

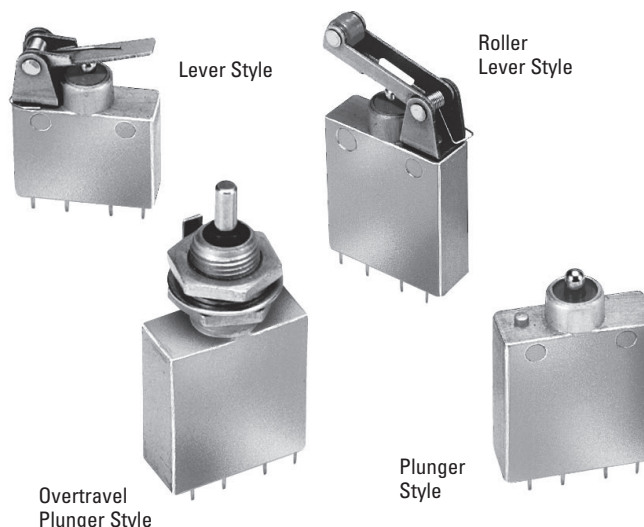
## FEATURING OTTO B5 SERIES BASIC SWITCHES

These subminiature sealed switches are contained in a rugged aluminum housing with choice of lever, roller or plunger. Featuring the B5 series basic switch, the P6-3 series is able to switch up to 10 amps. The high contact pressure and superior wiping action of the OTTO design also makes the P6-3 series an excellent choice when switching logic level loads.

Sealing against water and other liquids is per MIL-PRF-8805. Wire leaded models feature potted leads. The solder terminals are epoxy sealed.

### Features:

- Compact design
- Watertight to MIL-PRF-8805
- Choice of four actuator styles
- Choice of wire lead or solder termination styles
- Up to 10 amps switching capability
- High contact pressure
- Precision operating points



### Standard Characteristics/Ratings:

| ELECTRICAL RATINGS:    |                                                                                                   | Sea Level @ 28VDC  |            |                   | 50,000 feet @ 28VDC         |                     |            |            |
|------------------------|---------------------------------------------------------------------------------------------------|--------------------|------------|-------------------|-----------------------------|---------------------|------------|------------|
| Load                   | Single Circuit N.O. or N.C.                                                                       | 2 Circuit Per Pole |            |                   | Single Circuit N.O. or N.C. | 2 Circuit Per Pole  |            |            |
| Resistive              | 10A                                                                                               | 10A                |            |                   | 10A                         | 10A                 |            |            |
| Inductive              | 7.5A                                                                                              | 5A                 |            |                   | 3.5A                        | 2A                  |            |            |
| Motor                  | 4A                                                                                                | 2A                 |            |                   | N/A                         | N/A                 |            |            |
| DWV                    | 1000Vrms                                                                                          |                    |            |                   | 500Vrms                     |                     |            |            |
| Electrical Life:       | 50,000 cycles                                                                                     |                    |            |                   |                             |                     |            |            |
| Mechanical Life:       | 50,000 cycles                                                                                     |                    |            |                   |                             |                     |            |            |
| OPERATIONAL:           | P6-31                                                                                             | P6-32              | P6-33      | P6-34             | P6-35                       | P6-36               | P6-37      | P6-38      |
| Operating Force:       | 16 oz max                                                                                         | 40 oz max          | 20 oz max  | 40 oz max         | 32 oz max                   | 40 - 60 oz max      | 20 oz max  | 48 oz max  |
| Release Force:         | 4 oz min                                                                                          | 8 oz min           | 4 oz min   | 8 oz min          | 4 oz min                    | 24 oz min           | 4 oz min   | 8 oz min   |
| Movement Differential: | 0.060" max                                                                                        | 0.020"±0.010" max  | 0.060" max | 0.020"±0.010" max | 0.080" max                  | 0.010" - 0.035" max | 0.080" max | 0.040" max |
| Pretravel:             | 0.125" max                                                                                        | 0.050" max         | 0.125" max | 0.070" max        | 0.125" max                  | 0.050" max          | 0.125" max | 0.070" max |
| Overtravel:            | 0.025" min                                                                                        | 0.012" min         | 0.025" min | 0.187" min        | 0.025" min                  | 0.012" min          | 0.025" min | 0.187" min |
| Strength of Actuator:  | 10.0 lbs.                                                                                         | 25.0 lbs.          | 10.0 lbs.  | 25.0 lbs.         | 10.0 lbs.                   | 25.0 lbs.           | 10.0 lbs.  | 25.0 lbs.  |
| Temperature Range:     | -55°C to +85°C                                                                                    |                    |            |                   |                             |                     |            |            |
| Seal:                  | Enclosure Design 3, watertight per MIL-PRF-8805                                                   |                    |            |                   |                             |                     |            |            |
| MATERIALS:             |                                                                                                   |                    |            |                   |                             |                     |            |            |
| Plunger:               | Corrosion resistant steel                                                                         |                    |            |                   |                             |                     |            |            |
| Lever:                 | Corrosion resistant steel (where applicable)                                                      |                    |            |                   |                             |                     |            |            |
| Mounting Hardware:     | None provided except Actuator Style options 4 and 8 include hex nut, lockwasher and keyway washer |                    |            |                   |                             |                     |            |            |

