

# 22MM NEMA **PILOT DEVICES**



## SERIES 22 PRODUCT PROFILE

c3controls' **22mm NEMA Pilot Devices** are for all those tight fitting places. Our non-illuminated momentary and maintained push buttons, pilot lights, and selector switches are compact and ready for field wiring in almost any environment. Full voltage operators are available in 12V AC/DC, 24V AC/DC, and 120V AC/DC.



### DELIVERING THE MOST RUGGED 22MM NEMA DEVICES IN THE INDUSTRY

✓ <b>Easy to Install</b>	Our NEMA operators' compact and thin design comes with integral circuits ready for field wiring.
✓ <b>Simple Customization</b>	Our light modules come with various lens color options for appropriate operator interface, and feature LED lamps with leakage protection.
✓ <b>Rugged Design</b>	Optional polyester or polished aluminum clamp rings with coarse 16 pitch threads for quick and easy utilization that won't cross thread or strip.
✓ <b>Visible Certifications</b>	Our product certifications and electrical ratings are clearly marked on the outside of the contact blocks for easy reference during installation.
✓ <b>Heavy Duty</b>	Polyester construction provides superior durability, corrosion resistance, moisture rejection and electrical insulation.
✓ <b>Flexible</b>	Our "Add-On" Contact Blocks can be added to the basic operator to increase the number and type of contacts. Up to 3 blocks with 2 circuits each may be added, giving a total of 8 contacts per operator.
✓ <b>Convenient</b>	Reduce inventory with our interchangeable modular design, providing endless options for appropriate operator interface.
✓ <b>Environmentally Secure</b>	With 4/4X and IP65 ratings, our 22mm line of Pilot Devices are built to last and withstand dust, corrosion, ice, and rain.
✓ <b>Limited Lifetime Warranty*</b>	Every product is backed by our limited lifetime warranty—unmatched in the industry—bringing you quality components that perform in the most demanding applications.
✓ <b>Guaranteed Same-Day Shipping*</b>	Product availability reduces inventory, and improves cash-flow—saving you money. With c3controls any order for standard catalog items received by 6:00pm ET is guaranteed to ship same-day.
✓ <b>Advantage Pricing</b>	Our approach to product development, manufacturing, and focus on servicing the OEM and Electrical Equipment Builder reduces cost. The result—the best value in the industry.

\*See c3controls Terms & Conditions

### UNIQUE FEATURES

#### Metal on the inside—where it counts!

- c3controls Maintained Push Buttons contain a solid brass detent mechanism ensuring reliable operation in emergency stop applications, and providing safe interruption of circuits and longer life.

#### U-Cup Seal

- Our revolutionary U-Cup seal is infused with a Teflon coating to eliminate cracking when exposed to harsh conditions and keeps water, oils, and dust away from the contact blocks.

#### Internal Self-Lubricant

- All frictional parts are molded with an internal self-lubricant to provide outstanding wear without troublesome greases used by others.

#### One Cam Design

- Our single cam design eliminates the need for multiple cam and selector switch configurations, reducing inventory and saves you labor time and costs.

#### Rubber Boots

- Our state-of-the-art rubber boots protect both the operators and the circuits behind them from harsh chemicals and climates. They feature a built-in clamp ring that is molded with Neoprene and has been modified to provide added pliability and protection against dust, freezing and thawing environments.



**c3controls**<sup>®</sup>

Copyright © 2021 c3controls. All Rights Reserved.

