

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

Braced Post Insulator Assembly B2901053T12071MX

1) H2 90 10 043 MX SS 022	[1]
2) S1 40 80 042 MX AL 027	[1]
3) Socket/Y-Clevis (SYC-56)	[1]
4) Turnbuckle (G-227-NBC-3/4x6C)	[1]
5) Shackle (ASH-55-BC)	[1]

ASSEMBLY DIMENSIONAL VALUES

Post Section Length (PSL)	53.3 in	1,354 mm
Suspension Section Length (SSL)	54.0 in	1,372 mm
Height of Assembly (H)	71.0 in	1,803 mm
Length of Brace (B)	77.7 in	1,974 mm
Upper Pole Connection Offset (A)*	2.0 in	51 mm
Angle Between Insulators (C)		61 Degrees
Dry Arc Distance	44.6 in	1,133 mm
Leakage Distance	116.7 in	2,964 mm

^{*}This connection bracket to be supplied by customer

ASSEMBLY ELECTRICAL VALUES*

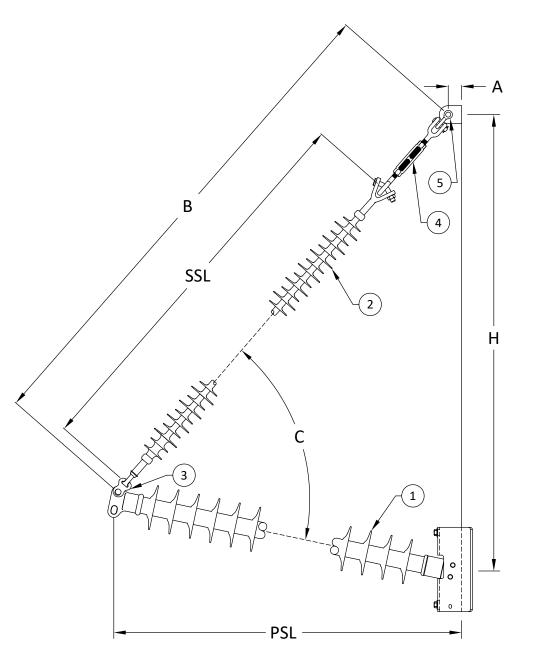
60 Hz Dry F.O. (Min. Withstand)	425 kV	(399) kV
60 Hz Wet F.O. (Min. Withstand)	394 kV	(310) kV
CIFO+ (Min. Withstand)	735 kV	(655) kV
CIFO- (Min. Withstand)	803 kV	(694) kV

^{*}Values shown are based on minimum electicals for the assembly

ASSEMBLY MECHANICAL VALUES

Maximum Working	vertical Load	11.214 lbs	49.9 kN

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

MPS Catalog Number

H2 90 10 043 MX SS 022

03/24/2022 Date:

End Fittings Gain / 12 deg / Steel **Tower End Fitting:**

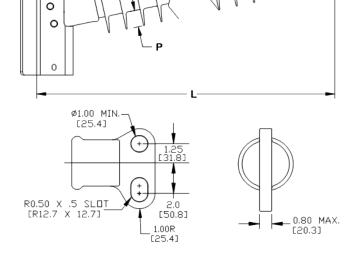
2 HL Drop Tongue / Galv. Ductile Iron Line End Fitting:

