DEUTSCH* DT Series Connector System

1. SCOPE

1.1. Content

This specification covers performance, tests and quality requirements for the TE Connectivity (TE) DT Series Connector System.

1.2. Qualification

When tests are performed on the subject product line, procedures specified in Test Requirements and Procedures Summary sections shall be used. All inspections shall be performed using the applicable inspection plan and product drawing.

1.3. Qualification Test Results

Successful qualification testing on the subject product line was completed in 1987 and 2017. The Qualification Test Report number for this testing is 501-151032 (original version) and 501-151088 (snap cap version). These documentations are on file at and available from Product Engineering, Industrial Commercial Transportation (ICT).

2. APPLICABLE DOCUMENTS AND FORMS

The following documents and forms constitute a part of this specification to the extent specified herein. Unless otherwise indicated, the latest edition of the document applies.

2.1. TE Connectivity (TE) Documents

- 109-1 General Requirements for Testing
- 114-151000 Application Specification for DEUTSCH Size 16 S&F Pin & Socket
- 114-151001 Application Specification for DEUTSCH Size 16 S&F Pin & Socket
- 114-151004 Application Specification for DEUTSCH Size 4-20 Solid Pin & Socket
- 114-151009 Application Specification for DEUTSCH DT Series Connector System
- 408-151008 Instruction Guide DEUTSCH Removal Tool DT-RT1
- 501-151032 DT Qualification Test Report
- 501-151088 DT 2&3 pin Snap Cap Qualification Test Report
- 502-151009 DT Ingress Protection Engineering Test Report

Product Drawings (X = A, B, C, D keys, XXXX = product modification)

DT04-2P-XXXX	2pin Receptacle
DT04-3P-XXXX	3pin Receptacle
DT04-4P-XXXX	4pin Receptacle
DT04-6P-XXXX	6pin Receptacle
DT04-08PX-XXXX	8pin Receptacle
DT04-12PX-XXXX	12pin Receptacle

DT13-2P-XXXX	2pin Receptacle, 90° Header
DT13-4P-XXXX	4pin Receptacle, 90° Header
DT13-6P-XXXX	6pin Receptacle, 90° Header
DT13-08PX-XXXX	8pin Receptacle, 90° Header
DT13-12PX-XXXX	12pin Receptacle, 90° Header

DT06-2S-XXXX	2pin Plug
DT06-3S-XXXX	3pin Plug
DT06-4S-XXXX	4pin Plug
DT06-6S-XXXX	6pin Plug
DT06-08SX-XXXX	8pin Plug
DT06-12SX-XXXX	12pin Plug

DT15-2P-XXXX	2pin Receptacle, 180° Header
DT15-3P-XXXX	3pin Receptacle, 180° Header
DT15-4P-XXXX	4pin Receptacle, 180° Header
DT15-6P-XXXX	6pin Receptacle, 180° Header
DT15-08PX-XXXX	8pin Receptacle, 180° Header
DT15-12PX-XXXX	12pin Receptacle, 180° Header

| Indicates Change

DT16-6SX-XXXX	6pin Plug
DT16-15SX-XXXX	15pin Plug
DT16-18SX-XXXX	18pin Plug

2303812	2pin Receptacle, Snap Cap
2303813	3pin Receptacle, Snap Cap
2303815	2pin Plug, Snap Cap
2303816	3pin Plug, Snap Cap
2441202	2pin, Plug, Snap Cap With No Cap

DTF13-2PX-XXXX	2pin Receptacle, 90º Header, Flangeless
DTF13-3PX-XXXX	3pin Receptacle, 90º Header, Flangeless
DTF13-4PX-XXXX	4pin Receptacle, 90º Header, Flangeless
DTF13-6PX-XXXX	6pin Receptacle, 90º Header, Flangeless
DTF13-8PX-XXXX	8pin Receptacle, 90º Header, Flangeless
DTF13-12PX-XXXX	12pin Receptacle, 90º Header, Flangeless
DTF15-12PX-XXXX	12pin Receptacle, 180º Header, Flangeless

Wedge Lock PN's are sold separately but are required for DT functionality.

