# MT
**Mini-Trim Toggles**

# Mini-Trim Switches

**2-way, 4-way, 4-way plus pushbutton, and 8-way toggle switches**



OTTO Mini-Trims are toggle switches available in 2-way, 4-way, 4-way plus pushbutton, and 8-way versions. Numerous button styles are available on both the Military and Commercial Grade switch versions. Mini-Trims are typically press-fit into control grips or panel mounted using versions with an 11/16" threaded case. Mini-Trims are also available with multiple sealing levels to fit all applications.

## Standard Characteristics/Ratings:

### OPERATIONAL:

**Circuit:** Contact made in opposite direction of lever travel.

**Electrical:** 1 amp inductive @ 28VDC for 100,000 cycles.

**Dielectric Withstand:** 1050 Vrms

**Temperature Range:** -55°C to +85°C

**Lever Travel:** 15° max. from center off.

**Actuating Force:** 16 ± 8 oz.

**Lever Pivot & Stop Strength:** Switch is capable of withstanding a force of 20 lbs. applied to the actuating button. Button also withstands 15 lbs. minimum pull force.

**Switch Body:** Black thermoplastic.

**Threaded Case:** Black anodized aluminum.

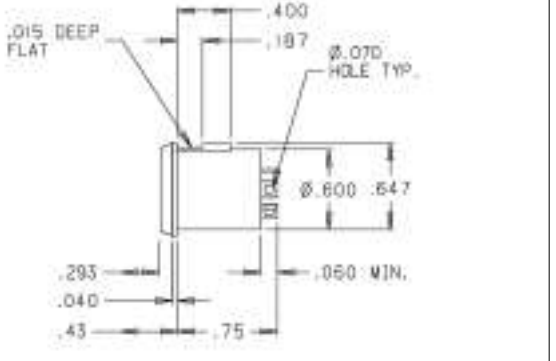
**Button:** Thermoplastic.

**Bat Handles:** Stainless steel.

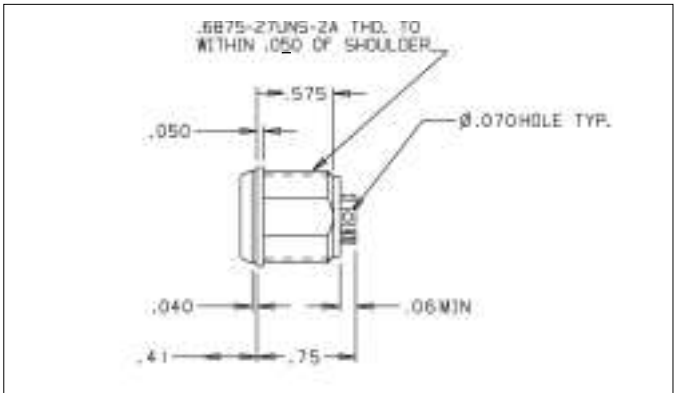
**Mounting Hardware for Threaded Case Versions:** Hex nut & internal tooth lockwasher.

**Seal:** Moistureproof and dusttight to IP64 and M8805 Design 2 or watertight to IP68.

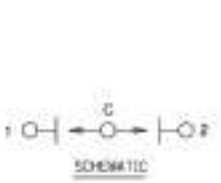
## Typical Dimensions




**Press Fit**



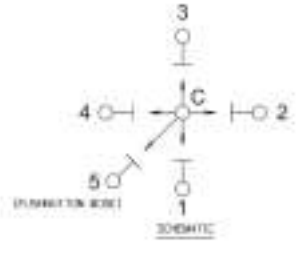

**Threaded Body**




**T1**




**T4**




**T5**




**T8**

## 2-way, 4-way, 4-way plus pushbutton, and 8-way toggle switches



| PART NUMBER | BUTTON | CASE | SEAL | GRADE |
|---|---|---|---|---|
| T1-0178 | Black 2-Way Jog | Press Fit | Dusttight & Moistureproof | Military |
| T1-0231 | Black 2-Way Jog | Press Fit | Dusttight & Moistureproof | Commercial |
| T1-0076 | Black 2-Way Jog | Threaded | Dusttight & Moistureproof | Military |
| T1-0167 | Black 2-Way Jog | Threaded | Dusttight & Moistureproof | Commercial |



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|---|---|---|---|---|
| T1-0078 | Black Tall Jog | Press Fit | Dusttight & Moistureproof | Military |
| T1-0206 | Gray Tall Jog | Press Fit | Dusttight & Moistureproof | Military |



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|---|---|---|---|---|
| T1-0202 | Black Rocker | Threaded | Dusttight & Moistureproof | Commercial |
| T1-0235 | Red Rocker | Threaded | Dusttight & Moistureproof | Commercial |

