tyco
Electronics

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RE: MOOS System Riser Cable Specification

Comments & Exceptions

Revision 3.0 - Preliminary

Paragraph	Status	Comments
1.0	Understood	
2.0	Understood	
3.0	- -	
3.1	- -	
3.1.1	Understood	The TRC Dataline provides this information.
3.1.2	Understood	The TRC Dataline provides this information.
3.1.3	Understood	Estimated cable modulus is 1,183,000. Estimated cable strain @ 6000 lbf is approximately 0.48 %.
3.1.4	Understood	Estimated rotation at 6000 lbf is 0.003°/ft.
3.2	Understood	
3.3	Understood	
3.4	Understood	
4.0	- -	
4.1	Understood	
4.2	Complies	
4.3	Complies	
4.4	Clarify	TRC is unsure as to the intent of this paragraph as written, is the inner belt of the cable to be a different color ? The design submitted by TRC utilizes a continuous outer jacket over the entire cable length. The inner belt will not be visible. The cable jacket could be externally marked if desired, to designate braided versus unbraided segments.

5.0	*- -*	
5.1	*Understood*	
5.1.1	*Understood*	
5.1.2	*Complies*	
5.1.3	*Complies*	
5.1.4	*Understood*	*TRC accepts the service life requirement as a goal. The intended application is such that unique stresses are imposed on the cable.*
5.2	*- -*	
5.2.1	*Understood*	
5.2.2	*Complies*	
5.2.3	*Complies*	
5.2.4	*Understood*	*TRC accepts this requirement as a goal. The exact degree of constructional stretch is difficult to predict in a new cable construction. See related comments under 6.1.*
5.2.5	*Complies*	
5.2.6	*Understood*	
5.2.7	*Understood*	*TRC accepts the service life requirement as a goal. The intended application is such that unique stresses are imposed on the cable.*
5.2.8	*Complies*	
5.3	*Understood*	*TRC has utilized a sub-sea grade of single mode optical fiber. (It should be noted that Corning "Titan" fiber is no longer commercially supplied.)*
5.3.2	*Complies*	
5.3.3	*Complies*	
5.3.4	*Exception*	*TRC can provide vendor data in regards to optical dispersion. However, TRC cannot measure dispersion in the completed cable. It should be noted that dispersion is not affected by cabling.*
5.3.5	*Complies*	*TRC utilizes 200 kpsi fiber.*
5.3.6	*Complies*	
5.4	*- -*	
5.4.1	*Complies*	
5.4.2	*Complies*	
5.4.3	*Exception*	*TRC assumes that the reference to 5.4.1 is in error. (Should read 5.4.2?). IR test equipment is typically configured for 500 or 1,000 volt test levels, not 425 volts. TRC cannot perform this test as described.*
5.4.4	*Complies*	*TRC's design utilizes multiple conductors in parallel.*
5.4.5	*Clarify*	*The description of a "partial discharge test" is not understood.*

5.4.6	*Complies.*	
6.0	*- -*	
6.1	*TBD*	*a) TRC will accept the optical element strain level requirement as a goal. The exact degree of constructional stretch is difficult to predict in a new cable product.* *b) Measurement of real time strain of a discrete optical element internal to a cable requires sophisticated test equipment TRC does not currently possess. Further discussions regarding the methodology of this test is necessary. TRC assumes that the strain optic effect will be accounted for in any measurements performed.* *c) TRC questions how/why a 0.65% strain factor was arrived at. According to the information provided in the specification, cable loading will rarely, if ever, reach 6000 lbs.*
6.2	*Understood*	
6.3	*Understood*	
6.4	*Understood*	
6.5	*Understood*	
7.0	*Understood*	

NOTE: TRC QA may have additional comments to add once they return from vacation