

LIMIT SWITCHES

series
PS

Protection	Gas	Zone	1-2	II2G	Ex db IIC T6÷T5 Gb
	Dusts		21-22	II2D	Ex tb IIIC T85°C÷T100°C Db

Degree of Protection	IP66/67
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Amb. Temp.	Standard	-20°C	+40°C
	Extended	-50°C	+80°C



Entries Threading	NPT ANSI B1.20
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Material	Aluminum light alloy
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Painting	External epoxy RAL7000
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Standards and Certificates	<p>Directive 2014/34/EU (ATEX)</p> <p>EN 60079-0 • EN 60079-1 EN 60079-31</p> <p>CE BVI 13 ATEX 0083</p> <p>IEC 60079-0 • IEC 60079-1 IEC 60079-31</p> <p>IECEx EPS 13.0033</p>
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- Compact and lightweight (450 g) design with ideal features for use in dangerous process and hazardous environments.
- Wide range of actuators in metal or in self-extinguishing glass-fiber-reinforced polymer (GFRP).
- Wide variety of options for adaptation and assembly.
- Internal operating rod in Stainless Steel AISI 303 on a brass bushing OT 58 UNI 5705/65.
- External screws in Stainless Steel except for actuators that may have components in tropicalized steel.

Options

- Stainless Steel version (see page I19).
- Quick snap-action contact units 2NC (C11) with positive opening ➡.
- Cable entry with metric thread M20x1.5 (M).
- Rollers in Metal.
- Different diameters rollers.
- Actuators with some metal parts in Stainless Steel.

Degree of pollution: 3 conforming to IEC/EN 60947-5-1 Standards.

Frequency of operations: 20/min (*) max

Number of cycles: 8÷10 millions

Storage Temperature: -40°C ÷ +70°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.

[°] The insulating voltage is equal to 400 VAC / 500 VDC for C2 and C11 contacts.

(*) 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 Vac / 600 Vdc [°]
Impulse Withstand Voltage:	U _{imp} : 6 kV
Short Circuit Current	: 1000 AV
Short Circuit Protection:	Fuse 10 A 500 V
Minimum conductor section	: 1.5 mm ²
Max Current Density	: 5 A/mm ²

	AC15 - A600			DC13 - Q600		
U _e (V)	240	400	500	24	125	250
I _e (A)	6	4	1	3	0.55	0.3

Electrical Diagram

Type	Contact	Diagram	Operating	Type	Contact	Diagram	Operating
C2	1NO+1NC 1NO+1NC		Snap action	C10	2NO		Slow action
C5	1NO+1NC		Snap action	C11	2NC		Snap action
C6	1NO+1NC		Slow action	C14	2NC		Slow action
C7	1NO+1NC		Overlapping slow action	C15	2NO		Slow action
C9	2NO		Slow action	C20	1NO+2NC		Slow action

Contacts identification (by numbers) in compliance with IEC/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 compliance with IEC/EN 60947-5-1 e CEI 17-45 - F. 1914 Standards.

Swivel heads

All switches allow to rotate the head by 90° x 90° by unscrewing the four fixing screws (fig. 1).

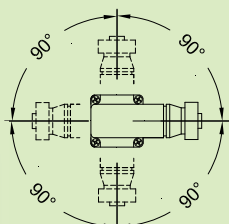


Fig. 1

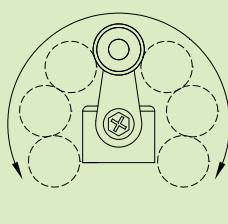


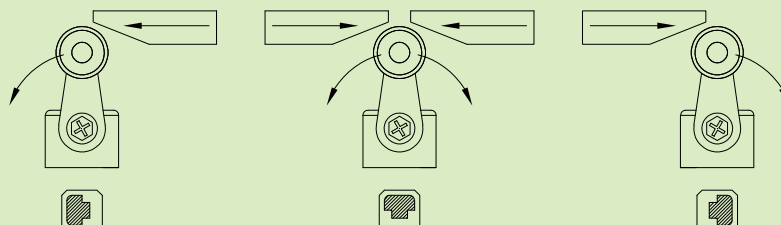
Fig. 2

Adjustable levers

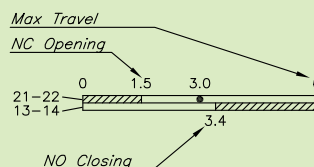
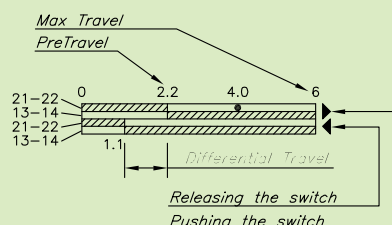
Position switches with roller lever have the lever adjustable by 10° x 10° (fig. 2). The positive movement transmission is always ensured by the particular geometric coupling between the lever and the shaft.

Unidirectional heads

To get the unidirectional operation on switches with revolving lever it is necessary to remove the four screws of the head and totate the internal piston.



Stroke Diagrams



Opened Contact
Closed Contact
Positive Opening

Example: PS 511N

Order coding

Type	Contact Unit	Actuator	Threading
PS	C5	11	N = NPT (N) M = metric (M)

Series PS : AVAILABLE MODELS

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

A PERNO

With push button

VELOCITA' MASSIMA: 0.5 m/s
Max speed

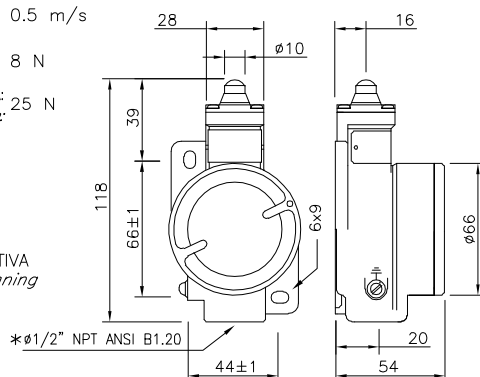
FORZA MIN. DI AZIONAMENTO: 8 N
Min. force actuation:

FORZA MIN. PER APERTURA POSITIVA: 25 N
Min. force positive opening operation:

LEGENDA

Legenda

- APERTURA POSITIVA
Positive opening
- INIZIO APERTURA POSITIVA
Positive opening beginning
- PREMENDO
Pushing
- RILASCIANDO
Releasing



UNITA' DI CONTATTO Contact blocks	N° CATALOGO Catalogue n°	DIAGRAMMI CORSE Travel diagrams
C2 1NO+1NC+ 1NO+1NC	PS 20IN	13-14 21-22 43-44 31-32 0 1.3 6 0.7
C5 1NO+1NC	PS 50IN	21-22 13-14 21-22 13-14 0 2.2 4.0 6 1.1
C6 1NO+1NC	PS 60IN	21-22 13-14 21-22 13-14 0 1.5 3.0 6 3.4
C7 1NO+1NC	PS 70IN	21-22 13-14 21-22 13-14 0 3.1 4.6 6 1.6
C9 2NC	PS 90IN	11-12 12-22 21-22 13-14 0 2.9 4.4 6
C10 2NO	PS 100IN	13-14 23-24 21-22 13-14 0 1.4 6
C14 2NC	PS 140IN	11-12 21-22 21-22 13-14 0 3.0 4.5 6 1.4
C15 2NO	PS 150IN	13-14 23-24 21-22 13-14 0 3.0 6 1.4
C20 1NO+2NC	PS 200IN	13-14 21-22 33-34 21-22 0 1.5 3.0 6 2.0

* IN ALTERNATIVA:
Alternative: M20x1.5 ISO 262



www.coelbo.it

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

A LEVA SEMPLICE CON ROTELLA

With simple roller lever

VELOCITA' MASSIMA:
CON CAMMA A 30°
Max speed with 30° cam: 0.5 m/s

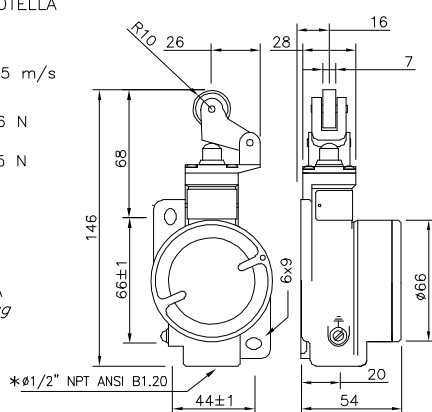
FORZA MIN. DI AZIONAMENTO: 6 N
Min. force actuation:

FORZA MIN. PER APERTURA POSITIVA: 25 N
Min. force positive opening operation:

LEGGENDA

Legenda

- APERTURA POSITIVA
Positive opening
- INIZIO APERTURA POSITIVA
Positive opening beginning
- PREMENDO
Pushing
- ◄ RILASCIANDO
Releasing



A LEVA ANGOLARE CON ROTELLA

With angular roller lever

VELOCITA' MASSIMA:
CON CAMMA A 30°
Max speed with 30° cam: 0.5 m/s

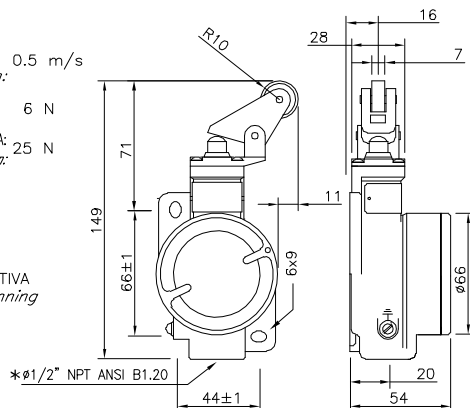
FORZA MIN. DI AZIONAMENTO: 6 N
Min. force actuation:

FORZA MIN. PER APERTURA POSITIVA: 25 N
Min. force positive opening operation:

