

ARD-ES-006

LH2 thermal-barrier pneumatic shut-off valve



A pneumatic LH2 shut-off globe assembly with an extended thermal-barrier bonnet. The cold pressure body and warm operating package are selected together for the required isolation sequence.

Series data guide enquiry and are not verified availability or approved operating limits for every size, pressure and execution. Confirm the selected LH2 configuration and pressure-temperature rating.

Product illustration. Appearance and dimensions depend on the selected configuration.

Selection	Specification
Size range	DN 15-250 / NPS 1/2-10 - series scope
Pressure ratings	ASME Class 150-300
Temperature	-253 to +80°C - LH2 selection
Connections	Butt weld (BW)
Medium	LH2 / liquid hydrogen

Define your requirement

Specify medium, design pressure and temperature, nominal size, connection standard, operation, quantity and required inspection documentation.

Project selection

Topic	Selection requirement
Process duty	Specify LH2 phase, design temperature, pressure, flow and differential pressure.
Selected assembly	Confirm insulation interface, materials, leakage acceptance and project test documentation.

View this product and request a quotation

This catalogue datasheet supports selection and enquiry. It is not a certified pressure-temperature curve, installation drawing or order-specific approval.

Technical specification

Parameter	Specification
Construction	Pneumatic shut-off globe; thermal barrier; extended bellows/packing seal
Operation	Pneumatic diaphragm
Insulation options	Vacuum jacket with multi-layer insulation or non-jacketed arrangement
Operating package	Fail position, air pressure, solenoid, feedback and trip interface to specify
End standard	Butt weld to ASME B16.25

End connections

Illustrated arrangement: an inline globe body with two butt-weld stubs, long cold bonnet, pneumatic diaphragm actuator and side-mounted instrument assembly

Connection detail	Selection requirement
Process ends	Butt weld to ASME B16.25; confirm the selected pipe schedule.
Insulation interface	Define the jacket, vacuum boundary and extension length separately from the process connection.

Materials

Component	Material / option
Body	304L / 316L stainless steel
Trim / seats	Selected cryogenic metal and polymer trim; confirm grades for LH2

Configuration features

- Pneumatic remote isolation
- Extended thermal-barrier bonnet
- Cold-box maintenance planning

Selection notes

Series data guide enquiry and are not verified availability or approved operating limits for every size, pressure and execution. Confirm the selected LH2 configuration and pressure-temperature rating.

The size range is the combined LH2 family scope; confirm the emergency shut-off model matrix. A specified fail action, closing time or SIL status requires qualification of the complete assembly.

Confirm pressure-temperature limits, material compatibility, oxygen cleaning, trapped-liquid relief and certification for the selected assembly. PN, ASME Class and relief set pressure are separate values.