

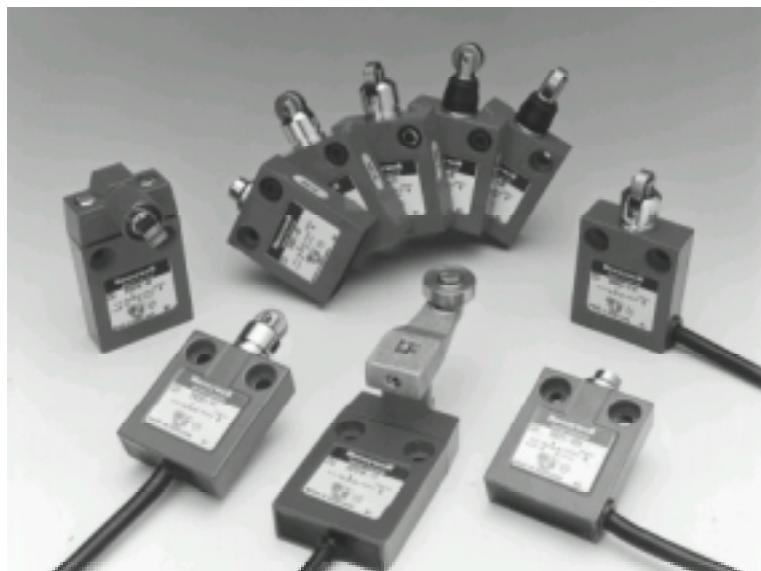
24CE/924CE (Miniature Safety Electromechanical Switch)

FEATURES

- Positive opening operation of Normally Closed contacts conforming to IEC/EN 60947-5-1-3
- Compact construction
- Pre-wired
- Die-cast Zinc housing
- Wide selection of actuators
- Cable length variations
- Side and bottom exit cable
- Simple two-screw mounting
- IP 65/66/67
- UL recognised; CSA certified (924CE), CE approved, BG approved (24CE)

BENEFITS

- Suitable for applications where space is at a premium
- Fast and easy to install
- Suitable for difficult operating environments
- Application flexibility
- Enhanced choice for application
- Multiple plunger capability



The ranges 24CE and 924CE have been tested and approved to meet the requirements of the Low Voltage directive and positive opening safety contacts per IEC/EN 60947-5-1-3. The devices are CE marked. The red colour clearly differentiates this safety component in the application. The 924CE range also has UL and CSA approval.

It is possible for the end user to enhance the safety level of these switches from Category 1 on their own to Categories 2, 3 or 4 when the switches are used in conjunction with our wide range of FF-SR safety relays to form a safety system.

Typical applications for these switches would use the roller plunger 24CE2- or 24CE3- style in conjunction with cams on doors with hinges; or our fixed side rotary 24CE16- style for detection of sliding doors. Also available are a range of panel mounting or top mounting versions to ensure that small space or difficult mounting can be simply achieved.

Several contact arrangements are available.

24CE/924CE

⚠ WARNING

MISUSE OF DOCUMENTATION

- The information presented in this product sheet (or catalogue) is for reference only. DO NOT USE this document as system installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

24CE Series Miniature Safety Electromechanical Switch

Technical Data

Mechanical life 10 million operations.

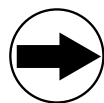
Degree of protection 24CE
Standard type IP 66
With boot seal type IP 67

Temperature range Operating: 0 to +70°C
(32 to +160°F)

Approvals* IEC 60947-5-1
EN 60947-5-1
AC15 B300
DC13 R300

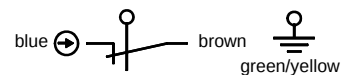
Electrical According to IEC/EN 60947-5-1.
Rated insulation voltage $U_i = 500V$.
Rated impulse withstand voltage $U_{imp} = 2.5kV$.
Not suitable for isolation.
SCPD, Quick blow fuse to IEC 127
suitable for rated current.

