

ARD-BV-001

High-pressure cryogenic ball valve



Extended-bonnet cryogenic ball valves in cast and forged constructions, with socket-weld, butt-weld or flanged connection options.

Sizes and pressure ratings depend on construction, materials and configuration. Confirm the selected pressure-temperature rating with the quotation.

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

Selection	Specification
Size range	NPS 1/2-36 cast / NPS 1/2-48 forged
Pressure ratings	ASME Class 150-2500
Temperature	Down to -196°C
Connections	Socket weld (SW) · Butt weld (BW) · Flanged

Define your requirement

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

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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
Size range	NPS 1/2-36 cast / NPS 1/2-48 forged
Pressure ratings	ASME Class 150-2500
End connections	Socket weld (SW) · Butt weld (BW) · Flanged
Temperature range	Down to -196°C
Referenced design standards	API / BS / ASME / ASTM (specific standards to be confirmed)
Referenced pressure / seat tests	To be confirmed

End connections

Illustrated arrangement: Heavy bolted end closures on the 8 in / Class 2500 reference; pipe-end preparation is not fully visible.

Connection detail	Selection requirement
Published connection	Socket weld, butt weld or flanged
Connection standard	Not specified on this product page. Confirm the mating standard with the offer.
Weld selection	Specify pipe OD, wall thickness/schedule, material and weld preparation. SW and BW are different connections.
Flange selection	Specify nominal size, flange rating, facing, drilling and gasket. Do not infer these from the image alone.

Materials

The material schedule is confirmed for the selected body, trim, seat and seal arrangement.

Configuration features

- Extended bonnet
- Manual, pneumatic, electric or hydraulic operation
- Cavity pressure-relief design
- Cryogenic treatment of parts specified below -100°C
- Fire-safe construction described in the technical record

Selection notes

Sizes and pressure ratings depend on construction, materials and configuration. Confirm the selected pressure-temperature rating with the quotation.

Construction, materials, testing and fire-safe documentation are confirmed for the selected assembly.

PN, ASME Class and safety-valve set pressure are separate values. Confirm allowable pressure versus temperature, material compatibility, oxygen cleaning, trapped-liquid relief and required certification for the selected assembly. Liquid hydrogen and helium service require a separate assessment.