



**QUALIFICATION PRODUCTS LABORATORY (QPL)
PATUXENT RIVER, MD.**

W.L. GORE

**Initial Qualification
AS6070/5 and /6
Test Summary**

Project 15738001.AA

November 3, 2016



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1. TEST RESULTS

The following tests were performed by the QPL Lab as designated in the Request for Samples for Retention of Qualification Testing of AS6070/5 and /6 NAVAIR letter dated 6 June 2016. Samples provided passed all testing as required in the AS6070 Specification.

2. TESTING

W.L. Gore 15738001.AA AS6070/5 & /6				
Test	Requirements Paragraph	Method Paragraph	Date Completed	Comments
Physical			9/20/2016	Pass
Construction Details	3.3.1	5.1.1	9/20/2016	Pass
Jacket Color	3.3.2	5.1.2	9/20/2016	Pass
Cable Diameter	3.3.3	5.1.3	9/20/2016	Pass
Cable Weight	3.3.4	5.1.4	9/20/2016	Pass
Conductor	3.3.5	Not in Spec		No Testing
Conductor Plating	3.3.6	Not in Spec		No Testing
Life Cycle	3.5.1	5.3.1	9/29/2016	Pass
Cold Bend	3.6.1	5.4.1	10/11/2016	Pass

Testing Issues: None.

3. INVENTORY SHEET

Sample No.	Item	Government Designation	Manufacturer Designation
1	Cable	AS6070/5-24	RCN9034-24
2	Cable	AS6070/6-26	RCN9047-26

4. DATA SHEET RETENTION

The data sheets generated during this testing will be scanned and sent as a separate .pdf attachment. This test report and data sheets must be maintained for 6 years from the date of this qualification. The data sheets will be emailed as a .pdf file with a “read receipt” required. After our office receives the confirmation “read receipt” to verify that you have received and read the email, all data sheets (including electronic copy) will be destroyed.



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5. EQUIPMENT LIST

Equipment	Calibration Due Date
Blue "M" Oven	10/31/2017
HiPot Tester	10/31/2017
A/Z Tech Scrape	10/31/2017
Espec Thermal Shock	10/31/2017
Caliper	10/31/2017
CSZ Cold Bend Chamber	10/31/2017



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PHYSICAL CHARACTERISTICS DATA SHEET

Manufacturer: W.L. Gore (541Q2)	Project Number: 15738001.AA
Specification: AS6070	Tested By: Edwards
Date: 9/20/16	Test Requirement: 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.6 Test Paragraph: 5.1.1, 5.1.2, 5.1.3, 5.1.4, 5.1.5, 5.1.6

Part Number	Conductor Wire Diameter .0254 Max (In)	Insulation Diameter .060 (In)	Jacket & Wire Color	Jacket Diameter .270 Max (In)	Cable Weight 45 Max (Ft)	Pass/ Fail
AS6070/5-0A9UA-1 (24)	.023	.060	Pair 1: blue/white & blue Pair 2: orange/white & orange Pair 3: green/white & green Pair 4: brown/white & brown	.245	40.0	Pass
AS6070/5-0A9UA-1 (24)	.022	.060	Pair 1: blue/white & blue Pair 2: orange/white & orange Pair 3: green/white & green Pair 4: brown/white & brown	.256	40.0	Pass
AS6070/5-0A9UA-1 (24)	.022	.060	Pair 1: blue/white & blue Pair 2: orange/white & orange Pair 3: green/white & green Pair 4: brown/white & brown	.250	39.5	Pass



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PHYSICAL CHARACTERISTICS DATA SHEET

Manufacturer: W.L. Gore (541Q2)	Project Number: 15738001.AA
Specification: AS6070	Tested By: Edwards
Date: 10/3/16	Test Requirement: 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.6 Test Paragraph: 5.1.1, 5.1.2, 5.1.3, 5.1.4, 5.1.5, 5.1.6

Part Number	Conductor Wire Diameter .0204 Max (In)	Insulation Diameter .050 (In)	Jacket & Wire Color	Jacket Diameter .230 Max (In)	Cable Weight 35 Max (Ft)	Pass/ Fail
AS6070/6-8A9UA-1 (26)	.0200	.043	Pair 1: blue/white & blue Pair 2: orange/white & orange Pair 3: green/white & green Pair 4: brown/white & brown	.206	40.0	Pass
AS6070/6-8A9UA-1 (26)	.0202	.043	Pair 1: blue/white & blue Pair 2: orange/white & orange Pair 3: green/white & green Pair 4: brown/white & brown	.215	40.0	Pass
AS6070/6-8A9UA-1 (26)	.0200	.043	Pair 1: blue/white & blue Pair 2: orange/white & orange Pair 3: green/white & green Pair 4: brown/white & brown	.203	39.5	Pass



