

ARD-CV-006

LH2 bellows-sealed angle control valve



An angle-pattern LH2 control assembly with bellows stem sealing, an extended cold section and a pneumatic diaphragm actuator with an electro-pneumatic positioner. Trim and actuator are selected from the required flow and pressure cases.

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 2-125; DN 150-300 on request
Pressure ratings	PN10 / PN25 / PN40 - size dependent
Temperature	LH2 selection at -253°C; upper limit +50°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	Angle-pattern globe control; bellows-sealed extended stem
Operation	Pneumatic diaphragm with positioner
Size / rating selection	PN40: DN2-80; PN25: DN2-100; PN10: DN125. Larger sizes require separate selection.
Control trim	Flow characteristic, Kv, rangeability and seat load selected for the duty
Air supply	Published actuator supply 6 to 6.5 bar; selected actuator requirements to confirm

End connections

Illustrated arrangement: an angle body with two butt-weld stubs, extended cold section, round diaphragm actuator and side-mounted positioner

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	Stainless steel; selected grade to confirm
Trim / seats	Selected cryogenic metal and polymer trim; confirm grades for LH2

Configuration features

- Electro-pneumatic positioning
- Bellows stem seal and monitored warm seal
- Vacuum-jacket integration flange

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.

Normally-open or normally-closed arrangements are selected for the complete assembly; closing time and safety qualification are project-specific.

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.