W2P-XXXX	2pin Rcpt Wedge Lock
W3P-XXXX	3pin Rcpt Wedge Lock
W4P-XXXX	4pin Rcpt Wedge Lock
W6P-XXXX	6pin Rcpt Wedge Lock
W8P-XXXX	8pin Rcpt Wedge Lock
W12P-XXXX	12pin Rcpt Wedge Lock

W2SX-XXXX	2pin Plug Wedge Lock
W3S-XXXX	3pin Plug Wedge Lock
W4SX-XXXX	4pin Plug Wedge Lock
W6S-XXXX	6pin Plug Wedge Lock
W8S-XXXX	8pin Plug Wedge Lock
W12S-XXXX	12pin Plug Wedge Lock

1011-344-0205	2pin Dust Cap
1011-345-0305	3pin Dust Cap
1011-346-0405	4pin Dust Cap
1011-347-0605	6pin Dust Cap
1011-348-0805	8pin Dust Cap
1011-349-1205	12pin Dust Cap

2.2. Industry Documents

- DIN 40050-9: Road vehicles Degrees of Protection (I P Code)
- DIN 72551-6: Road Vehicles—Low-Tension Cables—Part 6: Single-Core, Unscreened with Thin Insulation Wall; Dimensions, Materials, Marking
- EIA-364: Electrical Connector/Socket Test Procedures Including Environmental Classifications
- IEC-60512: Electronic Equipment - Tests and Measurements
- IEC-60529: Degrees of Protection Provided by Enclosures (IP Code)
- ISO 6722: Road Vehicles—60 V and 600 V Single-Core Cables—Dimensions, Test Methods, and Requirements
- SAE J1128: Low Voltage Primary Cable
- SAE J2030: Heavy-Duty Electrical Connector Performance Standard

3. REQUIREMENTS

3.1. Design and Construction

Product shall be of the design, construction, materials and physical dimensions specified on the applicable product drawing.

3.2. Ratings

- Voltage: 250 VAC/VDC
- Current (Amp)
  - 14 AWG [2.00 mm²]: 13 A
  - 16 AWG [1.00 mm²]: 13 A
  - 18 AWG [0.80 mm²]: 10 A
  - 20 AWG [0.50 mm²]: 7.5 A
- Temperature: -55°C to +125°C
- Ingress Protection (Inline): IP68 and IP6K9K (with rear protection, such as backshell)
- Ingress Protection (Header): Not Tested
- Flammability (Inline): UL Recognized. Parts are made from V-0 material and have been successfully tested to the 12 mm Flame Test per Standard UL-94.
- Flammability (Header): V-0

3.3. Test Requirements and Procedures Summary (Original Version)

Unless otherwise specified, all tests shall be performed at ambient environmental conditions.

NOTES

a) See Appendix A for Additional Test Requirements for Original Version

b) See Appendix B for Test Requirements and Procedures Summary for Snap Cap Version

c) See Appendix C for Procedure Comparison Chart

VISUAL

3.3.1. Examination of Product

A. Procedure: EIA-364-18

B. Method: Visually inspected for use of materials, proper construction, correct part number and insert markings and overall quality of workmanship. Poor molding fabrication, loose materials, damaged or improperly manufactured contacts, galling of metal parts, nicks and burrs of metal parts, torn seals or cracked plastic were considered adequate basis for rejection.

C. Requirement: The connectors shall be correctly constructed, marked, and shall show good quality and workmanship.

ELECTRICAL

3.3.2. Insulation Resistance

A. Procedure: MIL-STD-1344, Method 3003.1

B. Method: Using a 500 VDC megohmmeter check each contact to all other contacts and the shell electrically connected together.

C. Requirement: 1000 MΩ minimum at 25°C.

3.3.3. Dielectric Withstanding Voltage

A. Procedure: MIL-STD-1344, Method 3001.1

B. Method: Check each contact to all other contacts and the shell electrically connected together for breakdown / flashover when subjected to a 1500 VAC test potential for a period of 1 minute.

