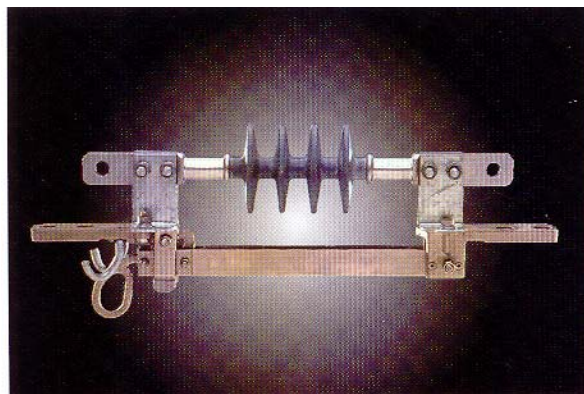


ULTRA-LIGHT LINE TENSION SWITCH



APPLICATION

The Firon line tension switch is ideal where line sectionalizing is required; it eliminates the need for pole mounted switches and reduces "pole clutter". With a tested momentary of 40kA RMS (asymmetrical) and a current rating of 900 amps continuous, the switches are available in ratings from 15 thru 69 kV.

CONSTRUCTION

PREMIUM INSULATOR

The design voltage ratings: 15, 28, 34, 46 & 69 kV use the superior Silicone type insulators as the mounting base.

TERMINAL PADS

Line connections are made through the flat, two hole Nema pads with hexagon bolt depressions cast in place. These depressions enable the lineman to use a single wrench for the installation of various connectors.

CURRENT CARRYING COMPONENTS

The hinge and jaw assemblies are constructed from tin plated, electrical grade cast aluminum with nickel plated copper contacts, over-plated with silver. The jaw assembly contacts are backed up with stainless steel pressure plates.

The jaw and hinge castings have an IACS conductivity percentage rating approximately twice that of bronze used on similar type switches today.

The blade is manufactured from a square hollow section aluminum tubing, 6101-T6 to provide the maximum in strength and rigidity, far surpassing

the parallel or twin blade construction. Both jaw and hinge ends are equipped with nickel/silver plated copper contacts. All of the current carrying components are assembled using 18-8 (304), stainless steel fasteners.

LOADBUSTER™ HOOK

Heavy duty galvanized steel Loadbuster™ hook is fastened to the jaw assembly with stainless steel fasteners (15 to 34kV standard, optional on 46 kV).

