

ACRIS®

PFA LINED BALL VALVE

ASME B16.5 Class 150 RF



CE

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ACRIS® PFA LINED FULL PORT BALL VALVE

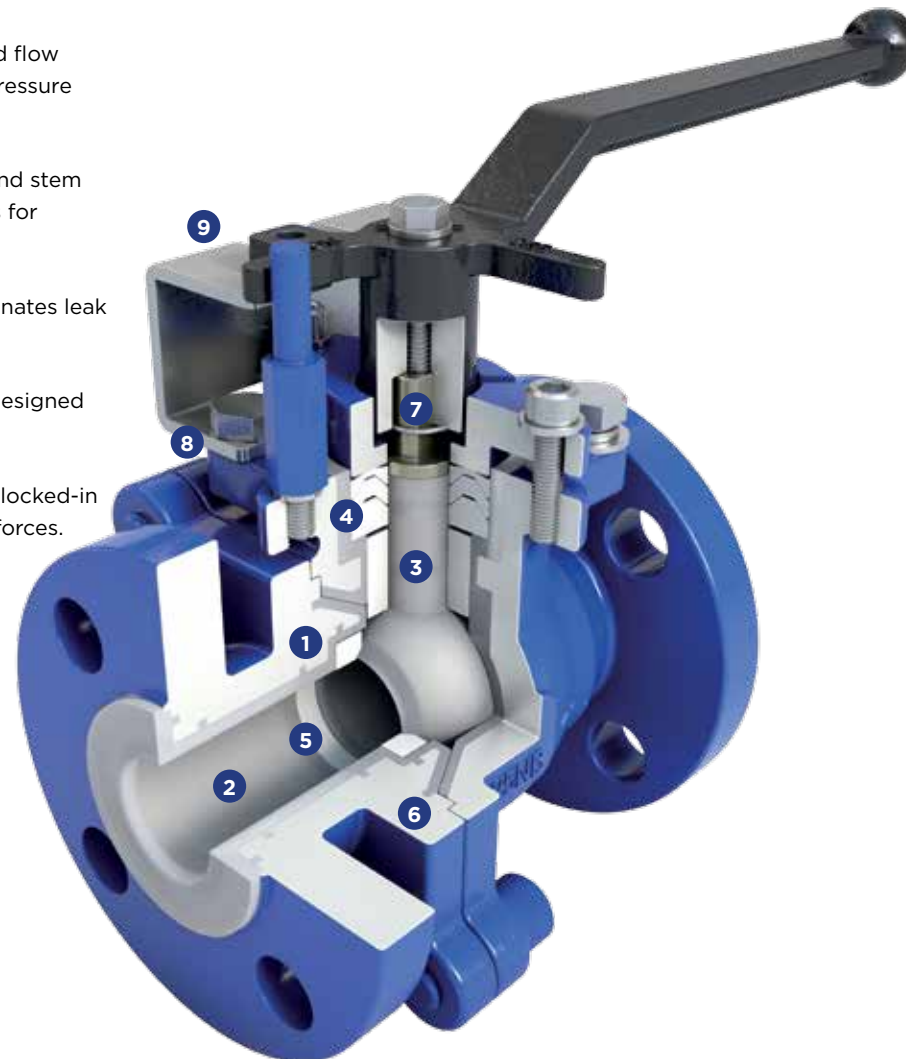
Fully PFA lined full port ball valves engineered for zero leakage shut-off in demanding corrosive and ultra pure industrial applications.

SPECIFICATION & STANDARDS

Size Range	DN15 - DN150 (½" to 6")	Body Design	ASME B16.34
Temperature	-45°C to +204°C (-49°F to +400°F)	Flanges	ASME B16.5 Class 150 RF EN 1092-1 PN10/16 (optional)
Pressure Rating	up to 17 bar (250 psi)	Fugitive Emissions	EN ISO 15848-1 (optional)
Face-to-face	ASME B16.10		

FEATURES & BENEFITS

- 1 Fully PFA lined ball, stem and body offer unsurpassed resistance to corrosion, permeation and microbial contamination for maximum purity and reliability.
- 2 Full port design ensures an unrestricted flow path for high flow rates with minimal pressure drop.
- 3 Rugged, high strength one piece ball and stem prevents blowouts and limits hysteresis for dependable operation.
- 4 Adjustable PTFE chevron packing eliminates leak paths and reduces fugitive emissions.
- 5 Durable, corrosion resistant TFM seat designed for zero leakage, low torque isolation.
- 6 Metal-to-metal body joints protect the locked-in liner from damage caused by external forces.
- 7 Anti-static grounding device prevents static buildup.
- 8 ISO 5211 top mounting plate for easy actuation.
- 9 Integral Lock Out / Tag Out (LOTO)