C. Requirement: No evidence of breakdown or flashover or current leakage in excess of 2.0 milliamperes.

3.3.4. Contact Resistance

A. Procedure: MIL-STD-1344, Method 3004.1

B. Method: 15A for 16AWG

C. Requirement: Maximum voltage drop across a 6-inch wire/contact assembly shall be 89mV max for 16AWG.

MECHANICAL

3.3.5. Maintenance Aging

A. Procedure: MIL-STD-1344, Method 2002.1

B. Method: Subject 10% of the cavities to 10 cycles of inserting and removing its respective contact. Insert by hand, remove using removal tool.

C. Requirement: There shall be no visible change or damage to the contact cavities.

3.3.6. Contact Retention

A. Procedure: MIL-STD-1344, Method 2007.1

B. Method: Subject each wired contact to an applied load of 25 lbf for a period of 15 seconds in a direction tending to push the contact out of the rear of the connector.

C. Requirement: The contact shall remain in place

3.3.7. Durability

A. Procedure: MIL-STD-1344, Method 2016

B. Method: The connector shall be mated and unmated for a total of 100 complete cycles at room temperature.

C. Requirement: No evidence of damage to the contacts, contact plating, connector housing or seals which may be detrimental to reliable connector performance.

3.3.8. Vibration

A. Procedure: MIL-STD-1344, Method 2005.1

B. Method:

- Sine Sweep: 10 to 2000 Hz
- Sweep Cycle: 20 minutes.
- Initial Displacement: .07-inch DA
- Maximum Acceleration: 20G
- Test Duration: 12 hours
- Time Per Axis X, Y, Z: 4 hours
- Test Current first 3 hours each axis: 16 AWG: 13A

C. Requirement: No discontinuity in excess of 1.0 µs at 100 mA during the last hour of each axis. Shall meet visual requirements, show no physical damage, and meet requirements of additional tests as needed.

3.3.9. Shock

A. Procedure: MIL-STD-1344, Method 2004.1

B. Method: 10 cycles of ½ sine pluses, 50g±15%, 11±1 ms duration X and Z axis are to be tested.

C. Requirement: No discontinuity in excess of 1.0 µs at 100 mA during the last hour of each axis. Shall meet visual requirements, show no physical damage, and meet requirements of additional tests as needed.

ENVIRONMENTAL

3.3.10. Temperature Life

A. Procedure: MIL-STD-1344, Method 1005.1

B. Method: The wired mated connectors shall be subjected to 100 hours at 125°C. Insulation resistance shall be measured immediately after removing sample from the oven.

C. Requirement: There shall be no evidence of cracking, distortion or detrimental damage to the connector following the test. Meet 500 MΩ minimum.

3.3.11. Salt Spray

A. Procedure: MIL-STD-1344, Method 1001.1

B. Method: Connector shall be fully mated, then submerged in a fine mist of 5% by weight of salt solution for 96 hours.

C. Requirement: There should be no evidence of corrosion on the connector or terminals after the connector is removed from the test and cleaned with tap water.

3.3.12. Fluid Immersion

A. Procedure: MIL-STD-1344, Method 1016

B. Method: Subject each connector to one fluid only. The wired mated connectors shall be submerged in the fluids below at ambient temperature. Each connector shall be submerged for 5 minutes, then removed from the fluid to air dry for 24 hours. This cycle is to be completed a total of 5 cycles.

- Motor Oil 30 weight
- Brake Fluid (disc type 1)
- Gasoline
- Diesel Fuel #2
- Antifreeze Solution (Max Protection)
- Transmission Oil 90 weight

C. Requirement: There shall be no evidence of cracking, distortion or detrimental damage to the connector following the test.

3.3.13. Thermal Shock

A. Procedure: MIL-STD-1344, Method 1003.1

B. Method: Cycle mated connectors for 30 minutes at –55°C followed by 30 minutes at +125°C with 2-minute max transfer time. Repeat for 5 cycles. Insulation resistance is measured during the last heat cycle.