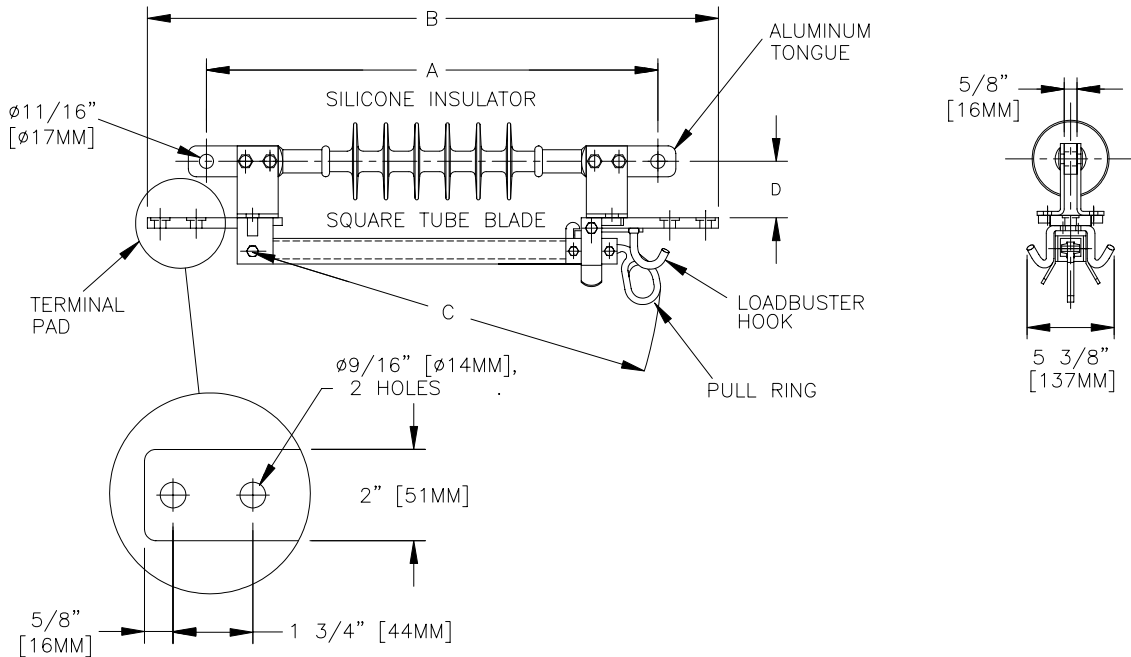
BLADE OPENING LIMITS

Two blade openings are available: 90 degrees and 180 degrees, the standard is a 180 degree opening, which is recommended for line switches. If a 90 degree blade opening is required, it should be requested at the time of order placement.

LARGE PULL RING AND LATCH

With the large tin plated, bronze pull ring located beyond the end of the switch blade, the switch in operation requires minimum effort to open or close (maximum leverage) and also provides the ultimate in operator control. A slight pull on the operating ring, transfers motion to the protected, tin plated spring-loaded latch, which initiates a pry out or ice breaking action to assist opening of the switch. The spring-loaded latch provides the security of blade closure retention when exposed to short circuit currents and vibration.

ULTRA-LIGHT LINE TENSION SWITCH



LINE TENSION SWITCH SPECIFICATIONS

CATALOG NUMBER	RATED VOLTAGE	CURRENT		NOMINAL BIL	FLASHOVER 60 HZ		LEAKAGE DISTANCE		DRY ARC DISTANCE	
		RATED	MOM		DRY	WET	IN.	MM.	IN.	MM.
TW15900S	15kV	900 A	40,000 A	145kV	100kV	70kV	15.1	385	7.6	195
TW28900S	28kV	900 A	40,000 A	215kV	125kV	110kV	23.2	589	11.4	289
TW34900S	34kV	900 A	40,000 A	230kV	130kV	110kV	27.7	704	12.5	318
TW46900S	46kV	900 A	40,000 A	300kV	180kV	165kV	40.4	1025	17.0	435
TW69900S	69kV	900 A	40,000 A	425kV	260kV	205kV	70.8	1798	24.7	627

DIMENSIONS AND WEIGHTS

CATALOG NUMBER	A		B		C		D		WEIGHT	
	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	LB	KG
TW15900S	18 1/4	464	26 1/8	670	16 1/2	419	2 3/4	70	9	4.1
TW28900S	22 5/8	574	30 1/2	775	20 1/4	514	2 3/4	70	10.2	4.6
TW34900S	22 7/8	581	30 3/4	781	21 1/8	536	2 3/4	70	11	5.0
TW46900S	27 1/2	699	35 3/8	899	25 5/8	651	2 3/4	70	12	5.4
TW69900S	33 5/8	855	41 1/2	1054	30 5/8	778	5 3/4	146	14	6.3

OPTIONS:

- FOR TWO SETS OF SWITCH TERMINAL CONNECTORS, (CATALOG NUMBER 9920), ADD SUFFIX "C" TO THE CATALOG NUMBER. i.e. TW28900SC
- THE STANDARD TW46900S AND TW69900S HAVE NO LOADBUSTER HOOK. IF REQUIRED, ADD THE SUFFIX "L" TO THE CATALOG NUMBER. i.e. TW46900SL or TW69900SL
- FOR A HIGHLY CORROSIVE ATMOSPHERE, CURRENT CARRYING COMPONENTS CAN BE NICKEL PLATED. ADD THE SUFFIX "NP" TO THE CATALOG NUMBER. i.e. TW15900SNP.