# Pneumatic Pushbuttons, 22mm
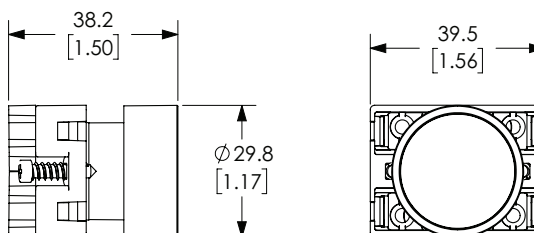
**NITRA** PNEUMATICS

## Momentary flush pushbuttons with protective plastic ring (30mm diameter actuator)

**ECP3100**

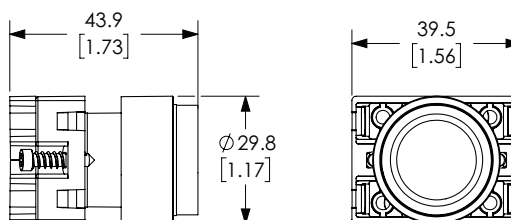| Part Number | Color | Description | Weight (lbs) | Price |
|---|---|---|---|---|
| ECP3100 | Black | NITRA pneumatic pushbutton, IP65, 22mm, momentary, plastic base, plastic bezel, black, operator only, Operator: black, flush, 30mm, round, plastic. | 0.07 | $2dxo: |
| ECP3101 | Red | NITRA pneumatic pushbutton, IP65, 22mm, momentary, plastic base, plastic bezel, black, operator only, Operator: red, flush, 30mm, round, plastic. | 0.07 | $2dq?: |
| ECP3102 | Green | NITRA pneumatic pushbutton, IP65, 22mm, momentary, plastic base, plastic bezel, black, operator only, Operator: green, flush, 30mm, round, plastic. | 0.07 | $:;2dq,: |
| ECP3103 | Yellow | NITRA pneumatic pushbutton, IP65, 22mm, momentary, plastic base, plastic bezel, black, operator only, Operator: yellow, flush, 30mm, round, plastic. | 0.07 | $2ds0: |
| ECP3104 | Blue | NITRA pneumatic pushbutton, IP65, 22mm, momentary, plastic base, plastic bezel, black, operator only, Operator: blue, flush, 30mm, round, plastic. | 0.07 | $2ds3: |
| ECP3105 | White | NITRA pneumatic pushbutton, IP65, 22mm, momentary, plastic base, plastic bezel, black, operator only, Operator: white, flush, 30mm, round, plastic. | 0.07 | $2ds4: |
| ECP3106 | Red | NITRA pneumatic pushbutton, IP65, 22mm, momentary, plastic base, plastic bezel, black, operator only, Operator: red, flush, 30mm, round, plastic, operator text "(O)". | 0.07 | $2ds5: |
| ECP3107 | Green | NITRA pneumatic pushbutton, IP65, 22mm, momentary, plastic base, plastic bezel, black, operator only, Operator: green, flush, 30mm, round, plastic, operator text "(I)". | 0.07 | $2ds6: |

### Dimensions
*mm [inches]*

38.2 [1.50]  39.5 [1.56]  Ø29.8 [1.17]

## Momentary extended pushbuttons with protective plastic ring (30mm diameter actuator)

**ECP3110**

| Part Number | Color | Description | Weight (lbs) | Price |
|---|---|---|---|---|
| ECP3110 | Black | NITRA pneumatic pushbutton, IP65, 22mm, momentary, plastic base, plastic bezel, black, operator only, Operator: black, extended, 30mm, round, plastic. | 0.07 | $2ds7: |
| ECP3111 | Red | NITRA pneumatic pushbutton, IP65, 22mm, momentary, plastic base, plastic bezel, black, operator only, Operator: red, extended, 30mm, round, plastic. | 0.07 | $2ds8: |
| ECP3112 | Green | NITRA pneumatic pushbutton, IP65, 22mm, momentary, plastic base, plastic bezel, black, operator only, Operator: green, extended, 30mm, round, plastic. | 0.07 | $2ds9: |
| ECP3113 | Yellow | NITRA pneumatic pushbutton, IP65, 22mm, momentary, plastic base, plastic bezel, black, operator only, Operator: yellow, extended, 30mm, round, plastic. | 0.07 | $2dsa: |
| ECP3114 | Blue | NITRA pneumatic pushbutton, IP65, 22mm, momentary, plastic base, plastic bezel, black, operator only, Operator: blue, extended, 30mm, round, plastic. | 0.07 | $2dsb: |
| ECP3115 | White | NITRA pneumatic pushbutton, IP65, 22mm, momentary, plastic base, plastic bezel, black, operator only, Operator: white, extended, 30mm, round, plastic. | 0.07 | $2dsc: |