ACRIS® PFA LINED STANDARD PORT BALL VALVE

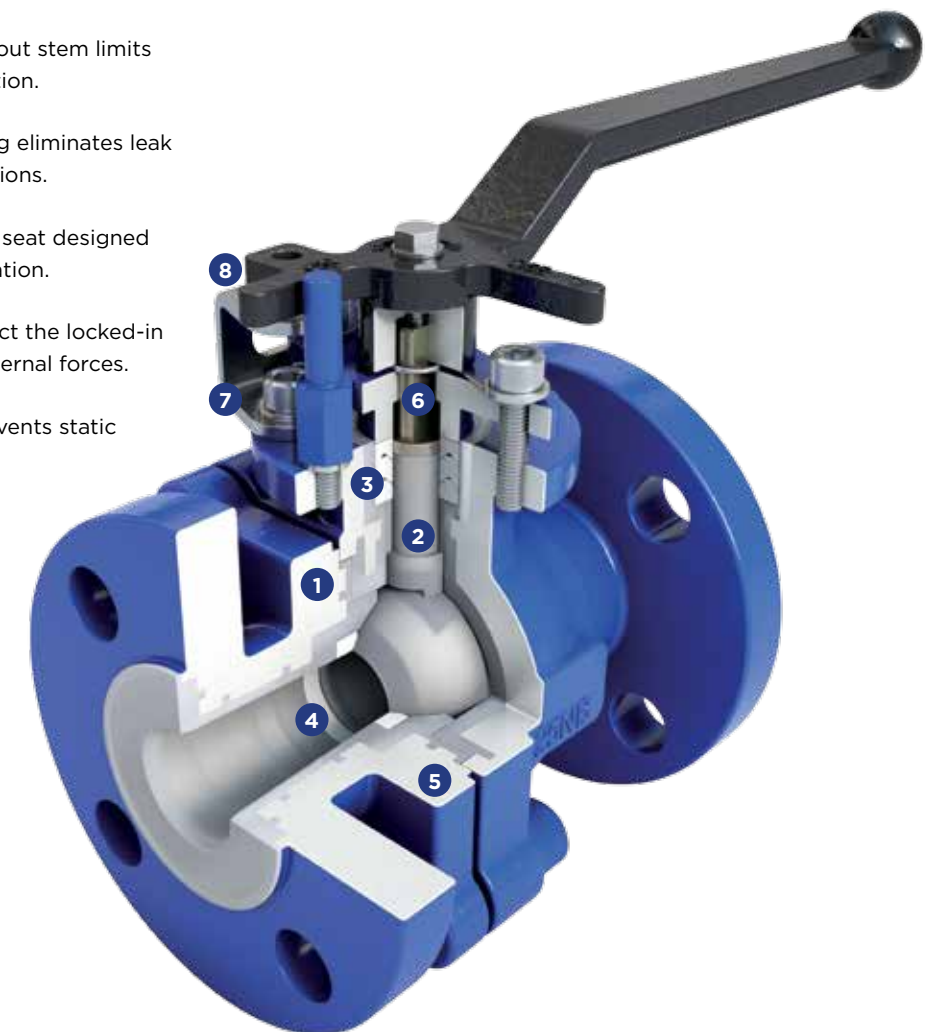
Fully PFA lined standard port ball valves engineered for zero leakage shut-off in demanding corrosive and ultra pure industrial applications.

SPECIFICATION & STANDARDS

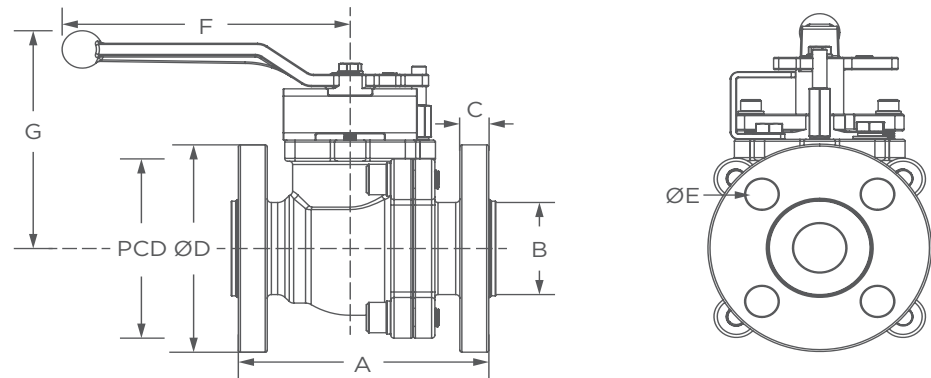
Size Range	DN25 - DN100 (1" to 4")	Body Design	ASME B16.34
Temperature	-45°C to +204°C (-49°F to +400°F)	Flanges	ASME B16.5 Class 150 RF EN 1092-1 PN10/16 (optional)
Pressure Rating	up to 17 bar (250 psi)		
Face-to-face	ASME B16.10		

