

13000X778 series

High performance pushbutton switches - threaded bushing Ø 11,9 (15/32) - alternate

Distinctive features



□ Applications

These professional switches are suitable for use in military and other high specifications environments.

□ Alternate action

Now available as a bistable switch to have a maintained electrical contact.

□ Contacts

Highly reliable contacts suitable for low level applications or power applications.

□ Double shell case

For high mechanical strength and high electrical insulation.



□ Compact size

The small rear end of the switch allows space savings behind the panel.

□ Finish

Black finish on body, bushing, plunger and hardware.

□ Full sealing

Panel sealed to IP 67, these switches are frontal sealed by two O-rings and have full rear end sealing.



ERMEC, S.L. BARCELONA
C/ Francesc Teixidó, 22
E-08918 Badalona
(Spain)

Tel.: (+34) 902 450 160
Fax: (+34) 902 433 088
info@ermec.com
www.ermec.com

ERMEC, S.L. MADRID
C/ Sagasta, 8, 1ª planta
E-28004 Madrid
(Spain)

PORTUGAL
portugal@ermec.com
BILBAO
bilbao@ermec.com

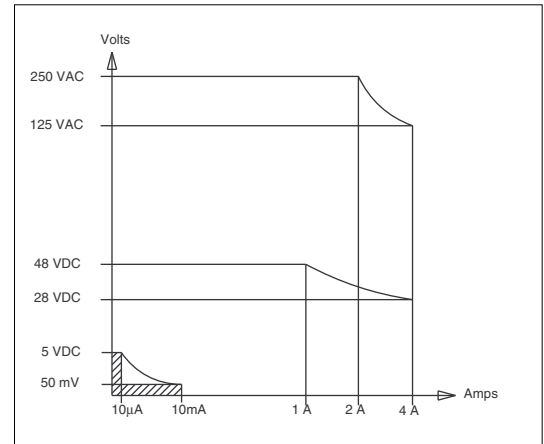
13000X778 series

High performance pushbutton switches - threaded bushing Ø 11,9 (15/32) - alternate

Specifications

ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load : 4A 28VDC
- Minimum load : 10mA 50mV, 10µA 5VDC
When used above 300mA 28VDC, the gold plating is removed on contact areas and is considered only as a protection against oxidation during storage.
- Initial contact resistance : 10 mΩ max.
- Insulation resistance : 1.000 MΩ min. at 500VDC
- Dielectric strength :
1.000 Vrms 50 Hz min. between terminals
2.000 Vrms 50 Hz min. between poles
2.000 Vrms 50 Hz min. between terminals and frame
- Contact bounce : 2 ms max.
- Electrical life :
 - At 4A 28VDC : 10.000 cycles
 - At low level (50mV 10mA) : 150.000 cycles

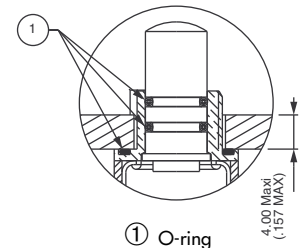


MATERIALS

- Case : diallylphthalate (DAP) with PBT external shell (epoxy sealed)
- Actuator : brass, black chrome plated
- Bushing : brass, black chrome plated
- Contacts : silver inlay - gold plated over nickel barrier

SEALING

- Front panel sealing by two O-rings
- Panel seal withstands 1 bar pressure and remains sealed even when the switch is operated.
- Epoxy sealed terminals
- Splash-proof case



GENERAL SPECIFICATIONS

- Total travel : 2,5 mm (.098)
- Torque : 1,50 Nm (1.10 Ft.lb) max. applied to nut
- Panel thickness : 8 mm (.315) max.
- Shock test : 50g - 11ms (IEC 68-2-27)
- Vibrations : 10-500 Hz - 10g (IEC68-2-6)
- Operating temperature : -40°C to +85°C
- Humidity test : 56 days, 93 % R.H., 40°C (IEC 68-2-3)
- Salt spray test : 96 hours (IEC 68-2-11)



ERMEC, S.L. BARCELONA
C/ Francesc Teixidó, 22
E-08918 Badalona
(Spain)