C. Requirement: There shall be no evidence of cracking, distortion or detrimental damage to the connector following the test. Meet 500 MΩ minimum.

3.3.14. Moisture

A. Procedure: Not Applicable

B. Method: The wired mated connectors shall be immersed in 3 feet of water for 24 hours.

C. Requirement: Connectors shall show no sign of moisture inside the cavities or connector interior.

3.4 Product Qualification and Requalification Test Sequence (Original Version)

TEST or EXAMINATION	TEST GROUP (a)					
	1	2	3	4	5	6
	TEST SEQUENCE (b)					
Examination of Product	1	1	1	1	1	1
Insulation Resistance	2	2	2	2	2	2
Dielectric Withstanding Voltage	3	3	3	3	3	3
Maintenance Aging	4		4			
Temperature Life		4		4		4
Contact Retention	5		5			
Durability		5	6		4	
Salt Spray		6	7			5
Moisture	6			5	5	
Fluid Immersion	7	7	8	6	6	6
Thermal Shock	8	8				7
Vibration	9		9	7		
Shock	10		10	8		
Contact Resistance	11	9	11	9	7	8
Final Examination	12	10	12	10	8	9

NOTE

a) Specimens shall be prepared in accordance with applicable Application Specification and shall be selected at random from current production.

b) Groups 1-6. Specimens shall consist of 3-position connectors with DEUTSCH solid terminal system size 16 nickel plated pin and socket contacts with 16 AWG GXL wire.

c) Numbers indicate the sequence in which tests are performed.

3.5 Appendix A. Additional Test Requirements (Original Version)

ELECTRICAL

3.5.1. Low Level Contact Resistance

A. Procedure: EIA-364-23

B. Method: Test with applied voltage not to exceed 20 mV open circuit and the test current shall be limited to 100 mA. The resistance of an equal length of wire (reference wire) shall be subtracted from the same reel as used for the connector wiring.

C. Requirement:

- 16 AWG [1.00 mm²]: 6.0 mΩ max
- 18 AWG [0.80 mm²]: 7.5 mΩ max
- 20 AWG [0.50 mm²]: 11.0 mΩ max

3.5.2. Contact Resistance

A. Procedure: EIA-364-6

B. Method: Using test currents as defined. The resistance of an equal length wire (reference wire) shall be subtracted from the actual readings to determine the added resistance of the terminal. The reference wire shall be from the same reel as used for the connector wiring.

Test Currents:

- 14 AWG [2.00 mm²]: 13A
- 16 AWG [1.00 mm²]: 13A
- 18 AWG [0.80 mm²]: 10A
- 20 AWG [0.50 mm²]: 7.5A

C. Requirement: 60mV (Solids) and 100mV (S&F) voltage drop

MECHANICAL

3.5.3. Vibration

A. Procedure: Not Applicable

B. Method:

- Sine Sweep: 10 to 2000 Hz
- Initial Displacement: 1.78 mm DA
- Maximum Acceleration: 20G
- Test Duration: 12 hours
- Time Per Axis X, Y, Z: 4 hours
- Test Current first 3 hours each axis:
  - 14-16 AWG [2.00-1.00 mm²]: 10A
  - 18 AWG [0.80 mm²]: 8A
  - 20 AWG [0.50 mm²]: 5A

C. Requirement: There shall be no discontinuity in excess of one (1) µs at 20mV and 100 mA during the last hour of each axis. Shall meet visual requirements, show no physical damage, and meet requirements of additional tests as needed.

3.5.4. Impact

A. Procedure: Not Applicable

B. Method: Wired mated connector shall be dropped from a height of 1.2m on a cement floor. This action is to be completed a total of five (5) times.

C. Requirement: There shall be no evidence of cracking, distortion or detrimental damage to the connector following the test. Small chips and dents that do not adversely affect the connector shall be disregarded.

3.5.5. Contact Retention

A. Procedure: Not Applicable

B. Method: Apply a pulling force to the wire bundles that exit the rear of the connector for a period of one (1) minute. The amount of load is to be 111N, times the number of cavities, up to a maximum of 445N.

