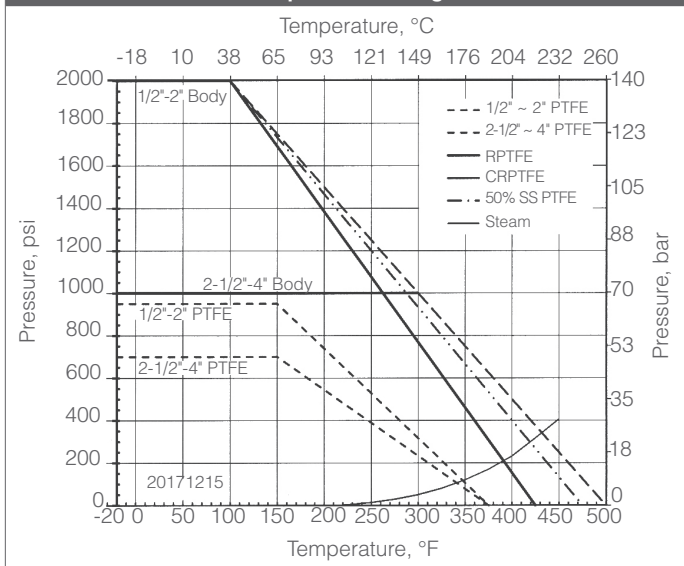




Features

- Investment cast body construction
- ISO 5211 actuator mounting pad
- Blow-out proof stem
- API 598 inspection and testing
- API 607 5th Edition fire tested
- Locking handle

Series 4700 Pressure-Temperature Ratings



Technical Specifications

Valve Size Inches	Flow Coefficient, Cv
1/2"	17
3/4"	34
1"	57
1-1/4"	80
1-1/2"	143
2"	245
2-1/2"	562
3"	700
4"	1200

4700F-XXX-CS Series Full Port Valve

4700F-XXX-S6 Series Full Port Valve

Quick Spec

Product Scope	
Size Range	1/2" – 4", Full Port
Body Type	3-pc, non swing-out w/FNPT ends (weld ends optional)
Pressure Rating	1/2" to 2": 2000 psi WOG (138 bar) 2-1/2" to 4": 1000 psi WOG (69 bar)
Temperature Range / WSP	-20°F thru 450°F / 150 psi Steam -29°C thru 232°C / 10,3 bar Steam
Body	Stainless or Carbon Steel Body
Ball & Stem	Stainless Steel, Anti-Static Design
Ball Seats	RPTFE standard
Stem Packing & Seals	Graphoil packing, w/ Viton stem o-ring
Operator/Mounting Pad	Manual Locking Lever / ISO 5211
Design Standards	
Design	ASME B16.34, Class 800
Threaded End Design	ASME B1.20.1
Testing Standards	
Pressure Testing	API 598
Approvals	
CRN0C5539.5	
API 607, 5th Ed.	