### Dimensions
*mm [inches]*

43.9 [1.73]  39.5 [1.56]  Ø29.8 [1.17]

*See our website www.AutomationDirect.com for complete Engineering drawings.*

# Pneumatic Key Selector Switches, 22mm

## Key selector switches

**ECP3420**

**ECP3470**

| Part Number | Color | Description | Weight (lbs) | Price |
|---|---|---|---|---|
| ECP3420 | Black | NITRA pneumatic selector switch, IP65, 22mm, 2-position, maintained, key removable in all positions, plastic base, plastic bezel, operator only, Operator: black, key, 30mm, round, plastic. | 0.17 | $2ds_: |
| ECP3430 | Black | NITRA pneumatic selector switch, IP65, 22mm, 2-position, spring return from right, key removable left position, plastic base, plastic bezel, operator only, Operator: black, key, 30mm, round, plastic. | 0.17 | $2ds#: |
| ECP3470 | Black | NITRA pneumatic selector switch, IP65, 22mm, 3-position, maintained, key removable in all positions, plastic base, plastic bezel, operator only, Operator: black, key, 30mm, round, plastic. | 0.17 | $;2ds!: |

*Note: Keyed switches come with two keys. All plastic 22mm keyed switches are keyed the same. Replacement keys are available. Order part no. ECX1067-2 (pkg. of 2). Keys for plastic 22mm keyed switches are not compatible with Cutler-Hammer key switches.*

### Dimensions
*mm [inches]*

49.4 [1.94]

Ø 29.8 [1.17]

39.5 [1.56]
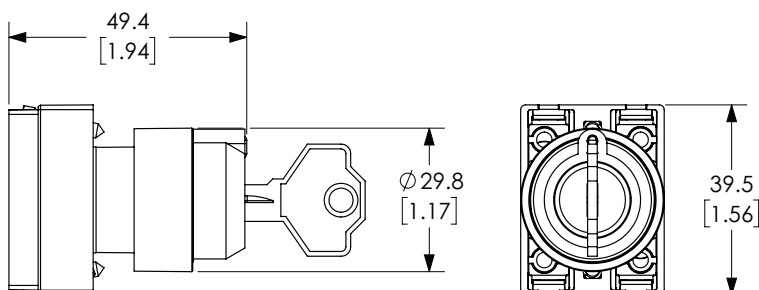
## Pneumatic switch accessory - support base with adapters

**ECP3029-02**

| Part Number | Description | Weight (lbs) | Price |
|---|---|---|---|
| ECP3029-02 | NITRA valve adapter block, replacement, plastic. For use with ECP series pneumatic pushbuttons. | 0.03 | $2ds1: |

### Dimensions
*mm [inches]*

37.5 [1.48]

17.5 [0.69]

29.8 [1.17]
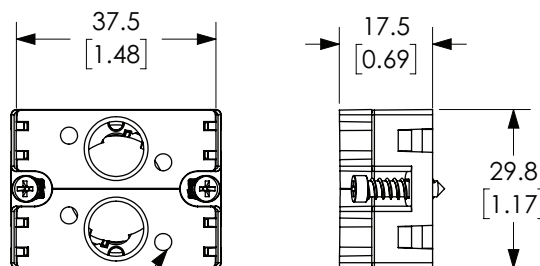
M3 THRU HOLE
SCREWS INCLUDED