* See Standards (page 139)

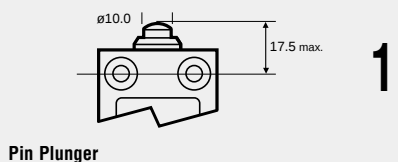


Actuator Types

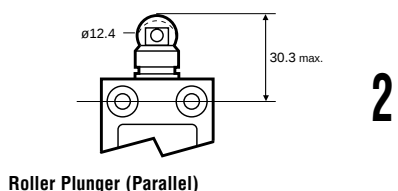
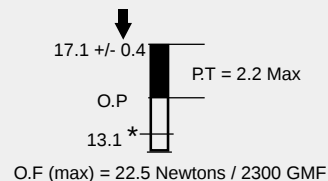
Slow Action Contacts 1 Normally Closed



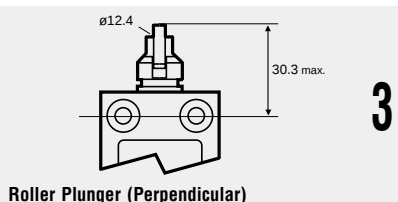
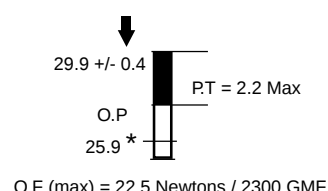
■ Circuit closed
* Positive opening to IEC/EN 60947-5-1-3



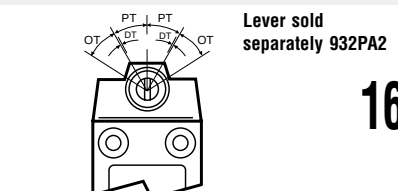
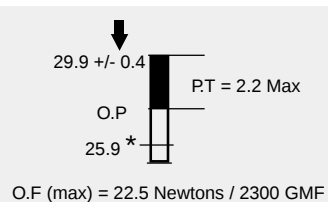
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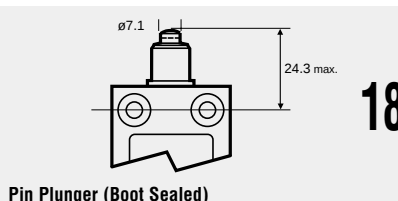
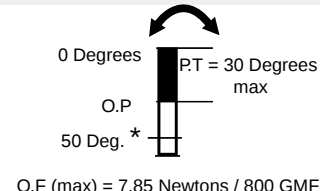
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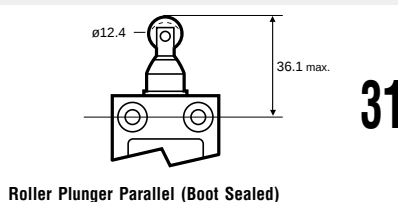
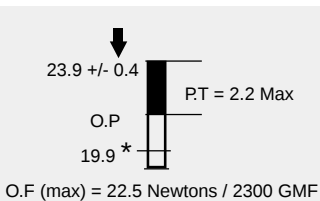
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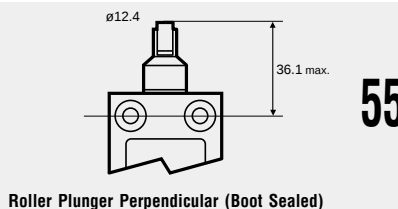
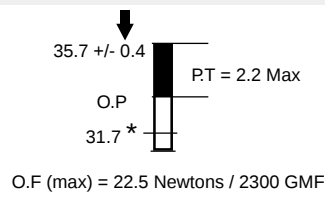
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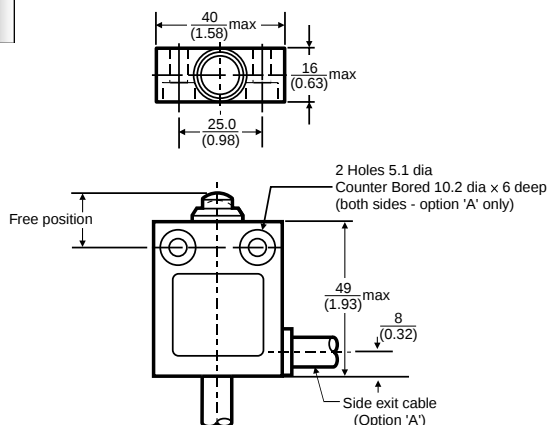
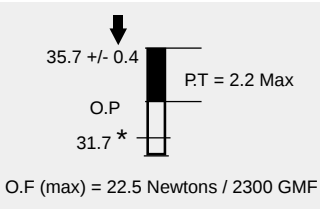
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31