Tel.: (+34) 902 450 160
Fax: (+34) 902 433 088
info@ermec.com
www.ermec.com

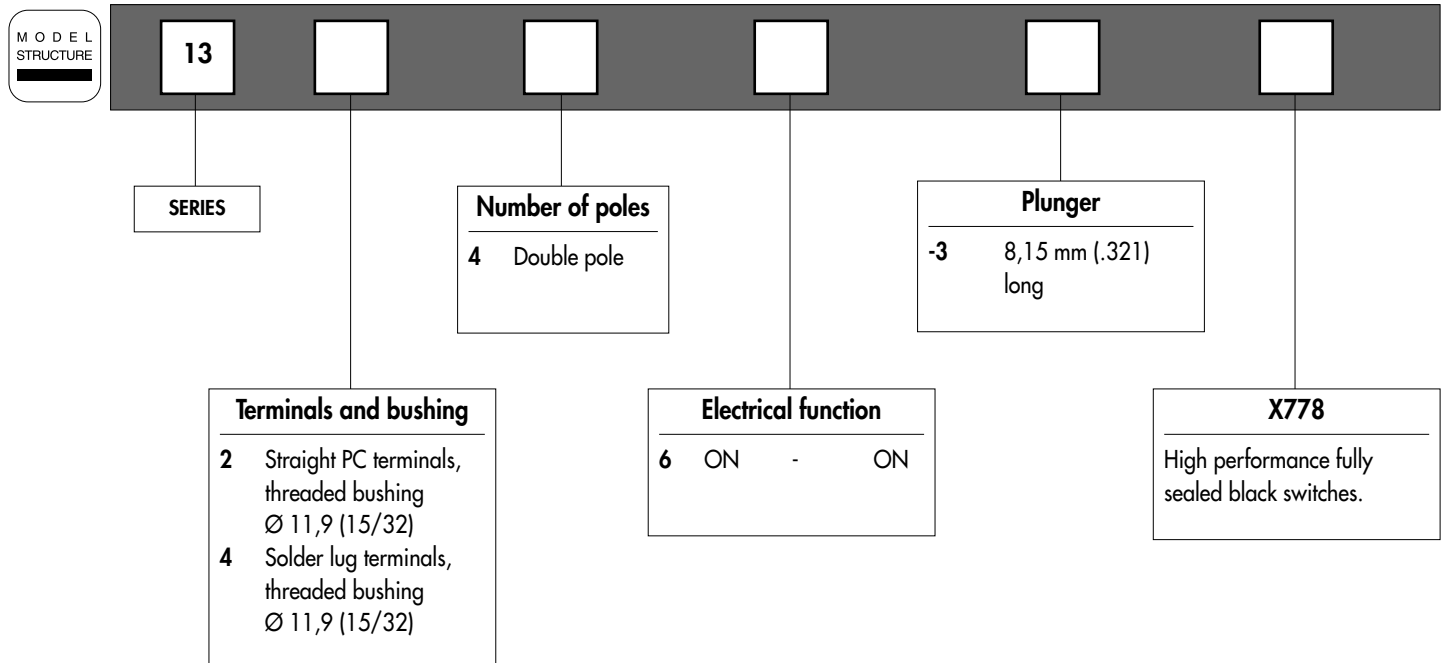
ERMEC, S.L. MADRID
C/ Sagasta, 8, 1ª planta
E-28004 Madrid
(Spain)

PORTUGAL
portugal@ermec.com
BILBAO
bilbao@ermec.com

13000X778 series

High performance pushbutton switches - threaded bushing Ø 11,9 (15/32) - alternate

Overview



ABOUT THIS SERIES

Dimensions : first dimensions are in mm while inches are shown as bracketted numbers.



Sealing boots can be used to further protect the switches against dust and water. They are presented in section H.



Mounting accessories : standard hardware supplied with all models : 1 hex nut 14 (.551) across flats, part number U41. This nut is presented after model structure of switches.