		V	la	t	e	ri	a	
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Corona Ring (Line):	Material				
Mounting Angle: Number of Sheds: Rod Diameter: Weight Estimate: Dimensional Values Section Length (L): Rubber Length (X): Shed spacing (S): Shed Projection (P): Dry Arc Distance: Leakage Distance: Leakage Distance: Electricals Values 60 Hz dry Flashover (Min. Withstand): 60 Hz Wet Flashover (Min. Withstand): CIFO Positive (Min. Withstand): Mechanical Values Max. Design Cant. Load (MDCL): Max Design Cant. Load (MDCL): Note that the same of the second state of the second state of the same of the second state of the same of	Corona Ring (Line):				None
Number of Sheds: 22 Rod Diameter: 2.5 in Weight Estimate: 57.9 lbs 26 kg Dimensional Values Section Length (L): 53.3 in 1,354 mm Rubber Length (X): 43 in 1,092 mm Shed spacing (S): 1.95 in 50 mm Shed Projection (P): 1.86 in 47 mm Dry Arc Distance: 45.1 in 1,145 mm Leakage Distance: 116.7 in 2,965 mm Electricals Values 60 Hz dry Flashover (Min. Withstand): 429 kV 403 kV 60 Hz Wet Flashover (Min. Withstand): 398 kV 313 kV CIFO Positive (Min. Withstand): 742 kV 662 kV CIFO Negative (Min. Withstand): 809 kV 701 kV Mechanical Values Max. Design Cant. Load (MDCL): 1,748 lbs 7.8 kN Specified Cant. Load (SCL): 3,496 lbs 15.6 kN	Corona Rings are recommended for application	ns of 230 kV a	and above		
Rod Diameter: 2.5 in Weight Estimate: 57.9 lbs 26 kg	Mounting Angle:			12	deg
Dimensional Values Soction Length (L): Soction Length (X): Soction Length (X): Soction Length (X): Socion Length (X): Soc	Number of Sheds:			22	
Section Length (L): 53.3 in 1,354 mm Rubber Length (X): 43 in 1,092 mm Shed spacing (S): 1.95 in 50 mm Shed Projection (P): 1.86 in 47 mm Dry Arc Distance: 45.1 in 1,145 mm Leakage Distance: 116.7 in 2,965 mm 116.7 in	Rod Diameter:			2.5	in
Section Length (L): 53.3 in 1,354 mm Rubber Length (X): 43 in 1,092 mm Shed spacing (S): 1.95 in 50 mm Shed Projection (P): 1.86 in 47 mm Dry Arc Distance: 45.1 in 1,145 mm Leakage Distance: 116.7 in 2,965 mm Electricals Values 60 Hz dry Flashover (Min. Withstand): 429 kV 403 kV 60 Hz Wet Flashover (Min. Withstand): 398 kV 313 kV CIFO Positive (Min. Withstand): 742 kV 662 kV CIFO Negative (Min. Withstand): 809 kV 701 kV Mechanical Values Max. Design Cant. Load (MDCL): 1,748 lbs 7.8 kN Specified Cant. Load (SCL): 3,496 lbs 15.6 kN	Weight Estimate:	57.9	lbs	26	kg
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Shed Projection (P): 1.86 in 47 mm Dry Arc Distance: 45.1 in 1,145 mm Leakage Distance: 116.7 in 2,965 mm Electricals Values 60 Hz dry Flashover (Min. Withstand): 429 kV 403 kV 60 Hz Wet Flashover (Min. Withstand): 398 kV 313 kV CIFO Positive (Min. Withstand): 742 kV 662 kV CIFO Negative (Min. Withstand): 809 kV 701 kV Mechanical Values Max. Design Cant. Load (MDCL): 1,748 lbs 7.8 kN Specified Cant. Load (SCL): 3,496 lbs 15.6 kN	Rubber Length (X):	43	in	1,092	mm
Dry Arc Distance: 45.1 in 1,145 mm Leakage Distance: 116.7 in 2,965 mm Electricals Values 60 Hz dry Flashover (Min. Withstand): 429 kV 403 kV 60 Hz Wet Flashover (Min. Withstand): 398 kV 313 kV CIFO Positive (Min. Withstand): 742 kV 662 kV CIFO Negative (Min. Withstand): 809 kV 701 kV Mechanical Values Max. Design Cant. Load (MDCL): 1,748 lbs 7.8 kN Specified Cant. Load (SCL): 3,496 lbs 15.6 kN	Shed spacing (S):	1.95	in	50	mm
Leakage Distance: Electricals Values 60 Hz dry Flashover (Min. Withstand): 429 kV 403 kV 60 Hz Wet Flashover (Min. Withstand): 398 kV 313 kV CIFO Positive (Min. Withstand): 742 kV 662 kV CIFO Negative (Min. Withstand): 809 kV 701 kV Mechanical Values Max. Design Cant. Load (MDCL): 5pecified Cant. Load (SCL): 3,496 lbs 15.6 kN	Shed Projection (P):	1.86	in	47	mm
Electricals Values 60 Hz dry Flashover (Min. Withstand): 60 Hz Wet Flashover (Min. Withstand): 61 Hz Wet Flashover (Min. Withstand): 62 Hz Wet Flashover (Min. Withstand): 63 Hz Wet Flashover (Min. Withstand): 64 Hz Wet Flashover (Min. Withstand): 64 Hz Wet Flashover (Min. Withstand): 65 Hz Wet Flashover (Min. Withstand): 66 Hz Wet Flashover (Min. Withstand): 66 Hz Wet Flashover (Min. Withstand): 67 Hz Wet Fl	Dry Arc Distance:	45.1	in	1,145	mm
60 Hz dry Flashover (Min. Withstand): 60 Hz Wet Flashover (Min. Withstand): CIFO Positive (Min. Withstand): CIFO Negative (Min. Withstand): Mechanical Values Max. Design Cant. Load (MDCL): Specified Cant. Load (SCL): 429 kV 403 kV 403 kV 662 kV 662 kV 701 kV 1,748 lbs 7.8 kN 5,8 kN	Leakage Distance:	116.7	in	2,965	mm
60 Hz Wet Flashover (Min. Withstand): CIFO Positive (Min. Withstand): CIFO Negative (Min. Withstand): Mechanical Values Max. Design Cant. Load (MDCL): Specified Cant. Load (SCL): 398 kV 313 kV 662 kV 701 kV 701 kV 701 kV	Electricals Values				
CIFO Positive (Min. Withstand): 742 kV 662 kV CIFO Negative (Min. Withstand): 809 kV 701 kV Mechanical Values Max. Design Cant. Load (MDCL): 1,748 lbs 7.8 kN Specified Cant. Load (SCL): 3,496 lbs 15.6 kN	60 Hz dry Flashover (Min. Withstand):	429	kV	403	kV
CIFO Negative (Min. Withstand): Mechanical Values Max. Design Cant. Load (MDCL): Specified Cant. Load (SCL): 809 kV 701 kV 1,748 lbs 7.8 kN 1,748 lbs 15.6 kN	60 Hz Wet Flashover (Min. Withstand):	398	kV	313	kV
Mechanical ValuesMax. Design Cant. Load (MDCL):1,748 lbs7.8 kNSpecified Cant. Load (SCL):3,496 lbs15.6 kN	CIFO Positive (Min. Withstand):	742	kV	662	kV
Max. Design Cant. Load (MDCL): 1,748 lbs 7.8 kN Specified Cant. Load (SCL): 3,496 lbs 15.6 kN	CIFO Negative (Min. Withstand):	809	kV	701	kV
Specified Cant. Load (SCL): 3,496 lbs 15.6 kN	Mechanical Values				
•	Max. Design Cant. Load (MDCL):	1,748	lbs	7.8	kN
Specified Tensile Load (STL): 15,000 lbs 66.7 kN	Specified Cant. Load (SCL):	3,496	lbs	15.6	kN
	Specified Tensile Load (STL):	15,000	lbs	66.7	kN

