

Momentary pushbutton switches • round plunger



#### **DISTINCTIVE FEATURES**

Butt action contacts

Double break

NF (EN 61058-1), UL and CSA approved





#### **ELECTRICAL SPECIFICATIONS**

- Max. current/voltage rating with resistive load :
- silver contacts (A): 4 A 250 VAC 8 A 125 VAC 4 A 24 VDC 8 A 12 VDC
- silver plated copper contacts (C):
- 2 A 250 VAC 3 A 125 VAC 2 A 24 VDC 3 A 12 VDC
- Initial contact resistance :  $10 \text{ m}\Omega$
- Insulation resistance : 1,000 M $\Omega$  min. at 500 VDC
- Dielectric strength:
  - 2,000 Vrms 50 Hz min. between terminals
  - 3,000 Vrms 50 Hz min. between terminals and frame
- Electrical life: 10,000 cycles at full load



#### **GENERAL SPECIFICATIONS**

- Torque: 1.50 Nm (1.10 Ft.lb) max. applied to nut
- Panel thickness: 5 mm (.196) max.
- Total travel :

NO : 4.5 mm (.177)  $\pm$  0.3 (.011) NC : 3.5 mm (.137)  $\pm$  0.3 (.011)

 $\bullet$  Operating temperature : -20 °C to +55 °C (-4 °F to +131 °F)



#### **MATERIALS**

- Case: polyamide
- Plunger: polyamide
- Bushing : brass, nickel plated
- Contacts:

A:silver

C: copper, silver plated

APEM products may be recycled at end-of-life for the re-claiming of valuable metal components.

The company reserves the right to change specifications without notice.



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#### **MOUNTING**

• Panel cut-out : Ø 12.2 (.480)

#### **AGENCY APPROVALS**



EN 61058-1

2 A 250 VAC or 4 A 250 VAC, T55/125 °C

All models



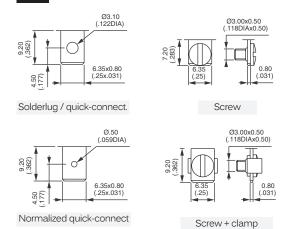


4 A 250 VAC - 8 A 125 VAC All models function 3 (NO)

Models 1233X209 and 1233X209L are standard marked NF. To order switches marked NF, UL or CSA, complete appropriate box of ordering format.



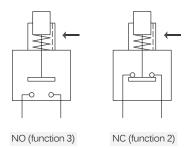
#### **TERMINALS**





#### **ELECTRICAL FUNCTIONS**

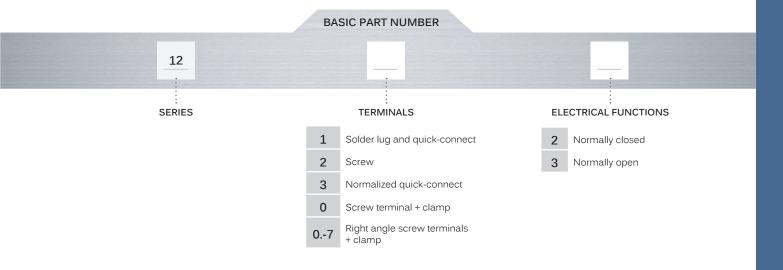


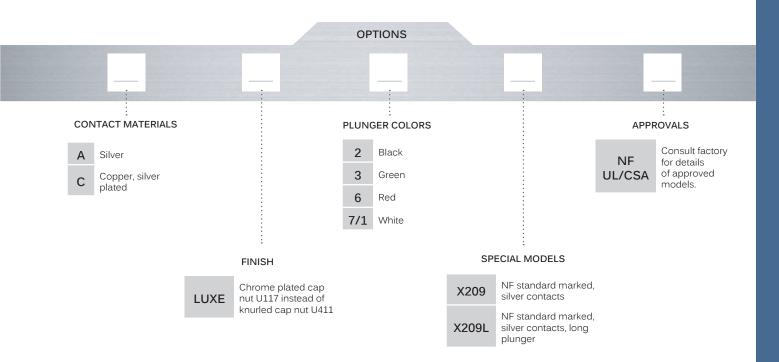


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#### **BUILD YOUR PART NUMBER**





# 4

#### **ABOUT THIS SERIES**

On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart.

- (1) Notice: please note that not all combinations of above numbers are available. Refer to following pages for further information.
- (Sealing boots are available to protect the switches against dust and water. See "Sealing Boots" section of website.
- Mounting accessories: standard hardware supplied: 1 hex nut U166 and 1 knurled nut U411.

  Standard and special hardware is presented in the "Hardware" section of website.

