



BALL VALVE SERIES

Threaded Floating Ball Valve

Q11F

Compact quarter-turn floating ball valve range for compatible gas, utility and industrial service, with threaded ends, soft seats and carbon steel, stainless steel or brass construction options.

01 Key Specifications

Product Type	Threaded floating ball valve, manual quarter-turn shut-off
Steel Size Reference	DN6-DN100; actual combinations vary by model
Steel Pressure Classes	PN16 / PN25 / PN40 / PN64
Body Materials	Carbon steel / SS304 / SS316; brass Q11F-16T option
Seat Materials	PTFE / reinforced PTFE (RPTFE) / PPL
Operation	Manual lever, quarter-turn
End Connection	Internal threaded; NPT / BSPT / BSPP-G depending on model
Typical Service	Natural gas / LPG / compatible gas, utility and industrial media subject to model confirmation

02 Design Features & Configuration

Floating Ball Design

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

Quarter-Turn Operation

90-degree manual lever operation provides fast open/close isolation.

Soft-Seated Sealing

PTFE, RPTFE and PPL seat options support different pressure and temperature requirements.

Threaded Ends

Compact direct connection for small-bore piping without flanges.

Body Construction Options

One-piece, two-piece and three-piece threaded designs are available in the Q11F range.

Material Range

Carbon steel, SS304, SS316 and brass constructions support different corrosion and service needs.

03 Materials of Construction

Component	Carbon Steel Series	Stainless Steel Series	Brass Model
Body / End Cap	A105 / 45 carbon steel	SS304 / SS316	Brass
Ball	Stainless steel	SS304 / SS316	Brass
Stem	Stainless steel	SS304 / SS316	Brass
Seat	PTFE / RPTFE / PPL	PTFE / RPTFE / PPL	PTFE
Body Seal / Packing	PTFE or PPL	PTFE or PPL	PTFE
Handle	Coated steel	Coated steel	Steel lever handle

04 Pressure Ratings & Temperature

Steel Pressure Classes	PN16 / PN25 / PN40 / PN64
Brass Q11F-16T	PN16; DN15-DN50
PTFE Seat	-29 C to +180 C reference
RPTFE Seat	-29 C to +180 C reference
PPL Seat	-29 C to +300 C reference

Pressure-temperature limits depend on the selected body, seat and seal materials. For natural gas or LPG service, confirm the selected model, applicable gas standard, sealing method and project requirements before order.

05 Thread & Gas-Service Selection

Thread Options	NPT / BSPT / BSPP-G depending on the selected model
Thread Compatibility	NPT, BSPT and BSPP-G are not interchangeable
Gas-Service Suitability	Must be confirmed for the selected model; do not infer suitability from model code alone
Gas Project Standards	EN 331 / EN 13774 may be relevant where required; verify actual certification scope

06 Typical Reference Dimensions

DN	Thread Size	L, mm	H, mm	H1, mm	Weight, g
6	1/4 in	60	110	56	320
10	3/8 in	60	110	58	320
15	1/2 in	60	110	58	350
20	3/4 in	67.5	110	62	430
25	1 in	73	110	68	570
32	1-1/4 in	90	150	75	1000
40	1-1/2 in	97.5	150	83	1550
50	2 in	112	150	90	2170
65	2-1/2 in	132	180	95	3625
80	3 in	156	220	100	5800
100	4 in	196	250	115	7200

Dimensions above are reference values for the two-piece steel threaded construction. Other body configurations and the brass Q11F-16T may have different dimensions. Confirm final dimensions against the approved product drawing.

07 Standards & Testing

Pressure Testing	GB/T 13927
Brass Thread	ISO 228 parallel pipe thread (BSPP-G) for Q11F-16T
Thread Options	NPT / BSPT / BSPP-G depending on model and order specification
Gas-Service Standards	EN 331 / EN 13774 may apply to relevant gas projects; confirm required certification scope
Operation	Manual quarter-turn shut-off

08 Quality & Documentation

Pressure Inspection

Valve shell and seat pressure inspection may be documented for the selected order.

Dimensional Inspection

Key valve dimensions can be checked against the approved product drawing.

Technical Documents

Product dimensions, material schedule and pressure-test documentation can be supplied.

Material Identification

Body and trim materials identified according to the selected C, P, R or T model.

Product Marking

Model, nominal size and pressure class marked for identification.

Export Packing

Protective packing suitable for international transport can be arranged.

09 Applications

- Natural gas distribution and industrial gas pipelines, subject to confirmation of the selected valve approval
- LPG transfer and distribution systems
- Gas pressure-regulating stations, utility skids and equipment isolation
- Water, oil and compatible utility service where the selected seat and body materials are suitable
- Compact equipment connections and small-bore process piping
- General industrial shut-off service requiring quick quarter-turn operation

10 Product Views



11 Frequently Asked Questions

Which body materials are available in the Q11F range?

The supplied Q11F range includes carbon steel, SS304, SS316 and brass constructions.

What pressure classes are available?

The steel series covers PN16, PN25, PN40 and PN64. Brass Q11F-16T is PN16. Exact size, material and pressure-class combinations depend on the selected model.

Can Q11F be used for natural gas?

Q11F can be offered for natural gas or LPG only when the selected model is confirmed for the service, including body and seat materials, thread type, sealing method, antistatic requirement and applicable project standard.

Which thread standard should I specify?

NPT, BSPT and BSPP-G are not interchangeable. Specify the exact thread standard and sealing method to match the mating piping.

12 How to Order

Send the valve size and quantity, body material, pressure class, seat material, service medium and operating temperature, thread standard and sealing method, and any gas-service or certification requirements. ZeMin Gas can support configuration confirmation before quotation.

Note: Technical data in this datasheet is based on the product information supplied for Q11F. Final dimensions, materials, ratings, gas-service suitability and documentation should be confirmed against the approved quotation and drawing for the selected model.