

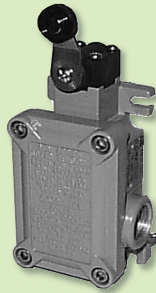
POSITION SWITCHES

series
LS

Protection	Gas	Zone	1-2	II2G	Ex d IIB+H ₂ T6 ÷ T5 Gb
	Dust	Zone	21-22	II2D	Ex tb IIIC T85°C ÷ T100°C Db

Grade of Protection	IP 66
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Amb. Temp.	Standard	Extended	-20°C	+40°C
			-50°C	+80°C



Entries Threading	NPT
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Material	Aluminium light alloy
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Painting	External epoxy RAL7000
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Standards and Certificates

Directive 2014/34/EU (ATEX)

EN 60079-0 • EN 60079-1 • EN 60079-31

BVI 13 ATEX 0084

IEC 60079-0 • IEC 60079-1 • IEC 60079-31

IECEx EPS 13.0034

- Ideal for use in dangerous process in hazardous environments: simple and rugged construction, compact size with the possibility of entry and branching on the three sides of the enclosure
- Complete with two plugs for closing unused entries
- Wide range of actuators in metal or in self-extinguishing glass-fiber-reinforced polymer
- Wide variety of options for adaptation and assembly
- Internal operating rod in SS AISI 303 on OT 58 UNI 5705/65 brass bushing
- External screws in SS except for actuators that may have components in tropicalized steel

Options	- Contact Units for currents and/or voltages beyond the standard	- Cable entry with isometric thread M20x1.5 (M)	- Rollers in Metal and/or of different diameters.
			- Actuators with metal parts in SS

Degree of pollution: 3 conforming to IEC 947-5-1 e EN 60947-5-1 Standards.
Frequency of operations: 20/min (*) max
Number of cycles: 8÷10 millions
Storage Temperature: -40 °C ÷ +85 °C

NOTES

To read the installation and maintenance instructions is recommended.

The temperature class T6/T85°C considers an Ambient Temperature (A.T.) extended up to +60°C, whereas, class T5/T100°C considers an A.T. extended up to +80°C.

(*) For A.T. up to +40°C the max surface temperature is 65°C reducing the number of operations to 600/h.

(**) As safety switches only those with symbol shall be used. The safety circuit must always be connected to NC contacts (11-12 or 21-22). Exceed by 1.5 mm (25°) the gap between the contacts. Operate the switch with the indicated opening force.

Contact Unit

Nominal current (active): I=10 A
 Insulating Voltage: U_i= 500 V_{ac} / 600 V_{dc}
 Short Circuit Protection: 10 A Fuse
 Minimum conductor section: 1.5 mm²
 Max Current Density: 5 A/mm²

	AC15 (50-60Hz)				DC13 (d.c.)		
U _e (V)	24	130	240	400	24	110	250
I _e (A)	10	5.5	3	1.8	2.8	0.6	0.27

ELECTRICAL DIAGRAM

Type	Contact	Diagram	Operating	Type	Contact	Diagram	Operating
C2	1NO+1NC 1NO+1NC		Snap action	C6I	1NC+1NO		Non overlapping slow action
C3I	1NC+1NC		Simultaneous snap action	C7I	1NC+1NO		Overlapping slow action
C4I	1NO+1NO		Simultaneous slow action	C9I	2NC		Simultaneous slow action
C5I	1NC+1NO		Snap action				

Contacts id (by numbers) in conformity to EN 60947-1 Standards
 All types (except C2) allow different voltages at the contacts terminals.
 For type C2 the contacts 13-14 and 21-22 are electrically separated from contacts 31-32 and 43-44.

Positive opening of contacts (** for some models available in conformity to IEC 947-5-1, EN 60.947-5-1 e CEI 17-45 - F. 1914 Standards

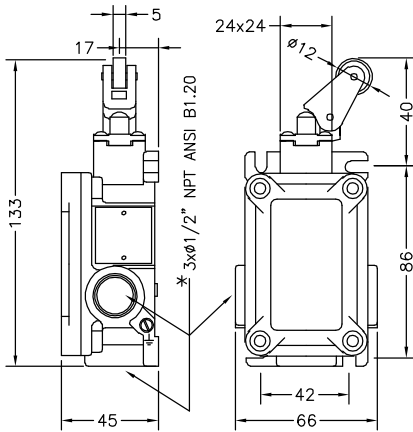
* I PRODOTTI CONTRASSEGNA TI SONO NORMALMENTE DISPONIBILI A MAGAZZINO
The marked products are normally available to store

A LEVA ANGOLARE CON ROTELLA
With angular roller lever

VELOCITA' MASSIMA:
Max speed 1.0 m/s
FORZA MIN. DI AZIONAMENTO:
Min. force actuation: 7 N
FORZA MIN. PER APERTURA POSITIVA:
Min. force positive opening operation: 24 N

