

FT Flexitest™ Switches

Type FT-1, FT-1F, FT-1X & FT-14

Descriptive Bulletin 41-077

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ABB

Specifications

All Flexitest Switches meet or exceed all requirements of ANSI/IEEE Standard C37.90 and are UL, CUL and CSA listed. Class 1E Switches meet IEEE C37.98, C37.105, 323-1983 and 344-1987 Standards.

Ratings All Flexitest Switches are rated at 600 volts and 30 amps.

Mounting The FT-1, FT-14 and FT-1X Switches are designed for semi-flush mounting on the front of switchboard panels, facilitating inspection and accessibility. The FT-1F is designed for surface mounting and can also be mounted on a unistrut with the use of a unistrut adapter plate. Refer to Figures 11 to 13 beginning on page 28 for the specific outline and drilling plan information of each switch.

Weight Specifications

Device Type	Net Lbs (kg)	Shipping Lbs (kg)	Shipping Container L x W x H in [cm]
FT-1 and FT-1F	1.75 (0.79)	3 (1.4)	7 x 5 x 4 [18 x 13 x 10]
FT-1X	2.7 (1.25)	3.75 (1.7)	7 x 12 x 4 [18 x 30 x 10]
FT-14	3.25 (1.5)	3.25 (1.5)	9 x 5 x 4 [22 x 13 x 10]
Separate Source Test Plug (10 position)	1.5 (0.68)	3 (1.4)	not available
In-Service Series Test Plug (10 position)	1.5 (0.68)	3 (1.4)	not available
Individual Current Circuit Test Plug	0.1 (0.045)	1 (0.45)	not available

Construction The base of all Flexitest Switches is made of a molded thermo-plastic which provides a tough, insulated enclosure. Barriers are molded into the base (front and rear) to separate the switch units from one another. The barriers provide insulation between poles, and also ample wiring space between terminals. The terminals of the FT-1X are extended 8 to 10 inches beyond the switch blades located on the front of the switch.

Cover All Flexitest Switch covers provide a tough insulated enclosure for the switch and are made from a durable plastic material. Covers are fastened to the switches with thumbnuts on either end that can be loosened and tightened by hand, or with a 1/4" nut driver. This is the same size nut driver used on the hex head terminal screws of all Flexitest Switches. All covers have the provision to accept meter seals.

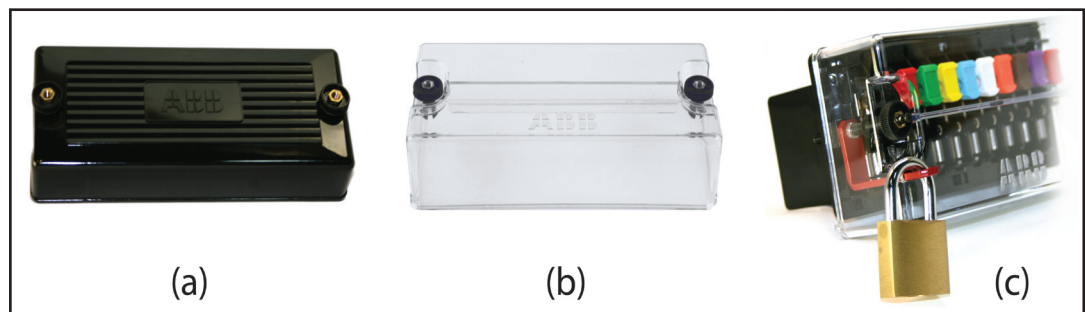


Figure 1. FT Cover selection samples (a) Black; (b) Clear; (c) Lockable

All switches may be purchased with a black opaque cover or a clear cover. The clear cover affords the user the unique option of intentionally leaving switch handles in the open position with the cover in place, maintaining the provision for a meter seal. This allows the user to service electrical equipment while still complying with OSHA tag and lockout procedures. Lockable covers (in black or clear) are also available upon request.

Any cover can be ordered separately to retrofit any existing switch, maintaining the same ease of use and accessibility. See Ordering Information on page 12.

Separate Source Test Plug

The 10 Position Separate Source Test Plug isolates the external connections from the relay or equipment under test. The test plug accepts all common size banana plugs, ring wire connectors, spade lugs and has a through hole for meter probe or wire connections.

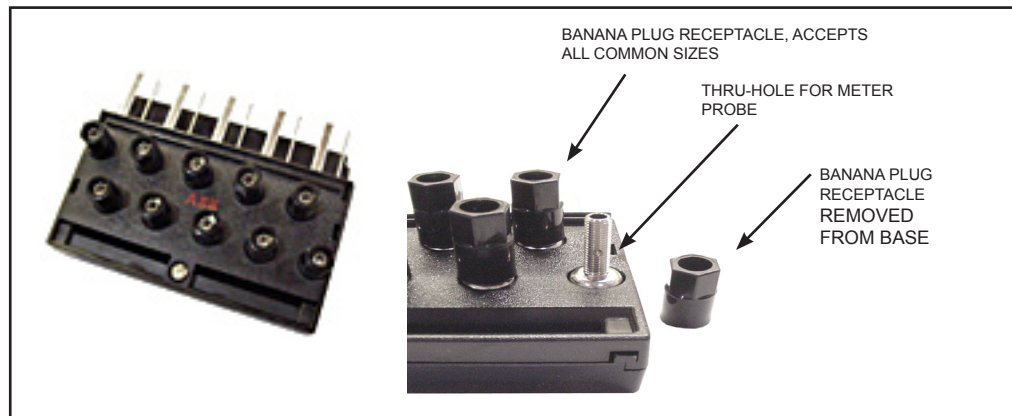


Figure 9. Separate Source Test Plug

This test plug provides quick circuit testing by fitting into the stationary contact jaws of any Flexitest Type FT Case or Switch. The L-shaped test blades assure quick, accurate alignment between the Test Plug and the stationary contact jaws. The blades connect the relay inputs and outputs to a set of binding banana posts on the top of the Test Plug. An insulated barrier along the bottom of the blades isolates the relay circuits from external connections. Test circuits can then be connected to these binding posts, which are staggered for easy accessibility.

Before inserting the Separate Source Test Plug into service, all switchblades must be placed in the full open position. In a Flexitest Type FT Case, the plug is inserted in the bottom switch jaw with the binding posts up and in the top test switch jaw with the binding posts down.



Figure 10. Separate Source Test Plug inserted in Flexitest Relay Case



WARNING

Provision is made only on current poles with shorting springs to automatically short-circuit current transformer circuits when the knife switches are opened prior to inserting the Test Plug.

FT Test Kit

The ABB FT test kit comes with a convenient carrying case to hold your hand held meter, test plugs, patch cords, test clips, and test probes in neat order. FT Test Kits can be ordered with your selected quantities of test plugs, patch cords, test clips, and test probes. Patch cords are highly durable and flexible. Contact your local ABB representative for a quotation.

To order the FT Test Kit with items shown shown here, use Style Number 9688A68G18. For more information see "Test Plugs & Accessories - Ordering Information" on page 12.





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