C. Requirement: There shall be no evidence of cracking, distortion or detrimental damage to the connector following the test.

ENVIRONMENTAL

3.5.6. Temperature Life

A. Procedure: MIL-STD-202, Method 108, Test Condition D

B. Method: The wired mated connectors shall be subjected to 1000 hours at +125 ±3°C without current flowing.

C. Requirement: There shall be no evidence of cracking, distortion or detrimental damage to the connector following the test.

3.5.7. Fluid Immersion

A. Procedure: Not Applicable

B. Method: Subject each sample group to one fluid only. The wired mated connectors shall be submerged in the fluids below at the temperatures listed. Each connector shall be submerged for five (5) minutes, then removed from the fluid to air dry for 24 hours. This cycle is to be completed a total of five (5) cycles.

- Motor Oil 30 weight: +60±3°C
- Brake Fluid (disc type 1): +60±3°C
- Gasoline: +25±3°C
- Diesel Fuel #2: +60±3°C
- 50/50 Antifreeze/Water Mixture: +60±3°C
- Transmission Oil 90 weight: +60±3°C

C. Requirement: There shall be no evidence of cracking, distortion or detrimental damage to the connector following the test.

3.5.8. Thermal Cycle

A. Procedure: Not Applicable

B. Method: Cycle mated connectors from –55 ± 3°C to +125 ±3°C at a rate of 3°C ± 1°C per minute. Connectors to remain at each temperature extreme for one (1) hour minimum. Mated connectors are to be cycled a total of 20 complete cycles.

C. Requirement: There shall be no evidence of cracking, distortion or detrimental damage to the connector following the test.

3.5.9. Water Immersion

A. Procedure: Not Applicable

B. Method: The wired mated connectors shall be placed in an oven at +125 ±3°C for two (2) hours minimum then immediately be placed in water with a 5% salt by weight content and 0.1 g/L wetting solution to a depth of 914mm for four (4) hours minimum. The free ends of the mated connectors must remain out of the water to prevent wicking of the water through the open wires. Water temperature to be +23 ±3°C.

C. Requirement: Test samples must meet Insulation Resistance.

3.6 Appendix B. Test Requirements and Procedures Summary (Snap Cap Version)

VISUAL

3.6.1. Examination of Product

A. Procedure: SAE J2030_201506

B. Method: Conduct a visual examination for identification of product, torn seals, cracked plastic, etc.

C. Requirement: The connectors shall be correctly constructed, marked, and show good quality and workmanship. Connector after conditioning shall not show signs of damage or any detectable loss of function.

ELECTRICAL

3.6.2. Insulation Resistance

A. Procedure: SAE J2030_201506

B. Method: Using a 1000 VDC megohmmeter check the insulation resistance between each contact to each adjacent contact.

C. Requirement: > 20 MΩ

3.6.3. Connection Resistance

A. Procedure: SAE J2030_201506

B. Method: The resistance of a cable equal in length to that of the two measuring points shall be subtracted from the measured values. The cable used shall be from the same batch of cable as used for the connector wiring.

C. Requirement: Measurements shall be taken after thermal equilibrium at 15A. Voltage drops shall not exceed 100mV.

MECHANICAL

3.6.4. Mating Force

A. Procedure: SAE J2030_201506

B. Method: The maximum required force to mate the plug and receptacle pair and engage the latching mechanism.

C. Requirement: F ≤ 135N

3.6.5. Un-Mating Force

A. Procedure: SAE J2030_201506

B. Method: The maximum force required to separate the plug and receptacle with the latch mechanism fully disengaged.

C. Requirement: F ≤ 135N

3.6.6. Maintenance Aging

A. Procedure: SAE J2030_201506

B. Method: Subject at least 10% of the cavities to 10 cycles of inserting and removing its respective contact. The 10th cycle shall include any disassembly required to remove the contacts. The connectors shall be mated and unmated during each cycle.

