

ARD-SF-008

Liquid-hydrogen safety valve



A 316L safety-valve reference for liquid-hydrogen pressure protection down to -253°C. Connection size, set pressure and certified relieving capacity are defined for the protected equipment.

Connection size, set pressure and certified capacity require project selection. These are not verified availability or approved operating limits for an unspecified safety-valve configuration.

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

Selection	Specification
Size range	Connection size to specify
Pressure ratings	PN40 nominal; set pressure to specify
Temperature	-253 to +80°C
Connections	Threaded / weld ends
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
Relief sizing	Specify protected volume/equipment, credible heat input or other relief case, set pressure, medium state and required discharge capacity.
Discharge system	Confirm inlet pressure loss, outlet connection, back pressure and the approved relief-system arrangement.

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
Protection duty	Liquid-hydrogen pressure relief
Set pressure	To be specified and certified
Relieving capacity	To be sized and certified for the protected equipment
Back pressure	To be specified

End connections

Illustrated arrangement: a right-angle body with a horizontal male-threaded port, a downward male-threaded port and an upright cylindrical/hexagonal bonnet

Connection detail	Selection requirement
Connection options	Threaded / weld ends
Interface selection	Specify the end standard, nominal size, pipe dimensions and required mating interface.
Illustrated ports	Two male-threaded ports are visible; the thread standard and sizes are not established by the photograph.
Documented alternatives	Threaded and welded alternatives are listed; confirm the selected inlet and outlet arrangement.

Materials

Component	Material / option
Body and bonnet	316L stainless steel
Sealing material	VESPEL / MELDEN - selected grade to confirm
Spring	316 stainless steel

Configuration features

- Dedicated liquid-hydrogen reference
- 316L construction and defined sealing-material selection
- Inlet and outlet arrangement reviewed for the protected system

Selection notes

Connection size, set pressure and certified capacity require project selection. These are not verified availability or approved operating limits for an unspecified safety-valve configuration.

No numeric DN range, spring setting range, discharge coefficient or certified relieving capacity is established by this reference. Nominal pressure must not be used as a relief set pressure.

Opening behavior, accumulation, blowdown, back-pressure limits and required approval are confirmed for the selected valve.

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.