

ARD-GL-016

LH2 cold-box bellows shut-off valve



A manual cold-box shut-off valve with a long cryogenic extension and metallic bellows sealing. Weld-in vacuum interfaces and optional thermal intercepts are selected to match the insulated pipework and heat-load budget.

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 2-250 - rating dependent
Pressure ratings	PN6 / PN25 / PN40 - size dependent
Temperature	LH2 selection at -253°C; upper limit +100°C
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	Bellows-sealed cold-box globe; angle arrangement illustrated
Operation	Manual handwheel
Size / rating selection	PN6: DN2-250; PN25: DN2-150; PN40: DN2-80
Body options	Angle or straight pattern; angle body illustrated
Vacuum boundary	Weld-in flange, jacket or selected interface

End connections

Illustrated arrangement: an angle body with horizontal and downward butt-weld stubs, long cold extension, thermal-intercept disc and manual handwheel

Connection detail	Selection requirement
Process ends	Specify pipe OD, wall thickness, material and weld preparation.
Insulation interface	Define the jacket, vacuum boundary and extension length separately from the process connection.

Materials

Component	Material / option
Body	Selected stainless-steel pressure-part schedule
Trim / seats	Selected cryogenic metal and polymer trim; confirm grades for LH2

Configuration features

- Metal bellows stem sealing
- Long cold-box extension
- Manual cold-line isolation

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.

Published size bands are separate pressure-dependent selections. Confirm allowable differential pressure and operating pressure at the selected temperature.

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.