

Fuji Electric Command 22mm Joysticks



AR22A5N-A0A0B



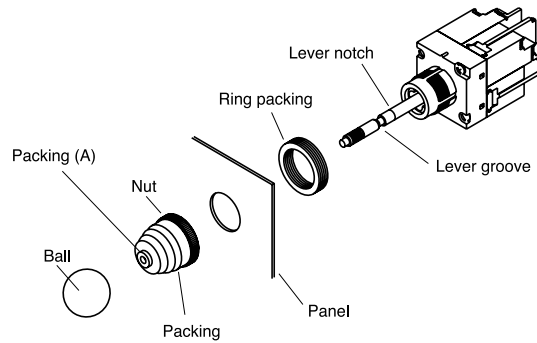
AR22A0N-A0A0B

| Command 22mm Joysticks - Screw Terminal | | | | |
|---|---------|-----------------------|---------------------|----------------------|
| Part Number | Price | Handle | Contact Arrangement | Operating Directions |
| AR22A5N-A0A0B | \$49.00 | Ball type, momentary | 2-position NO | ↑ ↓ |
| AR22A0N-A0A0B | \$49.00 | Ball type, maintained | | |
| AR22A5N-AAAAB | \$49.00 | Ball type, momentary | 4-position NO | ↑ ↓ ← → |
| AR22A0N-AAAAB | \$49.00 | Ball type, maintained | | |

Joystick selector switch mounting on panel

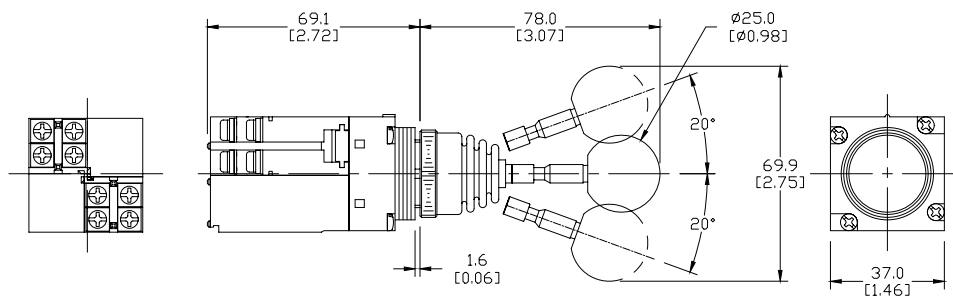
- (1) Twist and remove the ball from the operator.
- (2) If no locking nut is provided, loosen the nut and remove the switch after the packing part (A) shown in the illustration is stretched to the lever groove.
- (3) Mount the switch in the order opposite of removal. Set the packing to the notch on the lever as a reference. Do not separate the nut from the packing.
- (4) Use a torque wrench to tighten the nut from the front of the panel.

Note: Recommended tightening torque is 1 to 1.5 N-m.



Dimensions mm [in]

AR22AxN-AxAxB



Please see our website www.AutomationDirect.com for complete engineering drawings. Dimensions are approximate. Not for construction purposes.

Fuji Electric Command Series 22mm Pilot Devices Specifications

| Specifications (indoor use) | | | |
|--|---|---|---|
| | Pushbuttons Emergency stop pushbuttons Selector switches | Joysticks | Pilot Lights |
| Rated thermal current (contact block) | A600 / P600 | - | - |
| Mechanical durability | See durability table below | 250,000 operations | - |
| Electrical durability | 500,000 operations at 220V AC 6A 1 million operations at 220V AC 3A | 100,000 operations at 220V AC 1A (Res. load) | - |
| Operating frequency | 1200 operations/hour (On-load factor: 40%) | | - |
| Operating force (Avg) | 9N – Pushbuttons 30-45 N – Emergency stop pushbuttons 0.15 - 0.1 N-m – Selector switches | Less than 100N | |
| Positive opening operation | All functions incorporating a N.C. contact are positive-opening operation. | | |
| Dielectric strength | 2,500VAC, 1 minute (w/o transformer 2000VAC) | 2000VAC, 1 minute (Pilot light with transformer: 2500 VAC, 1minute) | |
| Insulation resistance | 100MΩ or more (500VDC megger) | | |
| Rated impulse dielectric strength | 6kV | - | 6kV |
| Conditional short-circuit current | 1000A | | |
| Short-circuit protective device | Fuse 15A (recommended, not supplied) | Fuse 1A (recommended, not supplied) | - |
| Pollution degree | 3 | | |
| Vibration | Resonance: 10 to 55Hz, double amplitude 0.1 mm* / Constant: 16.7 Hz, double amplitude 3mm | | |
| Shock | Malfunction durability: 100 m/s ² ** / | Mechanical durability: 500 m/s ² | Mechanical durability: 500 m/s ² |
| Ambient temperature (no condensation or no icing) | -20° to +70°C [-4° to +158°F] Illuminated type: -20° to -50°C [-4° to -58°F] | -5° to +60°C [+23° to +140°F] | -20° to +50°C [-4° to +122°F] |
| Temperature ratings | Storage: -40° to +80°C [-40° to +176°F] | | |
| Humidity | 45 to 85% RH (within -5° to +40°C) | | |
| Degree of protection | IP65 | | |
| Initial contact resistance | ≤ 50mΩ | - | - |
| Terminal markings | IEC 60445 | - | - |
| Connections | AWG 18 to AWG 14; Stripping length: 8mm to 11mm / Tightening torque: 0.8 to 1.0 N-m, 7.1 in-lb to 8.8 in-lb | | |
| Contacts operation | Self-cleaning types. Slow action. Positive opening. | | |
| Operation frequency | 1,200 cycle/hour (Application ratio 40%) | - | - |
| Utilization category/contact ratings | AC-15: 24VAC at 6A, 110VAC at 6A DC-13: 24VDC at 4A, 110VDC at 1.3 A | AC-1: 110VAC at 0.3 A DC-13: 24VDC at 0.7 A, 110VDC at 0.15 A | - |
| Rated insulation voltage | 600V AC/DC*** | 250V AC/DC | 250V AC/DC (w/transformer 600VAC) |
| Materials | Enclosure: Polyamide / Contacts: silver, nickel | | |
| Standards | UL 508, CSA C22.2, No.14, TUV - EN60947-5-1 | | |
| Approvals | UL file E44592, CSA file LR20479 | | |

