MacLean™ POWER SYSTEMS

7801 Park Place Rd.
York, SC 29745 USA
(803) 628-2100

Braced Post Insulator Assembly

B2911038T12061MX

1) H2 91 10 027 MX SS 014	[1]
2) S1 40 80 025 MX AL 015	[1]
3) Socket/Y-Clevis (SYC-56)	[1]
4) Turnbuckle (G-227-NBC-3/4x12C)	[1]
5) Shackle (ASH-55-BC)	[1]

ASSEMBLY DIMENSIONAL VALUES

Post Section Length (PSL)	38.0 in	965 mm
Suspension Section Length (SSL)	36.2 in	919 mm
Height of Assembly (H)	61.0 in	1,549 mm
Length of Brace (B)	69.8 in	1,773 mm
Upper Pole Connection Offset (A)*	2.0 in	51 mm
Angle Between Insulators (C)		58 Degrees
Dry Arc Distance	26.8 in	681 mm
Leakage Distance	66.9 in	1,699 mm

*This connection bracket to be supplied by customer

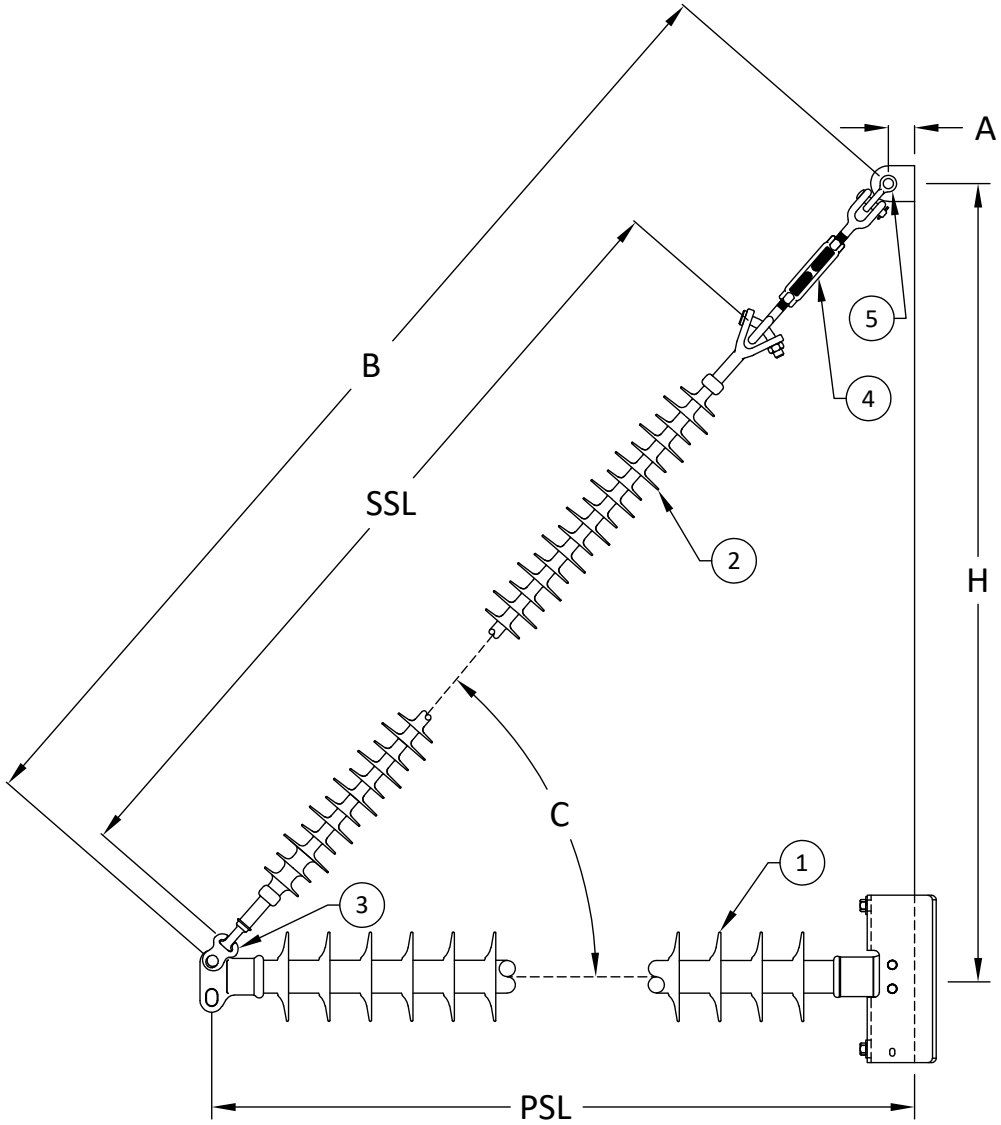
ASSEMBLY ELECTRICAL VALUES*

60 Hz Dry F.O. (Min. Withstand)	266 kV	(249) kV
60 Hz Wet F.O. (Min. Withstand)	243 kV	(187) kV
CIFO+ (Min. Withstand)	452 kV	(404) kV
