

1. Scope

- 1.1. This specification is a technical document providing generic drawing information. Standard terms, legal and export compliance requirements may also apply but are not within the scope of this document.
- 1.2. It only applies to drawings that reference it on the drawing frame or in the drawing notes.
- 1.3. **If there is a contradiction between the requirements of this specification and those on the drawing, the drawing requirements take precedence.**

2. General

- 2.1. It is the responsibility of the supplier to ensure they are in possession of the correct drawing and that its revision matches that of the purchase order.
- 2.2. All components are ROHS compliant unless otherwise stated.

3. Drawings

- 3.1. Geometric Dimensioning and Tolerancing will comply with: ASME Y14.5M-Current.
 - 3.1.1. All dimensions affected by a geometric tolerance shall be considered basic without symbology.
- 3.2. Drawing Symbols.
 - 3.2.1. "Critical To Function" specifications are denoted by encapsulation within an oval frame



- 3.2.2. Specifications which are associated to a note have a triangle symbol next to the specification, with the number of the note inside.



- 3.2.3. All changes for the current revision on the drawing are denoted by a hexagon, with the current revision inside.



- 3.3. Dimensional limits apply prior to plating, unless otherwise specified.

4. Workmanship

- 4.1. Unless otherwise specified, all parts are to be free of burrs visible at 10X magnification (extending beyond the normal plane of adjacent surfaces) and edges to be broken R.003" max or .003" x 45° max – edges are not to cut hands, wires or mating parts.
- 4.2. All parts are to be free of breakouts, cracks and scratches.
 - 4.2.1. All parts are to be free of contaminants such as machining fluids, material chips, oils, etc, unless otherwise specified. In the instance of holes, they especially need to be completely free of any type of foreign material or debris.
- 4.3. All parts will have a surface finish of Ra 63 unless otherwise specified.
- 4.4. Unless otherwise specified all threads are to meet the following classifications:
 - 4.4.1. Metric Screw Threads (Coarse Pitch - M Profile)
 - 4.4.1.1. External Threads - 6g Classification
 - 4.4.1.2. Internal Threads - 6H Classification
 - 4.4.2. Unified Screw Threads (UNC & UNF)

SCDSD-SIKC Revision C.2

(Local Drawing Specification Document)

- 4.4.2.1. External Threads – 2A Classification
- 4.4.2.2. Internal Threads – 2B Classification

5. Heat Treatment

- 5.1. Heat treatment should be in accordance to the notes on the drawing.

6. Materials

- 6.1. Materials to be specified on the drawing. Any deviation from this material or use of alternative materials is strictly prohibited unless authorized by an approved and signed deviation form.
- 6.2. Molded Parts
 - 6.2.1. No regrind allowed unless otherwise specified.
 - 6.2.2. Outside corners and sharp edges to be R.003 max unless otherwise specified.
 - 6.2.3. Part shall be clean and free of manufacturing contaminates cracks and voids.
 - 6.2.4. Surface Finish: All surfaces to be free of tool marks unless otherwise specified.
 - 6.2.5. Location of ejector pins, parting line, gate, cavity identification, flash and draft shall be at the supplier's discretion with prior approval of design engineering. The supplier shall prepare a drawing or sketch defining these features for approval prior to any tooling production.
 - 6.2.6. Ejector pin marks shall be flush to .010 below flush.
 - 6.2.7. Gate vestige shall be flush to surface by ± 0.005 . Gate recess must be approved by SC design engineering.
 - 6.2.8. Draft allowed only within tolerance limit unless otherwise specified.
 - 6.2.9. Multi cavity tools: part shall be identified by a cavity number preceded with the letters "SC" (ex. SC2)
 - 6.2.10. Smiths Connectors logo and all text to be molded at approximate size and location shown as indicated by 3D solid model. Feature shall be complete and legible under conditions of normal vision in daylight or equivalent illumination. Deviation from fonts as modeled and paint fill are not permitted.
 - 6.2.11. Flash will not be measured as a part of a feature. Flash is limited to .004" max unless otherwise specified.
 - 6.2.12. Vendor to follow the material manufacturer's processing recommendations unless otherwise specified.
 - 6.2.13. Use of mold release agents, silicone lubricants and additives are not permitted unless otherwise approved by SC design engineering.

7. Plating

- 7.1. All plating is to conform with specification: 300970 document
 - 7.1.1. Plating specification format to be 300970-XX-YY, where first two "XX"s represent the sheet number of the 300970 document and the last two "YY"s represent the two digit plating number on the referenced sheet.
- 7.2. All plating, anodizing, passivation, etc., must be free of voids, be continuous over all surfaces, and be free from any marks. Threads and holes must be plated or passivated.
 - 7.2.1. When anodizing components, threaded holes are to be plugged and may have screws run into them for fixturing.
 - 7.2.2. When "passivate" is specified on a stainless steel part drawing, use ASTM A967 (at its current revision level) as the requirement, unless otherwise specified.

SCDSD-SIKC Revision C.2
(Local Drawing Specification Document)

8. Part Marking

- 8.1. Marking of any form shall be appropriate with approximate height, location, and depth as shown on drawing.
- 8.2. Part Marking will be in accordance with Connectors product marking guidelines 2014 10 30 14_FINAL and Product Marking work instruction WI-751-04.
- 8.3. Laser Etching shall use Arial regular font size 4p, 6p or 8p.
- 8.4. Machined part marking shall not be filled with paint unless otherwise specified.

9. Packaging

- 9.1. All parts are to be packaged appropriately to avoid damage in transit or when placing in or taking out of packaging.
- 9.2. All parts manufactured from the following materials are to be packaged in a vacuum-sealed plastic bag and sufficiently supported to maintain the parts structure with a label attached to the bag:
 - 9.2.1. PolyAmide-Imide (PAI), (i.e. Torlon).

10. Quality Acceptance

- 10.1. All work must comply with Smiths Connectors quality standards and requirements

11. Questions

- 11.1. All Questions should be made to:
Smiths Connectors Kansas City, Sourcing Contact from P.O.
5101 Richland Ave,
Kansas City,
Kansas,
66106,
USA
Telephone number 913-342-4355.

SCDSD-SIKC Revision C.2
(Local Drawing Specification Document)

12. History

Version Number	Modification	Modified by	Date
A.2	Released on ECRN_34196	Don Marx	2/17/16
B.3	UPDATE 3.2.1, 3.2.2 & 3.2.3 on ECRN_34693	Don Marx	6/6/16
C.2	UPDATE 4.1 & 6.1 on ECRN_34756	Don Marx	6/10/16