



H-300U series

Integral bonnet needle valve

SUMMARY

The H-300U series is an integral bonnet and integral end connections instrumentation needle valve, most common design on instrumentation panels, well known as a panel-mounted needle valve. Pressure rated to 5,000psig (345barg) with SS316 structure and up to 3,000psig (200barg) with Brass structure and available with varied connections sized from 1/8" to 3/4". Available with 4 types of stems for different applications, colored Nylon handles, St.St shaped handles. For more features and product information, please see latest H-300U product catalog. Other manufacturers offer this type of valve, having a typical valve silhouette however, some important DAV's are making the HAM-LET® H-300U Series the best product selection for customer highest value.

Advantage Difference Value

Ceramic Stem Ball Tip (Al2O3)

A: Better handle grip and more comfortable turn.

D: most of other manufacturers are offering a smooth round bar metal handle. Since the valve is installed on panels, it is preferred that the handle will be as small as possible to save space. HAM-LET® metal bar handle is compact and designed with a shaped profile.

V: Customers and users indicate that the Ham-Let shaped metal bar handle is more comfortable for operation even in small spaces. The handle turn is done easily with no need for additional extension tool assistance and feel safe to use.



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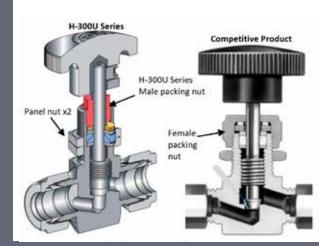
Valve Panel Mounting – Packing Nut

A: When paneling the H300U, there is no need to remove the packing nut. With competitive products, the packing nut must be removed to allow paneling the valve to a panel or a bracket.

D: HAM-LET® H-300U series is designed with a Male packing nut. Other manufacturers' products are designed with a Female packing nut.

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 Original manufacturer product warrantee is valid for H-300U 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-300U is eliminating it by enabling an easy and safe paneling, keeping original valve performance.

Warning!

When selecting individual components, the total design of the system must be taken into consideration to ensure that your HAM-LET® product will provide a safe and trouble-free operation. It is the responsibility of both the system designer and user to consider the inter-compatibility of the materials, components and systems, and the intended function of each component. Please ensure the component's appropriate ratings and their proper installation, operation and maintenance. Improper selection or use of products may cause property damage or personal injury, in regard of which the system designer and/or the user shall be solely liable and responsible. Follow all enclosed instructions and refer to the product catalog for detailed product specifications.

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Valve Panel Mounting - Panel Nut x2

A: The H-300U series enables valve height adjustments when paneling it. It enables compensation of tubing work imperfections, misalignment or height inaccuracies and will still allow an easy and proper paneling installation, without any over-loads on tubing.

D: The H-300U series is built with 2 panel nuts. Other manufacturers products are built with only 1 panel nut.

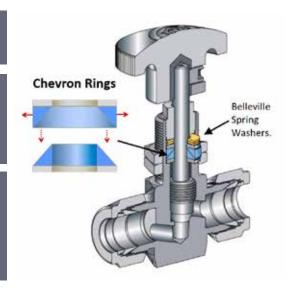
V: Less and easier troubleshooting on system construction I Faster installation even with tubing work errors I No/less tubing scrap on installation I faster system to end customer delivery.

Live Loaded Chevron Packing

A: HAM-LET® H-300U series introduces better leak integrity and lower operating torque.

D: HAM-LET® H-300U series is built with Live-Loaded Chevron packing, while some other manufacturers' products are built with a solid packing ring and no live-load springs washers.

V: Longer product life time, saving down-time I softer and more comfortable manual operation I Less frequent packing adjustment need (service), higher MTBF, saving down-time I Less service costs I Less media release to the environment reducing safety risk and financial implications.



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Stem hardening (SS316 construction)

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.

No stem hardening will result in stem-tip and stem thread galling and will reduce the product life time dramatically. The H-300U series is the best option due to its unique hardened stem design, done by a special diffusion hardening, improving the corrosion resistance and eliminating galling and particles generation.

D: The H-300U series is built with 2 panel nuts. Other manufacturers products are built with only 1 panel nut.

V: Safe operation no galling I corrosion resistance – longer service I resistance to abrasive media flow – saving replacement costs and system down-time I Longer life time and life cycle, saving replacements, service and down-time I Better seat leak integrity I No particles (from coating) damaging system instrumentation and measurement devices – less troubleshooting, less costly replacements, less costly down-time, preventing system maintenance and malfunctions.

Stem Rolled Thread (SS316 construction)

A: Better performance on valve stem throttling, while other manufacturers that cut their stem thread will face problems with stem travel deterrence and galling.

D: The H-300U stem thread is manufactured with thread rolling technology. Some other manufacturers produce the stem with cutting technology.

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

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Valve Panel Mounting - Panel Nut x2

A: Most of the other manufacturers are not certified for this this standard. Tested and validated product with clear fugitive emission classification for system risk mitigation. Some end users and EPC companies will not list a product on their specification without this standard.

D: The H-300U series is certified to ISO15848 Standard "Industrial Valves Measurement, test and qualification procedure for fugitive emissions".

V: Less service costs I Risk mitigation on safety and hazard media release I Less environmental penalties.



Brass Traceability1

A: Advanced materials management and containment ability.

D: The BRASS H-300U series provided material traceability for the valve body and Let-Lok® nuts and ferules. Other manufacturers to not offer traceability for brass versions.

V: Material identification I Material certificate transparency I containment and risk mitigation.



REACH Compliance

A: Other manufacturers are not complying to REACH.

D: TH-300U series is included in Ham-Let compliance with REACH.

V: Enables customer's progress on REACH compliance program, as the whole supply chain must comply to it.



1 Brass valves bodies and Let-Lok nuts and ferules stock still include also non-traceable material from previous stock and will gradually move to latest traceable material.

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