FEATURES & BENEFITS

- 1 Fully PFA lined ball, stem and body offer unsurpassed resistance to corrosion, permeation and microbial contamination for maximum purity and reliability.
- 2 Rugged, high strength anti-blowout stem limits hysteresis for dependable operation.
- 3 Adjustable PTFE chevron packing eliminates leak paths and reduces fugitive emissions.
- 4 Durable, corrosion resistant TFM seat designed for zero leakage, low torque isolation.
- 5 Metal-to-metal body joints protect the locked-in liner from damage caused by external forces.
- 6 Anti-static grounding device prevents static buildup.
- 7 ISO 5211 top mounting plate for easy actuation.
- 8 Integral Lock Out / Tag Out (LOTO)



ACRIS® PFA LINED FULL PORT BALL VALVE (ONE PIECE BALL & STEM)



DIMENSIONS | FLOW RATES | TORQUE

DN ¹ NPS ²	A	B	C	ØD	PCD	ØE	F	G	Kv Cv	TORQUE (NM) TORQUE (IN-LBS)
15 ½"	130.0 5.12	15.0 0.59	13.9 0.55	88.9 3.50	60.4 2.38	15.7 0.62	177.8 7.00	109.2 4.30	13 15	10 89
20 ¾"	150.0 5.90	20.0 0.78	13.9 0.55	97.7 3.85	69.8 2.75	15.7 0.62	177.8 7.00	124.9 4.92	22 25	12 106
25 1"	127.0 5.00	24.9 0.98	17.0 0.67	108.0 4.25	79.3 3.12	16.0 0.63	177.8 7.00	109.2 4.30	43 50	20 177
40 1½"	165.1 6.50	40.1 1.58	18.8 0.74	127.0 5.00	98.6 3.88	16.0 0.63	254.0 10.00	127.0 5.00	160 185	25 222
50 2"	177.8 7.00	50.0 1.97	20.3 0.80	152.4 6.00	120.7 4.75	19.1 0.75	254.0 10.00	142.2 5.60	277 320	35 310
80 3"	203.2 8.00	80.0 3.15	24.9 0.98	190.5 7.50	152.4 6.00	19.1 0.75	304.8 12.00	177.8 7.00	696 805	50 443
100 4"	228.6 9.00	99.8 3.93	24.9 0.98	228.6 9.00	190.5 7.50	19.1 0.75	304.8 12.00	208.3 8.20	1384 1600	85 752
150 6"	266.7 10.50	149.9 5.90	27.9 1.10	279.4 11.00	241.3 9.50	22.4 0.88	Gear Gear	Gear Gear	3893 4500	220 1947

¹ DN dimensions in mm.
Kv-values in m³/h @ Δp = 1 bar.
Torque values in Nm.

² NPS dimensions in inch.
Cv-values in US gpm @ Δp = 1 psi.
Torque values in In-Lbs.

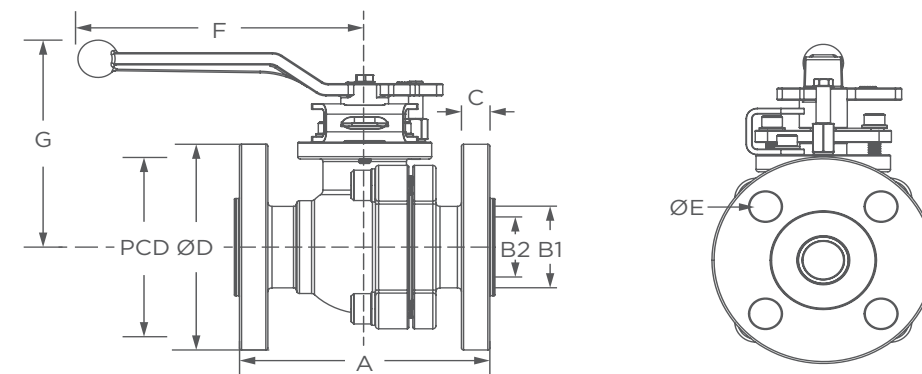
² DN150 (6") 304 & 316 stainless steel body valves are limited to 10 bar (145 psig.)