# SUBMINIATURE WATERTIGHT SEALED

**P6-3**  
LIMIT  
SWITCHES

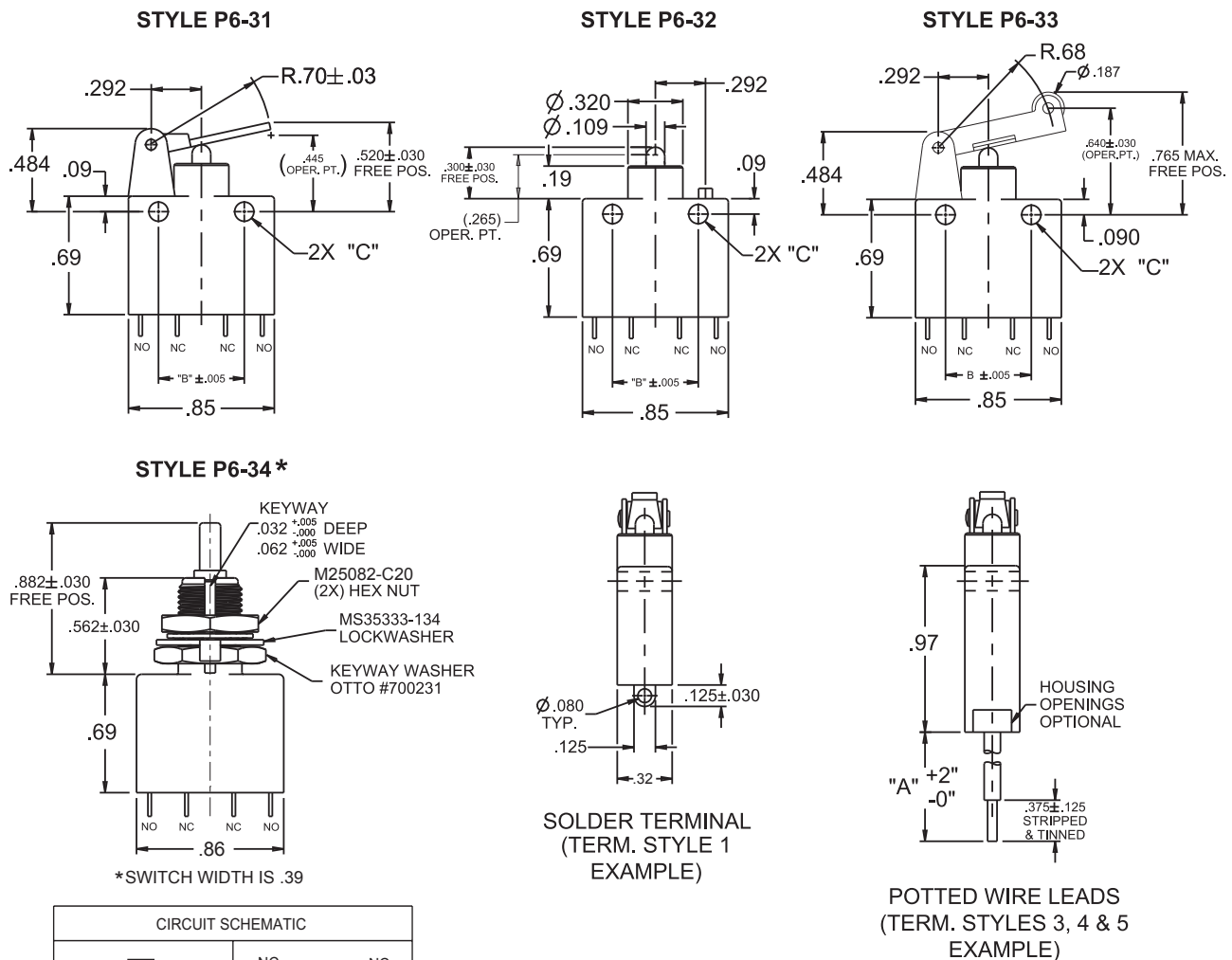
FEATURING OTTO B5 SERIES BASIC SWITCHES

## P6-3 PART NUMBER CODE

Single Pole

| Actuator Style         | Terminal Style      | Circuitry          | Mounting Holes (See drawing below.) | Serial Digit             |
|------------------------|---------------------|--------------------|-------------------------------------|--------------------------|
| 1. Lever               | 1. Solder Terminals | 1. SPNO-DB, Form X | 1. No Holes                         | 0. 0 Except for Specials |
| 2. Plunger             | 3. 1' Potted Leads  | 2. SPNC-DB, Form Y | 2. 1/2" Centers for #4-40 Screws    |                          |
| 3. Roller Lever        | 4. 3' Potted Leads  | 3. SPDT-SB, Form C | 4. 3/8" Centers for #2-56 Screws    |                          |
