch actuator.
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_A Latching travel: distance between the free positions P_0 and the latching point S_A.
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 (C1-C4): 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.

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

- ▶ Actuation
- ◀ Release
- Contact closed
- Contact opened
- ● Positive opening operation
- **R** Latching point S_A

			R11 **Steel plunger with reset**	R13 **Steel plunger with nylon roller with reset**	R31-R32 **Steel plunger with nylon roller with reset**	R38 **Steel plunger with nylon roller with reset**	R41-R51 **Lever with nylon roller with reset**
Z11:	Snap action 1NO+1NC	13 21 14 22	0 2.7 4.1 5.6 mm 1.6 R 4.2	0 3.1 7.6 9.6 mm 5.0 R 8.0	0 8.8 14.5 21.0 mm 5.2 R 16.5	0 14.0 23.2 32.0 mm 8.2 R 25.7	0 37° 47° 74° 23° R 62°
X11:	Slow action break before make 1NO+1NC	13 21 14 22	0 1.6 3.2 5.6 mm 2.6 R 4.2	0 3.3 6.0 9.6 mm 4.9 R 8.0	0 6.1 10.5 21.0 mm 9.1 R 16.5	0 10.9 18.5 32.0 mm 16.1 R 25.7	0 22° 37° 74° 35° R 62°
Y11:	Slow action make before break 1NO+1NC	13 21 14 22	0 2.9 4.5 5.6 mm 1.5 R 4.2	0 5.3 8.2 9.6 mm 3.0 R 8.0	0 10.2 14.6 21.0 mm 5.4 R 16.5	0 16.8 25.1 32.0 mm 9.4 R 25.7	0 35° 51° 74° mm 18° R 62°
W02:	Simultaneous slow action 2NC	11 21 12 22	0 1.6 3.1 5.6 mm R 4.2	0 3.1 5.9 9.6 mm R 8.0	0 6 10.2 21.0 mm R 16.5	0 10.1 17.8 32.0 mm R 25.7	0 20° 37° 74° R 62°
Z02:	Snap action 2NC	11 21 12 22	0 2.5 4.0 5.6 mm 1.3 R 4.2	0 2.5 7.4 9.6 mm 4.7 R 8.0	0 9.1 13.1 21.0 mm 5.1 R 16.5	0 15.1 22.8 32.0 mm 8.5 R 25.7	0 37° 46° 74° 20° R 62°
X12P:	Slow action break before make 1NO+2NC	11 21 33 12 22 34	0 1.8 3.4 5.6 mm 3.3 R 4.2	0 3.6 6.4 9.6 mm 6 R 8.0	0 6.9 11.8 21.0 mm 11 R 16.5	0 12.2 19.7 32.0 mm 19 R 25.7	0 23° 40° 74° 39° R 62°
X21P:	Slow action break before make 2NO+1NC	11 23 33 12 24 34	0 1.8 3.4 5.6 mm 3.3 R 4.2	0 3.6 6.4 9.6 mm 6 R 8.0	0 6.9 11.8 21.0 mm 11 R 16.5	0 12.2 19.7 32.0 mm 19 R 25.7	0 23° 40° 74° 39° R 62°
W03P:	Simultaneous slow action 3NC	11 21 31 12 22 32	0 1.8 3.4 5.6 mm R 4.2	0 3.6 6.4 9.6 mm R 8.0	0 6.9 11.8 21.0 mm R 16.5	0 12.2 19.7 32.0 mm R 25.7	0 23° 40° 74° R 62°

Notes

Notes

Notes

COMEPI AROUND THE WORLD

Comepi products are available all over the world, the company supplies 76 countries in 5 continents. Our focus on flexibility translates into the ability to create solutions where the market requires new application needs.
Comepi has a network of agents and importers, supported by local distributors. This organization ensures global presence and support.

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