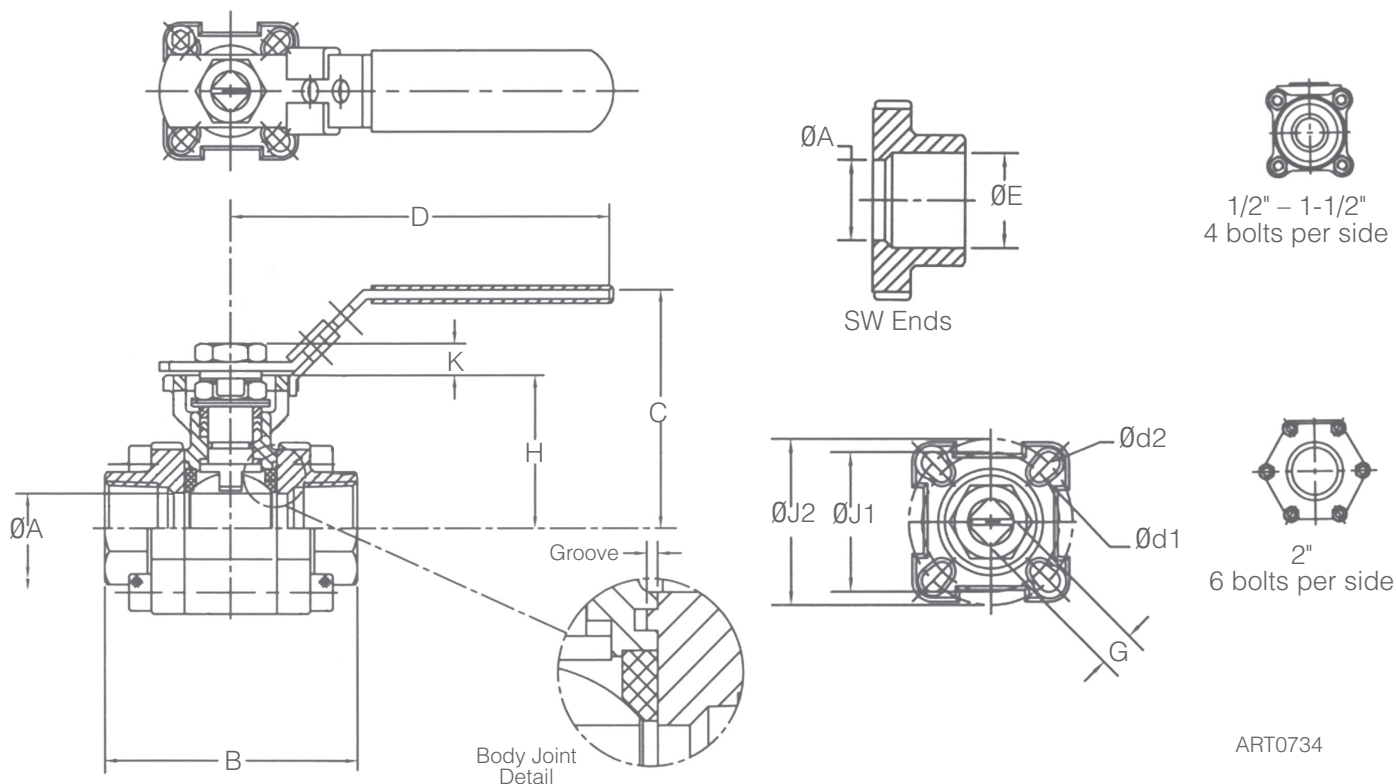
Materials of Construction (1/2" - 2")

Part	Carbon Steel	Stainless Steel
Body	WCB	CF8M
End Cap	WCB	CF8M
Seat	RPTFE	
Ball	CF8M/316	
Stem	AISI 316	
Seal, Body	Graphite	
Thrust Washer	RPTFE	
Packing	Grafoil	
Belleville Spring Washer	AISI 301	
Gland Ring	AISI 304	
Handle, Locking		
Nut, Stem		
Stop Screw		
Locking Tab	Vinyl	
Cover, Handle		
Bolt, Body	A2-70	8.8
O-Ring Stem	Viton	
Antistatic Ball	AISI 316	
Antistatic Spring		
Name Plate	SS	

Refer to page 4 for 2-1/2" – 4" size Materials of Construction

Technical Specifications, metric

Valve Size NPS	Flow Coefficient, Kv
DN15	14,6
DN20	29,2
DN25	49,0
DN32	68,8
DN40	123
DN50	211
DN65	483
DN80	602
DN100	1032



ART0734

Dimensions, Inches

Valve Size	Size Range 1/2" – 2"														Weight, lbs
Inches	ØA	B	C	D	ØE	G Sq.	H	K	ISO Pattern	ØJ1 (BC)	ØJ2 (BC)	Ød1	Ød2	ISO Pattern	
1/2"	0.63	2.95	2.8	4.4	0.86	0.354	1.67	0.32	F03	1.42	1.65	0.24	0.24	F04	1.9
3/4"	0.79	3.15	2.9	4.4	1.07	0.354	1.78	0.32	F03	1.42	1.65	0.24	0.24	F04	2.3
1"	0.96	3.54	3.3	5.3	1.34	0.433	2.13	0.40	F04	1.65	1.97	0.24	0.28	F05	3.8
1-1/4"	1.26	4.33	3.5	5.3	1.68	0.433	2.33	0.40	F04	1.65	1.97	0.24	0.28	F05	5.7
1-1/2"	1.50	4.72	4.3	6.5	1.92	0.551	2.89	0.58	F05	1.97	2.76	0.28	0.35	F07	8.2
2"	1.97	5.51	4.7	6.5	2.41	0.551	3.26	0.58	F05	1.97	2.76	0.28	0.35	F07	14.6