LEGGENDA

Legenda

- APERTURA POSITIVA
Positive opening
- INIZIO APERTURA POSITIVA
Positive opening beginning
- PREMENDO
Pushing
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Releasing



A PERNO CON PROTEZIONE IN GOMMA

With rubber gasket push button

VELOCITA' MASSIMA:
Max speed 0.5 m/s

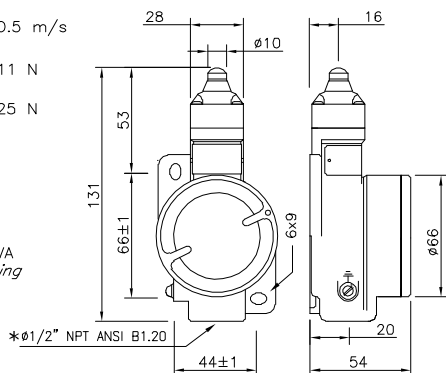
FORZA MIN. DI AZIONAMENTO: 11 N
Min. force actuation:

FORZA MIN. PER APERTURA POSITIVA: 25 N
Min. force positive opening operation:

LEGGENDA

Legenda

- APERTURA POSITIVA
Positive opening
- INIZIO APERTURA POSITIVA
Positive opening beginning
- PREMENDO
Pushing
- ◄ RILASCIANDO
Releasing



A PERNO ALLUNGATO

With lengthened push button

VELOCITA' MASSIMA:
Max speed 0.5 m/s

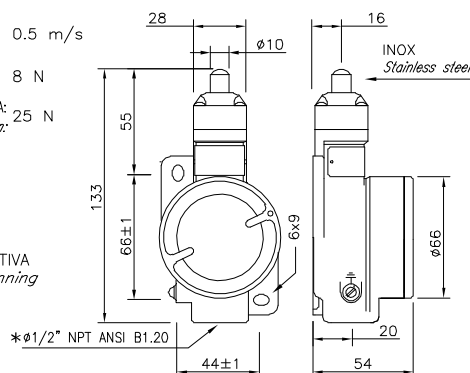
FORZA MIN. DI AZIONAMENTO: 8 N
Min. force actuation:

FORZA MIN. PER APERTURA POSITIVA: 25 N
Min. force positive opening operation:

LEGGENDA

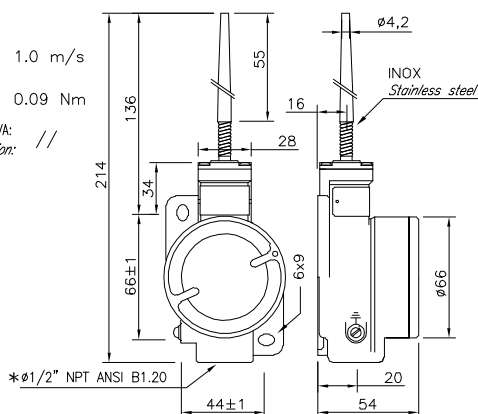
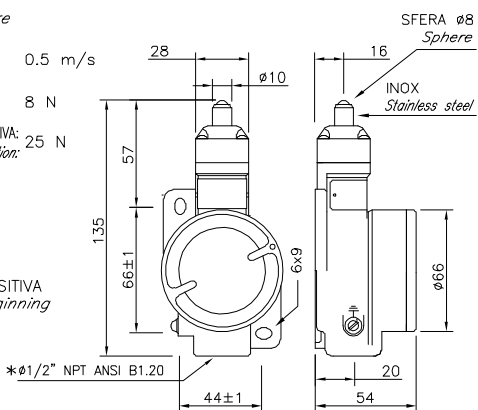
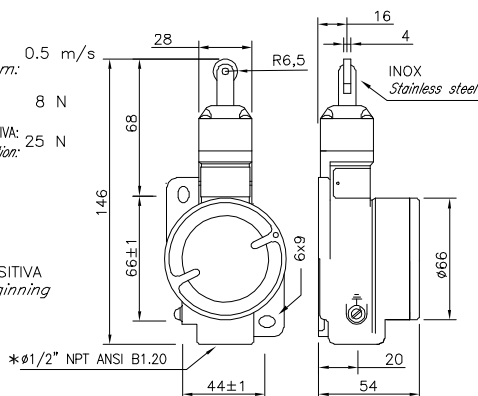
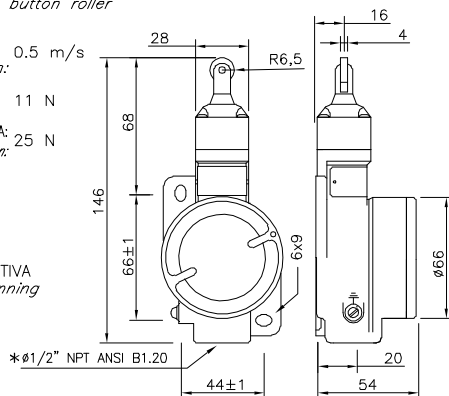
Legenda

- APERTURA POSITIVA
Positive opening
- INIZIO APERTURA POSITIVA
Positive opening beginning
- PREMENDO
Pushing
- ◄ RILASCIANDO
Releasing



* IN ALTERNATIVA:
Alternative: M20x1.5 ISO 262

UNITA' DI CONTATTO Contact blocks	N° CATALOGO Catalogue n°	DIAGRAMMI CORSE Travel diagrams
C2 1NO-1NC+ 1NO-1NC	PS 202N	13-14 0 1.6 8 21-22 0 2.7 4.9 8 43-44 0 0.9 31-32 0
C5 1NO+1NC	PS 502N	13-14 0 2.7 4.9 8 21-22 0 1.4 13-14 0
C6 1NO+1NC	PS 602N	13-14 0 1.8 3.7 8 21-22 0 4.2
C7 1NO+1NC	PS 702N	13-14 0 3.8 5.7 8 21-22 0 2.0
C9 2NC	PS 902N	11-12 0 3.6 5.4 8 21-22 0
C10 2NO	PS 1002N	13-14 0 1.7 8 23-24 0
C14 2NC	PS 1402N	11-12 0 3.7 5.5 8 21-22 0 1.7
C15 2NO	PS 1502N	13-14 0 3.7 8 23-24 0 1.7
C20 1NO+2NC	PS 2002N	13-14 0 1.8 3.7 8 21-22 0 2.5 33-34 0
C2 1NO-1NC+ 1NO-1NC	PS 205N	13-14 0 1.6 8 21-22 0 2.7 4.9 8 43-44 0 0.9 31-32 0
C5 1NO+1NC	PS 505N	13-14 0 2.7 4.9 8 21-22 0 1.4 13-14 0
C6 1NO+1NC	PS 605N	13-14 0 1.8 3.7 8 21-22 0 4.2
C7 1NO+1NC	PS 705N	13-14 0 3.8 5.7 8 21-22 0 2.0
C9 2NC	PS 905N	11-12 0 3.6 5.4 8 21-22 0
C10 2NO	PS 1005N	13-14 0 1.7 8 23-24 0
C14 2NC	PS 1405N	11-12 0 3.7 5.5 8 21-22 0 1.7
C15 2NO	PS 1505N	13-14 0 3.7 8 23-24 0 1.7
C20 1NO+2NC	PS 2005N	13-14 0 1.8 3.7 8 21-22 0 2.5 33-34 0
C2 1NO-1NC+ 1NO-1NC	PS 210N	13-14 0 1.3 6 21-22 0 2.2 4.0 6 43-44 0 0.7 31-32 0
C5 1NO+1NC	PS 510N	13-14 0 2.2 4.0 6 21-22 0 1.1 13-14 0
C6 1NO+1NC	PS 610N	13-14 0 1.5 3.0 6 21-22 0 3.4
C7 1NO+1NC	PS 710N	13-14 0 3.1 4.6 6 21-22 0 1.6
C9 2NC	PS 910N	11-12 0 2.9 4.4 6 21-22 0
C10 2NO	PS 1010N	13-14 0 1.4 6 23-24 0
C14 2NC	PS 1410N	11-12 0 3.0 4.5 6 21-22 0 1.4
C15 2NO	PS 1510N	13-14 0 3.0 6 23-24 0 1.4
C20 1NO+2NC	PS 2010N	13-14 0 1.5 3.0 6 21-22 0 2.0 33-34 0
C2 1NO-1NC+ 1NO-1NC	PS 211N	13-14 0 1.3 6 21-22 0 2.2 4.0 6 43-44 0 0.7 31-32 0
C5 1NO+1NC	PS 511N	13-14 0 2.2 4.0 6 21-22 0 1.1 13-14 0
C6 1NO+1NC	PS 611N	13-14 0 1.5 3.0 6 21-22 0 3.4
C7 1NO+1NC	PS 711N	13-14 0 3.1 4.6 6 21-22 0 1.6
C9 2NC	PS 911N	11-12 0 2.9 4.4 6 21-22 0
C10 2NO	PS 1011N	13-14 0 1.4 6 23-24 0
C14 2NC	PS 1411N	11-12 0 3.0 4.5 6 21-22 0 1.4
C15 2NO	PS 1511N	13-14 0 3.0 6 23-24 0 1.4
C20 1NO+2NC	PS 2011N	13-14 0 1.5 3.0 6 21-22 0 2.0 33-34 0