# Mini-Trim Switches

## 2-way, 4-way, 4-way plus pushbutton, and 8-way toggle switches



| PART NUMBER | BUTTON | CASE | SEAL | GRADE |
|---|---|---|---|---|
| T4-0026 | Black Plain Hat | Press Fit | Dusttight & Moistureproof | Military |
| T4-0077 | Black Plain Hat | Press Fit | Watertight | Military |
| T4-0130 | Black Plain Hat | Press Fit | Dusttight & Moistureproof | Commercial |
| T4-0032 | Black Plain Hat | Threaded | Dusttight & Moistureproof | Military |
| T4-0107 | Black Plain Hat | Threaded | Dusttight & Moistureproof | Commercial |
| T4-0169 | Black Plain Hat | Threaded | Dusttight & Moistureproof | Commercial & LL |




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|---|---|---|---|---|
| T4-0068 | Black LRUD Hat | Press Fit | Dusttight & Moistureproof | Military |
| T4-0096 | Black LRUD Hat | Press Fit | Dusttight & Moistureproof | Commercial |




| | | | | |
|---|---|---|---|---|
| T4-0013 | Black IOUD Hat | Press Fit | Dusttight & Moistureproof | Military |
| T4-0173 | Gray IOUD Hat | Press Fit | Dusttight & Moistureproof | Military |
| T4-0042 | Black IOUD Hat | Press Fit | Resilient | Military (QPL M9419/2-003) |

## 2-way, 4-way, 4-way plus pushbutton, and 8-way toggle switches

| PART NUMBER | BUTTON | CASE | SEAL | GRADE |
|---|---|---|---|---|
| T4-0020 | Black Cone | Press Fit | Dusttight & Moistureproof | Military (QPL M9419/2-004) |
| T4-0046 | Gray Cone | Press Fit | Dusttight & Moistureproof | Military |
| T4-0129 | Black Cone | Press Fit | Dusttight & Moistureproof | Commercial |
| T4-0095 | Black Cone | Threaded | Dusttight & Moistureproof | Military |



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|---|---|---|---|---|
| T4-0015 | Black Stadium | Press Fit | Dusttight & Moistureproof | Military (QPL M9419/2-001) |
| T4-0034 | Gray Stadium | Press Fit | Dusttight & Moistureproof | Military |
| T4-0043 | Black Stadium | Press Fit | Resilient | Military (QPL 9419/2-002) |
| T4-0165 | Black Stadium | Press Fit | Dusttight & Moistureproof | Commercial |
| T4-0031 | Black Stadium | Threaded | Dusttight & Moistureproof | Military |
| T4-0112 | Black Stadium | Threaded | Watertight | Military |
| T4-0122 | Black Stadium | Threaded | Dusttight & Moistureproof | Commercial |



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|---|---|---|---|---|
| T4-0063 | Black Castle | Press Fit | Dusttight & Moistureproof | Military |
| T4-0128 | Black Castle | Press Fit | Dusttight & Moistureproof | Commercial |
| T4-0136 | Gray Castle | Press Fit | Dusttight & Moistureproof | Military |
| T4-0109 | Gray Castle | Press Fit | Dusttight & Moistureproof | Commercial |
| T4-0101 | Black Castle | Threaded | Watertight | Military |



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|---|---|---|---|---|
| T4-0045 | Black 4-Way Jog | Press Fit | Dusttight & Moistureproof | Military |
| T4-0114 | Black 4-Way Jog | Press Fit | Dusttight & Moistureproof | Commercial |
| T4-0108 | Gray 4-Way Jog | Press Fit | Dusttight & Moistureproof | Commercial |



# Mini-Trim Switches

## 2-way, 4-way, 4-way plus pushbutton, and 8-way toggle switches



| PART NUMBER | BUTTON | CASE | SEAL | GRADE |
|---|---|---|---|---|
| T4-0053 | Short Bat | Press Fit | Dusttight & Moistureproof | Commercial |
| T4-0166 | Short Bat | Threaded | Dusttight & Moistureproof | Commercial |



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|---|---|---|---|---|
| T4-0033 | Bat | Press Fit | Dusttight & Moistureproof | Military |
| T4-0041 | Bat | Press Fit | Resilient | Military (QPL M9419/2-005) |
| T4-0093 | Bat | Press Fit | Dusttight & Moistureproof | Commercial |
| T4-0049 | Bat | Threaded | Dusttight & Moistureproof | Military |
| T4-0103 | Bat | Threaded | Dusttight & Moistureproof | Commercial |