C. Requirement: There shall be no visible change or damage to the contact cavity

3.6.7. Durability

A. Procedure: SAE J2030_201506

B. Method: The connector shall be mated and unmated for a total of 50 complete cycles.

C. Requirement: No evidence of damage to the contacts, contact plating, connector housing or seals which may be detrimental to reliable connector performance.

3.6.8. Terminal Retention in Connector

A. Procedure: SAE J2030_201506

B. Method: The contacts shall be subjected to a direct pull of 110N for 1 minute. The pull is to be exerted on the conductor by means of a tension-testing machine or equivalent to prevent sudden or jerking force during test. The terminal shall maintain its original position in the connector throughout the test. The secondary-locking device is needed.

C. Requirement: The contact shall remain in place.

3.6.9. Connector Retention

A. Procedure: SAE J2030_201506

B. Method: Apply a pulling force to the wire bundle of the mated connector. The load shall be applied for 30 seconds.

C. Requirement:

a. 2pin: 222N

b. 3pin: 300N

3.6.10. Vibration

A. Procedure: SAE J2030_201506

B. Method:

- Sine Sweep: 10 to 2000 Hz
- Max Acceleration: 20G
- Time Per Axis: 8 hours
- Test Duration: 24 hours
- Test Current: 13A first 3 hours each axis

C. Requirement: No defects, cracks, and no discontinuity greater than 10Ω >1 µs during the last hour of each axis

3.6.11. Drop

A. Procedure: SAE J2030_201506

B. Method: The free end of the cord or cable, which shall be 1500 mm, shall be fixed to a wall at a height of 750 mm above a concrete floor. The specimen shall be held so that the cord or cable is horizontal and allowed to fall to a concrete floor eight times. Rotate the specimens through approximately 45° at it fixing each time.

C. Requirement: There shall be no evidence of cracking, distortion or detrimental damage to the connector following the test. Small chips and dents that do not adversely affect the connector shall be disregarded.

ENVIRONMENTAL

3.6.12. Temperature Life

A. Procedure: SAE J2030_201506

B. Method: +125ºC for 1000 hours

C. Requirement: No evidence of cracking, chipping, or other damage detrimental to the normal operation of the connector.

3.6.13. Thermal Shock

A. Procedure: SAE J2030_201506

B. Method: Test samples were subjected to 10 cycles. One cycle consisted of a soak time at -55°C, then transitioned within 2 minutes to an ambient temperature of +125°C with a soak time, and then transition back to -55°C within 2 minutes. The soak times were established as the time necessary to bring the internal connector temperature on test to within 5°C of each of the ambient temperatures.

C. Requirement: No evidence of cracking, chipping, or other damage detrimental to the normal operation of the connector.

3.6.14. Water Immersion

A. Procedure: SAE J2030_201506

B. Method: The wired mated connectors shall be placed in an oven at +125°C for 1 hour then immediately be placed in water with a 5% salt in weight content and 0.1 g/L wetting agent, to a depth of 1 meter for 4 hours. Water temperature is to be 23°C. The ends of the cable are to be sealed during this test.

C. Requirement: Must meet Insulation Resistance and visually inspect for moisture inside the connector.

3.6.15. Fluid Immersion

A. Procedure: SAE J2030_201506

B. Method: Subject each connector to one fluid only in cabled and mated condition. Submerge the mated connector in fluid per table below at the specified temperature ±3 °C for 5 minutes, then remove and allow to air dry for 24 h. This completes one cycle. Each connector is to be subjected to a total of five cycles. Inspect for damage after the test.