*IN ALTERNATIVA:
Alternative: M20x1.5 ISO 262

UNITA' DI CONTATTO Contact blocks	N°CATALOGO Catalogue n°	DIAGRAMMI CORSE Travel diagrams
C2 1N0.1NC+ 1N0.1NC	13 21 43 31 14 22 44 32	PS 215N 13-14 0 1.3 21-22 4.0 43-44 6 31-32 0.7
C5 1N0+1NC	13 21 14 22	PS 515N 21-22 0 2.2 4.0 13-14 1.1
C6 1N0+1NC	13 21 14 22	PS 615N 21-22 0 1.5 3.0 13-14 3.4
C7 1N0+1NC	13 21 14 22	PS 715N 21-22 0 3.1 4.6 13-14 1.6
C9 2NC	11 21 12 22	PS 915N 11-12 0 2.9 4.4
C10 2N0	13 23 14 24	PS 1015N 13-14 0 1.4
C14 2NC	11 21 12 22	PS 1415N 11-12 0 3.0 4.5 21-22 1.4
C15 2N0	13 23 14 24	PS 1515N 13-14 0 3.0 23-24 1.4
C20 1N0+2NC	11 21 33 12 22 34	PS 2015N 13-14 0 1.5 3.0 21-22 2.0 33-34
C2 1N0.1NC+ 1N0.1NC	13 21 43 31 14 22 44 32	PS 216N 13-14 0 1.3 21-22 4.0 43-44 6 31-32 0.7
C5 1N0+1NC	13 21 14 22	PS 516N 21-22 0 2.2 4.0 13-14 1.1
C6 1N0+1NC	13 21 14 22	PS 616N 21-22 0 1.5 3.0 13-14 3.4
C7 1N0+1NC	13 21 14 22	PS 716N 21-22 0 3.1 4.6 13-14 1.6
C9 2NC	11 21 12 22	PS 916N 11-12 0 2.9 4.4
C10 2N0	13 23 14 24	PS 1016N 13-14 0 1.4 23-24
C14 2NC	11 21 12 22	PS 1416N 11-12 0 3.0 4.5 21-22 1.4
C15 2N0	13 23 14 24	PS 1516N 13-14 0 3.0 23-24 1.4
C20 1N0+2NC	11 21 33 12 22 34	PS 2016N 13-14 0 1.5 3.0 21-22 2.0 33-34
C2 1N0.1NC+ 1N0.1NC	13 21 43 31 14 22 44 32	PS 218N 13-14 0 1.3 21-22 4.0 43-44 6 31-32 0.7
C5 1N0+1NC	13 21 14 22	PS 518N 21-22 0 2.2 4.0 13-14 1.1
C6 1N0+1NC	13 21 14 22	PS 618N 21-22 0 1.5 3.0 13-14 3.4
C7 1N0+1NC	13 21 14 22	PS 718N 21-22 0 3.1 4.6 13-14 1.6
C9 2NC	11 21 12 22	PS 918N 11-12 0 2.9 4.4
C10 2N0	13 23 14 24	PS 1018N 13-14 0 1.4 23-24
C14 2NC	11 21 12 22	PS 1418N 11-12 0 3.0 4.5 21-22 1.4
C15 2N0	13 23 14 24	PS 1518N 13-14 0 3.0 23-24 1.4
C20 1N0+2NC	11 21 33 12 22 34	PS 2018N 13-14 0 1.5 3.0 21-22 2.0 33-34
C2 1N0.1NC+ 1N0.1NC	13 21 43 31 14 22 44 32	PS 220N 13-14 0' 8" 21-22 4" 43-44 15" 31-32 4"
C5 1N0+1NC	13 21 14 22	PS 520N 21-22 0 15" 13-14 5"
C10 2N0	13 23 14 24	PS 1020N 13-14 0' 9" 23-24
C20 1N0+2NC	11 21 33 12 22 34	PS 2020N 13-14 0' 10" 21-22 15" 33-34 15"

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

CON MOLLA INOX
With spring stainless steel

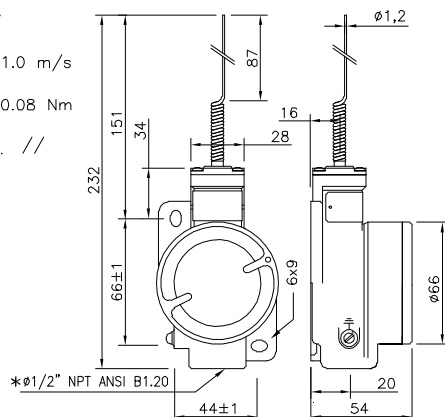
VELOCITA' MASSIMA:
Max speed 1.0 m/s

COPPIA MIN. DI AZIONAMENTO:
Min. torque actuation: 0.08 Nm

COPPIA MIN. PER APERTURA POSITIVA:
Min. torque positive opening operation: //

LEGENDA
Legenda

- PREMENDO
Pushing
- ◄ RILASCIANDO
Releasing



CON MOLLA INOX
With spring stainless steel

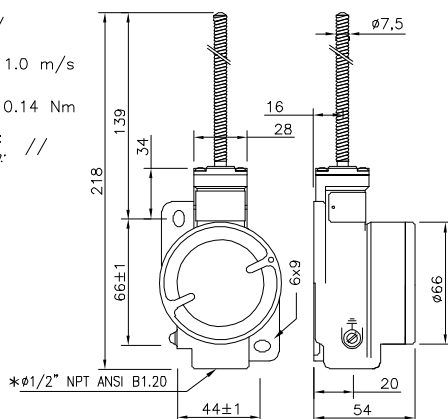
VELOCITA' MASSIMA:
Max speed 1.0 m/s

COPPIA MIN. DI AZIONAMENTO:
Min. torque actuation: 0.14 Nm

COPPIA MIN. PER APERTURA POSITIVA:
Min. torque positive opening operation: //

LEGENDA
Legenda

- PREMENDO
Pushing
- ◄ RILASCIANDO
Releasing



A LEVA CON ROTELLA
With roller lever

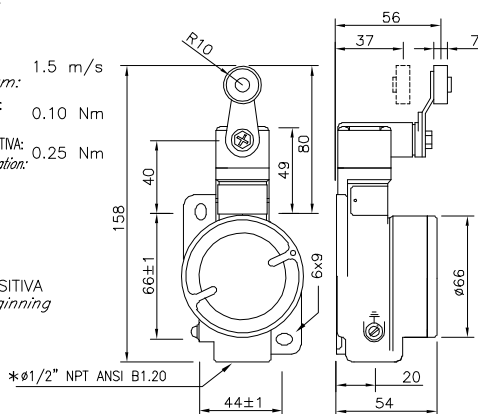
VELOCITA' MASSIMA:
CON CAMMA A 30°
Max speed with 30° cam: 1.5 m/s

COPPIA MIN. DI AZIONAMENTO:
Min. torque actuation: 0.10 Nm

COPPIA MIN. PER APERTURA POSITIVA:
Min. torque positive opening operation: 0.25 Nm

LEGENDA
Legenda

- APERTURA POSITIVA
Positive opening
- INIZIO APERTURA POSITIVA
Positive opening beginning
- PREMENDO
Pushing
- ◄ RILASCIANDO
Releasing



A LEVA CON ASTA RIGIDA TONDA
With rigid round rod lever

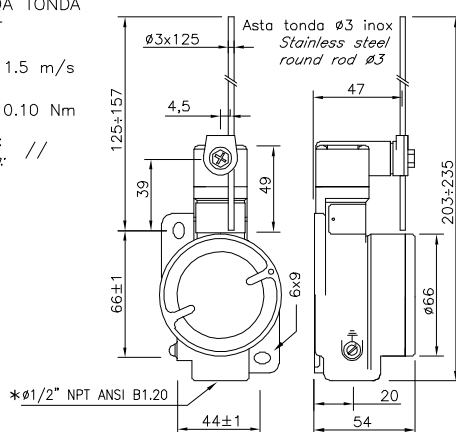
VELOCITA' MASSIMA:
Max speed 1.5 m/s

COPPIA MIN. DI AZIONAMENTO:
Min. torque actuation: 0.10 Nm

COPPIA MIN. PER APERTURA POSITIVA:
Min. torque positive opening operation: //

LEGENDA
Legenda

- PREMENDO
Pushing
- ◄ RILASCIANDO
Releasing



UNITA' DI CONTATTO Contact blocks	N° CATALOGO Catalogue n°	DIAGRAMMI CORSE Travel diagrams
C2 1NO, 1NC+ 1NO, 1NC	PS 22IN	
C5 1NO+1NC	PS 52IN	
C10 2NO	PS 102IN	
C20 1NO+2NC	PS 202IN	
C2 1NO, 1NC+ 1NO, 1NC	PS 225N	
C5 1NO+1NC	PS 525N	
C10 2NO	PS 1025N	
C20 1NO+2NC	PS 2025N	
C2 1NO, 1NC+ 1NO, 1NC	PS 23IN	
C5 1NO+1NC	PS 53IN	
C6 1NO+1NC	PS 63IN	
C7 1NO+1NC	PS 73IN	
C9 2NC	PS 93IN	
C10 2NO	PS 103IN	
C14 2NC	PS 143IN	
C15 2NO	PS 153IN	
C20 1NO+2NC	PS 203IN	
C2 1NO, 1NC+ 1NO, 1NC	PS 232N	
C5 1NO+1NC	PS 532N	
C6 1NO+1NC	PS 632N	
C7 1NO+1NC	PS 732N	
C9 2NC	PS 932N	
C10 2NO	PS 1032N	
C14 2NC	PS 1432N	
C15 2NO	PS 1532N	
C20 1NO+2NC	PS 2032N	

*IN ALTERNATIVA:
Alternative: M20x1.5 ISO 262

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

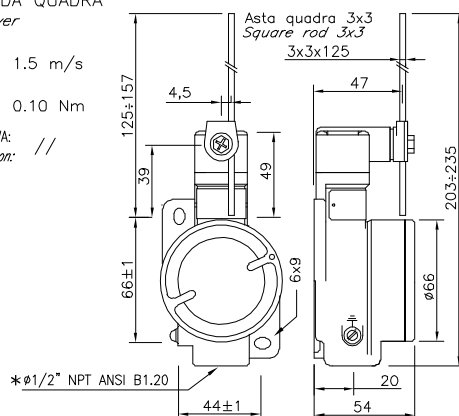
A LEVA CON ASTA RIGIDA QUADRA With rigid square rod lever