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|---|---|---|---|---|
| T4-0157 | Bat w/o Arrows | Press Fit | Dusttight & Moistureproof | Military |
| T4-0175 | Bat w/o Arrows | Threaded | Dusttight & Moistureproof | Commercial |



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|---|---|---|---|---|
| T4-0051 | Square Post | Press Fit | Dusttight & Moistureproof | Military |
| T4-0078 | Square Post | Press Fit | Dusttight & Moistureproof | Military (QPL M9419/2-006) |
| T4-0144 | Square Post | Press Fit | Dusttight & Moistureproof | Commercial |
| T4-0092 | Square Post | Threaded | Dusttight & Moistureproof | Military |
| T4-0153 | Square Post | Threaded | Dusttight & Moistureproof | Commercial |



| | | | | |
|---|---|---|---|---|
| T4-0160 | 4-40 Threaded Post | Press Fit | Dusttight & Moistureproof | Military |
| T4-0184 | 4-40 Threaded Post | Press Fit | Dusttight & Moistureproof | Commercial |

## 2-way, 4-way, 4-way plus pushbutton, and 8-way toggle switches

| PART NUMBER | BUTTON | CASE | SEAL | GRADE |
|---|---|---|---|---|
| T5-0041 | Black Stadium | Press Fit | Dusttight & Moistureproof | Military |
| T5-0044 | Black Stadium | Threaded | Dusttight & Moistureproof | Military |
| T5-0096 | Black Stadium | Threaded | Dusttight & Moistureproof | Commercial |



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|---|---|---|---|---|
| T5-0090 | Black LRUD Hat | Press Fit | Dusttight & Moistureproof | Military |
| T5-0088 | Black LRUD Hat | Threaded | Dusttight & Moistureproof | Military |



# T8
8-Way Toggles

# Mini-Trim Switches

**2-way, 4-way, 4-way plus pushbutton, and 8-way toggle switches**



| PART NUMBER | BUTTON | CASE | SEAL | GRADE |
|---|---|---|---|---|
| T8-0003 | Black Plain Hat | Threaded | Dusttight & Moistureproof | Military |



| | | | | |
|---|---|---|---|---|
| T8-0001 | Stadium | Threaded | Dusttight & Moistureproof | Military |



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|---|---|---|---|---|
| T8-0005 | Bat | Threaded | Dusttight & Moistureproof | Commercial |

## MINI-TRIM SERIES CATALOG CODE

XX – X X X X X X

**SERIES**

- **T1-** 2-Way
- **T4-** 4-Way
- **T5-** 4-Way Plus Center Pushbutton
- **T8-** 8-Way

**GRADE**

- **M.** Military
- **C.** Commercial

**BUTTON STYLE**

- **A.** 2-Way Jog
- **B.** Tall Jog
- **C.** Rocker
- **D.** Cone
- **E.** LRUD Hat
- **F.** IOUD Hat
- **G.** Hat
- **H.** Stadium
- **J.** Castle
- **K.** 4-Way Jog
- **L.** Short Bat
- **M.** Bat
- **N.** Post
- **P.** 4-40 Threaded Post

**CASE STYLE**

- **1.** Press Fit
- **2.** Threaded

**SEAL LEVEL**

- **1.** Dusttight and Moistureproof Per IP64
- **2.** Watertight Per IP68

**CURRENT RATING**

- **1.** Standard
- **2.** Low Level

**BUTTON COLOR**

- **1.** Red
- **2.** Black
- **8.** Gray
- **N.** Not Applicable Use When Specifying Button Styles L, M, N, & P.

Consult Factory For Colors Not Listed.

# Toggle Switches

## T4

**4-Way Toggles**

### Mini-Trim Switches

**2-way, 4-way, 4-way plus pushbutton, and 8-way toggle switches**

| Part Number | Button | Case | Seal | Grade |
|---|---|---|---|---|
| T4-0026 | Black Plain Hat | Press Fit | Dusttight & Moistureproof | Military |
| T4-0077 | Black Plain Hat | Press Fit | Watertight | Military |
| T4-0130 | Black Plain Hat | Press Fit | Dusttight & Moistureproof | Commercial |
| T4-0032 | Black Plain Hat | Threaded | Dusttight & Moistureproof | Military |
| T4-0107 | Black Plain Hat | Threaded | Dusttight & Moistureproof | Commercial |
| T4-0169 | Black Plain Hat | Threaded | Dusttight & Moistureproof | Commercial & LL |



| Part Number | Button | Case | Seal | Grade |
|---|---|---|---|---|
| T4-0068 | Black LRUD Hat | Press Fit | Dusttight & Moistureproof | Military |
| T4-0096 | Black LRUD Hat | Press Fit | Dusttight & Moistureproof | Commercial |