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#### SOLDER LUG/QUICK-CONNECT TERMINALS



1212 O Normally Closed

1213 O Normally Open

Plunger height: NO model: 7.50 mm, NC model: 6.70 mm

#### **SCREW TERMINALS**



1222 O Normally Closed

1223 O Normally Open

Plunger height: NO model: 7.50 mm, NC model: 6.70 mm

#### NORMALIZED QUICK-CONNECT TERMINALS



1232 O Normally Closed

1233 O Normally Open

Plunger height: NO model: 7.50 mm, NC model: 6.70 mm

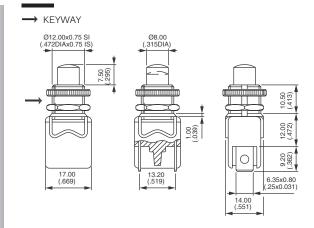
#### STRAIGHT SCREW TERMINALS + CLAMP

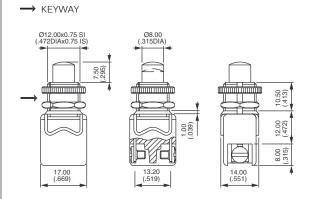


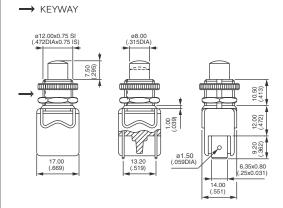
1202 O Normally Closed

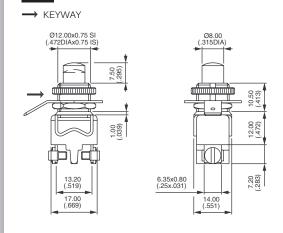
1203 O Normally Open

Plunger height: NO model: 7.50 mm, NC model: 6.70 mm



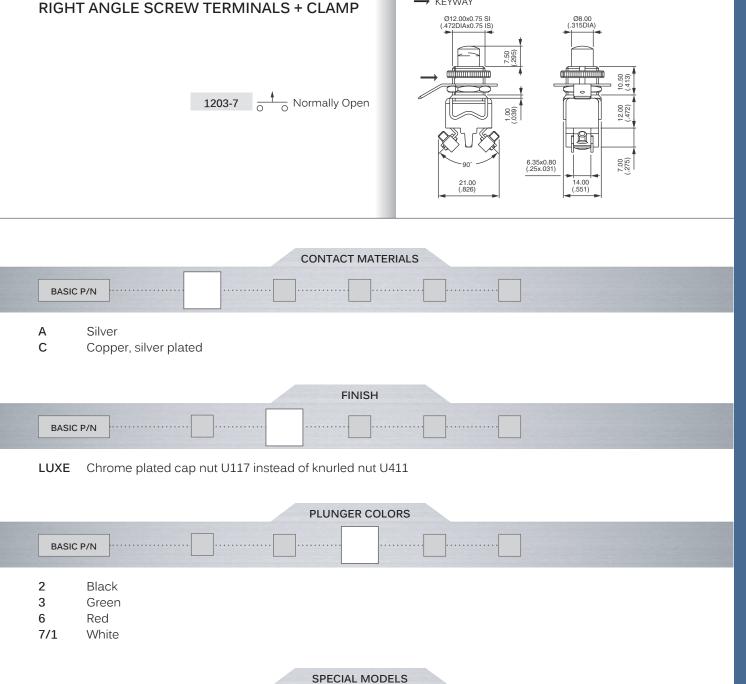






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KEYWAY



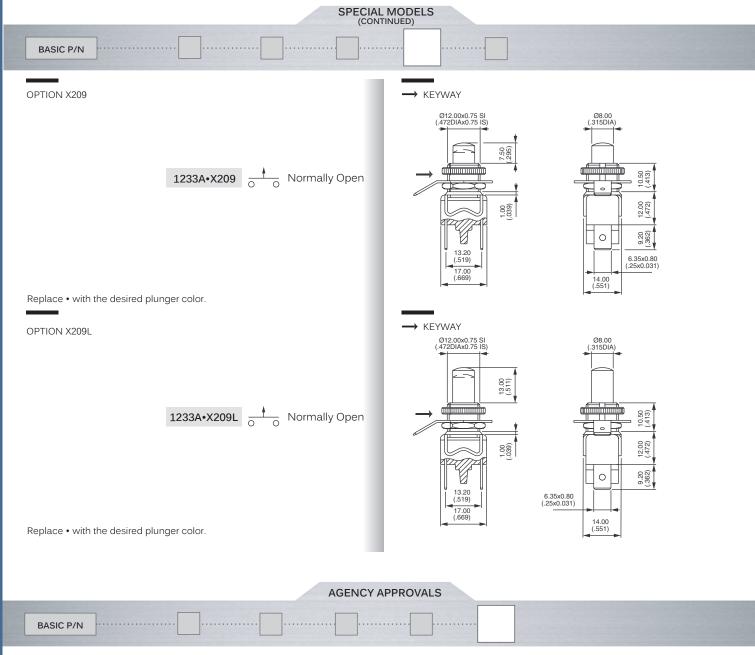
X209 NF standard marked - Silver contacts - short plunger
 X209L NF standard marked - Silver contacts - long plunger
 See drawings next page.

BASIC P/N

NOTE: Ground connector U187 compulsory on models X209 and X209L if the panel is not metallic or not connected to ground. Order separately: see "Hardware" section of website.

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NF All models

UL-CSA All models function 3 (NO), including X209 and X209L

Marking: to order switches marked NF, UL or CSA, complete above box with desired approvals.