VELOCITA' MASSIMA:
Max speed 1.5 m/s
COPPIA MIN. DI AZIONAMENTO:
Min. torque actuation: 0.10 Nm
COPPIA MIN. PER APERTURA POSITIVA:
Min. torque positive opening operation: //

LEGENDA

Legenda

- PREMENDO
Pushing
- ◄ RILASCIANDO
Releasing



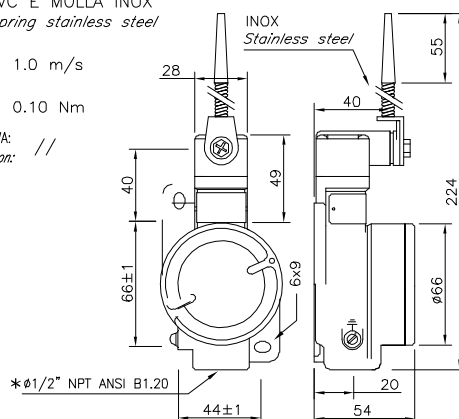
A LEVA CON ASTA IN PVC E MOLLA INOX With PVC rod lever and spring stainless steel

VELOCITA' MASSIMA:
Max speed 1.0 m/s
COPPIA MIN. DI AZIONAMENTO:
Min. torque actuation: 0.10 Nm
COPPIA MIN. PER APERTURA POSITIVA:
Min. torque positive opening operation: //

LEGENDA

Legenda

- PREMENDO
Pushing
- ◄ RILASCIANDO
Releasing



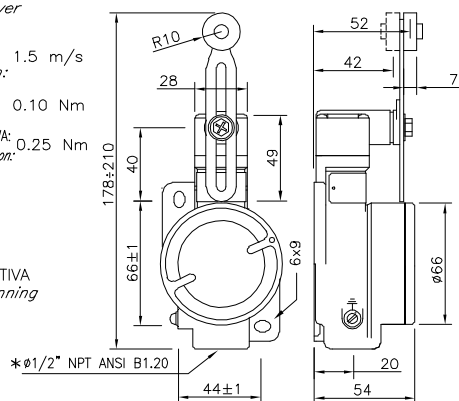
A LEVA LUNGA CON ROTELLA With lengthened roller lever

VELOCITA' MASSIMA:
CON CAMMA A 30°
Max speed with 30° cam: 1.5 m/s
COPPIA MIN. DI AZIONAMENTO:
Min. torque actuation: 0.10 Nm
COPPIA MIN. PER APERTURA POSITIVA:
Min. torque positive opening operation: 0.25 Nm

LEGENDA

Legenda

- APERTURA POSITIVA
Positive opening
- INIZIO APERTURA POSITIVA
Positive opening beginning
- PREMENDO
Pushing
- ◄ RILASCIANDO
Releasing



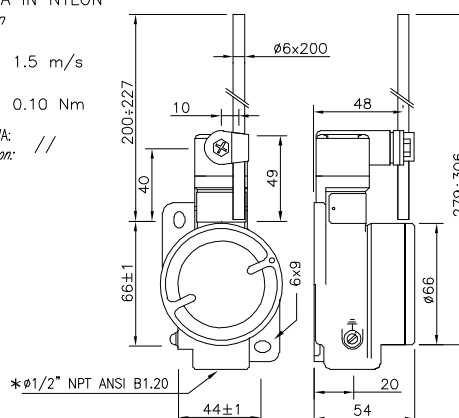
A LEVA CON ASTA RIGIDA IN NYLON With rigid rod lever nylon

VELOCITA' MASSIMA:
Max speed 1.5 m/s
COPPIA MIN. DI AZIONAMENTO:
Min. torque actuation: 0.10 Nm
COPPIA MIN. PER APERTURA POSITIVA:
Min. torque positive opening operation: //

LEGENDA

Legenda

- PREMENDO
Pushing
- ◄ RILASCIANDO
Releasing



*IN ALTERNATIVA:
Alternative: M20x1.5 ISO 262

UNITA' DI CONTATTO 2NC Contact blocks	N° CATALOGO Catalogue n°	DIAGRAMMI CORSE Travel diagrams
C2 1NO, 1NC+ 1NO, 1NC	PS 233N	13-14 0' 20' 75' 21-22 0' 22' 75' 43-44 0' 22' 75' 31-32 13' 14 22
C5 1NO+1NC	PS 533N	21-22 0' 22' 75' 13-14 0' 22' 75' 21-22 0' 22' 75' 13-14 0' 22' 75'
C6 1NO+1NC	PS 633N	21-22 0' 22' 75' 13-14 0' 22' 75' 21-22 0' 22' 75' 13-14 0' 22' 75'
C7 1NO+1NC	PS 733N	21-22 0' 22' 75' 13-14 0' 22' 75' 21-22 0' 22' 75' 13-14 0' 22' 75'
C9 2NC	PS 933N	11-12 0' 32' 75' 21-22 0' 32' 75' 11-12 0' 32' 75' 21-22 0' 32' 75'
C10 2NO	PS 1033N	13-14 0' 14' 75' 23-24 0' 14' 75' 13-14 0' 14' 75' 23-24 0' 14' 75'
C14 2NC	PS 1433N	11-12 0' 32' 75' 21-22 0' 32' 75' 11-12 0' 32' 75' 21-22 0' 32' 75'
C15 2NO	PS 1533N	13-14 0' 32' 75' 23-24 0' 32' 75' 13-14 0' 32' 75' 23-24 0' 32' 75'
C20 1NO+2NC	PS 2033N	13-14 0' 15' 75' 21-22 0' 15' 75' 33-34 0' 15' 75' 12 22 34
C2 1NO, 1NC+ 1NO, 1NC	PS 234N	13-14 0' 20' 75' 21-22 0' 22' 75' 43-44 0' 22' 75' 31-32 13' 14 22
C5 1NO+1NC	PS 534N	21-22 0' 22' 75' 13-14 0' 22' 75' 21-22 0' 22' 75' 13-14 0' 22' 75'
C6 1NO+1NC	PS 634N	21-22 0' 22' 75' 13-14 0' 22' 75' 21-22 0' 22' 75' 13-14 0' 22' 75'
C7 1NO+1NC	PS 734N	21-22 0' 22' 75' 13-14 0' 22' 75' 21-22 0' 22' 75' 13-14 0' 22' 75'
C9 2NC	PS 934N	11-12 0' 32' 75' 21-22 0' 32' 75' 11-12 0' 32' 75' 21-22 0' 32' 75'
C10 2NO	PS 1034N	13-14 0' 14' 75' 23-24 0' 14' 75' 13-14 0' 14' 75' 23-24 0' 14' 75'
C14 2NC	PS 1434N	11-12 0' 32' 75' 21-22 0' 32' 75' 11-12 0' 32' 75' 21-22 0' 32' 75'
C15 2NO	PS 1534N	13-14 0' 32' 75' 23-24 0' 32' 75' 13-14 0' 32' 75' 23-24 0' 32' 75'
C20 1NO+2NC	PS 2034N	13-14 0' 15' 75' 21-22 0' 15' 75' 33-34 0' 15' 75' 12 22 34
C2 1NO, 1NC+ 1NO, 1NC	PS 235N	13-14 0' 20' 75' 21-22 0' 22' 75' 43-44 0' 22' 75' 31-32 13' 14 22
C5 1NO+1NC	PS 535N	21-22 0' 22' 75' 13-14 0' 22' 75' 21-22 0' 22' 75' 13-14 0' 22' 75'
C6 1NO+1NC	PS 635N	21-22 0' 22' 75' 13-14 0' 22' 75' 21-22 0' 22' 75' 13-14 0' 22' 75'
C7 1NO+1NC	PS 735N	21-22 0' 22' 75' 13-14 0' 22' 75' 21-22 0' 22' 75' 13-14 0' 22' 75'
C9 2NC	PS 935N	11-12 0' 32' 75' 21-22 0' 32' 75' 11-12 0' 32' 75' 21-22 0' 32' 75'
C10 2NO	PS 1035N	13-14 0' 14' 75' 23-24 0' 14' 75' 13-14 0' 14' 75' 23-24 0' 14' 75'
C14 2NC	PS 1435N	11-12 0' 32' 75' 21-22 0' 32' 75' 11-12 0' 32' 75' 21-22 0' 32' 75'
C15 2NO	PS 1535N	13-14 0' 32' 75' 23-24 0' 32' 75' 13-14 0' 32' 75' 23-24 0' 32' 75'
C20 1NO+2NC	PS 2018N	13-14 0' 15' 75' 21-22 0' 15' 75' 33-34 0' 15' 75' 12 22 34
C2 1NO, 1NC+ 1NO, 1NC	PS 236N	13-14 0' 20' 75' 21-22 0' 22' 75' 43-44 0' 22' 75' 31-32 13' 14 22
C5 1NO+1NC	PS 536N	21-22 0' 22' 75' 13-14 0' 22' 75' 21-22 0' 22' 75' 13-14 0' 22' 75'
C6 1NO+1NC	PS 636N	21-22 0' 22' 75' 13-14 0' 22' 75' 21-22 0' 22' 75' 13-14 0' 22' 75'
C7 1NO+1NC	PS 736N	21-22 0' 22' 75' 13-14 0' 22' 75' 21-22 0' 22' 75' 13-14 0' 22' 75'
C9 2NC	PS 936N	11-12 0' 32' 75' 21-22 0' 32' 75' 11-12 0' 32' 75' 21-22 0' 32' 75'
C10 2NO	PS 1036N	13-14 0' 14' 75' 23-24 0' 14' 75' 13-14 0' 14' 75' 23-24 0' 14' 75'
C14 2NC	PS 1436N	11-12 0' 32' 75' 21-22 0' 32' 75' 11-12 0' 32' 75' 21-22 0' 32' 75'
C15 2NO	PS 1536N	13-14 0' 32' 75' 23-24 0' 32' 75' 13-14 0' 32' 75' 23-24 0' 32' 75'
C20 1NO+2NC	PS 2036N	13-14 0' 15' 75' 21-22 0' 15' 75' 33-34 0' 15' 75' 12 22 34