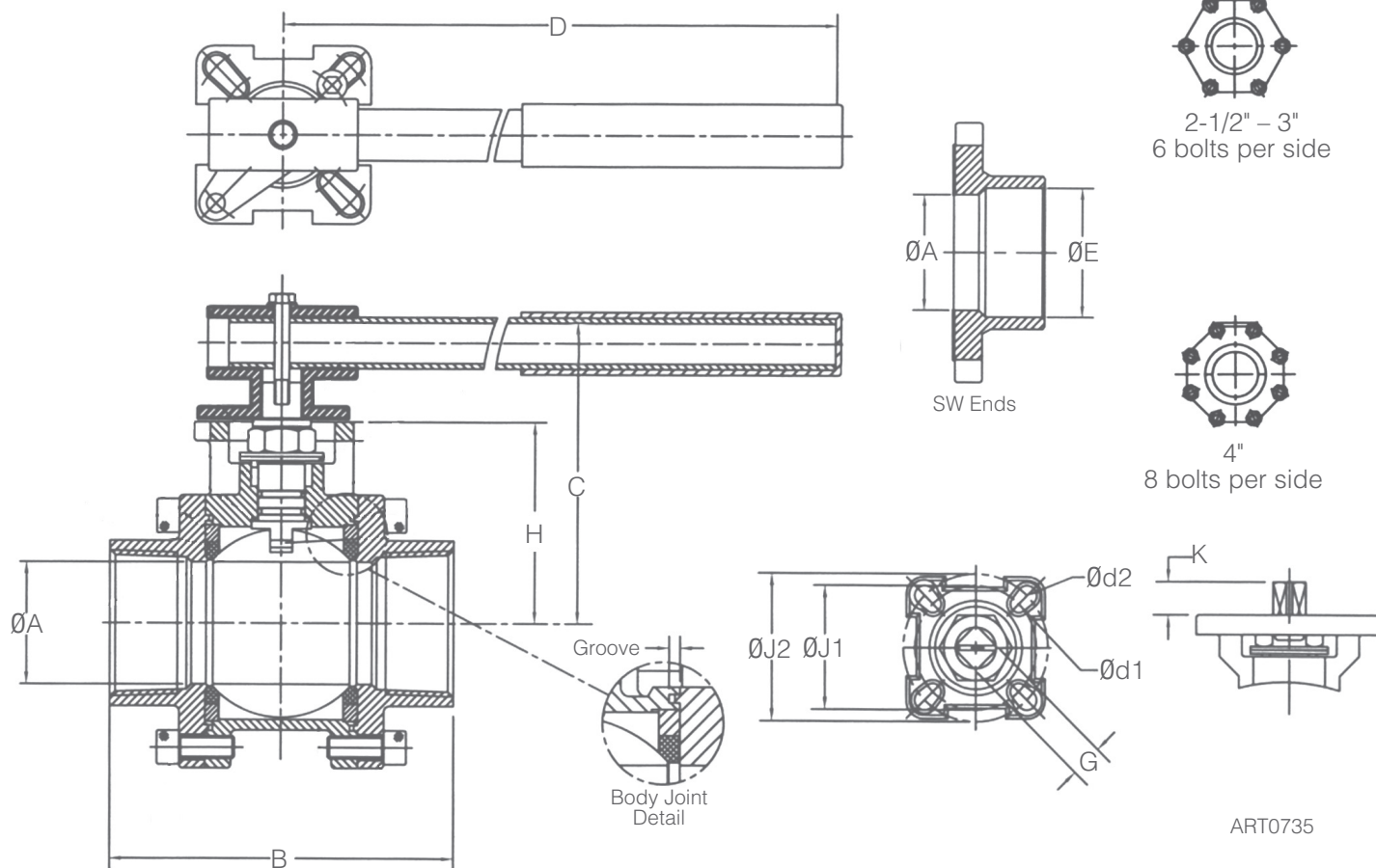
Dimensions, mm

Valve Size	Size Range DN15 – DN50														Weight, kgs
NPS	ØA	B	C	D	ØE	G Sq.	H	K	ISO Pattern	ØJ1 (BC)	ØJ2 (BC)	Ød1	Ød2	ISO Pattern	
DN15	16,0	74,9	71	110	21,8	9	42,4	8,0	F03	36,1	41,9	6,0	6,0	F04	0,9
DN20	20,1	80,0	74	110	27,2	9	44,7	8,0	F03	36,1	41,9	6,0	6,0	F04	1,0
DN25	24,4	89,9	84	135	34,0	11	54,1	10,0	F04	41,9	50,0	6,0	7,0	F05	1,7
DN32	32,0	110	90	135	42,7	11	59,2	10,0	F04	41,9	50,0	6,0	7,0	F05	2,6
DN40	38,1	120	110	165	48,8	14	73,4	14,8	F05	50,0	70,1	7,0	9,0	F07	3,7
DN50	50,0	140	119	135	61,2	14	82,8	14,8	F05	50,0	70,1	7,0	9,0	F07	6,6