CIFO- (Min. Withstand)	547 kV	(439) kV

*Values shown are based on minimum electicals for the assembly

ASSEMBLY MECHANICAL VALUES

Maximum Working Vertical Load	10,707 lbs	47.6 kN



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MPS Catalog Number **H2 91 10 027 MX SS 014**

Date: 04/13/2022

End Fittings

Tower End Fitting:	Gain / 0 deg / Steel
Line End Fitting:	2 HL Drop Tongue / Galv. Ductile Iron

Material

Corona Ring (Line):		None
Corona Rings are recommended for applications of 230 kV and above		
Mounting Angle:		0 deg
Number of Sheds:		14
Rod Diameter:		2.5 in
Weight Estimate:	48.9 lbs	22 kg

Dimensional Values

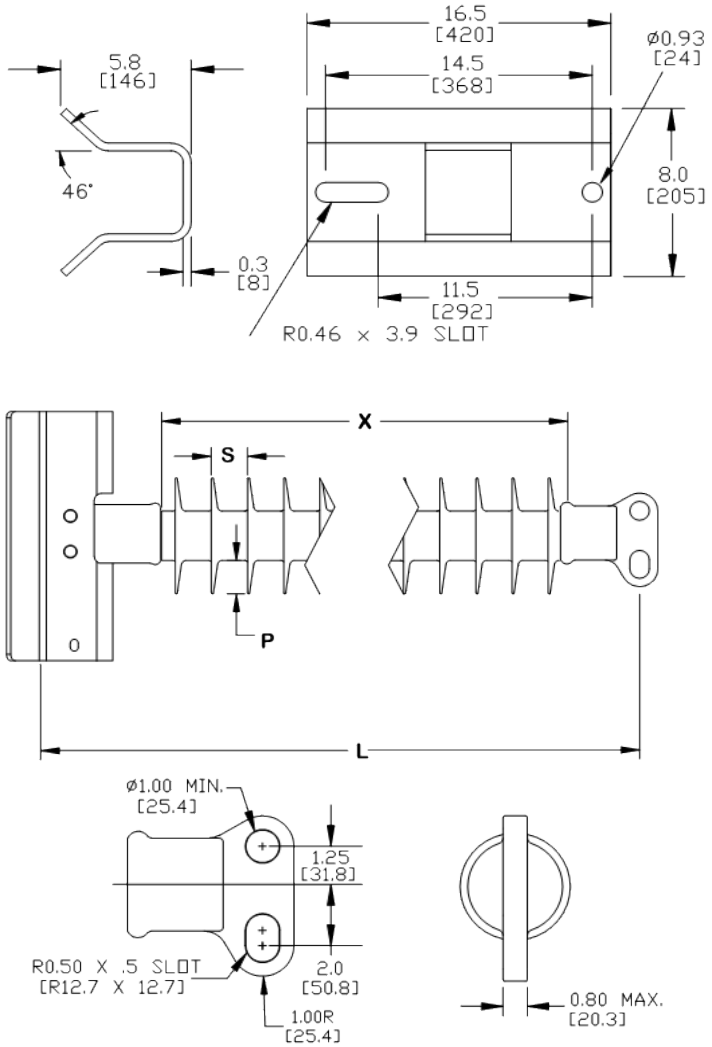
Section Length (L):	38 in	965 mm
Rubber Length (X):	27 in	686 mm
Shed spacing (S):	1.95 in	50 mm
Shed Projection (P):	1.86 in	47 mm
Dry Arc Distance:	29.5 in	749 mm
Leakage Distance:	74.4 in	1,889 mm

