

ARD-RG-003

Liquid-hydrogen pressure-reducing valve



A liquid-hydrogen pressure-reducing enquiry reference for a defined upstream and downstream pressure duty. Regulating architecture, sensing arrangement and insulation are selected from the actual process cases.

Series limits guide enquiry and are not verified availability or approved operating limits for every size, pressure and operator combination. Confirm the selected design and pressure-temperature rating.

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

Selection	Specification
Size range	Nominal size to specify
Pressure ratings	Inlet / outlet pressure to specify
Temperature	LH2 service down to -253°C; selected limits to confirm
Connections	End connections to specify
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
Regulator sizing	Provide inlet range, outlet set point, minimum/normal/maximum flow and permissible droop.
Process integration	Confirm fluid phase, flashing risk, sensing arrangement, relief protection and insulated interfaces.

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	LH2 pressure-reducing family; selected architecture to confirm
Operation	Regulating system to select; spring-loaded arrangement illustrated

End connections

Illustrated arrangement: a flanged regulator body, extended upper assembly and spring housing

Connection detail	Selection requirement
Connection options	End connections to specify
Mating interface	Confirm end standard, facing or weld preparation, pipe dimensions and installation envelope.
Configuration selection	The flanged layout and regulator exterior are illustrative; the selected pressure-reducing design requires confirmation.

Materials

Component	Material / option
Pressure parts	Hydrogen-compatible grades to select
Regulating trim and seals	Duty-specific LH2 material system to confirm

Configuration features

- Dedicated LH2 pressure-reduction duty
- Inlet/outlet cases define the selection
- Sensing and control arrangement specified for the project

Selection notes

Series limits guide enquiry and are not verified availability or approved operating limits for every size, pressure and operator combination. Confirm the selected design and pressure-temperature rating.

No set-point band, capacity, Cv/Kv, droop or self-operated/pilot mechanism is established by the family statement. Select these explicitly before quotation.

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.