55



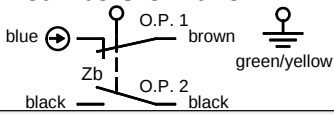
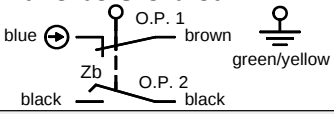
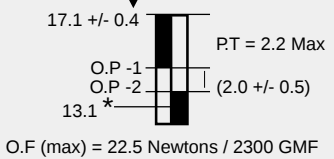
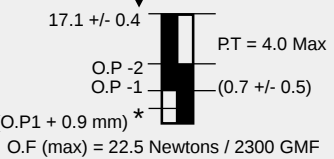
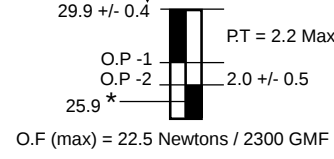
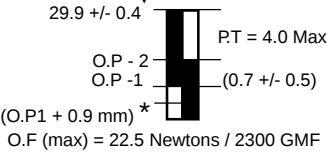
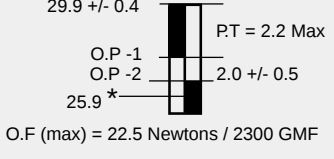
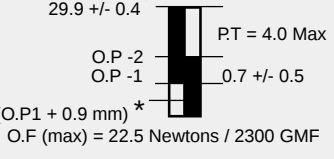
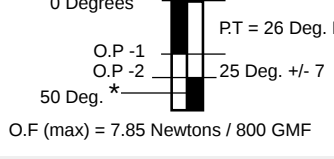
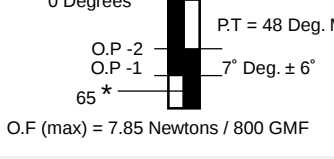
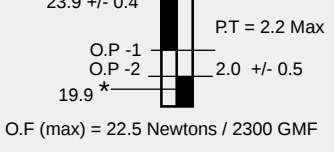
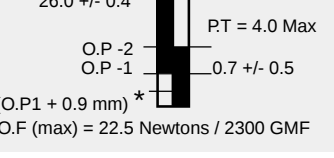
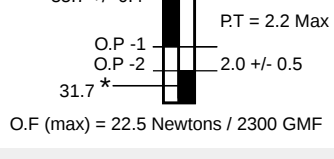
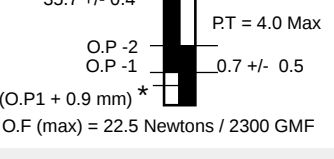
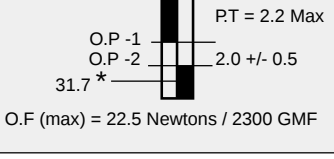
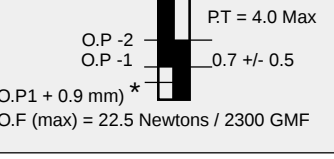
Cable Type
3 or 5 x 0.75mm² harmonised CENELEC cable.

Ordering:

24CE

X OR XX

Example: 24CE1-Y1A

Slow Action Contacts 1 Normally Closed/ 1 Normally Open Break before make 	Slow Action Contacts 1 Normally Closed/ 1 Normally Open Make before break 	Cable Length (in metres)	Option Codes Available
		Specify cable length in 1 metre increments e.g. 1 = 1 metre 2 = 2 metre etc. Normal maximum cable length available is 4 metres. Cable lengths greater than 4 metres available on special request. Cable Standard: 3 or 5 Core PVC sheathed, colour of sheath: Black Cable Option B, C: 3 or 5 Core Silicone sheathed, colour of sheath: Brown	A: Side Exit Cable. B: Low temperature constructions (-40°C). C: Low temperature constructions (-40°C/-40°F) + Option "A". G: Gold contacts (plated) M: PUR cable
			
			
			
			
			
			
S X	T	X	X

Note:

Multiple selection of code options is allowed. However, all coding permutations may not be available or permissible.

24CE/924CE

924CE Series Miniature Safety Electromechanical Switch

Technical Data

Mechanical life 10 million operations.

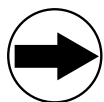
Degree of protection 924CE
Standard type IP 66
With boot seal type IP 67

Temperature range Operating: 0 to +105°C
(32 to +221°F)

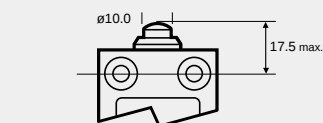
Approvals* IEC 60947-5-1
EN 60947-5-1
AC15 B300
DC13 R300
UL; CSA

Electrical According to IEC/EN 60947-5-1.
Rated insulation voltage
 $U_i = 500V$.
Rated impulse withstand voltage
 $U_{imp} = 2.5kV$.
Not suitable for isolation.
SCPD, Quick blow fuse to IEC
127 suitable for rated current.