Electricals Values

60 Hz dry Flashover (Min. Withstand):	290 kV	272 kV
60 Hz Wet Flashover (Min. Withstand):	266 kV	206 kV
CIFO Positive (Min. Withstand):	495 kV	443 kV
CIFO Negative (Min. Withstand):	589 kV	478 kV

Mechanical Values

Max. Design Cant. Load (MDCL):	2,573 lbs	11.4 kN
Specified Cant. Load (SCL):	5,146 lbs	22.9 kN
Specified Tensile Load (STL):	15,000 lbs	66.7 kN



Dimension: inches [millimeters]

NOTE: Drawing not actual depiction of insulator appearance.

Silicone rubber sheath and sheds complies with applicable ANSI and IEC standards.

Notes:

Prepared By: Stephen Lucci

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7801 Park Place Rd.
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MPS Catalog Number **S1 40 80 025 MX AL 015**

Date: 03/22/2022

End Fittings

Tower End Fitting:	Y-Clevis / Forged Steel
Line End Fitting:	Ball / Forged Steel / (ANSI 52-5)

Material

Corona Ring (Line):	None

Corona Rings are recommended for applications of 230 kV and above

Number of Sheds:	7 large	8 standard
Rod Diameter:		16 mm
Weight Estimate:	7.3 lbs	3 kg

Dimensional Values

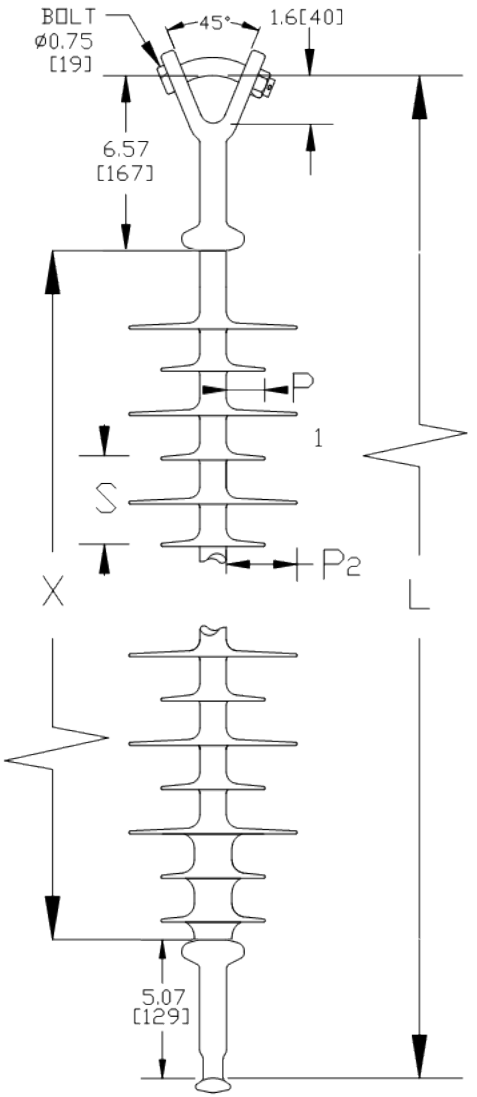
Section Length (L):	36.2 in	919 mm
Rubber Length (X):	25 in	635 mm
Standard Shed Height (P1):	1.5 in	38 mm
Large Shed Height (P2):	2 in	51 mm
Projection Ration (S/P):	-	1.5
Shed Spacing (S):	3 in	76 mm
Dry Arc Distance:	26.8 in	681 mm
Leakage Distance:	66.9 in	1,699 mm

Electricals Values

60 Hz dry Flashover (Min. Withstand):	269 kV	251 kV
60 Hz Wet Flashover (Min. Withstand):	243 kV	212 kV
CIFO Positive (Min. Withstand):	468 kV	403 kV
CIFO Negative (Min. Withstand):	503 kV	444 kV

