



**PED350SS Series Multi-Port Connector
ANSI C119.1**

1. Date and Location of Test

All Tests were conducted from Jan 2012 thru Aug 2012 at the ILSCO Company Research and Development test facility, 4730 Madison Rd, Cincinnati, Ohio.

2. Product Tested

PED350SS body (6061-T6) made with multi-diameter resealable port plugs.

3. Product Description

PED350SS series of submersible TPE Multiport encapsulated bar. Wire range from 350 kcmil to #12 AWG.

4. Purpose of Tests

Qualify new product to ANSI standards.

5. Standard Tested To

ANSI C119.1 -2011 Clauses 6.4.1 Integrity of Seal and Connector insulation including optional tests for Resealability, and Impact (Direct Bury)(6.2.3).

6. Test Requirements (ANSI C119.1-2011)

Each cut on the port plug and the unplugged port was tested using the smallest and largest wire sizes for each size.

7. Test Equipment Used

All equipment is calibrated in accordance to ISO-17025. We utilize an automated data collection system for monitoring.

8. Test Method (Appendix B)

Remove insulation as noted on the part and clean the wire. Cut the wire port plug as indicated according to the wire size being used. Assemble the wire port plug into the wire port hole and fully seat the plug. Remove the resealing plug.

Apply an anti-oxidant, if not supplied in connector. Apply silicone from included packet at the junction of the insulation and the wire. Push the wire into the already seated wire port plug until it is fully inserted into the connector body. Each wire was torqued using a calibrated wrench to the recommended torque.

**ANSI C119.1
Impact Test Data**

**4.2.4
Summary Sheet**

Cable Size - Maximum Size	350 kcmil	4/0 AWG	2/0 AWG	#2 AWG	#6 AWG	#10 AWG
Cut Ring (If Applicable)	None	3/0-4/0	#1- 2/0	#4 - #2	#8 - #6	#12 - #10
Insulation Type	USE	USE	USE	USE	USE	USE
Screw Size	11/16-16					
Number of Screws	1 Screw					
Torque (in-lb)	240	240	240	240	120	120



PED350SS Series Multi-Port Connector ANSI C119.1

ANSI C119.1 (4.4.1) Sealed Insulated Underground Systems Test Summary

This connector was tested to ANSI C119.1. Each cut on the wire port plug (five options) and the unplugged port was tested using the smallest and largest wires sizes for each size in accordance with clause 6.4.1. Covering wire sizes from #12 to 350 kcmil.