| 4. Overtravel Plunger* | 5. 6' Potted Leads  | 4. SPDT-DB, Form Z |                                     |                          |

\* No mounting holes are offered in models with threaded bushing



FEATURING OTTO B5 SERIES BASIC SWITCHES

## P6-3 PART NUMBER CODE

Double Pole

P6-3 X X X X X

### Actuator Style

5. Lever
6. Plunger
7. Roller Lever
8. Overtravel Plunger\*

### Terminal Style

1. Solder Terminals
2. Taper Tab, Quick Disconnect
3. 1' Potted Leads
4. 3' Potted Leads
5. 6' Potted Leads

### Circuitry

1. DPNO-DB, Form XX
2. DPNC-DB, Form YY
3. DPDT, Form CC
4. DPDT-DB, Form ZZ

### Mounting Holes (See drawing below.)

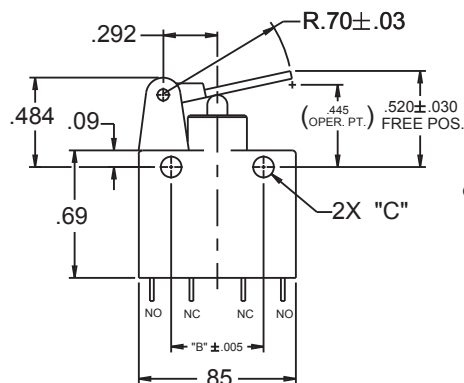
1. No Holes
2. 1/2" Centers for #4-40 Screws
4. 3/8" Centers for #2-56 Screws

