

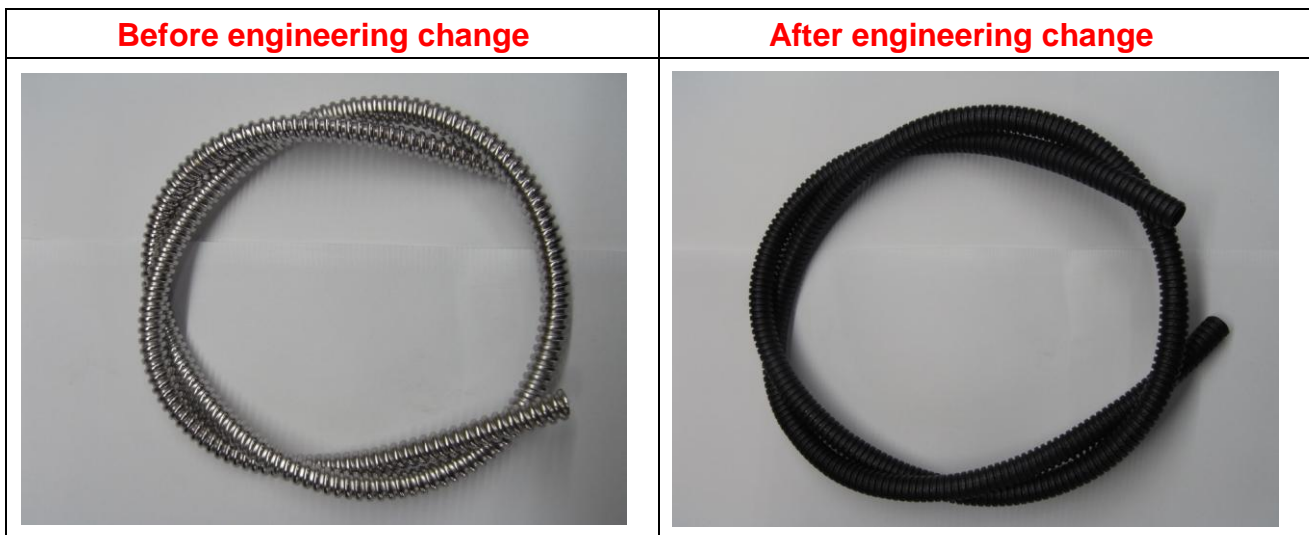
2012/12/20

TB-20121202

**Subject: Oil level switch conduit change****Description:**

This technical bulletin is to explain the upcoming engineering change on conduit of oil level switch wires. In the past we used the stainless steel corrugated tube to protect the wires for some customers and we plan to replace the tube by plastic conduit. After consulting with our customers, we learned that the most concerns were temperature and UV resistance for new plastic tubes.

The new plastic corrugated tubing is Nylon PA6 with UL, CE and RoHS compliant. Its flammability is UL 94V-2 and has passed UV (Irradiance 340 nm) exposure for 1000 hours. Its working temperature is from -40°C to 105°C. Therefore we are confident that with this new PA6 corrugated tubing, it can perform the same function like what stainless steel tubing does.

**Difference before and after engineering change:**

In conclusion, this engineering change will not bring any negative effect on protection of the wires and we plan to start with the plastic tube from January 2013. If you have any concern about it please let us know at your convenience. Thank you for your understanding and continuously support on Hanbell. We will keep providing the high quality compressors to your esteemed company as always.



## TEST REPORT

Mechanical & Hardgoods Lab

Report No. : HLO0423/2008

Page : 1 of 2

Date : OCT. 30, 2008

### AVC INDUSTRIAL CORP.

122, WUKUNG ROAD, WUKU INDUSTRIAL PARK, TAIPEI HSIEN, TAIWAN 24886

The following merchandise was submitted and identified by the applicant as:

Product Description: Split Plastic Corrugated Tubings

Style/Item No.: NAN Series

Manufacturer/Vendor: AVC

Country of Origin: TAIWAN

We have tested the submitted sample(s) as requested and the following results were obtained:

#### Test Requested:

For compliance with Federal Motor Vehicles Safety Standard No. 302

Flammability of interior materials.