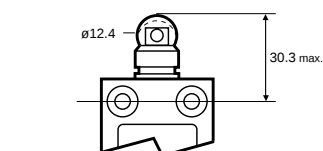
* See Standards (page 139)



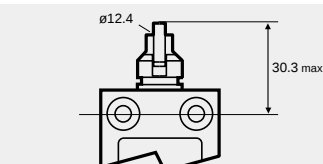
Actuator Types



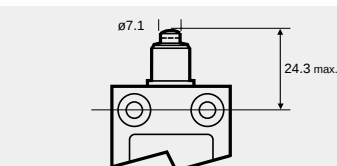
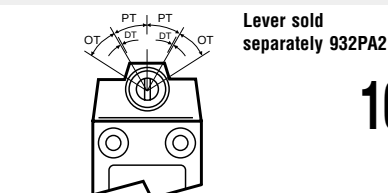
Pin Plunger



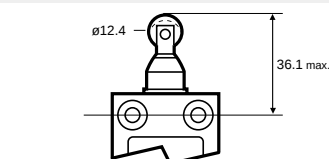
Roller Plunger (Parallel)



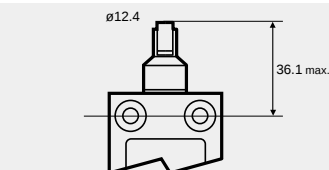
Roller Plunger (Perpendicular)



Pin Plunger (Boot Sealed)



Roller Plunger Parallel (Boot Sealed)



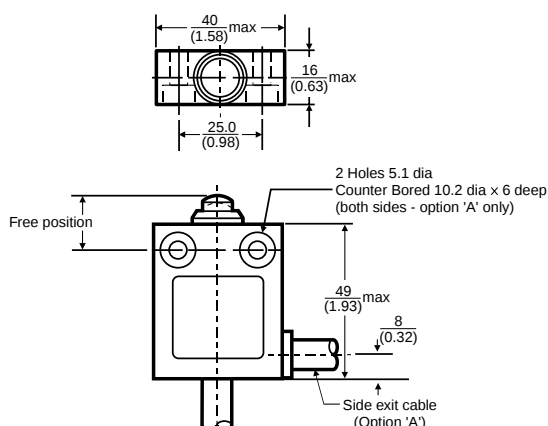
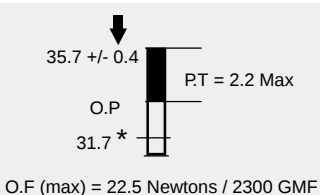
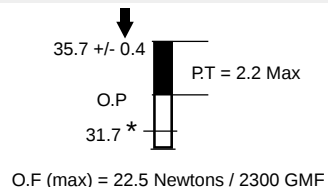
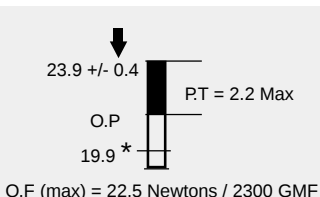
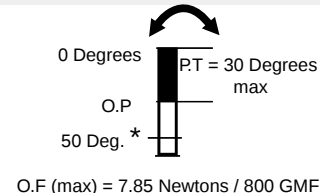
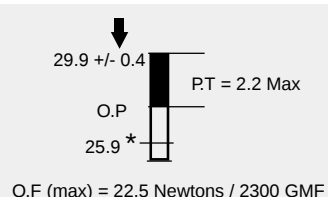
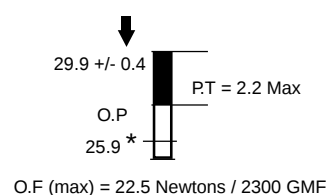
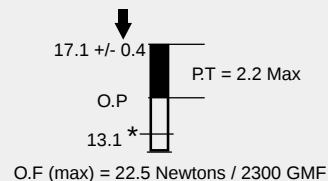
Roller Plunger Perpendicular (Boot Sealed)