* Emergency stop type: 10 to 500 Hz, double amplitude 0.7mm(acceleration 50m/s²), according to test condition of EN60947-5-5 (1998)

** Emergency stop type: 150 m/s²

*** Illuminated type without transformer

To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

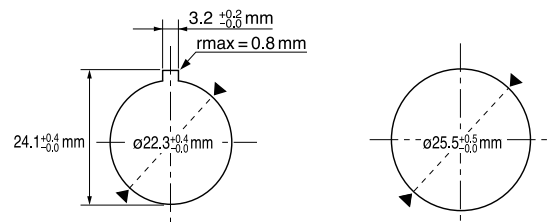
| Mechanical Durability | | |
|---|-------------------------------------|-------------------|
| | | Operations |
| Pushbutton switch Illuminated pushbutton switch E-stop pushbutton switch E-stop illuminated pushbutton | Momentary action | 5 million |
| | Alternate action | 1 million |
| | Push-lock, turn-reset | 100,000 |
| | Push-lock, pull-reset | 30,000 |
| Selector switch | Maintained 1, 2, 3, 4-contact | 1 million |
| | Maintained 5, 6-contact | 500,000 |
| | Spring return, spring/manual return | 200,000 |
| Illuminated selector switch | Maintained | |
| | Without transformer 1, 2, 3-contact | 1 million |
| | 4-contact | 500,000 |
| | With transformer 1, 2-contact | 1 million |
| | 3-contact | 500,000 |
| Spring return, spring/manual return | 200,000 | |

Note: Key insertion/removal durability for selector switch key types

• Key type 10,000

22mm Pilot Devices Cutouts

AR22 pilot devices can be mounted in either 22.3 or 25.5 mm diameter holes as shown in the figure below without any extra adapter.



Note: If key washer or legend plate is not used, 3.2 mm-wide location holes do not need to be cut out.

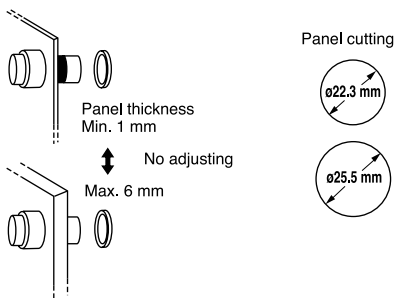
Fuji Electric 22mm Pilot Devices Overview

Pushbuttons, Selectors, Pilot Lights, Joysticks, Buzzers

Fuji Electric AR22 pilot devices can be mounted on panels up to 6mm thick by securing the operator with a locking nut from behind the panel without needing any adjustment.

Easy mounting

Fuji AR22 pilot devices can be mounted on panels between 1 and 6mm thick and are mountable in panel cutouts of 22.3 or 25.5 mm. The button and lens can be mounted on a panel while the operator is engaged.

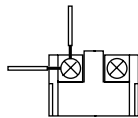


Wiring

These pilot devices can be wired in both vertical and lateral directions making wiring in narrow spaces easier. Contact block color coding makes wiring even easier.

1NO: Blue, 1NC: Red

Lamp terminal and transformer unit: black



Short depth

Fuji AR22 pilot devices are designed to occupy less space than traditional 22mm devices.



AR22FOR-01RZA



AR22FOL-10E3YZA



DR22E3L-E3SZA



AR22VOR-01R



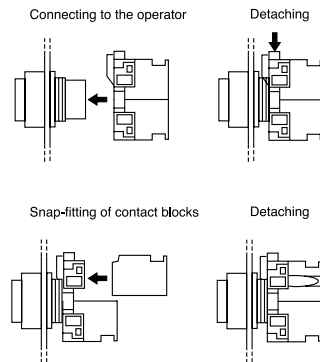
AR22PR-210BZA



DR22B8-EB

Quick contact block and transformer replacement

Fuji AR22 pilot devices have a snap-on mounting that makes replacing or adding a contact block and transformer unit easier.



Safety

AR22 pilot devices include terminal covers for added safety and security. Emergency stop pushbuttons include a trigger action mechanism that prevents the contacts from moving until the button is pushed and locked.

Protection

AR22 pilot devices feature oil and dust-tight operator construction (IP65), except for buzzers DR22B5 (IP00), DR22B8 (IP54).

