

ENGINEERED AROUND YOUR PROCESS

V-port ball valve systems.

Precise control &
Quick shut-off

Complete valve, actuator
and control packages
for industrial customers.



**SPECIFY THE ASSEMBLY.
CONTROL THE PROCESS.**

VQ47 flanged / VQ77 wafer / Related isolation valves

CHINA-BASED VALVE EXPERTISE

One coordinated package.



Manufacturing facility · digitally updated VPORTA brand presentation

Specialization that supports the duty

VPORTA focuses on segmented V-port control valves, industrial isolation and integrated actuation. The manufacturing experience documented in the supplied company materials dates to 1999.

From process conditions to an approved assembly: body and trim, seat and packing, actuator torque, failure response and plant interface are reviewed together.

01 / APPLICATION

Review the medium, flow envelope, pressure drop, temperature and shut-off duty.

02 / PACKAGE

Match the valve, actuator, positioner and accessories to one defined scope.

03 / DOCUMENTS

Agree the datasheet, dimensions, inspection records and required certificates.

Current company credentials and certification scope are supplied for review on request.

CORE PRODUCT RANGE

Flanged or wafer.

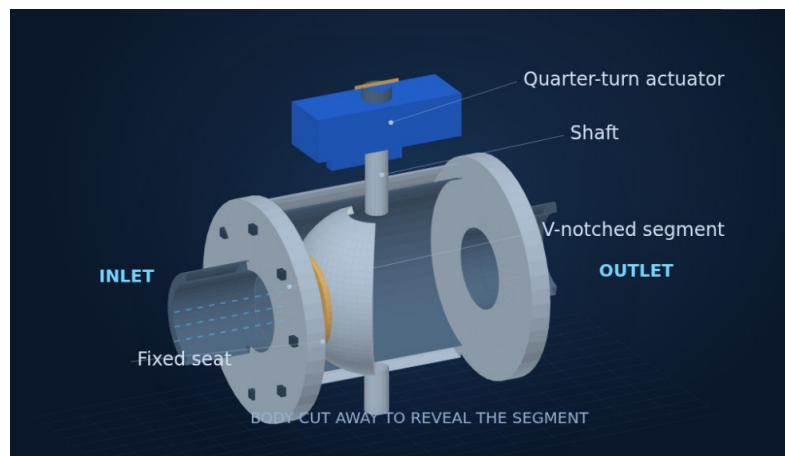


Selection item	VQ47 flanged	VQ77 wafer
Nominal size	DN15-DN500	DN25-DN250
Published pressure range	PN10-PN40 Class 150 / 300	PN10-PN20 Class 150
Flow direction	Unidirectional	Unidirectional
Operating duty	Modulating and on/off	Modulating and on/off
Inherent characteristic	Approximately equal percentage	Approximately equal percentage
Seat construction	Metal or soft seat	Metal seat
Temperature configurations	-29 to 220°C; -29 to 350°C; special -29 to 600°C	-29 to 220°C
Body materials in source	WCB, stainless steel; other options on review	WCB, stainless steel; other options on review
Face-to-face basis	ASME/ISA 75.08.02; IEC 60534-3-2	Manufacturer standard
Leakage test basis	IEC 60534-4 / ANSI/FCI 70-2	IEC 60534-4 / ANSI/FCI 70-2

Source: supplied 2023 product data. Ratings describe different constructions; maximum size, pressure and temperature are not necessarily available together. Confirm trim, leakage class and rated capacity for the selected assembly.

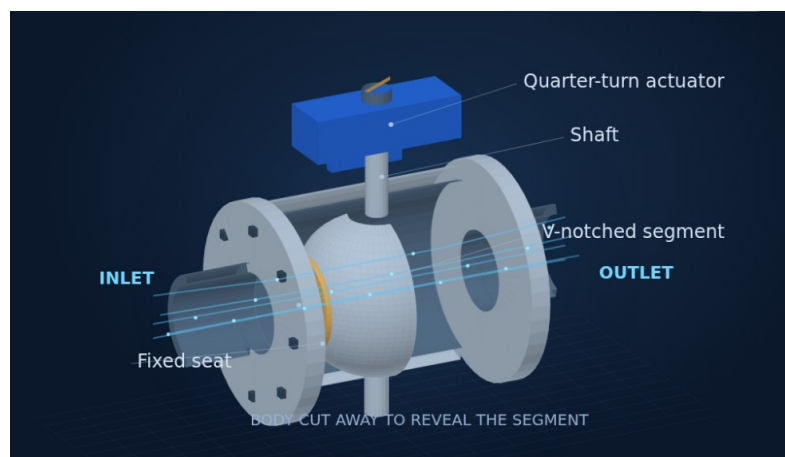
THE SHAPE BEHIND THE CONTROL

See the V-port at work.



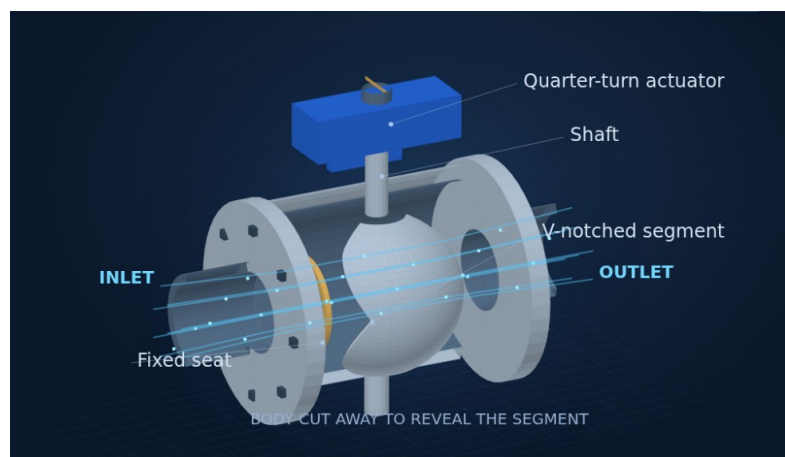
01 / CLOSED

The curved segment covers the seat opening. The selected seat and test conditions define the specified shut-off performance.



