

EST Group

POP-A-PLUG[®] QADOC5 CERTIFICATION

Thursday, March 26, 2015

To whom it may concern:

For the Pop-A-Plug[®] System (P2 and CPI Plugs) EST Group offers an optional QADOC5 certification package.

All EST Group products are manufactured under the ISO-9001 Quality Management System. However the EST Group QADOC5 certification

package provides additional valuable information specific to each Pop-A-Plug manufactured. This can be summarized as follows:

The **QADOC5** certification package is in accordance with **EN 10204 3.1** for:

- The *materials of construction* used for the Pop-A-Plug Pin and Ring. The certification provides the heat and lot numbers for the raw materials used for manufacturing. The certification is traceable to the Pop-A-Plugs by means of:
 - 1.1. The S.O.# on the box label if manufactured prior to March 1, 2015.
 - 1.2. The Lot # on the box label and marked on each pin if manufactured since March 1, 2015 (see fig. 1.1).
- 2. The *performance testing* of the Pop-A-Plugs as supplied is conducted:
 - 2.1. In both the *smallest* and *largest* inside diameter as applicable for the Pop-A-Plug size in question.
 - 2.2. Testing is performed based on the "*worst case scenario*" of the tube side pressure being greater as the shell side pressure (in the direction of the pin's small diameter), effectively trying to push the pin out of the ring. This confirms the Pop-A-Plug is "*pressure direction independent*" (see fig.1.2).
 - 2.3. A *minimum safety ratio of 1.5* in place where the minimum acceptable performance test results must be at least 1.5 x the specified maximum pressure as applicable for the Pop-A-Plug in question.
- **Example**: A Pop-A-Plug rated for 6000 PsiG (414 BarG) must pass a minimum performance test value of 9000 PsiG (621 BarG).

Submitted by,

Florian Kuchera

Florian Kuchera Quality Manager





North America / Central & South America EST Group Corporate Office Industrial Division 2701 Township Line Road Hatfield PA 19440-1770 USA (P)+1.215.721.1100 +1.800.355-7044 (F)+1.215.721.1101 est-info@curtisswright.com

Europe / Middle East / Africa Est Group B.V. Hoorn 312a 2404 HL Alphen aan den Rijn The Netherlands (P)+31.172.418841 (F)+31.172.418849 est-emea@curtisswright.com Asia Pacific EST Group Asia 35 Tannery Road #11-10 Tannery Block Ruby Industrial Complex Singapore 347740 (P)+65.6745.8560 (F)+65.6742.8700 est-asia@curtisswright.com

China EST Group China Rm 3709, China World Office 1 No. 1 Jian Guo Men Wai Avenue Beijing, 100004 (P)+86.10.65058966 (F)+86.10.65050966 est-china@curtisswright.com

Part Number Description Part Number Description Part Number Proc. A Page A Fung D C Pril Nume KA. 10 Tennomichan 400000 Los Numbers 2017/17 Tennin 0 429.21 C 310.2341 2012 2012 2012 2012 2012 2012 2012 20
EST BY P/D
Marukarum EST Group Hatfield PA UBA Bargelie: EST Group 1 W 2004 FA John and the FB John State The Naterlands Description of Ecogenetic to drive (Including specific Mertification): Park Nation Description Physiology 2 April (Children A), 131 Baretans Stylin (Thermit Baretans Stylin (Thermit Bare
Staplin: EST Group B V Text Text Text Text Text Text Text Text
Human State Addet 14, Applies and lote Right Description of Equipment & Binvolo (Including specific Mantflattler): Description Description of Equipment & Binvolo (Including specific Mantflattler): Maximum Addet State Sta
P2-7005 Pop-A-Phug® CPUPerma K8, 316 500°F 4500Pail P2-7005 Pop-A-Phug® CPUPerma K8, 316 500°F 4500Pail Stakless. 300°(17:78mm) 452.2°C 310.28ar Lot Number Quality Inspection Performance Pin Heat Ring Heat
Pop-A-PlugB CPUPerma Kit, 310 Temperature P2-7005 Pop-A-PlugB CPUPerma Kit, 310 600°F 4500Pair Stainless. 700°(17:78mm) 452.2°C 310.28ar Lot Number Quality Inspection Performance Pin Heat Ring Heat
P2-7005 Pop-A-PhogR CP/I/Rema K8, 319 000°F 4500°H Statiless-700°(17.78mm) 452.2°C 310.28ar Lot Number Quality Inspection Performance Pin Heat Ring Her
Lot Number Quality Inspection Performance Pin Heat Ring Heat
2175814 Passed Passed D4LS 743790
These products were menufactured, surgical, testid and inspected in accordance with ETI testing of the surgical sector of the surgical sector of the surgical sector of the surgical requirements including all codes, standards, test requirements and Daally Assurence require include theses. Scott Energic 12–01–14
Manager, Quality Assurance Date (Month/Day/Y
SAMPLE COPY



Fig. 1.1 Shows marking on pin since March 1, 2015