*Note: base sold as three piece kit.*

*See our website www.AutomationDirect.com for complete Engineering drawings.*

# NITRA® PNEUMATICS

# Pneumatic Pushbuttons, 22mm

NITRA® pneumatic pushbuttons are all plastic and come with adapters to allow mounting of up to two 3-way valves, or one valve and one  to three contact blocks. They fit in a standard 22.5mm hole, just like electrical pushbuttons.
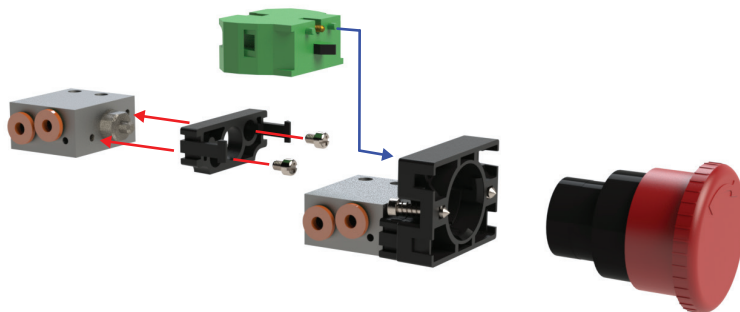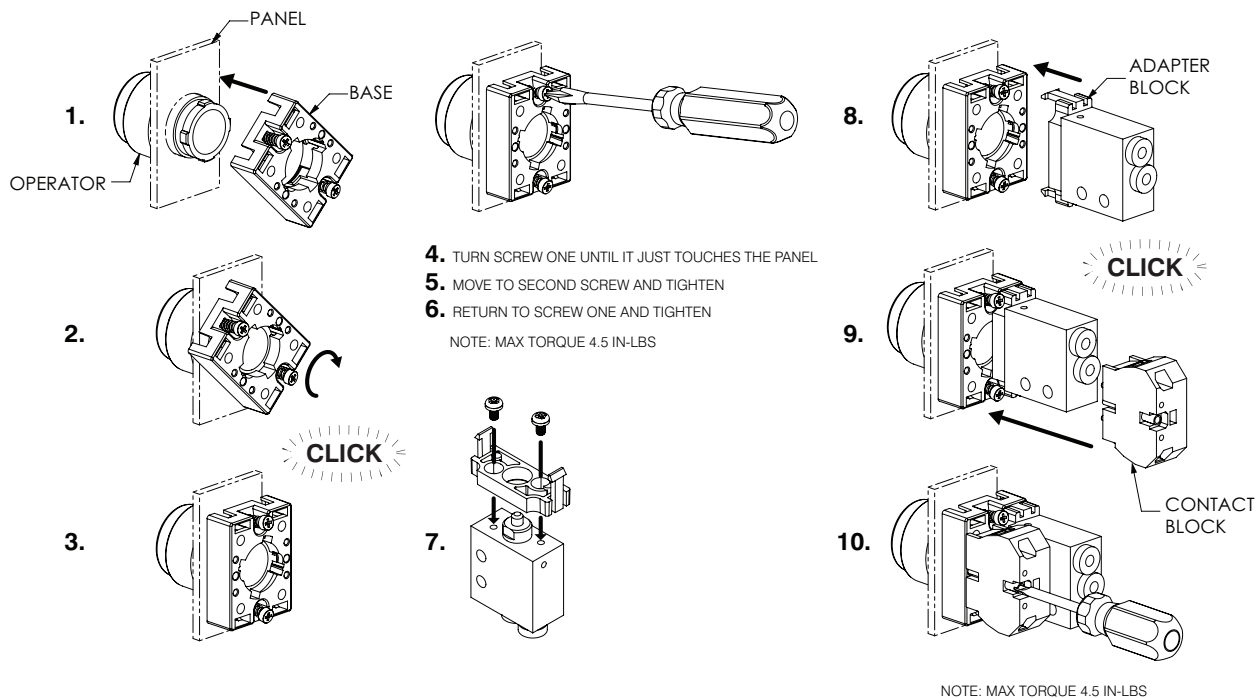
## Features

- Plastic bezel and button
- Valve adapters and mounting screws included
- Valves sold separately
- Bases will work with GCX plastic operators and **only** the three ECX Series contact blocks shown below

| Pushbutton Specifications | |
|---|---|
| *Operating Temperature* | -13 to 158ºF (-25 to +70ºC) |
| *Storage Temperature* | -40 to 176ºF (-40 to +80ºC) |
| *Mechanical Life* | 1,000,000 cycles |
| *Switching Cycles* | 3600 cycles/hr |
| *Mounting (Valve)* | (4) M3x5 valve mounting screws included |
| *Protection* | IP65 after installation |
| *Approvals* | CE |