MATERIAL SPECIFICATION

QTY	DESCRIPTION	MATERIAL	QTY	DESCRIPTION	MATERIAL
2	Body	PFA Lined ASTM A-352 LCB Optional: A-216 Grade WCB, A-351 CF8 (304-Stainless Steel) A-351 CF8M (316-Stainless Steel)	1	Handle	Epoxy Coated Carbon Steel
1	Ball ¹ & Stem (Full Port)	One Piece CF8, PFA	1	Gland Packing	PTFE
1	Ball ² (Standard Port)	CF8, PFA	2	Seat	PTFE
1	Stem (Standard Port)	304 Stainless Steel, PFA	-	Fasteners	18-8 (B7 optional)
			1	Gland Gap	304 Stainless Steel
			1	Lock Out / Tag Out	304 Stainless Steel
			1	Ground Spring	304 Stainless Steel

¹Optional vented ball for chlorine gas service.

ACRIS® PFA LINED STANDARD PORT BALL VALVE (FLOATING BALL - TWO PIECE BALL & STEM)



DIMENSIONS | FLOW RATES | TORQUE

DN ¹ NPS ²	A	B1	B2	C	ØD	PCD	ØE	F	G	Kv Cv	TORQUE (NM) TORQUE (IN-LBS)
25 1"	127.0 5.00	24.9 0.98	19.1 0.75	17.0 0.67	108.0 4.25	79.3 3.12	16.0 0.63	177.8 7.00	109.2 4.30	26 30	15 135
40 1½"	165.1 6.50	40.1 1.58	24.9 0.98	18.8 0.74	127.0 5.00	98.6 3.88	16.0 0.63	254.0 10.00	127.0 5.00	39 45	20 180
50 2"	177.8 7.00	50.0 1.97	40.1 1.58	20.3 0.80	152.4 6.00	120.7 4.75	19.1 0.75	254.0 10.00	142.2 5.60	171 198	28 250
80 3"	203.2 8.00	80.0 3.15	65.0 2.56	24.9 0.98	190.5 7.50	152.4 6.00	19.1 0.75	304.8 12.00	177.8 7.00	303 350	42 375
100 4"	228.6 9.00	99.8 3.93	80.0 3.15	24.9 0.98	228.6 9.00	190.5 7.50	19.1 0.75	304.8 12.00	208.3 8.20	554 640	60 535

Note: Dimensions are approximate and subject to change.

¹ DN dimensions in mm.
Kv-values in m³/h @ Δp = 1 bar.
Torque values in Nm.

² NPS dimensions in inch.
Cv-values in US gpm @ Δp = 1 psi.
Torque values in In-Lbs.

ORDERING INFORMATION

Size	½ to 6 inch	Body Bolts	18-8 Stainless Steel
Body Type	FF = Flanged Full Port FR = Flanged Standard Port	Operator	Handle (½ to 6 inch) with LOTO
Body Material	1Lf = LCB A-352, PFA lined, Epoxy coated 1f = WCB A-216, PFA lined, Epoxy coated 6f = SS A-351 CF8, PFA lined 6Mf = SS A-351 CF8M, PFA lined	Options	B7 = 9.8 or 10.9 Zinc Plated Bolting (B7 Equivalent) VB = Vented Ball for Chlorine Gas Service A4 = 316 Stainless Steel Bolting OH = Oval Handwheel (2 inch & smaller) FE* = Fugitive Emissions Model (*Full Port only, no retrofitting)
Stem/Ball (Full Port)	6f = 304 Stainless Steel over molded with PFA		
Ball (Reduced Port)	6f = 304 Stainless Steel over molded with PFA		
Stem (Reduced Port)	6f = 304 Stainless Steel over molded with PFA		
Seats	T = TFM		
Packing	PTFE Chevron		

Example:
3"-FR-1f-6f-T = 3 inch Flanged Standard Port Ball Carbon Steel Body PFA Lined, 304 SS Stem / Ball PFA over molded, TFM Seats, PTFE Packing, 18-8 Bolts, Handle with LOTO

Amresist®

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