OTTO COMMUNICATIONS

| Part Number | Button | Case | Seal | Grade |
|---|---|---|---|---|
| T4-0013 | Black IOUD Hat | Press Fit | Dusttight & Moistureproof | Military |
| T4-0173 | Gray IOUD Hat | Press Fit | Dusttight & Moistureproof | Military |
| T4-0042 | Black IOUD Hat | Press Fit | Resilient | Military (QPL M9419/2-003) |



| Part Number | Button | Case | Seal | Grade |
|---|---|---|---|---|
| T4-0020 | Black Cone | Press Fit | Dusttight & Moistureproof | Military (QPL M9419/2-004) |
| T4-0046 | Gray Cone | Press Fit | Dusttight & Moistureproof | Military |
| T4-0129 | Black Cone | Press Fit | Dusttight & Moistureproof | Commercial |
| T4-0095 | Black Cone | Threaded | Dusttight & Moistureproof | Military |



| Part Number | Button | Case | Seal | Grade |
|---|---|---|---|---|
| T4-0015 | Black Stadium | Press Fit | Dusttight & Moistureproof | Military (QPL M9419/2-001) |
| T4-0034 | Gray Stadium | Press Fit | Dusttight & Moistureproof | Military |
| T4-0043 | Black Stadium | Press Fit | Resilient | Military (QPL 9419/2-002) |

| | | | | |
|---|---|---|---|---|
| T4-0165 | Black Stadium | Press Fit | Dusttight & Moistureproof | Commercial |
| T4-0031 | Black Stadium | Threaded | Dusttight & Moistureproof | Military |
| T4-0112 | Black Stadium | Threaded | Watertight | Military |
| T4-0122 | Black Stadium | Threaded | Dusttight & Moistureproof | Commercial |



| Part Number | Button | Case | Seal | Grade |
|---|---|---|---|---|
| T4-0063 | Black Castle | Press Fit | Dusttight & Moistureproof | Military |
| T4-0128 | Black Castle | Press Fit | Dusttight & Moistureproof | Commercial |
| T4-0136 | Gray Castle | Press Fit | Dusttight & Moistureproof | Military |
| T4-0109 | Gray Castle | Press Fit | Dusttight & Moistureproof | Commercial |
| T4-0101 | Black Castle | Threaded | Watertight | Military |



| Part Number | Button | Case | Seal | Grade |
|---|---|---|---|---|
| T4-0045 | Black 4-Way Jog | Press Fit | Dusttight & Moistureproof | Military |
| T4-0114 | Black 4-Way Jog | Press Fit | Dusttight & Moistureproof | Commercial |
| T4-0108 | Gray 4-Way Jog | Press Fit | Dusttight & Moistureproof | Commercial |



| Part Number | Button | Case | Seal | Grade |
|---|---|---|---|---|
| T4-0053 | Short Bat | Press Fit | Dusttight & Moistureproof | Commercial |
| T4-0166 | Short Bat | Threaded | Dusttight & Moistureproof | Commercial |



| Part Number | Button | Case | Seal | Grade |
|---|---|---|---|---|
| T4-0033 | Bat | Press Fit | Dusttight & Moistureproof | Military |
| T4-0041 | Bat | Press Fit | Resilient | Military (QPL M9419/2-005) |
| T4-0093 | Bat | Press Fit | Dusttight & Moistureproof | Commercial |
| T4-0049 | Bat | Threaded | Dusttight & Moistureproof | Military |
| T4-0103 | Bat | Threaded | Dusttight & Moistureproof | Commercial |



| Part Number | Button | Case | Seal | Grade |
|---|---|---|---|---|
| T4-0157 | Bat w/o Arrows | Press Fit | Dusttight & Moistureproof | Military |
| T4-0175 | Bat w/o Arrows | Threaded | Dusttight & Moistureproof | Commercial |



| Part Number | Button | Case | Seal | Grade |
|---|---|---|---|---|
| T4-0051 | Square Post | Press Fit | Dusttight & Moistureproof | Military |
| T4-0078 | Square Post | Press Fit | Dusttight & Moistureproof | Military (QPL M9419/2-006) |
| T4-0144 | Square Post | Press Fit | Dusttight & Moistureproof | Commercial |
| T4-0092 | Square Post | Threaded | Dusttight & Moistureproof | Military |
| T4-0153 | Square Post | Threaded | Dusttight & Moistureproof | Commercial |



| Part Number | Button | Case | Seal | Grade |
|---|---|---|---|---|
| T4-0160 | 4-40 Threaded Post | Press Fit | Dusttight & Moistureproof | Military |
| T4-0184 | 4-40 Threaded Post | Press Fit | Dusttight & Moistureproof | Commercial |



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