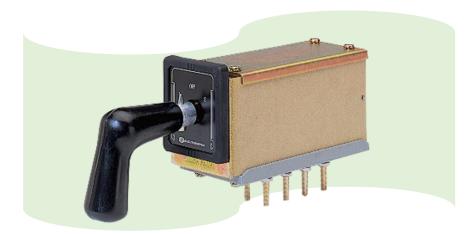
# TYPE W Instrument & Control Switches



### Abstract

The rugged, time-tested design of the Type W switch has made it a standard for reliability in utility applications. The Type W is available with maintained contacts for instrument switch applications, or momentary contacts for control of circuit breakers, motors or other electrically operated devices.

## Operation

Circuits to a Type W switch are generally connected from a stud on one side of the terminal base, through a segment on the rotor, to a stud on the other side; this constitutes a single contact, or stage. In the simplest form, a stage is a single-pole, single-throw, double-break contact.

The operating shaft, made of cold-rolled steel rod, rotates in bronze bearings riveted to the end plates. The end plates provide ample support for the base and the zinc plated steel top, which is channel-shaped for strength. This arrangement assures permanent alignment of the contacts.

Both the moving and stationary contacts are faced with a layer of silver to insure low contact resistance throughout the life of the switch.

The moving contacts are separated by spacers of arc resistant moisture-proof material. They are keyed to an insulating tube, which covers the steel operating shaft. Spacers and contacts are securely clamped to the shaft.

The stationary contacts are self-aligning and are made of high conductivity copper alloy. Good contact pressure is obtained by the use of compression springs which do not carry current. This contact construction operates with a wiping action, insuring clean, low-resistance contact, with long life.

Multiple laminated copper shunts conduct the current from the contacts to the terminal studs. These studs are mounted on the terminal base in such a manner that they positively will not turn or become loose.

The terminal base is made of high-grade molded material which has very high mechanical and dielectric strength and is ribbed to give creepage distance between studs. Each stud hole is numbered for terminal identification.

Protective side plates slide into groves in the top and bottom of the switch to provide immediate access to the contacts for inspection. Operational features such as slip and lateral contacts are available.

# Nameplates

Type W instrument and control switches are supplied with a standard black nameplate which can be engraved to customer requirements. Circuit Breaker Control Switches have a cutout in the nameplate for a red and green target indicator to show the last manual operation of the switch. Special engravings should be indicated clearly at the time of order.

# Ratings

Type W switches are insulated for 600 volt service, and have a continuous current-carrying capacity of 20 amperes. The interrupting capacity depends upon voltage, current, and inductance of the circuit controlled.

Interrupting rating in amperes		
	Inductive	Non-inductive
AC		
125 volt 250 volt 600 volt	30 15 3	50 25 5
DC		
125 volt 250 volt 600 volt	4 1 0.2	8 2 0.5