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COLD BEND DATA SHEET

Manufacturer: W.L. Gore (541Q2)	Project Number: 15738001.AA
Specification: AS6070	Tested By: Edwards
Date: 10/11/16	Test Requirement: 3.6.1 Test Paragraph: 5.4.1
Test Duration: 4 hours	Chamber Temperature: -55 +/-5 deg C
Dielectric Voltage: 1500 volts	Immersion/Test Time: 4 hours
Test Equipment: Cold Bend Chamber, Hipot Tester	Calibration Due Dates: 10/31/17

Part Number	Mandrel 10X Cable Diameter (In)	Test Weight (Lbs)	Visual After Bend	DVW Jacket and Component	Results
AS6070/5-24	2.5	2.0	OK	OK	Pass
AS6070/5-24	2.5	2.0	OK	OK	Pass
AS6070/5-24	2.5	2.0	OK	OK	Pass
AS6070/6-26	2.0	2.0	OK	OK	Pass
AS6070/6-26	2.0	2.0	OK	OK	Pass
AS6070/6-26	2.0	2.0	OK	OK	Pass



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LIFE CYCLE DATA SHEET

Manufacturer: W.L. Gore (541Q2)	Project Number: 15738001.AA
Specification: AS6070	Tested By: Edwards
Date: 9/29/16	Test Requirement: 3.5.1 Test Paragraph: 5.3.1
Test Duration: 120 hours (5 days)	Chamber Temperature: 200 deg C
Dielectric Voltage: 1500 volts	Immersion/Test Time: 4 hours

Part No.	Insulation and Jacket Start (in)	Max Wire Shrinkage: 0.090 Inch Measured (in):	Max Jacket Shrinkage: 0.150 Inch Measured (in):	Bend Test	Visual After Bend	DWV Test Jacket and Insulation	Pass /Fail
AS6070/5-24	1.00	Blue: +0.016/+0.010 Blue Stripe: +0.004/+0.023 Orange: -0.037/+0.010 Orange Stripe: +0.003/+0.037 Green: +0.005/+0.058 Green Stripe: -0.034/+0.058 Brown: -0.020/-0.016 Brown Stripe: +0.049/-0.009	-0.052 / -0.080	OK	OK	OK	Pass
AS6070/5-24	1.00	Blue: -0.003/+0.022 Blue Stripe: +0.077/+0.033 Orange: +0.055/+0.035 Orange Stripe: +0.035/+0.023 Green: +0.030/-0.006 Green Stripe: +0.014/-0.029 Brown: +0.022/+0.013 Brown Stripe: +0.052/+0.022	-0.063 / -0.067	OK	OK	OK	Pass
AS6070/5-24	1.00	Blue: -0.046/+0.005 Blue Stripe: -0.006/-0.003 Orange: 0.000/+0.030 Orange Stripe: -0.005/+0.021 Green: +0.021/+0.021 Green Stripe: +0.029/+0.012 Brown: -0.009/+0.005 Brown Stripe: -0.017/+0.003	-0.0370 / -0.060	OK	OK	OK	Pass



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Manufacturer: W.L. Gore (541Q2)	Project Number: 15738001.AA
Specification: AS6070	Tested By: Edwards
Date: 9/29/16	Test Requirement: 3.5.1 Test Paragraph: 5.3.1
Test Duration: 120 hours (5 days)	Chamber Temperature: 200 deg C
Dielectric Voltage: 1500 volts	Immersion/Test Time: 4 hours

Part No.	Insulation and Jacket Start (in)	Max Wire Shrinkage: 0.090 Inch Measured (in):	Max Jacket Shrinkage: 0.150 Inch Measured (in):	Bend Test	Visual After Bend	DWV Test Jacket and Insulation	Pass /Fail
AS6070/6-26	1.00	Blue: -0.002/+0.010 Blue Stripe: -0.051/+0.049 Orange: +0.024/+0.006 Orange Stripe: -0.030/+0.041 Green: -0.007/+0.047 Green Stripe: -0.001/+0.034 Brown: -0.039/+0.011 Brown Stripe: -0.035/+0.011	-0.070 / -0.092	OK	OK	OK	Pass
AS6070/6-26	1.00	Blue: -0.025/-0.012 Blue Stripe: -0.060/+0.029 Orange: +0.003/-0.025 Orange Stripe: -0.022/+0.023 Green: +0.034/-0.044 Green Stripe: -0.028/+0.012 Brown: 0.000/-0.009 Brown Stripe: +0.026/+0.008	-0.113 / -0.092	OK	OK	OK	Pass
AS6070/6-26	1.00	Blue: -0.007/+0.041 Blue Stripe: +0.039/-0.001 Orange: +0.016/+0.011 Orange Stripe: +0.057/+0.078 Green: +0.014/+0.060 Green Stripe: +0.044/+0.019 Brown: +0.029/+0.012 Brown Stripe: -0.002/-0.018	-0.117 / -0.078	OK	OK	OK	Pass