#### Test Results:

Pass

#### Sample

	<u>Char Length</u> (mm.)	<u>After Flame</u> (sec.)	<u>Burn Rate</u> (mm/min)
1.	-	-	D.N.I.
2.	-	-	D.N.I.
3.	-	-	D.N.I.
4.	-	-	D.N.I.
5.	-	-	D.N.I.
6.	-	-	D.N.I.

Note: SE/B = Self Extinguish with a burn rate in mm/minute Flame extinguishes itself before reaching the 38 mm point from the clamped end of the specimen.

SE/NBR = Self Extinguishing/No Burn Rate. The material stops burning before it has burned for 60 seconds from the start of timing and has not burned more than 51 mm from the point where timing was started.

D.N.I. = Does not ignite. The material does not support combustion during or following the 15 second ignition period.

#### Test Requirements:

The burn rate shall not exceed 102 mm per minute.

#### Conclusion:

In our opinion, the submitted sample(s) complies with Federal Motor Vehicle Safety Standard No. 302 Flammability of interior materials (49 CFR 571.302 10-1-07 Edition).

Testing Period: OCT. 24, 2008 ~ OCT. 30, 2008

Signed for and on behalf of  
SGS Taiwan Ltd.

Owen Cheng  
Manager

## TEST REPORT

Mechanical & Hardgoods Lab

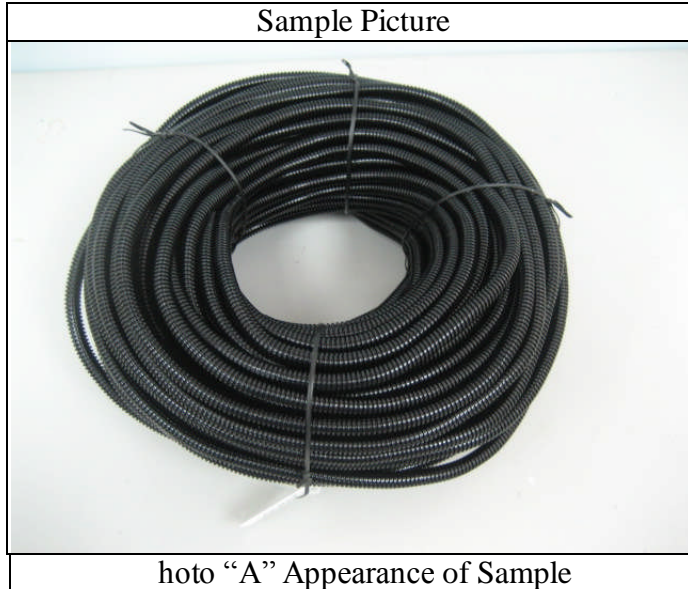
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– Picture Page –

Sample Picture



--End of Report--

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.  
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塑膠工業技術發展中心

Plastics Industry Development Center

## Analysis/Test Report



Assignment No : 94A11-F110140R1

Sampler : AVC INDUSTRIAL CORP.

Articles : N-Series Nylon Conduit Fittings (Including Conduits)

Date Received : 2005/03/28

Date Tested :

2005/03/31

Item(s)	Method(s)	Result(s)
Weather Resistance	ASTM G155	Inspect the structural of Specimen : 1.Structural of Nylon material 2.Structural of Rubber material 3. Structural of Nylon Conduit material  Whitening on the sample surface is observed with the naked eye, but no deformation, damage and crack are occurred on the sample.
Remark(s) : 1.Specimen Preparation Method : Provided By Customer 2.Apparatus : Atlas Weather - ometer Ci4000 3.Test Condition : (1)Irradiance : 0.35 W/m <sup>2</sup> at 340 nm (2)Black Standard Temperature 63±3 °C (3)Relative Humidity :50±5 % (4)Dry Bulb Temperature :42±3 °C (5)Cycle: 102 min light,18 min spray. (6)Exposure Time:1000 hrs 4.Specimen : 1 piece		

Authorized by

Hui-Min Hsu  
Group Leader

The first revision