LEGENDA
Legenda

- ➔ APERTURA POSITIVA
Positive opening
- CORSA APERTURA POSITIVA
Positive opening travel
- PREMENDO
Pushing
- ◀ RILASCIANDO
Releasing

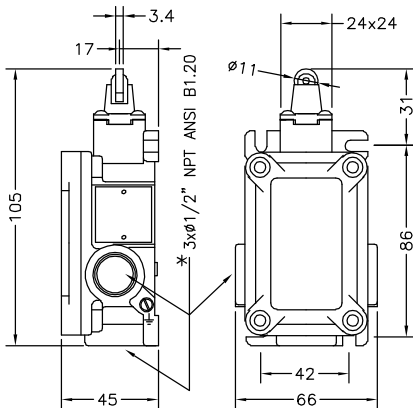


A PERNO CON ROTELLA
With push button roller

VELOCITA' MASSIMA:
Max speed 0.3 m/s
FORZA MIN. DI AZIONAMENTO:
Min. force actuation: 12 N
FORZA MIN. PER APERTURA POSITIVA:
Min. force positive opening operation: 30 N

LEGENDA
Legenda

- ➔ APERTURA POSITIVA
Positive opening
- CORSA APERTURA POSITIVA
Positive opening travel
- PREMENDO
Pushing
- ◀ RILASCIANDO
Releasing

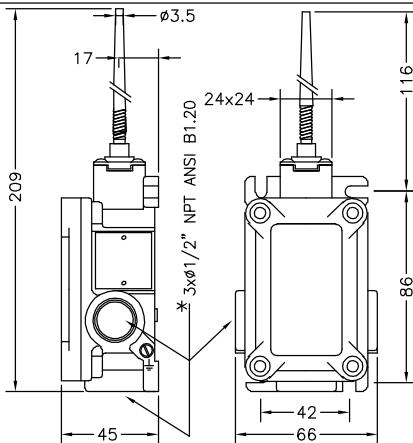


AD ASTA CON MOLLA INOX
With spring rod stainless steel

VELOCITA' MASSIMA:
Max speed 1.0 m/s
COPPIA MIN. DI AZIONAMENTO:
Min. torque actuation: 0.12 Nm
COPPIA MIN. PER APERTURA POSITIVA:
Min. torque positive opening operation: - Nm

LEGENDA
Legenda

- PREMENDO
Pushing
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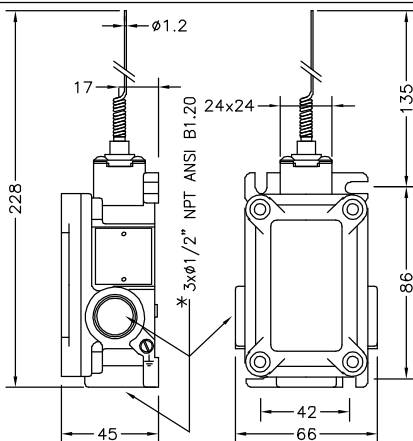


A STELO CON MOLLA INOX
With spring rod stainless steel

VELOCITA' MASSIMA:
Max speed 1.0 m/s
COPPIA MIN. DI AZIONAMENTO:
Min. torque actuation: 0.12 Nm
COPPIA MIN. PER APERTURA POSITIVA:
Min. torque positive opening operation: - Nm

LEGENDA
Legenda

- PREMENDO
Pushing
- ◀ RILASCIANDO
Releasing



UNITA' DI CONTATTO Contact blocks	N° CATALOGO Catalogue n°	DIAGRAMMI CORSE Travel diagrams
C51 1NC+1NO	LS5105N *	
C61 1NC+1NO	LS6105N *	
C71 1NC+1NO	LS7105N *	
C91 1NC+1NC	LS9105N *	
C41 1NO+1NO	LS4105N *	
C31 1NC+1NC	LS3105N *	
C2 1NO+1NC 1NO+1NC	LS205N *	
C51 1NC+1NO	LS5115N *	
C61 1NC+1NO	LS6115N *	
C71 1NC+1NO	LS7115N *	
C91 1NC+1NC	LS9115N *	
C41 1NO+1NO	LS4115N *	
C31 1NC+1NC	LS3115N *	
C2 1NO+1NC 1NO+1NC	LS2115N *	
C51 1NC+1NO	LS5120N *	
C61 1NC+1NO	LS6120N *	
C71 1NC+1NO	LS7120N *	
C91 1NC+1NC	LS9120N *	
C41 1NO+1NO	LS4120N *	
C31 1NC+1NC	LS3120N *	
C2 1NO+1NC 1NO+1NC	LS220N *	
C51 1NC+1NO	LS5121N *	
C61 1NC+1NO	LS6121N *	
C71 1NC+1NO	LS7121N *	
C91 1NC+1NC	LS9121N *	
C41 1NO+1NO	LS4121N *	
C31 1NC+1NC	LS3121N *	
C2 1NO+1NC 1NO+1NC	LS221N *	

* IN ALTERNATIVA:
Alternative: M20x1.5 ISO 965