

DAV-H-99  
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## H-99 Series

### SCREWED BONNET NEEDLE VALVES

#### **SUMMARY**

The H-99 Series offers a general-service valve features rugged design and structure. The valve is suitable for a wide range of applications thanks to material composition of stainless-steel.

The valve is also suitable for operation at high pressures (10,000 psig max) and high temperatures.

This valve is typically used in a severe environment, high pressure sampling systems, high pressure shut-down systems and test benches.

#### **Features & Benefits**

- ✓ Blowout-Proof Stem
  - ✓ MAWP up to 10,000 psi (690 bar)
  - ✓ MAWT up to 648°C (1200°F)
  - ✓ Wide end connection size range: 1/4" to 1" or 6mm to 25mm
  - ✓ Flow Coefficient (CV) up to 1.5
  - ✓ Variety of stem types- V, R, NR, CB (ceramic ball tip)
- Packing bolt for easy panel mounting without packing disassembly



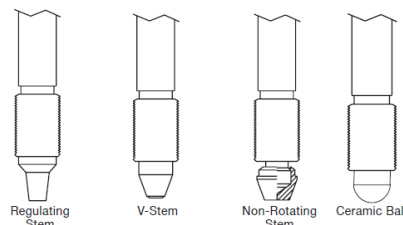
## Differentiation Advantage Value

#### **CERAMIC STEM BALL TIP (Al2O3)**

**D:** The H-99 stem has a tip option of ceramic stem ball tip.

**A:** Superior hardness prevents deformation of the sealing tip and wear, significantly increasing the lifetime of the product.

**V:** No stem to body galling, no valve costly replacement, saving troubleshooting, system malfunction, system down-time, which all concludes to lower total cost of ownership



#### **Stem Rolled Thread (SS316 construction)**

**D:** The H-99 stem thread is manufactured with thread rolling technology. Some other manufacturers produce the stem with cutting technology.

**A:** Better performance on valve stem throttling, in comparison with stem thread cutting technologies that will result in stem travel deterrence and galling.

**V:** Smooth, soft and reliable operation | No stem to body galling, no valve costly replacement, saving troubleshooting of system malfunction and system down-time.

### **Valve Panel Mounting Packing Nut**

**D:** Ham-Let H-99 series is designed with a Male packing nut.

Other manufacturers' products are designed with a Female packing nut.

**A:** Ease of installation when paneling the H-99, since there is no need to remove the packing nut. Competitive products require to remove the packing nut in order to enable paneling of the valve.

**V:** 1. **Safety:** No risk of pressure burst or stem blow-out due to packing area disassembly. Competitive products will allow valve paneling only after female packing nut disassembly which will result in a safety risk.

2. **Product warrantee:** Ham-Let's warrantee is valid for H-99 after panel mounting. Other manufacturers' products must be dismantled (by design definition) to allow paneling, hence original product warrantee is no longer valid.

3. **Reliability: Original** factory tested performance - No effect on packing sealing integrity.

4. **Installation time:** Faster and simple installation on a panel or a bracket. With other products you must remove the packing area, reassemble it back after paneling to precise tightening torque and then perform acceptance pressure testing.

5. **Longer product life time and cost-effective service:** removing the valve's primer sealing mechanism will randomly affect the sealing material compression and expansion. This will result in random packing leak integrity and suggest on life time. In addition, wrong installation of packing nut may result in stem misalignment that may lead to seat leakage and stem thread damage. The H-99 is eliminating it by enabling an easy and safe paneling, keeping original valve performance.

### **Stem hardening (SS316 construction)**

**D:** The H-99 stem is hardening with special diffusion surface treatment (not coating). Other manufacturers are hardening their stem with Chromium coating. Some manufacturers are not hardening their stem at all.

**A:** Chromium (or other) coating will eventually peel-off and will generate particles, these particles will flow at high velocity in the system, will impact and damage instrumentation devices, especially measurement devices.

Without stem hardening the stem-tip and stem thread will result in galling, thus reducing the product life time dramatically. The H-99 series is the superior choice thanks to its unique hardened stem design, made by a special diffusion hardening, improving the corrosion resistance and eliminating galling and particles generation.

**V:** Safe operation without galling | corrosion resistance | longer service | resistance to abrasive media flow | saving maintenance costs and system down-time | Longer life time and life cycle | Improved seat leak integrity | No particles (from coating) damaging the system instrumentation and measurement devices | Low total cost of ownership