02 / THROTTLING

The shaft rotates the segment. Its V-shaped edge progressively exposes the opening and meters the flow path.



03 / FULLY OPEN

A quarter turn moves the segment away from the principal flow path. Capacity must be taken from the selected trim's verified data.

A SYSTEM, NOT JUST A BODY

Complete valve assemblies.



01 / Valve & trim

Confirm bore, V-notch, metallurgy, seat, shaft and packing against the medium.

02 / Pneumatic or electric actuation

Size for the maximum differential pressure, supply conditions, duty cycle and required failure response.

03 / Positioning & feedback

Define input signal, feedback, positioner interface and commissioning requirements.

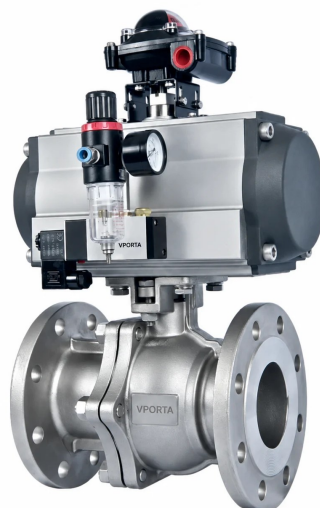
04 / Accessories

Select the air filter regulator, solenoid, limit switches, manual override and mounting scope.

Provide	Why it matters
Normal / minimum / maximum flow	Establishes the required capacity and operating range.
Inlet / outlet pressure and shut-off ΔP	Separates throttling duty from actuator breakaway requirements.
Medium, solids and temperature	Guides material, seat, packing and construction choices.
Control signal, utilities and failure response	Defines the complete package and plant interface.

COMPARE BY OPERATING DUTY

Ball valves for isolation duties.

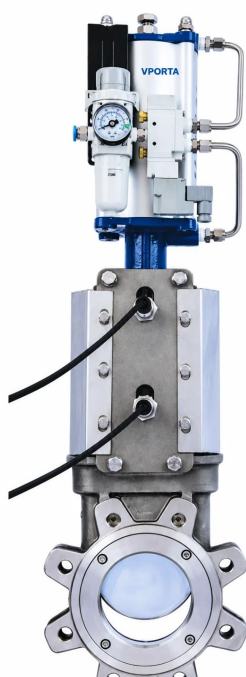


Selection item	HQ47 trunnion mounted	HQ41 floating
Operating duty	On/off isolation	On/off isolation
Flow direction	Bidirectional	Bidirectional
Nominal size	DN100-DN500	DN100-DN250
Pressure range	PN10-PN40; Class 150 / 300	PN10-PN40; Class 150 / 300
Connection	Flanged	Flanged
Seat options	Metal or soft seat	Metal or soft seat
Published temperature	-29 to 220°C	-29 to 220°C
Face-to-face references	GB/T 12221; ASME B16.10; DIN 3202	GB/T 12221; ASME B16.10; DIN 3202

Use a characterized V-port valve when modulation is the principal task. Select related ball valves for the required isolation duty, and confirm materials, pressure-temperature rating and leakage acceptance separately.

SOLIDS AND FIBROUS MEDIA

Knife gates for isolation.



UP series

A U-shaped peripheral seat supports sealing in both directions. Review the elastomer, medium, solids and pressure for the actual duty.

Series / source description	Nominal size	Published temperature
PZ73 / knife gate	DN50-DN1000	-29 to 220°C; -29 to 350°C
CPZ73 / through-conduit knife gate	DN50-DN600	-29 to 220°C
APZ73 / knife gate	DN50-DN600	-29 to 220°C; -29 to 350°C
UPZ73 / U-seat knife gate	DN50-DN600	-29 to 180°C

Pressure depends on nominal size

Published family tiers: DN50-250: 10 bar; DN300-450: 7 bar; DN500-600: 4 bar. The PZ73 range additionally lists DN700-1000 at 2 bar. Materials, seat and operating temperature must be reviewed together.

For UP-series dimensions, bolting, parts and actuator reference data, download the separate VPORTA Bidirectional Knife Gate Valve catalogue. Source ranges are reference data, not a substitute for an approved order drawing.

START WITH YOUR PROCESS DATA

Let's specify the right valve.

Send your valve list, duty sheet or replacement requirements. A complete enquiry helps us compare the construction, trim and actuator against the same operating envelope.

Enquiry field	What to include
Process medium	Composition, concentration, solids content / size and any abrasive or corrosive conditions.
Operating envelope	Minimum, normal and maximum flow; inlet and outlet pressures; temperature; units.
Mechanical interface	DN / NPS, connection standard, pressure class, available face-to-face and orientation.
Control package	Power or air supply, input signal, feedback, fail-open / fail-close / fail-in-place requirements.
Procurement scope	Quantity, destination, documentation, inspection and required delivery date.

TALK TO VPORTA

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Editable RFQ worksheet available in the website download center.