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

A LEVA CON ROTELLA

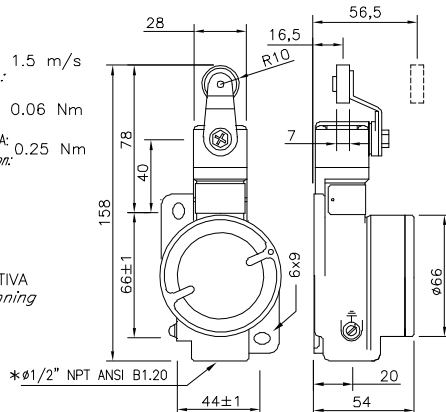
With roller lever

VELOCITA' MASSIMA:
CON CAMMA A 30°
Max speed with 30° cam: 1.5 m/s
COPPIA MIN. DI AZIONAMENTO:
Min. torque actuation: 0.06 Nm
COPPIA MIN. PER APERTURA POSITIVA:
Min. torque positive opening operation: 0.25 Nm

LEGENDA

Legenda

- ➡ APERTURA POSITIVA
Positive opening
- INIZIO APERTURA POSITIVA
Positive opening beginning
- ▶ PREMENDO
Pushing
- ◀ RILASCIANDO
Releasing



A LEVA CON ROTELLA

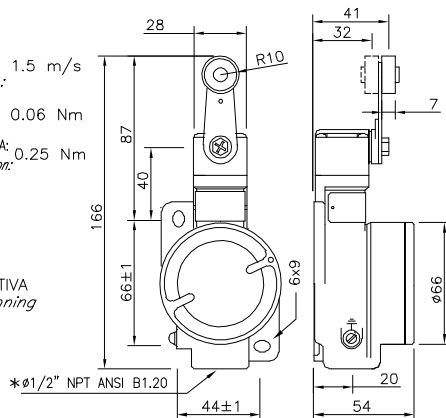
With roller lever

VELOCITA' MASSIMA:
CON CAMMA A 30°
Max speed with 30° cam: 1.5 m/s
COPPIA MIN. DI AZIONAMENTO:
Min. torque actuation: 0.06 Nm
COPPIA MIN. PER APERTURA POSITIVA:
Min. torque positive opening operation: 0.25 Nm

LEGENDA

Legenda

- ➡ APERTURA POSITIVA
Positive opening
- INIZIO APERTURA POSITIVA
Positive opening beginning
- ▶ PREMENDO
Pushing
- ◀ RILASCIANDO
Releasing



A LEVA CON RULLO IN PORCELLANA

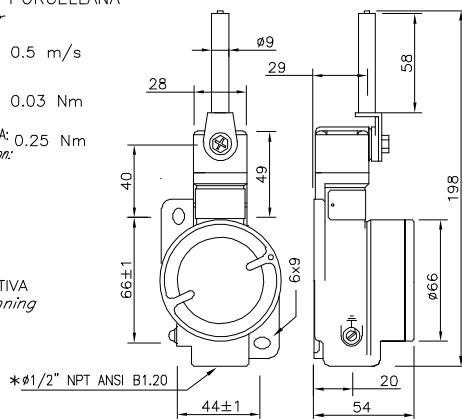
With porcelain roller lever

VELOCITA' MASSIMA:
Max speed 0.5 m/s
COPPIA MIN. DI AZIONAMENTO:
Min. torque actuation: 0.03 Nm
COPPIA MIN. PER APERTURA POSITIVA:
Min. torque positive opening operation: 0.25 Nm

LEGENDA

Legenda

- ➡ APERTURA POSITIVA
Positive opening
- INIZIO APERTURA POSITIVA
Positive opening beginning
- ▶ PREMENDO
Pushing
- ◀ RILASCIANDO
Releasing



CON LEVA A LIRA

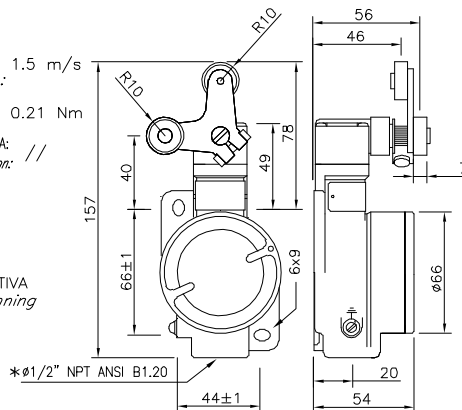
With lyra lever

VELOCITA' MASSIMA:
CON CAMMA A 30°
Max speed with 30° cam: 1.5 m/s
COPPIA MIN. DI AZIONAMENTO:
Min. torque actuation: 0.21 Nm
COPPIA MIN. PER APERTURA POSITIVA:
Min. torque positive opening operation: //

LEGENDA

Legenda

- ➡ APERTURA POSITIVA
Positive opening
- INIZIO APERTURA POSITIVA
Positive opening beginning
- ▶ PREMENDO
Pushing
- ◀ RILASCIANDO
Releasing



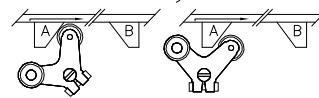
UNITA' DI CONTATTO Contact blocks	N°CATALOGO Catalogue n°	DIAGRAMMI CORSE Travel diagrams
C2 1NO+1NC+ 1NO+1NC	PS 25IN	
C5 1NO+1NC	PS 55IN	
C6 1NO+1NC	PS 65IN	
C7 1NO+1NC	PS 75IN	
C9 2NC	PS 95IN	
C10 2NO	PS 105IN	
C14 2NC	PS 145IN	
C15 2NO	PS 155IN	
C20 1NO+2NC	PS 205IN	
C2 1NO+1NC+ 1NO+1NC	PS 252N	
C5 1NO+1NC	PS 552N	
C6 1NO+1NC	PS 652N	
C7 1NO+1NC	PS 752N	
C9 2NC	PS 952N	
C10 2NO	PS 1052N	
C14 2NC	PS 1452N	
C15 2NO	PS 1552N	
C20 1NO+2NC	PS 2052N	

C5 1NO+1NC	PS 553N	
C6 1NO+1NC	PS 653N	

C5 1NO+1NC	PS 542N	
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FINECORSA A DUE POSIZIONI STABILI
Limit switch with two stable position

Leva a lyra a due piste
Double trak lyra lever



Escursione meccanica
Mechanical excursion

A richiesta
On request

PS 54IN
Leva a lyra ad una pista
Single trak lyra lever

*IN ALTERNATIVA:
Alternative: M20x1.5 ISO 262

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

A LEVA ALLUNGABILE CON ROTELLA With roller extensible lever

VELOCITA' MASSIMA:
CON CAMMA A 30°
Max speed with 30° cam: 1.5 m/s

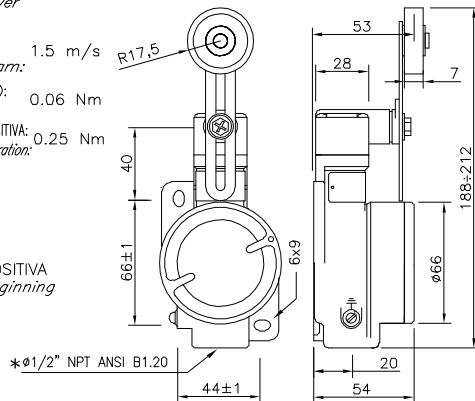
COPPIA MIN. DI AZIONAMENTO:
Min. torque actuation: 0.06 Nm

COPPIA MIN. PER APERTURA POSITIVA:
Min. torque positive opening operation: 0.25 Nm

LEGENDA

Legenda

- ➔ APERTURA POSITIVA
Positive opening
- INIZIO APERTURA POSITIVA
Positive opening beginning
- ▶ PREMENDO
Pushing
- ◀ RILASCIANDO
Releasing



A LEVA CON ROTELLA IN GOMMA With rubber roller lever

VELOCITA' MASSIMA:
CON CAMMA A 30°
Max speed with 30° cam: 1.5 m/s

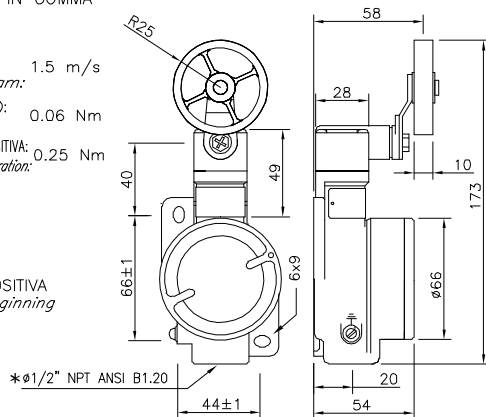
COPPIA MIN. DI AZIONAMENTO:
Min. torque actuation: 0.06 Nm

COPPIA MIN. PER APERTURA POSITIVA:
Min. torque positive opening operation: 0.25 Nm

LEGENDA

Legenda

- ➔ APERTURA POSITIVA
Positive opening
- INIZIO APERTURA POSITIVA
Positive opening beginning
- ▶ PREMENDO
Pushing
- ◀ RILASCIANDO
Releasing