Mechanical Values

Specified Mech. Load (SML):	25,000 lbs	111.2 kN
Routine Test Load (RTL):	12,500 lbs	55.6 kN



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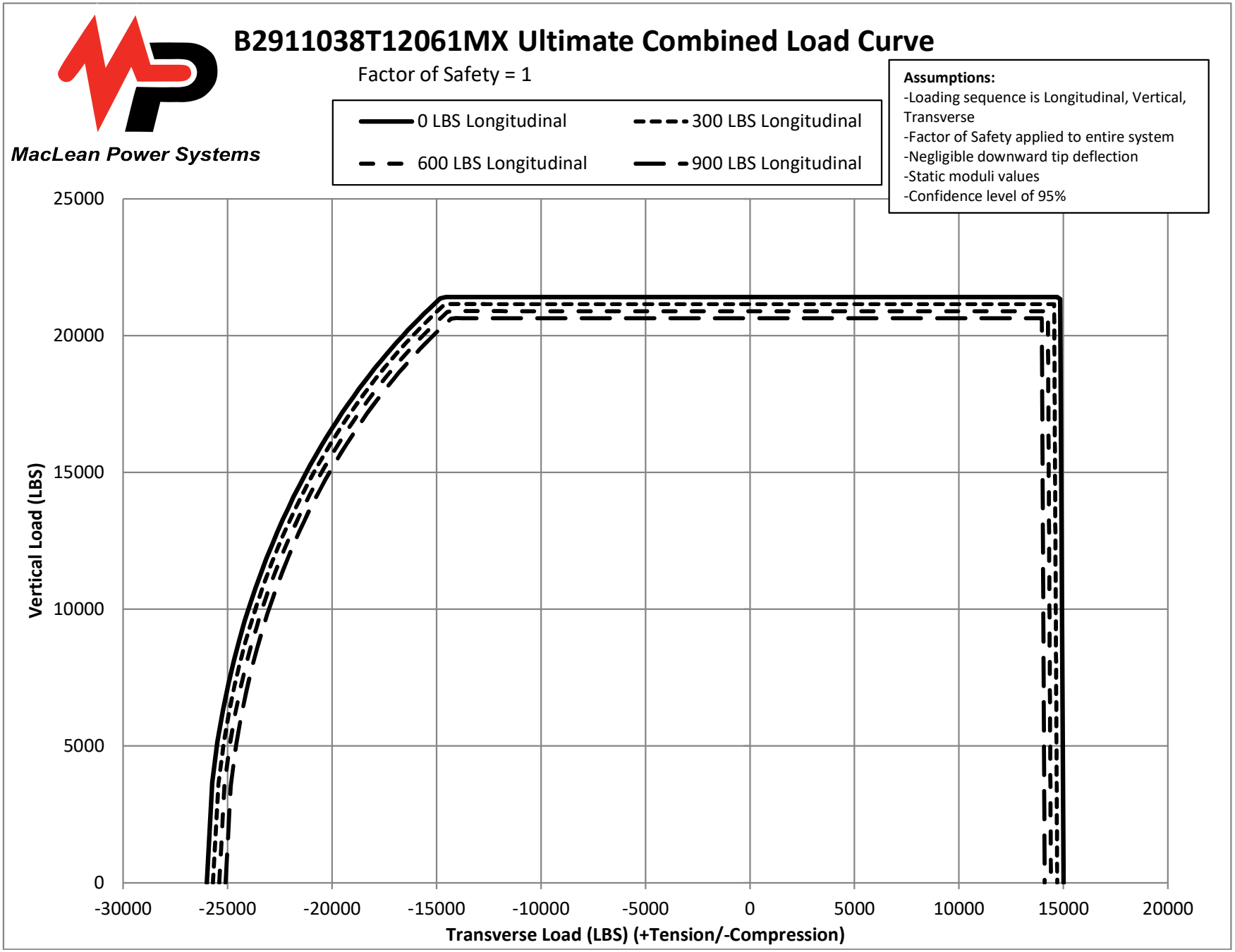
B2911038T12061MX Ultimate Combined Load Curve

Factor of Safety = 1



4/18/2022