Item	Cable Information				Insulation resistance @ 500V DC										Leakage 4.3.2 (17)	
					Initial 6.4.1.2 (2)		Dielectric 6.4.1.2 (3)		After Heat conditioning Flex & Twist 6.4.1.2 (5,6,7,8)			After Cold conditioning Flex & Twist 6.4.1.2 (10,11,12)				Heat Cycling Submersion 6.4.1.2 (14)
	Size	Material	Insulation type	Diameter (Cable & Insulation)	resistance (Giga Ω)	2.2 Kv AC Pass/ Fail	resistance (Giga Ω)	% of Initial reading	Dielectric 6.4.1.5 (8) Pass/Fail	6.4.1.2 (13) Resistance (Giga Ω)	% of Initial reading	Dielectric test 6.4.1.5 Pass/Fail	6.4.1.2(15) Resistance (Giga Ω)	% of Initial reading		Dielectric 6.4.1.5 (16) Pass/Fail
PED 350SS	350 kcmil	AL	USE-2	0.82	700	Pass	1000	43%	Pass	1.7	-100%	Pass	3.6	-99%	Pass	0.07
PED 350SS	350 kcmil	AL	USE-2	0.82	600	Pass	1100	83%	Pass	1.8	-100%	Pass	4.2	-99%	Pass	0.07
PED 350SS	350 kcmil	AL	USE-2	0.82	800	Pass	900	13%	Pass	1.9	-100%	Pass	4.4	-99%	Pass	0.06
PED 350SS	250 kcmil	AL	USE-2	0.78	500	Pass	1200	140%	Pass	1.5	-100%	Pass	1700	240%	Pass	0.07
PED 350SS	250 kcmil	AL	USE-2	0.78	900	Pass	1000	11%	Pass	1.6	-100%	Pass	900	0%	Pass	0.12
PED 350SS	250 kcmil	AL	USE-2	0.78	700	Pass	1500	114%	Pass	1.6	-100%	Pass	1300	86%	Pass	0.13
PED 350SS	4/0 AWG	AL	USE-2	0.66	50	Pass	290	480%	Pass	1000	1900%	Pass	1200	2300%	Pass	0.13
PED 350SS	4/0 AWG	AL	USE-2	0.66	42	Pass	200	376%	Pass	800	1805%	Pass	1400	3233%	Pass	0.2
PED 350SS	4/0 AWG	AL	USE-2	0.66	40	Pass	220	450%	Pass	1800	4400%	Pass	1100	2650%	Pass	0.25
PED 350SS	3/0 AWG	AL	USE-2	0.62	3200	Pass	1200	-63%	Pass	2100	-34%	Pass	1900	-41%	Pass	0.05
PED 350SS	3/0 AWG	AL	USE-2	0.62	4800	Pass	1100	-77%	Pass	2900	-40%	Pass	1200	-75%	Pass	0.06
PED 350SS	3/0 AWG	AL	USE-2	0.62	4800	Pass	1100	-77%	Pass	5100	6%	Pass	1100	-77%	Pass	0.05
PED 350SS	2/0 AWG	AL	USE-2	0.57	3600	Pass	1000	-72%	Pass	3900	8%	Pass	1500	-58%	Pass	0.09
PED 350SS	2/0 AWG	AL	USE-2	0.57	2200	Pass	1000	-55%	Pass	3600	64%	Pass	1900	-14%	Pass	0.1
PED 350SS	2/0 AWG	AL	USE-2	0.57	3800	Pass	800	-79%	Pass	3600	-5%	Pass	1500	-61%	Pass	0.1
PED 350SS	#1 AWG	AL	USE-2	0.48	3200	Pass	1200	-63%	Pass	16	-100%	Pass	4.9	-100%	Pass	0.2
PED 350SS	#1 AWG	AL	USE-2	0.48	4900	Pass	1000	-80%	Pass	15	-100%	Pass	4.8	-100%	Pass	0.22
PED 350SS	#1 AWG	AL	USE-2	0.48	3200	Pass	1300	-59%	Pass	17	-99%	Pass	4.8	-100%	Pass	0.23
PED 350SS	#2 AWG	AL	USE-2	0.40	600	Pass	1000	67%	Pass	1.2	-100%	Pass	400	-33%	Pass	0.1
PED 350SS	#2 AWG	AL	USE-2	0.40	800	Pass	1400	75%	Pass	1.4	-100%	Pass	300	-63%	Pass	0.1
PED 350SS	#2 AWG	AL	USE-2	0.40	600	Pass	1100	83%	Pass	1.4	-100%	Pass	400	-33%	Pass	0.1
PED 350SS	#4 AWG	AL	USE-2	0.34	4000	Pass	1300	-68%	Pass	12	-100%	Pass	400	-90%	Pass	0.4
PED 350SS	#4 AWG	AL	USE-2	0.34	4100	Pass	1100	-73%	Pass	15	-100%	Pass	300	-93%	Pass	0.3
PED 350SS	#4 AWG	AL	USE-2	0.34	4800	Pass	1200	-75%	Pass	17	-100%	Pass	300	-94%	Pass	0.3
PED 350SS	#6 AWG	AL	USE-2	0.32	600	Pass	1700	183%	Pass	1	-100%	Pass	10	-98%	Pass	0.1
PED 350SS	#6 AWG	AL	USE-2	0.32	700	Pass	1100	57%	Pass	1.1	-100%	Pass	11	-98%	Pass	0.1
PED 350SS	#6 AWG	AL	USE-2	0.32	400	Pass	1100	175%	Pass	1.2	-100%	Pass	13	-97%	Pass	0.1
PED 350SS	#8 AWG	AL	USE-2	0.30	40	Pass	60	50%	Pass	60	50%	Pass	1.4	-97%	Pass	0.15
PED 350SS	#8 AWG	AL	USE-2	0.30	50	Pass	30	-40%	Pass	70	40%	Pass	1.4	-97%	Pass	0.14
PED 350SS	#8 AWG	AL	USE-2	0.30	51	Pass	30	-41%	Pass	70	37%	Pass	1.6	-97%	Pass	0.15
PED 350SS	#10 AWG	AL	THHN	0.22	2.8	Pass	200	7043%	Pass	1400	49900%	Pass	150	5257%	Pass	0.1
PED 350SS	#10 AWG	AL	THHN	0.22	60	Pass	5	-92%	Pass	1800	2900%	Pass	110	83%	Pass	0.1
PED 350SS	#10 AWG	AL	THHN	0.22	34	Pass	170	400%	Pass	1200	3429%	Pass	120	253%	Pass	0.09
PED 350SS	#12 AWG	CU	USE-2	0.19	32	Pass	30	-6%	Pass	90	181%	Pass	60	88%	Pass	0.35
PED 350SS	#12 AWG	CU	USE-2	0.19	6.5	Pass	50	669%	Pass	80	1131%	Pass	50	669%	Pass	0.34
PED 350SS	#12 AWG	CU	USE-2	0.19	29	Pass	20	-31%	Pass	30	3%	Pass	9	-69%	Pass	0.32