Slow Action Contacts 1 Normally Closed



■ Circuit closed

*Positive opening to IEC/EN 60947-5-1-3



Cable Type
3 or 5 x 18 AWG SJTO CABLE

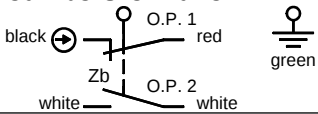
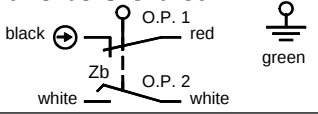
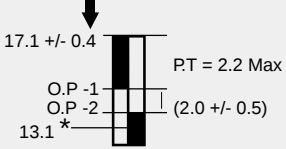
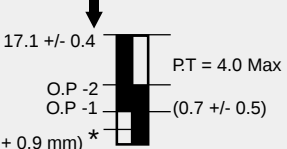
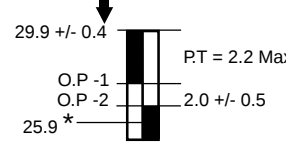
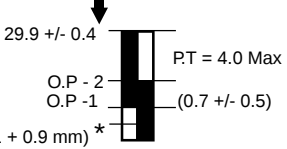
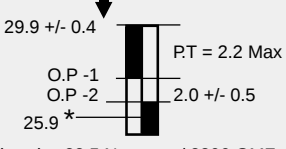
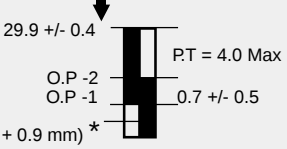
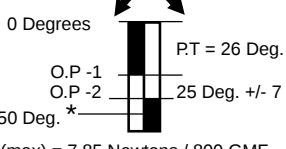
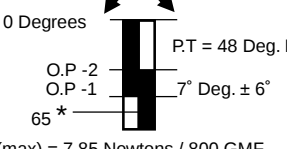
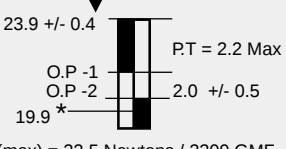
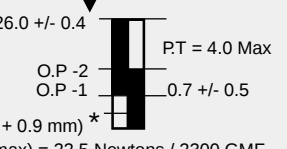
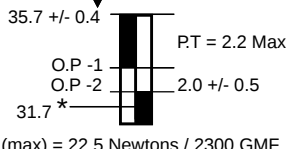
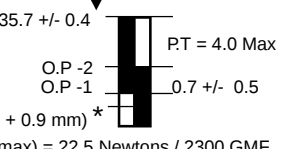
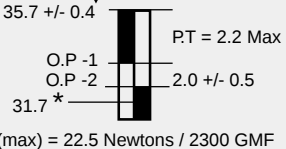
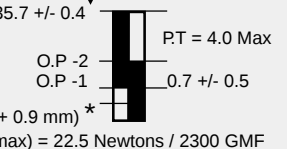
Ordering:

924CE

Example: 924CE16-Y3A

X OR XX

Y

Slow Action Contacts 1 Normally Closed/ 1 Normally Open Break before make 	Slow Action Contacts 1 Normally Closed/ 1 Normally Open Make before break 	Cable Length (in metres)	Option Codes Available
 O.F (max) = 22.5 Newtons / 2300 GMF	 O.F (max) = 22.5 Newtons / 2300 GMF	Specify cable length in 3 feet increments e.g. 3 = 3 feet 6 = 6 feet etc. Normal maximum cable length available is 12 feet. Cable lengths greater than 12 feet available on special request. Cable Standard: 3 or 5 Core SJTO sheathed, colour of sheath: Grey	A: Side Exit Cable P: Top mounting holes
 O.F (max) = 22.5 Newtons / 2300 GMF	 O.F (max) = 22.5 Newtons / 2300 GMF		
 O.F (max) = 22.5 Newtons / 2300 GMF	 O.F (max) = 22.5 Newtons / 2300 GMF		
0 Degrees  O.F (max) = 7.85 Newtons / 800 GMF	0 Degrees  O.F (max) = 7.85 Newtons / 800 GMF		Note: Multiple selection of code options is allowed. However, all coding permutations may not be available or permissible.
 O.F (max) = 22.5 Newtons / 2300 GMF	 O.F (max) = 22.5 Newtons / 2300 GMF		
 O.F (max) = 22.5 Newtons / 2300 GMF	 O.F (max) = 22.5 Newtons / 2300 GMF		
 O.F (max) = 22.5 Newtons / 2300 GMF	 O.F (max) = 22.5 Newtons / 2300 GMF		
S X	T X		X