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14.0 [356] 5.8 [146] Ø0,93 12.0 [24] [305] 46° [205] R0.46 × 1.5 SLOT [12 × 38]



Dimension: inches [millimeters]

NOTE: Drawing not actual depiction of insulator appearance.

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

Notes:



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MPS Catalog Number

S1 40 80 042 MX AL 027

Date:	03/24/2022
Date.	U3/24/2U22

	Date.	03/24/2022
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 applica	tions of 230 kV and above	2
Number of Sheds:	13 large	14 standard
Rod Diameter:		16 mm
Weight Estimate:	9.9 lbs	5 kg
Dimensional Valu	es	
Section Length (L):	54 in	1,372 mm
Rubber Length (X):	42 in	1,067 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:	44.8 in	1,138 mm
Leakage Distance:	121.8 in	3,094 mm
Electricals Value	es	
60 Hz dry Flashover (Min. Withstand):	441 kV	408 kV
60 Hz Wet Flashover (Min. Withstand):	395 kV	344 kV
CIFO Positive (Min. Withstand):	757 kV	656 kV
CIFO Negative (Min. Withstand):	803 kV	704 kV
Mechanical Value	es	
Specified Mech. Load (SML):	25,000 lbs	111.2 kN
Routine Test Load (RTL):	12,500 lbs	55.6 kN

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Ø0.75 [19] 6.57 [167] 5.07 [129]

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