## Adapter Block Installation

**1.**
PANEL
BASE
OPERATOR

**2.**

**3.**
CLICK

**4.** TURN SCREW ONE UNTIL IT JUST TOUCHES THE PANEL
**5.** MOVE TO SECOND SCREW AND TIGHTEN
**6.** RETURN TO SCREW ONE AND TIGHTEN
NOTE: MAX TORQUE 4.5 IN-LBS

**7.**

**8.**
ADAPTER BLOCK

**9.**
CLICK
CONTACT BLOCK

**10.**

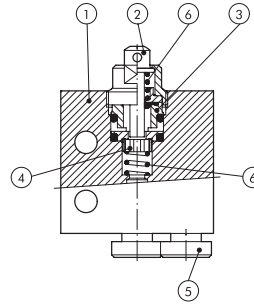NOTE: MAX TORQUE 4.5 IN-LBS

**ECX1040-2**

**ECX1042-2**

**ECX1030-2**

# Pneumatic Manual Valves

## Pneumatic Manual Valve Materials

1. Aluminum valve body
2. Chemically nickel-plated brass button
3. Brass distance plates
4. NBR gaskets
5. Stainless steel, brass and plastic push-to-connect cartridges
6. Stainless steel springs

## Pneumatic Metal Plunger Valves

*These pneumatic valves are used with Nitra pneumatic pushbuttons and switches*

## Features

- Available in normally open or normally closed
- 5/32" [4mm] push-to-connect ports located on side or end
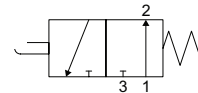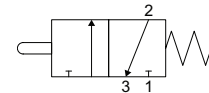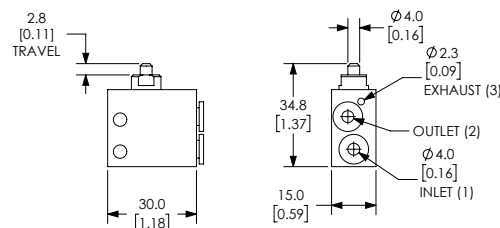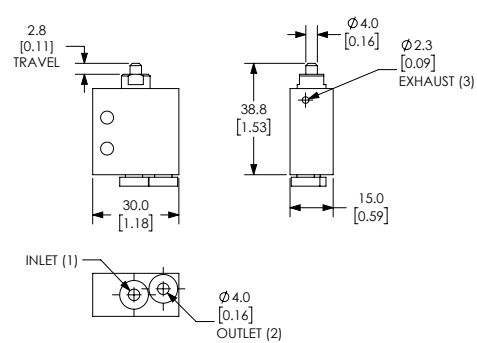
*Valve Symbols*

*Diagram "A"*          *Diagram "B"*

**EVP-CA-PL**

**EVP-CS-PL**

| Models | EVP-CA-PL | EVP-AA-PL | EVP-CS-PL | EVP-AS-PL |
|---|---|---|---|---|
| Price | $;2ds]: | $;2ds[: | $;2dt2: | $;2dt3: |
| Weight (lbs) | 0.1 | 0.1 | 0.1 | 0.1 |
| Valve Type | 2-port (3-way) 2-position | | | |
| Acting | Metal plunger, normally closed, spring return | Metal plunger, normally open, spring return | Metal plunger, normally closed, spring return | Metal plunger, normally open, spring return |
| Diagram | B | A | B | A |
| Port Size | Axial ports 5/32in (4mm) | | Side ports 5/32in (4mm) | |
| Flow (Cv) | 0.13 | 0.13 | 0.13 | 0.13 |
| Fluid | Air (to be filtered by 40µ filter element) | | | |
| Min. / Max. Pressure | 7.25 to 145 psi (0.5 to 10 bar) | | | |
| Temperature | 14ºF to 140ºF (-10ºC to 60ºC) | | | |
| Lubrication | Not Required | | | |
| Body | Aluminum | | | |
| Protection | IP65 | | | |

## Dimensions
*mm [inches]*

**EVP-CA-PL**          **EVP-AA-PL**

**EVP-CS-PL / EVP-AS-PL**

*See our website www.AutomationDirect.com for complete Engineering drawings.*