

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.

3. Drawings

- 3.1. Drawings are generally in accordance with ISO-2768-f

DIMENSION [mm]	from 0 below 0.5	from 0.5 to 3	above 3 to 6	above 6 to 30	above 30 to 120	above 120 to 400	above 400 to 1000	above 1000 to 2000
	t.b.d.	±0.05	±0.05	±0.1	±0.15	±0.2	±0.3	±0.5

- 3.2. Geometric tolerances

3.2.1. Concentricity on turned parts to be  $\phi 0.03$

3.2.2. Concentricity on milled or moulded diameters on the same axis to be  $\phi 0.05$

3.2.3. All dimensions shown across a centerline shall be centralized within one half of their tolerance.

3.2.4. Hole pattern positional tolerance to be  $\phi 0.05$

3.2.5. Flatness  0.1 up to 100mm and 0.5% for lengths greater than 100mm

3.2.6. Straightness  0.1 up to 100mm and 0.5% for lengths greater than 100mm

3.2.7. Features drawn perpendicular to be  $\phi 0.1$

- 3.3. Drawing symbols.

3.3.1. "Critical to function" specifications are denoted by encapsulation within an oval frame



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



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



- 3.4. Dimensional limits apply prior to plating, where applicable, unless otherwise specified

4. Workmanship

- 4.1. All parts are to be free of burrs, sharp edges and flash.
- 4.2. Maximum blend or chamfer 0.10mm.
- 4.3. All parts are to be free of breakouts, cracks and surface scratches.
- 4.4. All parts are to be free of contaminants such as machining fluids, material chips, oils, etc. In the instance of holes, they especially need to be completely free of any type of foreign material or debris.
- 4.5. Unless otherwise stated all parts will have a surface finish of 1.6 Ra.
- 4.6. Threads:
 - 4.6.1. Metric Screw Threads (Coarse Pitch - M Profile)
 - 4.6.1.1. External Threads - 6g Classification (Unless otherwise stated)
 - 4.6.1.2. Internal Threads - 6H Classification (Unless otherwise stated)
 - 4.6.2. Unified screw threads (UNC&UNF)
 - 4.6.2.1. External threads –2A (Unless otherwise stated)
 - 4.6.2.2. Internal threads – 2B (Unless otherwise stated)

5. Heat Treatment

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

6. Materials

- 6.1. Component material is specified on the drawing and any deviation from this material or use of alternative materials is prohibited without the written consent of Smiths Connectors.
- 6.2. Moulded Parts
 - 6.2.1. No recycled or reground materials allowed.
 - 6.2.2. Parts shall be free of all sprues and runners.
 - 6.2.3. Parts shall be free of porosity.
 - 6.2.4. Parts shall be clean and free of all burrs, fines, and sharp edges.
 - 6.2.5. Location of ejector pins, parting line, gate, cavity identification, flash location 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 locations and submit to Smiths Connectors design engineering for approval upon quotation.
 - 6.2.6. Ejector pin marks and gate vestige shall be flush to 0.2mm below surface unless otherwise specified.
 - 6.2.7. Draft angle to be controlled within the designed feature tolerance.
 - 6.2.8. Multi cavity tools: part shall be identified by a cavity number
 - 6.2.9. Smiths Connectors logo to be moulded per solid model.
 - 6.2.10. Parts to be free of flash.

7. Plating

- 7.1. Plating references refer to document: plating specification SM1003 last issue.

- 7.2. All plating, anodising, passivation etc must be free of voids and be continuous over all surfaces free from any marks. Threads and holes must be plated, anodised, passivated etc unless otherwise stated.

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

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.

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
Via P.D. da Bissone 7A,
16156 Genova
Italy
Telephone: +39 01060361

12. History

Version Number	Modification	Modified by	Date
1.0	First release	SHYIGCESARI	26/10/2015
1.A	Drawing symbol description modified – Modified 6.2.1	SHYIGCESARI	20/06/2016