

### **APPLICATION**

The Firon Surface Mount Switch is ideal for branch feeder, main feeder and cross arm applications. When equipped with a Loadbuster™ hook and in conjunction with a Loadbuster™, the switch may be used for load interrupting and breaking line, cable-charging and transformer-magnetizing currents. The switch may be mounted in either the vertical or inverted positions.

### CONSTRUCTION

The Firon Surface Mount Switch is hookstick operated and comes in two styles: the parallel insulator type and the "V" style insulator type.

Equipped with Silicone post type insulators, mounted in a parallel configuration on a single base, the switch is light and robust with superior insulator qualities.

The current carrying components are the same as those utilized in the In-line switch (TW).

With a tested momentary of 40kA RMS (asymmetrical) and a current rating of 900 amps continuous, the switch is available from 15 thru 46kV. The standard blade opening is 90 degrees; if a 180 deg. opening is required, it should be indicated at time of ordering.

Terminal pads are standard Nema drilled with 9/16" diameter on 1-3/4" centers.

Loadbuster<sup>™</sup> hooks are fitted on the jaw of each blade assembly, except the 46 kV rated switch.

The base is constructed from either galvanized, formed steel or an optional aluminum channel and is suitable for mounting on single or double cross arms. The switch may be directly bolted or mounted in conjunction with optional backstraps, it may also be mounted on structures or flat surfaces.

### "V" STYLE SWITCH

### **APPLICATION**

The switch can be used when there is only a single cross arm or when electrical clearances might be compromised by the longer base of the parallel insulator type switch.

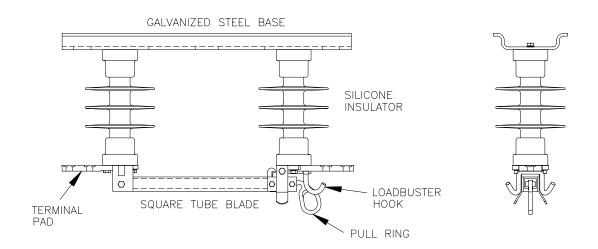
### CONSTRUCTION

The V-style switch is similar in construction to the standard parallel insulator type switch except the Silicone insulators are mounted in a V-style configuration on a single base. This configuration inherently provides greater open gap clearance than that of the standard hookstick operated switch; therefore dielectric values are limited only to the electrical values of the insulator.

The standard blade opening is 90 degrees; if a 180 deg. opening is required, it should be indicated at the time of ordering.

This style is available from 15 thru 35kV.





### SURFACE MOUNT SWITCH SPECIFICATIONS

CATALOG RATED		CURRENT		NOMINAL	FLASHOVER 60 HZ		LEAKAGE DISTANCE		DRY ARC DISTANCE	
NUMBER	VOLTAGE	RATED	MOM	BIL	DRY	WET	IN.	MM.	IN.	MM.
SM15900S	15kV	900 A	40,000 A	110kV	130kV	40kV	10.8	274	5.7	145
SM25900S	25kV	900 A	40,000 A	125kV	160kV	65kV	17.2	437	7.6	193
SM28900S	28kV	900 A	40,000 A	150kV	160kV	65kV	17.2	437	7.6	193
SM35900S	35kV	900 A	40,000 A	175kV	195kV	85kV	26.0	660	10.6	270
SM46900S	46kV	900 A	40,000 A	220kV	240kV	115kV	34.0	865	13.6	345

MAXIMUM DESIGN CANTILEVER: 1,200 lbs [ 5.3 kN ] MAXIMUM DESIGN TENSION: 12,000 lbs [ 53 kN ] MAXIMUM DESIGN COMPRESSION: 75,000 lbs [ 335 kN ]

MAXIMUM DESIGN TORSION: 6,000 in-lbs [680 Nm ] FOR SM15, SM25 & SM28 SWITCH INSULATORS.

9,000 in-lbs [1020 Nm] FOR SM35 SWITCH INSULATORS.

