Certificate no: HSN1710040/1 Page 1 of 2 Inspection Certificate Project: Client: **CIRCOR Energy** Office: Chicago 405 Centura Court, Spartanburg, SC -29303 USA. Client's Order Number: Request for Services signed and dated 22 June 2017 Date: 05 July 2017 PO#108570 Order Status: Complete Inspection Dates First: 29 June 2017 Final: 05 July 2017

This certificate is issued to CIRCOR Energy, that the undersigned Surveyor to Lloyd's Register Quality Assurance, Inc., did at their request attended their works on and between the aforementioned dates for the purpose of verifying, witnessing tests on the items detailed below to the following scope of inspection:

Ferrule Size	Tube Set-up Size/Material/Mill Heat#	Quantity Tested
10FRD50mm-XP-NK	10mm x 2.0mm/6Mo/HC#4G	6 Nos.
12FRD50mm-XP-NK	12mm x 2.0mm/6Mo/HC#525	6 Nos.
18FRD50mm-XP-NK	18mm x 2.0mm/6Mo/HC#489	6 Nos.
20FRD50mm-XP-NK	20mm x 2.5mm/6Mo/HC#0979	6 Nos.
25FRD50mm-XP-NK	25mm x 2.0mm/6Mo/HC#1088	6 Nos.
10FR316mm-XP	10mm x 2.0mm/316/HC#361	6 Nos.
12FR316mm-XP	12mm x 2.0mm/316/HC#469	6 Nos.
18FR316mm-XP	18mm x 2.0mm/316/HC#361	6 Nos.
20FR316mm-XP	20mm x 2.0mm/316/HC#0964	6 Nos.
16FR316mm-XP	1'' x .120''/316/HC#1167	6 Nos.
12FRD50mm-XP-NK	12mm x 2.0mm/316-6Mo/HC#525	4 Nos.
18FRD50mm-XP-NK	18mm x 2.0mm/316-6Mo/HC#489	4 Nos.

Scope of Inspection:

- 1. Identified Ferrule and Tube material with part numbers and manufacturer's drawing.
- 2. Reviewed internal records, calibration records and production testing procedure.
- 3. Witnessed burst test on the Ferrules per manufacturers test set-up and procedure.
- 4. Carried out visual examination of Ferrule for finish, profile per drawing requirements.
- 5. Manufacturer's Ferrule's Testing Data Log endorsed.

Note:

1. The above inspection was undertaken at the request of the client and does in no way relieve the client/manufacturer of its responsibilities of complying with all statutory requirements including statutory inspection requirements of any importing country.

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Conclusion:

Based on the above scope of inspection, the material described is considered by the undersigned to comply with the manufacturers' specification and drawing requirements.

-End-

Ref. C.	R Lloyd's Register
Raju Cunkari, CEng.	
05 Jul 2017	
HSN1710040	
Chicago	
LRQA, Inc Inspection Services	

Raju Cunkari Surveyor to Lloyd's Register Quality Assurance, Inc.

a member of the Lloyd's Register group.