A LEVA ALLUNGABILE CON ROTELLA IN GOMMA With rubber roller extensible lever

VELOCITA' MASSIMA:
CON CAMMA A 30°
Max speed with 30° cam: 1.5 m/s

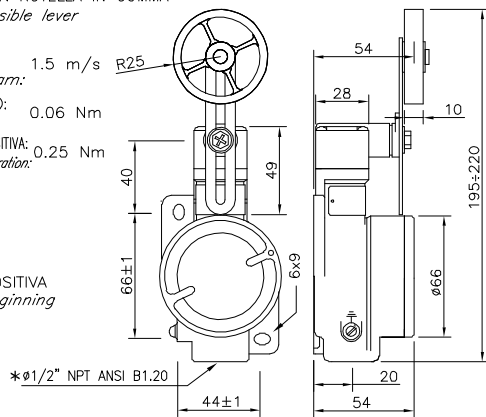
COPPIA MIN. DI AZIONAMENTO:
Min. torque actuation: 0.06 Nm

COPPIA MIN. PER APERTURA POSITIVA:
Min. torque positive opening operation: 0.25 Nm

LEGENDA

Legenda

- ➔ APERTURA POSITIVA
Positive opening
- INIZIO APERTURA POSITIVA
Positive opening beginning
- ▶ PREMENDO
Pushing
- ◀ RILASCIANDO
Releasing



A LEVA ALLUNGABILE CON ROTELLA IN GOMMA With rubber roller extensible lever

VELOCITA' MASSIMA:
CON CAMMA A 30°
Max speed with 30° cam: 1.5 m/s

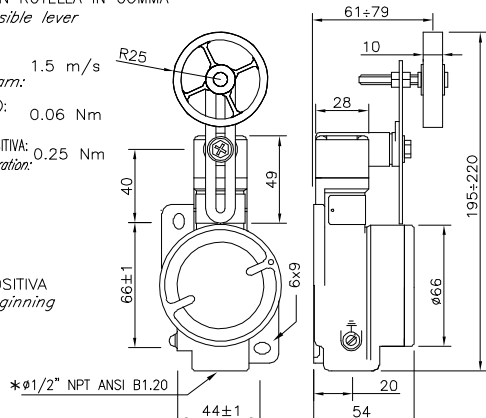
COPPIA MIN. DI AZIONAMENTO:
Min. torque actuation: 0.06 Nm

COPPIA MIN. PER APERTURA POSITIVA:
Min. torque positive opening operation: 0.25 Nm

LEGENDA

Legenda

- ➔ APERTURA POSITIVA
Positive opening
- INIZIO APERTURA POSITIVA
Positive opening beginning
- ▶ PREMENDO
Pushing
- ◀ RILASCIANDO
Releasing



*IN ALTERNATIVA:
Alternative: M20x1.5 ISO 262

UNITA' DI CONTATTO Contact blocks	N° CATALOGO Catalogue n°	DIAGRAMMI CORSE Travel diagrams
C2 1NO+1NC+ 1NO+1NC	PS 238EN	13-14 0' 20' 75' 21-22 0' 22' 42' 75' 13-14 13 21-22 17
C5 1NO+1NC	PS 538EN	13-14 0' 30' 60' 75' 21-22 0' 22' 42' 75' 13-14 17
C6 1NO+1NC	PS 638EN	13-14 0' 22' 42' 75' 21-22 0' 22' 42' 75' 13-14 42
C7 1NO+1NC	PS 738EN	13-14 0' 40' 60' 75' 21-22 0' 22' 42' 75' 13-14 23
C9 2NC	PS 938EN	11-12 0' 40' 60' 75' 21-22 0' 22' 42' 75' 13-14 23
C10 2NO	PS 1038EN	13-14 0' 22' 42' 75' 21-22 0' 22' 42' 75' 13-14 23
C14 2NC	PS 1438EN	11-12 0' 40' 60' 75' 21-22 0' 22' 42' 75' 13-14 22
C15 2NO	PS 1538EN	13-14 0' 40' 75' 21-22 0' 22' 42' 75' 13-14 22
C20 1NO+2NC	PS 2038EN	13-14 0' 23' 43' 75' 21-22 0' 22' 42' 75' 13-14 29
C2 1NO+1NC+ 1NO+1NC	PS 238AN	13-14 0' 20' 75' 21-22 0' 22' 42' 75' 13-14 13
C5 1NO+1NC	PS 538AN	13-14 0' 30' 60' 75' 21-22 0' 22' 42' 75' 13-14 17
C6 1NO+1NC	PS 638AN	13-14 0' 22' 42' 75' 21-22 0' 22' 42' 75' 13-14 42
C7 1NO+1NC	PS 738AN	13-14 0' 40' 60' 75' 21-22 0' 22' 42' 75' 13-14 23
C9 2NC	PS 938AN	11-12 0' 40' 60' 75' 21-22 0' 22' 42' 75' 13-14 23
C10 2NO	PS 1038AN	13-14 0' 22' 42' 75' 21-22 0' 22' 42' 75' 13-14 23
C14 2NC	PS 1438AN	11-12 0' 40' 60' 75' 21-22 0' 22' 42' 75' 13-14 22
C15 2NO	PS 1538AN	13-14 0' 40' 75' 21-22 0' 22' 42' 75' 13-14 22
C20 1NO+2NC	PS 2038AN	13-14 0' 23' 43' 75' 21-22 0' 22' 42' 75' 13-14 29
C2 1NO+1NC+ 1NO+1NC	PS 238BN	13-14 0' 20' 75' 21-22 0' 22' 42' 75' 13-14 13
C5 1NO+1NC	PS 538BN	13-14 0' 30' 60' 75' 21-22 0' 22' 42' 75' 13-14 17
C6 1NO+1NC	PS 638BN	13-14 0' 22' 42' 75' 21-22 0' 22' 42' 75' 13-14 42
C7 1NO+1NC	PS 738BN	13-14 0' 40' 60' 75' 21-22 0' 22' 42' 75' 13-14 23
C9 2NC	PS 938BN	11-12 0' 40' 60' 75' 21-22 0' 22' 42' 75' 13-14 23
C10 2NO	PS 1038BN	13-14 0' 22' 42' 75' 21-22 0' 22' 42' 75' 13-14 23
C14 2NC	PS 1438BN	11-12 0' 40' 60' 75' 21-22 0' 22' 42' 75' 13-14 22
C15 2NO	PS 1538BN	13-14 0' 40' 75' 21-22 0' 22' 42' 75' 13-14 22
C20 1NO+2NC	PS 2038BN	13-14 0' 23' 43' 75' 21-22 0' 22' 42' 75' 13-14 29
C2 1NO+1NC+ 1NO+1NC	PS 238CN	13-14 0' 20' 75' 21-22 0' 22' 42' 75' 13-14 13
C5 1NO+1NC	PS 538CN	13-14 0' 30' 60' 75' 21-22 0' 22' 42' 75' 13-14 17
C6 1NO+1NC	PS 638CN	13-14 0' 22' 42' 75' 21-22 0' 22' 42' 75' 13-14 42
C7 1NO+1NC	PS 738CN	13-14 0' 40' 60' 75' 21-22 0' 22' 42' 75' 13-14 23
C9 2NC	PS 938CN	11-12 0' 40' 60' 75' 21-22 0' 22' 42' 75' 13-14 23
C10 2NO	PS 1038CN	13-14 0' 22' 42' 75' 21-22 0' 22' 42' 75' 13-14 23
C14 2NC	PS 1438CN	11-12 0' 40' 60' 75' 21-22 0' 22' 42' 75' 13-14 22
C15 2NO	PS 1538CN	13-14 0' 40' 75' 21-22 0' 22' 42' 75' 13-14 22
C20 1NO+2NC	PS 2038CN	13-14 0' 23' 43' 75' 21-22 0' 22' 42' 75' 13-14 29

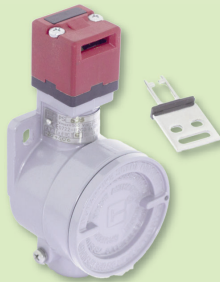
KEY-LOCK SAFETY SWITCHES with POSITIVE OPENING

series
PS

Protection	Gas	Zone	1-2	II2G	Ex db IIC T6÷T5 Gb
	Dusts		21-22	II2D	Ex tb IIIC T85°C÷T100°C Db

Degree of Protection	IP66/67
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Amb. Temp.	Standard	-20°C	+40°C
	Extended	-50°C	+80°C



Entire Threading	NPT ANSI B1.20
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Material	Aluminum 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
	CE BVI 13 ATEX 0083
	IEC 60079-0 • IEC 60079-1 IEC 60079-31 IECEx EPS 13.0033

- Ideal to control Gates, Protections, Carters and any moving mechanical parts.
- Stainless Steel operating key has to be fixed to the mobile part of the protection. The key is removed from the switch when opening the protection and a mechanism ensures the positive opening of the electric contact.
- Applicable to any type of protection (hinged, removable or sliding)
- Possibility to operate the switch with a key allowing the restart only by inserting the same key
- The switch with manual mechanical delay are used on machines where dangerous conditions continue for a limited time even after pressing the stop command of the machine (mechanical inertia of pulleys, belt saw, grinders, etc.)
- Electrical power or timers not required
- For any other information pls. see pages D13 and D14.

Options

- Stainless Steel version (see page I19).
- Cable entry with metric thread M20x1.5 (M).
- Orthogonal key.
- Jointed Key.

Information on available contacts: see pages D13 and D14.

Installation

- The safety circuit shall be connected to the NC contact 21-22 when the key is inserted.
- The safety switches must be mounted to the body of the machine while the key-lock is fixed to the protection.
- Safety switches with manual mechanical delay firmly lock the key, once installed. Turn the knob to release/remove the key. Since the early rounds of rotation the electrical contact is positively open, only after about 20 seconds, the key is released: for closing the knob must be rotated in reverse.
- The head may be positioned on any of the four sides of the switch just by removing the four fixing screws: this allows up to 8 different actuation directions (the head has two key entries). Switches with manual mechanical delay allow up to 32 different possible configurations as the head has two key entries and a release knob independently swiveled 90° x 90°.
- When the key is not inserted make sure that any dust and dirt do not obstruct its seat (use the protection cap).
- **Periodically verify the correct operation of the switch.**
- Fix the switch interposing a washer under fixing screws head.