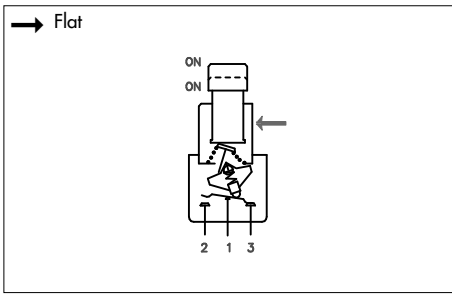


Packaging unit : 25 pieces

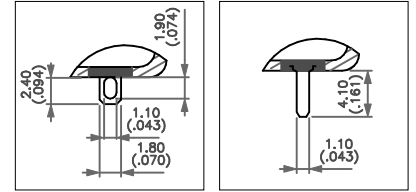
13000X778 series

High performance pushbutton switches - threaded bushing $\varnothing 11,9$ (15/32) - alternate

Fully sealed - black



- Alternate action pushbutton switches
- Button returns in upper position after actuation.



MODEL
STRUCTURE

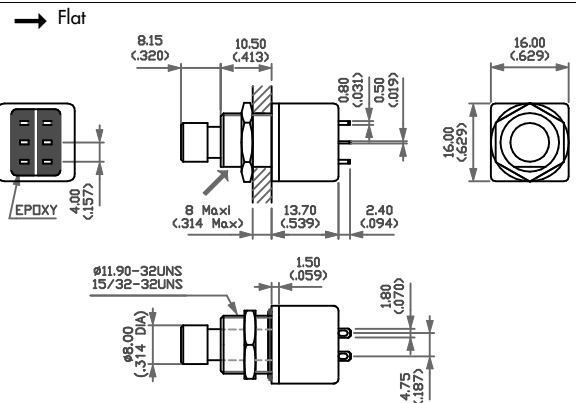


Solder lug terminals - double pole



13446-3X778

ON ON

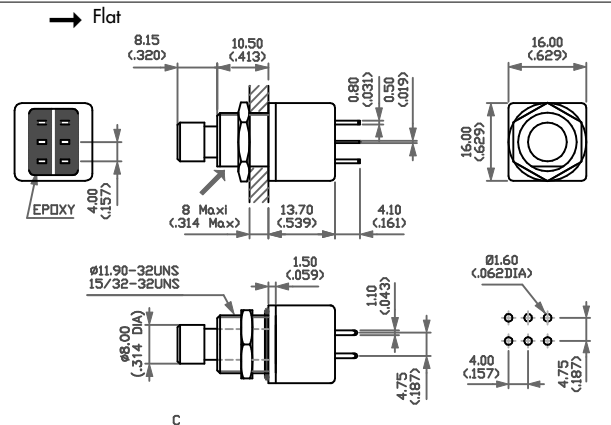


Straight PC terminals - double pole



13246-3X778

ON ON



ERMEC, S.L. BARCELONA
C/ Francesc Teixidó, 22
E-08918 Badalona
(Spain)

Tel.: (+34) 902 450 160
Fax: (+34) 902 433 088
info@ermec.com
www.ermec.com

ERMEC, S.L. MADRID
C/ Sagasta, 8, 1ª planta
E-28004 Madrid
(Spain)

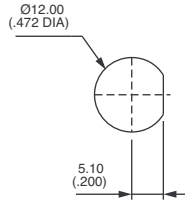
PORTUGAL
portugal@ermec.com
BILBAO
bilbao@ermec.com

13000X778 series

High performance pushbutton switches - threaded bushing \varnothing 11,9 (15/32) - alternate

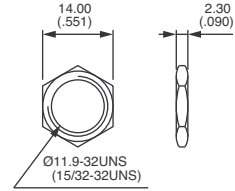
Fully sealed - black

PANEL CUT-OUT



STANDARD HARDWARE

Hex nut



U41 (matt black)

POSITIONS AND CONNECTIONS

FUNCTION	BUTTON POSITION AND CONNECTIONS		TERMINAL IDENTIFICATION
	I	II	
13246 13446	ON A 1-2 B 1-2	ON A 1-3 B 1-3	<p>→ Flat</p>



ERMEC, S.L. BARCELONA
C/ Francesc Teixidó, 22
E-08918 Badalona
(Spain)

Tel.: (+34) 902 450 160
Fax: (+34) 902 433 088
info@ermec.com
www.ermec.com

ERMEC, S.L. MADRID
C/ Sagasta, 8, 1ª planta
E-28004 Madrid
(Spain)

PORTUGAL
portugal@ermec.com
BILBAO
bilbao@ermec.com