### **OPTIONS:**

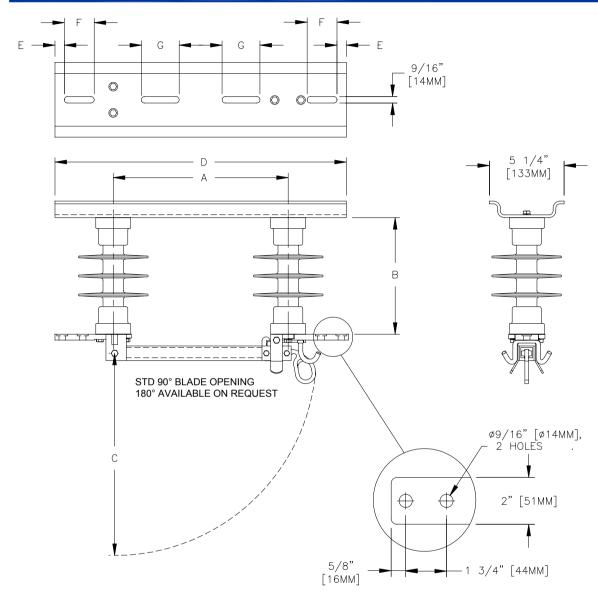
- FOR TWO SETS OF SWITCH TERMINAL CONNECTORS, (CATALOG NUMBER 9920), ADD THE SUFFIX "C" TO THE CATALOG NUMBER. i.e. SM28900SC
- THE STANDARD SM46900S HAVE NO LOADBUSTER HOOK. IF REQUIRED, ADD THE SUFFIX "L" TO THE CATALOG NUMBER. i.e. SM46900SL
- FOR A HIGHLY CORROSIVE ATMOSPHERE, CURRENT CARRYING COMPONENTS CAN BE NICKEL PLATED. ADD THE SUFFIX "NP" TO THE CATALOG NUMBER. i.e. SM15900SNP.
- ORDER BACK STRAP SEPARATELY IF REQUIRED.

Catalog Number: ZF9945S, Back strap for single crossarm.

Catalog Number: ZF9945D, Back strap for SM15900S, double crossarm. Catalog Number: ZF9945DL, Back strap for SM25900S, SM28900S, SM35900S, double crossarm.

- GALVANIZED STEEL MOUNTING BASES ARE STANDARD. FOR ALUMINUM ALLOY BASES ADD THE SUFFIX "A" TO THE CATALOG NUMBER. i.e. SM25900SA.
- FOR PORCELAIN INSULATORS, REPLACE THE CHARACTER "S" IN THE CATALOG NUMBER WITH "P". i.e. SM15900P.



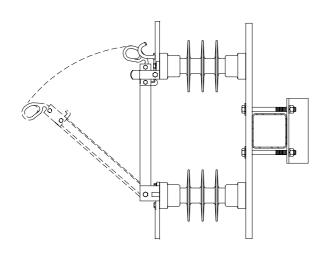


### **DIMENSIONS AND WEIGHTS**

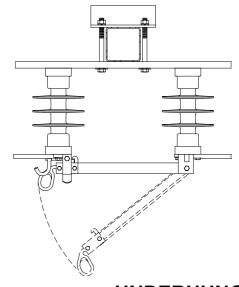
CATALOG NUMBER	IN.	MM.	B IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	F IN.	MM.	IN.	MM.	WEI	GHT KG
- TOWNSER	IIN.	IVIIVI.	IIN.	IVIIVI.	IIN.	IVIIVI.	IIN.	IVIIVI.	IIN.	IVIIVI.	IIN.	IVIIVI.	IIN.	IVIIVI.	LDS	NG
SM15900S	12	304	8	203	14 1/4	362	22	559	27/32	21	2 9/16	65	2 9/16	65	15	6.8
SM25900S	15	381	10	254	17 1/2	444	27	686	23/32	18	2 9/16	65	2 9/16	65	17	7.7
SM28900S	15	381	11 1/2	292	17 1/2	444	27	686	23/32	18	2 9/16	65	2 9/16	65	18	8.2
SM35900S	21	533	14	356	23 1/2	597	26	660	N/A	N/A	N/A	N/A	4 1/2	114	24	10.9
SM46900S	30	762	17	431	32 1/2	826	42	1066	N/A	N/A	N/A	N/A	N/A	N/A		



# **MOUNTING POSITIONS**



**VERTICAL** 

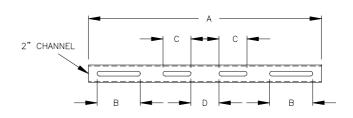


**UNDERHUNG** 

# ARRESTER 20°

## **SWITCH BACK STRAP**

HOT DIP GALVANIZED STEEL C/W 1/2" CARRIAGE BOLTS



CATALOG NUMBER	А	В	С	D	WEIGHT PER 100
ZF9945S	9" [229MM]	2 1/4" [57MM]	N/A	3 1/4" [83MM]	275LB [125KG]
ZF9945D	22"	2"	2"	3 1/4"	525LB
	[559MM]	[51MM]	[51MM]	[83MM]	[240KG]
ZF9945DL	27"	5"	3 1/4"	3 1/4"	600LB
	[686MM]	[127MM]	[83MM]	[83MM]	[275KG]

20° VERTICAL INCLINE