Application on fences

When the switch is used to protect parts of machines physically accessible to people, to prevent the door or gate may accidentally close when the operator is inside, a padlock may be used at the appropriate hole on the key. The arc of the padlock shall be of 6 mm diameter minimum.

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.

[*] The insulating voltage is equal to 400 VAC / 500 VDC for C2 and C11 contacts.

(*) 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.

Key-lock safety switch with positive opening ➡ PS 693N

Type	Contact unit	Actuator	Threading
PS	C6	93	N = NPT (N) M = metric (M)

Key-lock safety switch with manual mechanical delay and positive opening ➡ PS 9R2M

Type	Contact unit	Actuator	Threading
PS	C9	R2	N = NPT (N) M = metric (M)

Codifica
d'Ordine

KEY-LOCK SAFETY SWITCHES with POSITIVE OPENING

series
PS

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

UNITA' DI CONTATTO
Contact blocks

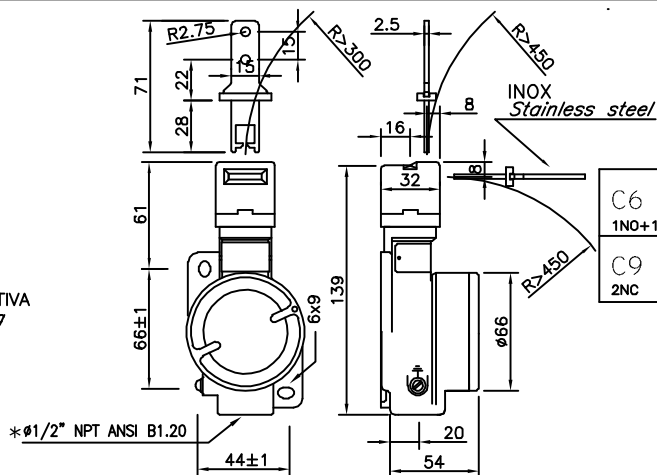
N° CATALOGO
Catalogue n°

DIAGRAMMI CORSE
Travel diagrams

A CHIAVE
With key

LEGENDA
Legenda

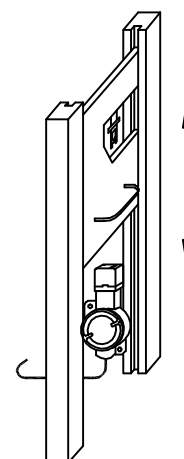
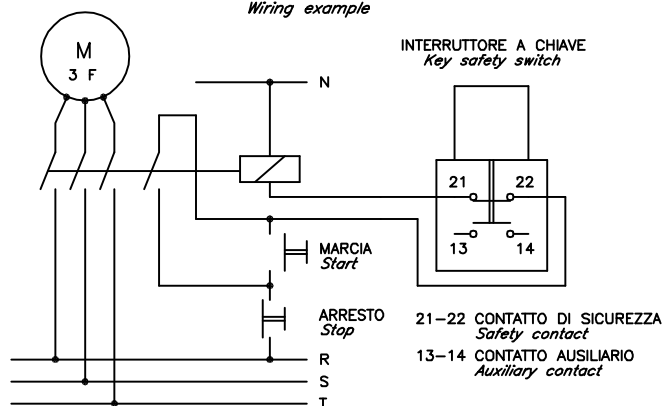
➔ APERTURA POSITIVA
Positive opening



C6	13 21 14 22	PS 693N	21-22 13-14	0 4.7 7.2 7
C9	11 21 12 22	PS 993N	11-12 21-22	0 6.5 9

ESEMPIO DI COLLEGAMENTO
Wiring example

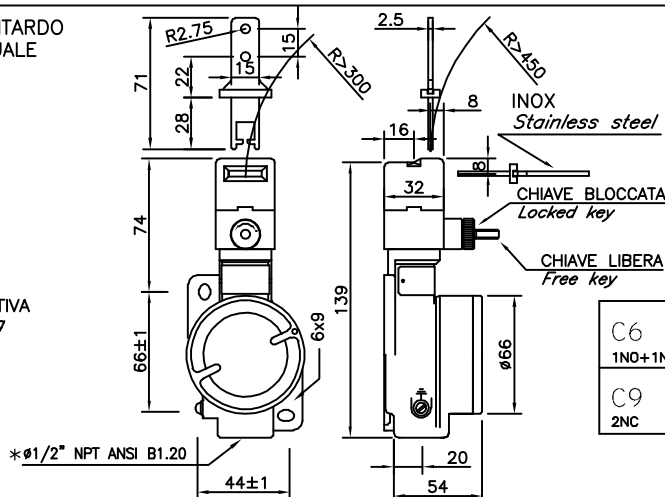
ESEMPIO DI APPLICAZIONE
Installation example



A CHIAVE CON RITARDO
MECCANICO MANUALE
With key manual
mechanical delay

LEGENDA
Legenda

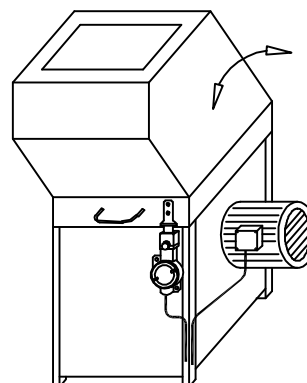
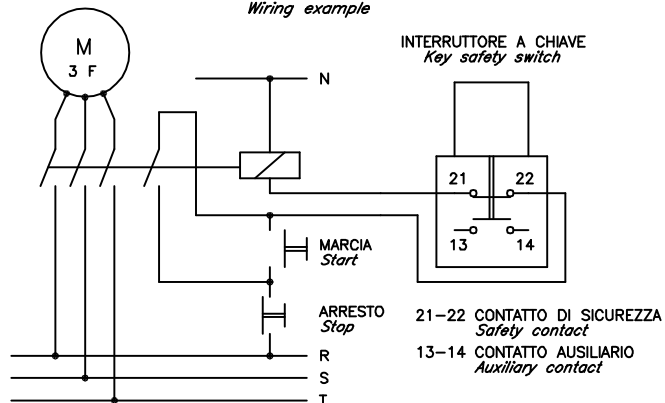
➔ APERTURA POSITIVA
Positive opening



C6	13 21 14 22	PS 6R2N	
C9	11 21 12 22	PS 9R2N	

ESEMPIO DI COLLEGAMENTO
Wiring example

ESEMPIO DI APPLICAZIONE
Installation example



*IN ALTERNATIVA:
Alternative: M20x1.5 ISO 262

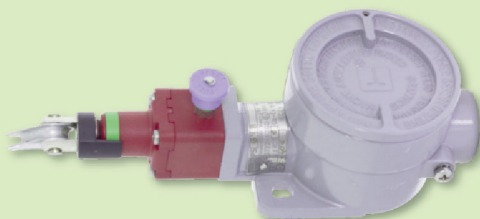
CABLE OPERATED SAFETY SWITCHES with POSITIVE OPENING

series
PS

Protection	Gas	Zone	1-2	II2G	Ex db IIC T6÷T5 Gb
	Dusts		21-22	II2D	Ex tb IIIC T85°C÷T100°C Db

Degree of Protection	IP66/67
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Amb. Temp.	Standard	-20°C	+40°C
	Extended	-50°C	+80°C



Entire Threading	NPT ANSI B1.20
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Material	Aluminum 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
	CE BVI 13 ATEX 0083
	IEC 60079-0 • IEC 60079-1 IEC 60079-31 IECEx EPS 13.0033

- Ideal to control any moving mechanical parts especially conveyors. They make possible to stop the machine from any point of intervention by manually pulling the cable.
- Self-diagnostic for the correct operation of the unit by opening the contacts in case of cable loosening or breakage detection.
- The version with reset includes the indicator of correct tension of the cable as well as a mechanical indicator of the status of the contacts. Contacts remain open after the intervention even if the cable is released.
- Suitable for cables with free span up to 16 m and, with appropriate extensions, even beyond.
- For any other information pls. see pages D13 and D14.

Options

- Stainless Steel version (see page I19).

- Cable entry with metric thread M20x1.5 (M).

Information on available contacts: see pages D13 and D14.

Installation

The switch is supplied with the following accessories:

- Plastic coated steel cable Ø5 mm length 6 m or 16 m;
- 1 tie rod for tensioning the cable;
- 2 terminals;
- 2 jumpers.

- The safety circuit shall be connected to NC contact (11-12 or 21-22).
- For tensioning the cable allow a stroke of about 8 mm to the cursor of the switch.
- Use original accessories only, otherwise the switch performances are not guaranteed.
- **Periodically verify the correct operation of the switch.**

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.

[*] The insulating voltage is equal to 400 VAC / 500 VDC for C2 and C11 contacts.

(*) 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.

