

**TEXAS DEPARTMENT OF TRANSPORTATION  
DEPARTMENTAL SPECIFICATION  
TO-6019  
PEDESTRIAN PUSH BUTTONS**

**1.0 GENERAL**

1.1 This specification describes the minimum acceptable requirements for a pedestrian push button including hardware and installation.

**2.0 HARDWARE**

2.1 The housing of the pedestrian push button shall be a sturdy two piece unit consisting of a base housing and a removable cover constructed of heavy cast aluminum and be weatherproof and tamper proof. There shall be a 1/2" threaded plugged outlet on the bottom of the housing and a minimum 1/2" outlet on the back. The finish of the housing shall be painted highway yellow enamel.

2.2 The pushbutton shall be activated by a minimum 2" convex plunger. A protective shroud shall encircle the plunger to deter vandalism. The shroud shall be cast as part of the housing cover. The plunger shall have an integral shaft to actuate the switch.

2.3 The plunger shall protrude beyond the protective shroud a distance adequate to accommodate the switch travel. The assembly shall be designed so that the maximum plunger travel does not exceed the switch travel.

2.4 There shall be moisture barrier between the plunger and the switch.

2.5 There shall be a nylon shoulder bushing installed to minimize the friction between the plunger and the cover.

2.6 The internal components shall provide a switch with normal open contacts and shall include all electrical and mechanical parts required for operation. There shall be a spring installed between the plunger and the switch to insure proper operation of the assembly. The pushbutton assembly shall be activated by a force of no more than five pounds.

2.7 The pushbutton assembly shall provide a weather and moisture proof compartment for the switch using a neoprene O-ring between the base housing and removable cover.

2.8 The pushbutton assembly shall comply with all minimum requirements of the Americans



with Disabilities Act.

- 2.9 The push button shall be furnished with saddle and/or brackets for mounting on flat or round steel or wood poles.
- 2.10 The switch shall conform to the following qualifications:
- Temperature range of -65 F to +180 F
  - mechanical life of 10,000,000 actuations.
  - Recognized certifications or approval: UL, CSA, MIL Spec # MIL-S-8805.
  - Electrical rating of 25 Amp at 125 Volts AC, 250 Volts AC maximum.
- 2.11 A spring shall be installed between the plunger and the switch. The spring shall provide an operating force not to exceed 5 lbs.

### **3.0 INSTALLATION**

- 3.1 Individual wire leads shall be provided for each push button to the nearest splicing point or terminal strip. No splicing or terminal connection of wire leads will be permitted except in the hand holes located in the signal pole shaft, in the signal pole base, and/or at special locations designated by the Engineer.
- 3.2 The push button leads shall be of ground potential. Information signs, when required to be furnished by the contractor, shall be in accordance with the example shown on the plans.

### **4.0 SHIPMENT/DELIVERY**

- 4.1 Each pedestrian pushbutton shall be individually boxed.

### **5.0 MEASUREMENT**

- 5.1 Measurement shall be made of each pedestrian push button.
- 5.2 On construction contracts, work performed and materials furnished as prescribed by this item will be measured and paid for in accordance with the provisions governing the item; "installation of Highway Traffic Signals".