724.775.7926 | [www.c3controls.com](http://www.c3controls.com)

REVISION 01 . 2021



# 22MM NEMA PILOT DEVICES

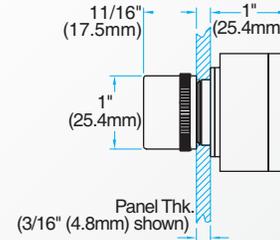
## SPECIFICATIONS

ELECTRICAL RATINGS								
Lamp	Industry Number	Rated Volts	Lumens (MSCD)	Design Life (Hrs.)	Current Draw (mA)	Lamp Type	Shock & Vibration	Leakage Protection
LED12	**	12V †	Varies w/Color 2000 mcd Typical	100,000	< 20	LED	Excellent	4 mA
LED24	**	24V †			< 20			4 mA
LED130	**	130V †			< 10			2 mA
** Designates a lamp design optimized for c3controls Illuminated Devices.								
† LED voltage tolerance is +/- 10%								
DIELECTRIC STRENGTH (MECHANICAL CONTACTS) 2200V for 1 Minute								
STANDARD CONTACTS								
		Utilization Category						
	IEC	UL	Make Rating	Break Rating	Ith Thermal Current			
AC	AC-15	A600	7200VA	720VA	10A			
DC	DC-13	P300	138VA	138VA	5A			
NOTE: For AC voltages below 72VAC the max. allowed switching current is 10A=Ith. For DC voltages below 28VDC the max. allowed switching current is 5A=Ith.								
ENVIRONMENTAL RATINGS								
		Type 1, 2, 3, 3R, 4/4X, 12, 13, and IP65						
Operating Temperature		-40° F to +131° F (-40° C to +55° C)						
Storage Temperature		-40° F to +185° F (-40° C to +85° C)						
TERMINAL & WIRING CONSIDERATION								
Wire: AWG 22 -12 CU		(Copper only - Solid & Stranded) [5 ~ 4mm <sup>2</sup> ] One or two wires permitted per termination.						
Recommended Torque		7-10 lb-in [.8 Nm]						
ROHS COMPLIANCE								
For RoHS compliance documentation by product, refer to <a href="http://www.c3controls.com">www.c3controls.com</a> .								

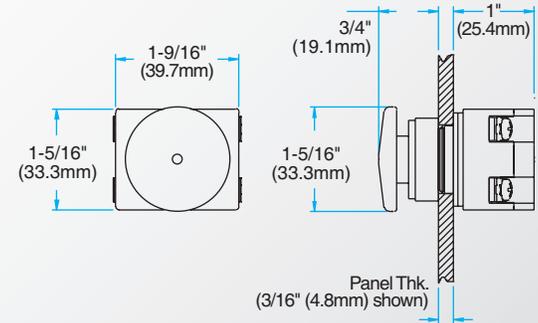
For complete ratings and detailed specifications refer to [www.c3controls.com](http://www.c3controls.com).

## DIMENSIONS

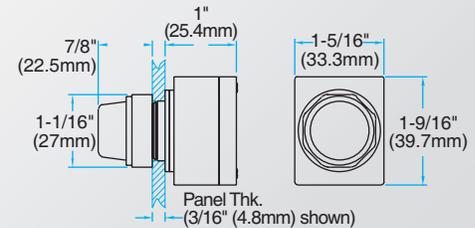
Momentary Non-Illuminated Operator (shown with Flush Cap)



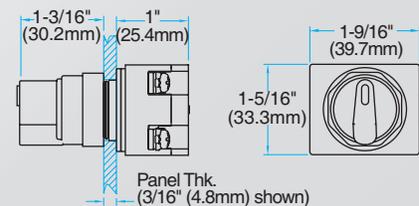
2-Position Push-Pull Maintained Non-Illuminated Operator (shown with 1-1/2\" [38mm] Mushroom Cap)



Full Voltage Pilot Light Operator



Selector Switch Operator (shown with Standard Handle)



## CERTIFICATIONS

**Conformity to Standards:**

UL 508  
CSA C22.2 No. 14  
IEC 60947-1, 60947-5-1

**Certifications:**

UL File #: E68568 (Guide NKCR, NKCR7)  
CSA File #: LR47446-1  
CE Marked (per EU Low Voltage Directive 2006/95/EC and RoHS Directive 2011/65/EU)



Visit [www.c3controls.com](http://www.c3controls.com) to download product certifications.



**c3controls**

Copyright © 2021 c3controls. All Rights Reserved.

724.775.7926 | [www.c3controls.com](http://www.c3controls.com)

REVISION 01, 2021