Order coding

Safety switch with tie rod for cable and positive opening ➡ PS 680M

Type	Contact unit	Actuator	Threading
PS	C6	80	N = NPT (N) M = metric (M)

Safety switch with tie rod for cable and positive opening ➡ with reset: PS 984N

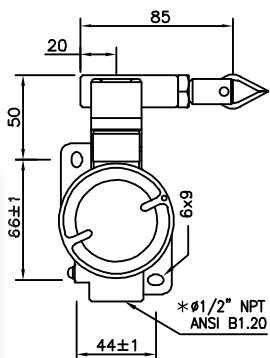
Type	Contact unit	Actuator	Threading
PS	C9	84 = right 83 = left	N = NPT (N) M = metric (M)

Safety switch with tie rod for vertical cable and positive opening ➡ with reset: PS 678M

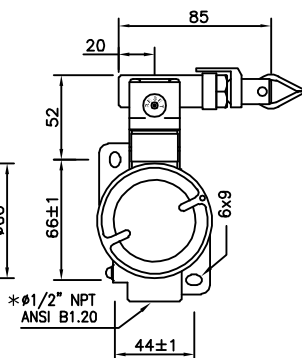
Type	Contact unit	Actuator	Threading
PS	C6	78	N = NPT (N) M = metric (M)

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

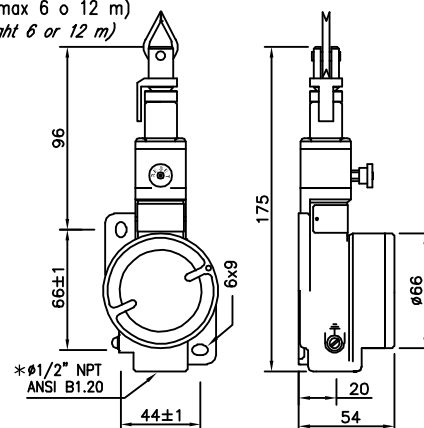
CON TIRANTE PER FUNE
With connecting rod for rope



CON TIRANTE PER FUNE DESTRA (684N-984N) E SINISTRA (683N-983N)
CON RESET
With connecting rod reset rope on the right (684N-984N) and left (683N-983N)

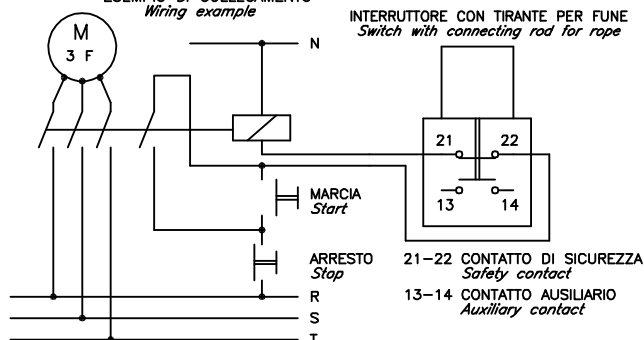


CON TIRANTE PER FUNE VERTICALE E RESET
With connecting rod reset rope on the vertical
(Lungh. max 6 o 12 m)
(max lenght 6 or 12 m)



UNITA' DI CONTATTO Contact blocks	N° CATALOGO Catalogue n°	DIAGRAMMI CORSE Travel diagrams	N° CATALOGO Catalogue n°	DIAGRAMMI CORSE Travel diagrams	N° CATALOGO Catalogue n°	DIAGRAMMI CORSE Travel diagrams
C6 1NO+1NC	PS 680N*		PS 684N* PS 683N*		PS 678N*	
C9 2NC	PS 980N		PS 984N* PS 983N*		PS 978N	

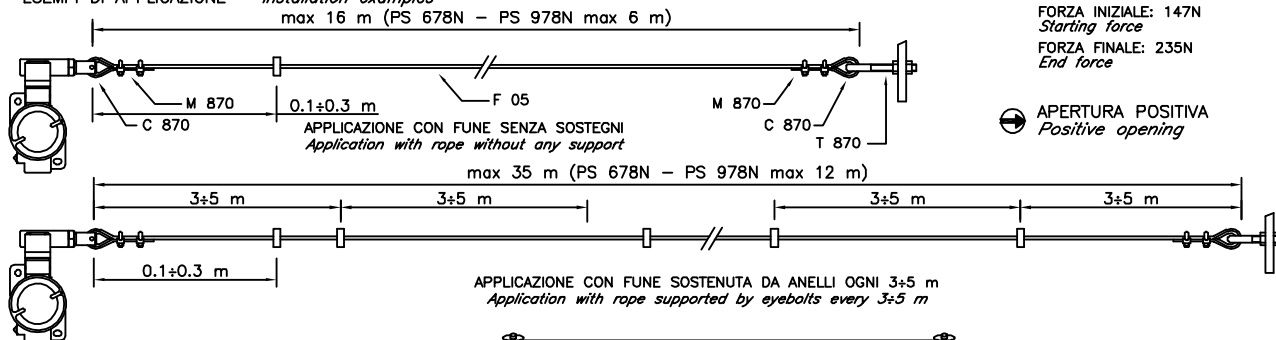
ESEMPIO DI COLLEGAMENTO
Wiring example



ACCESSORI - Accessories

- Art. T 870
TIRANTE PER METTERE IN TENSIONE LA FUNE IN MODO CORRETTO (Pz. 1).
Stay bolt suitable for setting the rope in tension correctly (pcs. 1).
- Art. M 870
MORSETTO (Pz. 2 o 4).
Rope clamp (pcs. 2 or 4).
- Art. C 870
CAVALLOTTO (Pz. 1).
Thimble (pcs. 1).
- Art. F 05
FUNE IN ACCIAIO PLASTIFICATA ROSSA
#5 mm (in rotoli da 100 m).
Red plasticized steel rope
#5 mm (coils of 100 m).

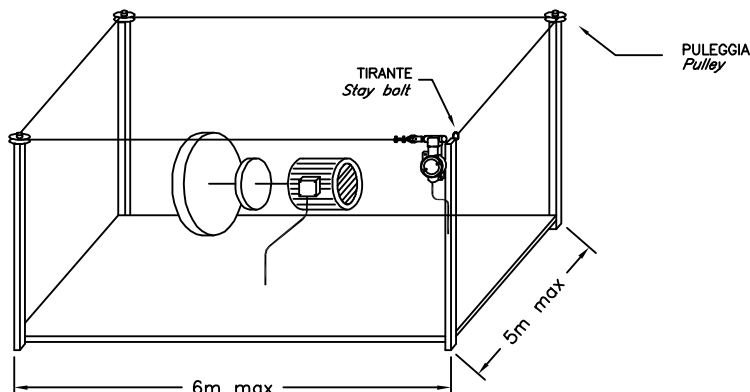
ESEMPI DI APPLICAZIONE - Installation examples



FORZA INIZIALE: 147N
Starting force
FORZA FINALE: 235N
End force

APERTURA POSITIVA
Positive opening

*IN ALTERNATIVA:
Alternative: M20x1.5 ISO 262



BUOYANT OPERATED LIMIT SWITCHES

series
PS

Protection	Gas	Zone	1-2	II2G	Ex db IIC T6÷T5 Gb
	Dusts		21-22	II2D	Ex tb IIIC T85°C÷T100°C Db

Degree of Protection	IP66/67
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Amb. Temp.	Standard	-20°C	+40°C
	Extended	-50°C	+80°C



Entire Threading	NPT ANSI B1.20
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Material	Aluminum light alloy
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Painting	External epoxy RAL7000
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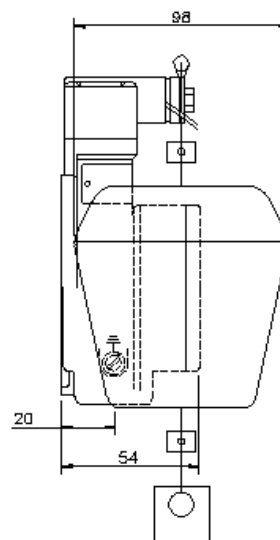
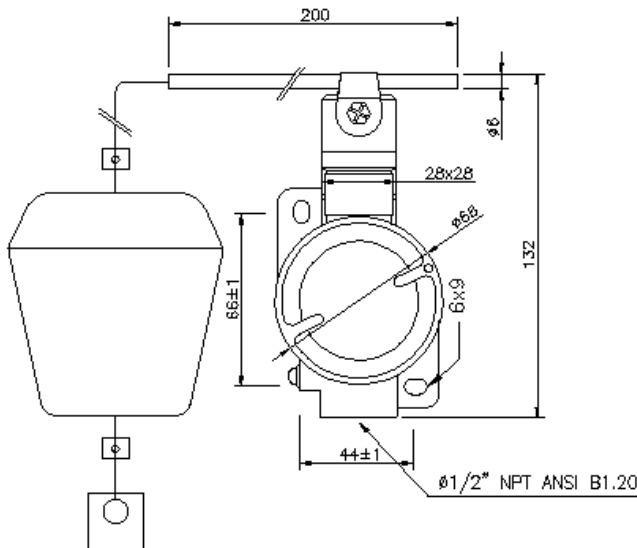
Standards and Certificates	<p>Directive 2014/34/EU (ATEX)</p> <p>EN 60079-0 • EN 60079-1 EN 60079-31</p> <p>CE BVI 13 ATEX 0083</p> <p>IEC 60079-0 • IEC 60079-1 IEC 60079-31</p> <p>IECEx EPS 13.0033</p>
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- Buoyant in Moplen, Cable in Nylon (2 m) and counterweight in Zinc plated Steel
- The limit switch may be used in any position and the mechanical actuator rotated by 90° x 90°.
- Tags and screws in Stainless Steel.
- Information on available contacts: see pages D13 and D14.

Opzioni

- Stainless Steel version (see page I19).
- Cable entry with metric thread M20x1,5 (M).

- Double counterweight.
- Stainless Steel AISI 304 counterweight/s and buoyant.



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.

Use screw-terminals for wiring. Max section wires 2.5 mm².

CHARACTERISTICS of the CONTACT ELEMENTS

MODEL	CONTACT TYPE	CONTACT	CURRENT (A)	VOLTAGE (V)
PS 10AG	Single Pole	1NO+1NC	I _{max} =10 A	V _{max} =220 V AC/DC
PS 20AG	Double Pole	2NO+2NC	I _{max} =10 A	V _{max} =220 V AC/DC

- The rod can be adjusted in length and tilt.
- The switch is normally supplied with actuator acting in both directions (actuator with float left or right) to set one sole direction loose the screws of the turret beneath which there is a knurled ring: by pressing and rotating it 90° to the right or left the desired direction of actuation is set. Restore the turret.
- Periodically verify the correct operation of the switch.

Example: PS 10AG N

Order Coding

Type

PS

Contact Unit

10 = Single Pole
20 = Double Pole

Actuator

AG

Threading

N = NPT (N)
M = metric (M)