Fluid	Concentration	Temperature	Classification
Motor oil 30 wt	100%	85 °C	ASTM D 471, IRM-902
Brake fluid (disc type 1)	100%	85 °C	SAE RM66-04
Diesel fuel #2	90/10%	60 °C	IRM-903/T-Xylene
50/50 antifreeze mixture	50/50	85 °C	ASTM Service Fluid 104
Roundup Original	7.5% (48 oz to 592 oz)	23 °C	EPA Reg. No. 524-445
Gear oil 90 wt	100%	85 °C	ASTM STP 512, API GL-5
Aqueous Urea	32.5%	23 °C	AUS 32 ISO 22241

C. Requirement: No evidence of cracking, distortion, or detrimental damage to the connector.

3.7 Product Qualification and Requalification Test Sequence (Snap Cap Version w/ and w/o snap cap)

TEST OR EXAMINATION	TEST GROUP (a)			
	1	2	3	4
	TEST SEQUENCE (b)			
Examination of Product	1,12	1,11	1,8	1,7
Insulation Resistance	2,10	2		2,4,6
Connection Resistance	3,6,8	3,10		
Mating Forces		5	3	
Un-mating Forces		6	4	
Maintenance Aging			2	
Durability		7	5	
Terminal Retention in Connector			6	
Connector Retention			7	
Thermal Shock	4	8		3
Temperature Life		4		
Vibration	5			
Drop	7	9		
Water Immersion	9			5
Fluid Immersion	11			

NOTE

a) *Specimens shall be prepared in accordance with applicable Application Specification and shall be selected at random from current production.*

b) *Groups 1-3. Specimens shall consist of 2 and 3-position snap cap connectors with DEUTSCH stamped and formed terminal system size 16 nickel plated pin and socket contacts with 16 GXL wire.*

c) *Group 4 Specimens shall consist of 2-position snap cap connectors without snap cap with DEUTSCH stamped and formed terminal system size 16 nickel plated pin and socket contacts with 16 AWG GXL wire.*

d) *Numbers indicate the sequence in which tests are performed.*

3.8 Appendix C. Test Procedure Comparison Chart

Test	MIL-STD-1344 Method	EIA-364 Dash No.	Similar to SAE J2030 Paragraph	Similar to ISO 8092-2 Paragraph
Examination of product	-	18	6.1	4.2
Insulation Resistance	3003.1	21	6.3	4.12
Dielectric Withstanding Voltage	3001.1	20	-	4.13
Low Level Contact Resistance	3002.1	23	6.2	4.8
Contact Resistance	3004.1	06	6.4	4.8
Maintenance Aging	2002.1	24	6.6	-
Contact Retention	2007.1	29	6.18	4.7
Durability	2016	09	6.11	4.3
Vibration	2005.1	28	6.15	-
Shock	2004.1	27	6.16	-
Impact	-	42	6.17	4.20
Connector Retention	-	-	6.20	-
Temperature Life	1005.1	17	6.7	4.18
Salt Spray	1001.1	26	6.12	4.16
Fluid Immersion	1016	10	6.14	4.23
Thermal Cycle	-	-	-	-
Thermal Shock	1003.1	32	6.13	4.22
Moisture	-	-	-	-
Water Immersion	-	-	6.19	4.9

4. REVISION HISTORY

Rev Ltr	Brief Description of Change	Date	Dwn	Apvd
A	Initial Release	02-Mar-2015	RM	DM
B	Fixed Section 3.3	19-Mar-2015	RM	DM
B1	Removed INLINE from part number table	09-Jun-2015	RM	DM
B2	Add new part numbers	24-Jul-2015	RM	DM
B3	Fix typo	30-Jul-2015	RM	DM
B4	Add dust cap part number table on sheet 1 for the plugs	28-Jun-2017	JA	DM
B5	Add Production Drawing table for DTF13 and 15 on sheet 2.	11-May-2018	JA	DM
C	Revised and rewritten Added snap cap version	17-Apr-2020	DM	DM
D	Page 1. Corrected hyperlinks Page 1, Sec 2.1. Added 114-151001, 114-151004, 502-151009 Page 3, Sec 3.2. Added (Inline) to Ingress Protection, Added Ingress Protection (Header) Page 3, Sec 3.2. Added (Inline) to Flammability, Added Flammability (Header)	11-May-2020	DM	DM
D1	Page 2. Add new part number to part number table. Page 3. Fix Typo Page 4. Fix Typo Page 13. Sec 3.7. Revised per updates made in document 501-151088	10MAY2023	AP	IG