

SPRING ACTION  
**ProSeal™ environmental connector covers**



**Qualification test compliance**

Qualification Test Compliance for Full Environmental ProSeal Covers			
Qualification Requirement	Test Purpose	Test Method	Vendor Compliance
Salt Spray 500 hours Finsihes: OD Cadmium (NF) No Plating Composite (XB)	Assess Corrosion Resistance	EIA-364-26	Pass
Salt/S02 336 hours Finsihes: OD Cadmium (NF) No Plating Composite (XB)	Assess Corrosion Resistance	EIA-364-26	Pass
Durability (1500 Cycles) Lifting the arm at a rate of 300 cycles per hour.	Assess Robustness of Spring Action	MIL-DTL-38999M Ser.III paragraph 4.5.8.1	Pass
External Humidity	Assess Withstanding of Humid Atmosphere	QTP-665 para 11.3 RTCA/DO-160G, category C-External Humidity Environment (Section 6.0)	Pass
IP6X Dust-tight	Assess Withstanding Ingress of Dust	IEC 60529 para 13.4 and 13.5	Pass
IPX7-Temporary Water Immersion	Assess Ingress of Water During Temporary Immersion in Water	IEC 60529 para 14.2.7	Pass
IPX6-Water Jet 12.5mm diameter, distance 2.5 m to 3	Assess Ingress of Water After Water Jet/Stream	IEC 60529 para 14.2.6	Pass
IPX5-Water jet hose nozzle 6.3 mm diameter, distance 2,5m to 3m	Assess Ingress of Water After Water Jet/Stream	IEC 60529 para 14.2.5	Pass
IPX4-Water Spray numeral 3 Spray ± 180° from vertical	Assess Ingress of Water After Water Oscillating Spray	IEC 60529 para 14.2.4, FIG 5, TABLE 8	Pass
Sine Vibration	Test for the purpose of assuring no disengagement of test covers, no backing off of the coupling mechanism or opening of the arm, no evidence of cracking/ breaking, or loosening of parts during and after vibration simulating helicopter operating vibration.	MIL-STD-810G, Method 514.7, Annex E, Category 24 for Helicopters	Pass
Sine Vibration with Temperature (200°C)	Test for the purpose of assuring no disengagement of test covers, no backing off of the coupling mechanism or opening of the arm, no evidence of cracking/ breaking, or loosening of parts during and after vibration simulating helicopter operating vibration.	MIL-STD-38999M Series III para 4.5.23.2.1	Pass
Random Vibration with Rain	Test for the purpose of assuring no disengagement of test covers, no backing off of the coupling mechanism or opening of the arm, no evidence of cracking/ breaking, or loosening of parts during and after vibration simulating helicopter operating vibration. Assess signs of water ingress.	MIL-DTL-38999M Ser.III paragraph 4.5.23.4 In accordance with EIA- 364-28	Pass
Fluid Immersion	Test for detrimental damage (cracking, peeling, dissolution) after immersion in several fluids,	EIA 364-10	Pass



Qualification Test Compliance for Dust and Immersion Resistant ProSeal Covers			
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Salt Spray 500 hours Finihes: OD Cadmium (NF) No Plating Composite (XB)	Assess Corrosion Resistance	EIA-364-26	Pass
Salt/S02 336 hours Finihes: OD Cadmium (NF) No Plating Composite (XB)	Assess Corrosion Resistance	EIA-364-26	Pass
Durability (1500 Cycles) Lifting the arm at a rate of 300 cycles per hour.	Assess Robustness of Spring Action	MIL-DTL-38999M Ser.III paragraph 4.5.8.1	Pass
External Humidity	Assess Withstanding of Humid Atmosphere	QTP-665 para 11.3 RTCA/DO-160G, category C-External Humidity Environment (Section 6.0)	Pass
IP6X Dust-tight	Assess Withstanding Ingress of Dust	IEC 60529 para 13.4 and 13.5	Pass
IPX7-Temporary Water Immersion	Assess Ingress of Water During Temporary Immersion in Water	IEC 60529 para 14.2.7	Pass
IPX4-Water Spray numeral 3 Spray ± 180° from vertical	Assess Ingress of Water After Water Oscillating Spray	IEC 60529 para 14.2.4, FIG 5, TABLE 8	Pass
Sine Vibration	Test for the purpose of assuring no disengagement of test covers, no backing off of the coupling mechanism or opening of the arm, no evidence of cracking/ breaking, or loosening of parts during and after vibration simulating helicopter operating vibration.	MIL-STD-810G, Method 514.7, Annex E, Category 24 for Helicopters	Pass
Sine Vibration with Temperature (200°C)	Test for the purpose of assuring no disengagement of test covers, no backing off of the coupling mechanism or opening of the arm, no evidence of cracking/ breaking, or loosening of parts during and after vibration simulating helicopter operating vibration.	MIL-STD-38999M Series III para 4.5.23.2.1	Pass
Random Vibration with Rain	Test for the purpose of assuring no disengagement of test covers, no backing off of the coupling mechanism or opening of the arm, no evidence of cracking/ breaking, or loosening of parts during and after vibration simulating helicopter operating vibration. Assess signs of water ingress.	MIL-DTL-38999M Ser.III paragraph 4.5.23.4 In accordance with EIA- 364-28	Pass
Fluid Immersion	Test for detrimental damage (cracking, peeling, dissolution) after immersion in several fluids,	EIA 364-10	Pass