### Serial Digit

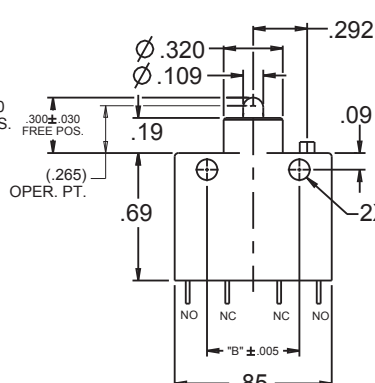
0. 0 Except for  
Specials

\* No mounting holes are offered in models with threaded bushing

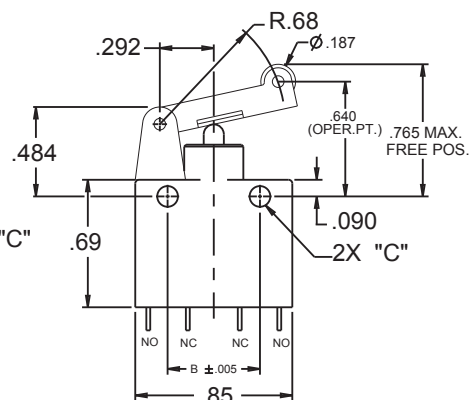
**STYLE P6-35**



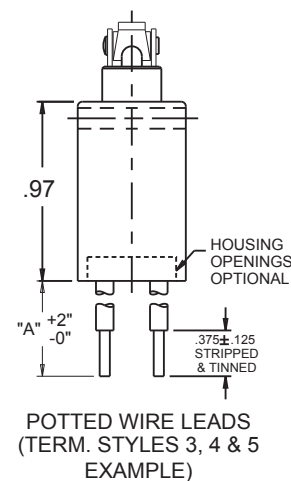
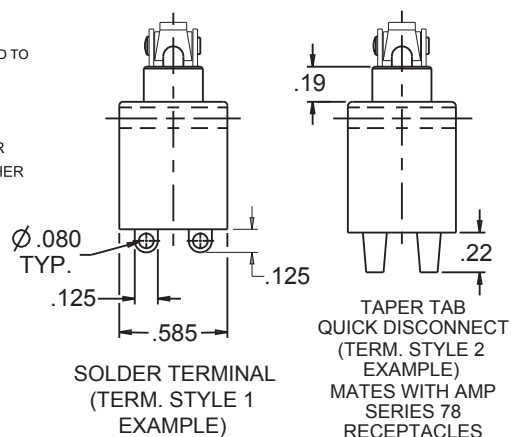
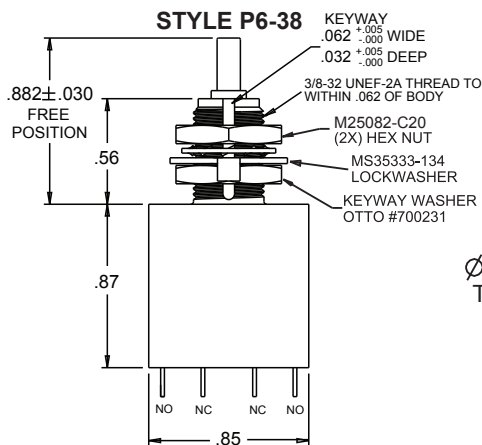
**STYLE P6-36**



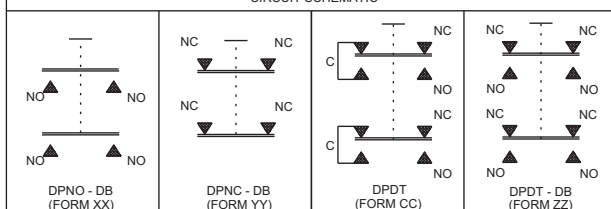
**STYLE P6-37**



**STYLE P6-38**



**CIRCUIT SCHEMATIC**



| POTTED WIRE LEADS |         | DIM "B" CNTRS. | DIM "C" DIA. |
|-------------------|---------|----------------|--------------|
| STYLE             | DIM "A" |                |              |
| 3                 | 12"     | .500           | Ø.112 ± .003 |
| 4                 | 36"     |                |              |
| 5                 | 72"     |                |              |

| MOUNTING HOLES:        |  | DIM "B" CNTRS. | DIM "C" DIA. |
|------------------------|--|----------------|--------------|
| CODE 2 FOR 4-40 SCREWS |  | .500           | Ø.112 ± .003 |
| CODE 4 FOR 2-56 SCREWS |  | .375           | Ø.089 ± .003 |

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