



BALL VALVE SERIES

Welded Floating Ball Valve

Q61F

Quarter-turn welded floating ball valve for natural gas, LPG and compatible gas or utility service, with butt weld or socket weld ends and carbon steel or stainless steel construction.

01 Key Specifications

Product Type	Welded floating ball valve, manual quarter-turn
End Connection	Butt weld (BW) or socket weld (SW)
Size Reference	DN6-DN100; exact combinations vary by model
Pressure Classes	PN16 / PN25 / PN40 / PN64
Body Materials	Carbon steel / SS304 / SS316
Seat Materials	PTFE / reinforced PTFE (RPTFE) / PPL
Operation	Manual lever; extended stem option for buried or insulated lines
Typical Service	Natural gas / LPG / compatible gas and utility service subject to model confirmation

02 Design Features & Configuration

Welded Body-to-Pipe Joint

BW or SW ends eliminate a threaded or flanged connection at the pipeline joint.

Floating Ball Design

Line pressure loads the ball against the downstream seat for shut-off.

Quarter-Turn Operation

Manual lever rotates the ball 90 degrees between open and closed positions.

Extended Stem Option

Available for buried pipelines and insulated lines requiring accessible operation.

Soft-Seated Sealing

PTFE, RPTFE and PPL seat options support different operating conditions.

Antistatic Option

Antistatic construction can be specified for gas projects where required.

03 Materials of Construction

Component	Carbon Steel Series	Stainless Steel Series
Body / End Cap	A105 / 45 carbon steel	SS304 / SS316
Ball	Stainless steel; hard-chrome option where offered	SS304 / SS316
Stem	Stainless steel	SS304 / SS316
Seat	PTFE / RPTFE / PPL	PTFE / RPTFE / PPL
Body Seal / Packing	PTFE or PPL; graphite where offered	PTFE or PPL; graphite where offered
Handle	Coated steel	Coated steel
Antistatic Components	Stainless steel where selected	Stainless steel where selected

04 Pressure Ratings & Temperature

Pressure Classes	PN16 / PN25 / PN40 / PN64
PTFE Seat	-29 C to +180 C reference
RPTFE Seat	-29 C to +180 C reference
PPL Seat	-29 C to +300 C reference
Gas-Service Note	Confirm selected model, seat/seal, weld type, antistatic requirement and applicable gas standard

Pressure derating applies as temperature increases. Final pressure-temperature limits must be confirmed for the selected valve configuration.

05 Weld & Installation Options

Butt Weld (BW)	Typically specified with project-defined pipe schedule and weld end preparation
Socket Weld (SW)	Common on smaller-bore piping; confirm socket dimensions and pipe schedule
Extended Stem	Optional for buried or insulated pipelines
Installation Note	Confirm weld procedure, gas service approval and maintenance strategy before installation

06 Typical Reference Dimensions

DN	NPS	FLANGE	END	END	WEIGHT
15	1/2 in	60	58	110	0.35
20	3/4 in	67.5	62	110	0.43
25	1 in	73	68	110	0.57
32	1-1/4 in	90	75	150	1.00
40	1-1/2 in	97.5	83	150	1.55
50	2 in	112	90	150	2.17
65	2-1/2 in	132	95	180	3.63
80	3 in	156	100	220	5.80
100	4 in	196	115	250	7.20

Dimensions are typical references for the two-piece welded construction. Actual dimensions depend on BW/SW type, pipe schedule, body construction and any extended stem. Confirm final dimensions on the approved drawing.

07 Standards & Testing

Butt Weld Ends	ASME B16.25 or project-specified weld end preparation
Socket Weld Ends	ASME B16.11 where applicable
Pressure Testing	GB/T 13927; API 598 / ISO 5208 where confirmed for selected model
Gas Product Standards	EN 331 / EN 13774 may be relevant where required; confirm certification scope
Fire-Safe / Low Emission	Only where the exact design has valid qualification evidence

08 Quality & Documentation

Pressure Test Report

Shell and seat pressure-test report available for the selected order.

Weld Documentation

WPS, PQR and welder qualification can be supplied where required.

Third-Party Inspection

SGS / BV / TUV inspection can be coordinated on request.

Material Certificate

EN 10204 2.2 / 3.1 documentation available where specified.

Dimensional Inspection

Key dimensions can be verified against the approved drawing.

Export Documentation

Protective packing and shipment documents can be arranged for export supply.

09 Applications

- Natural gas distribution and industrial gas pipelines, subject to selected model approval
- LPG transfer and distribution systems
- Buried gas pipelines and insulated lines using an extended stem
- Gas pressure-regulating stations, skids and equipment isolation
- Permanent welded installations where threaded or flanged joints are not preferred
- Compatible utility and industrial services using approved material and seal combinations

10 Product Views



11 Frequently Asked Questions

What is the difference between Q61F and Q11F / Q41F?

Q61F uses welded ends instead of threaded or flanged ends. This removes a mechanical connection at the pipe joint and is often preferred for permanent, buried or insulated installations.

Can Q61F be used for natural gas?

It can be offered for natural gas or LPG when the selected model is confirmed for gas service, including body and seat materials, weld type, antistatic requirement and applicable gas standard.

Butt weld or socket weld - which should I choose?

The choice depends on pipe size, schedule, pressure and project specification. Butt weld is common for larger or higher-pressure lines; socket weld is common for smaller bore service.

Do you offer extended stems?

Yes. Extended stem options are available for buried or insulated pipelines. State the required extension length and installation condition.

12 How to Order

Send the valve size and quantity, body material, pressure class, weld type (BW or SW), pipe schedule and weld end preparation, seat material, service medium and operating temperature, extended stem requirement, gas-service requirements, and required inspection documents.

Note: Technical data in this datasheet is based on the product information supplied for Q61F. Final dimensions, materials, ratings, weld details, gas-service suitability and documentation should be confirmed against the approved quotation and drawing for the selected model.