Technical Specifications

Valve Size		Operating Torque, in-lb					
Inches	NPS	0 – 1250 psi	0 – 86,2 bar	1500 psi	103 bar	2000 psi	138 bar
1/2"	DN15	45	5,1	45	5,1	45	5,1
3/4"	DN20	70	7,9	70	7,9	70	7,9
1"	DN25	130	14,7	130	14,7	130	14,7
1-1/4"	DN32	190	21,5	190	21,5	250	28
1-1/2"	DN40	250	28	350	40	550	62
2"	DN50	400	45	800	90	1650	187

Operating torques in table are for RPTFE seats. For PTFE seats, multiply by 0.87; for CRPTFE (15% Glass PTFE), and 50% SS PTFE, multiply by 1.09. Include an appropriate service factor for sizing actuators


Dimensions, Inches

Valve Size	Size Range 2-1/2" – 4"														Weight, lbs
Inches	ØA	B	C	D	E	G Sq.	H	ISO Pattern	ØJ1 (BC)	ØJ2 (BC)	Ød1	Ød2	ISO Pattern	K	
2-1/2"	2.56	7.28	6.5	10.4	3.03	0.669	4.21	F07	2.76	4.02	0.354	0.433	F10	0.67	22.6
3"	3.15	8.07	6.9	14.4	3.54	0.669	4.62	F07	2.76	4.02	0.354	0.433	F10	0.67	35.4
4"	3.94	9.45	7.5	14.4	4.50	0.669	5.21	F07	2.76	4.02	0.354	0.433	F10	0.67	56.7

Dimensions, mm

Valve Size	Size Range DN65 – DN100														Weight, kgs
NPS	ØA	B	C	D	E	G Sq.	H	ISO Pattern	ØJ1 (BC)	ØJ2 (BC)	Ød1	Ød2	ISO Pattern	K	
DN65	65,0	185	166	265	77,0	17	107	F07	70,1	102	9,0	11,0	F10	17,1	10,3
DN80	80,0	205	176	365	89,9	17	117	F07	70,1	102	9,0	11,0	F10	17,1	16,1
DN100	100	240	191	365	114	17	132	F07	70,1	102	9,0	11,0	F10	17,1	25,7

Technical Specifications

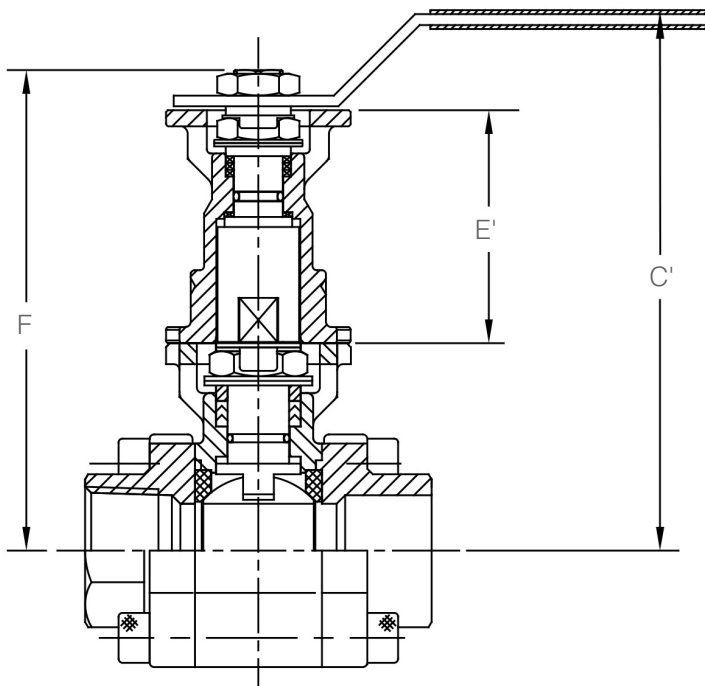
Valve Size		Operating Torque, in-lb			
Inches	NPS	0 – 750 psi	0 – 51,7 bar	1000 psi	68,9 bar
2-1/2"	DN65	600	68	675	76
3"	DN80	800	90	925	105
4"	DN100	1450	164	1600	181

Operating torques in table are for RPTFE seats. For PTFE seats, multiply by 0.87; for CRPTFE (15% Glass PTFE), and 50% SS PTFE, multiply by 1.09. Include an appropriate service factor for sizing actuators

Materials of Construction (2-1/2" – 4")		
Part	Carbon Steel	Stainless Steel
Body	WCB	CF8M
End Cap	WCB	CF8M
Seat	RPTFE	
Ball	CF8M/316	
Stem	AISI 316	
Seal, Body	Graphite	
Thrust Washer	RPTFE	
Packing	Grafoil	
Gland Ring	AISI 304	
Belleville Spring Washer	AISI 301	
Adaptor, Handle	CF8M	
Stem Nut	AISI 304	
Stop Screw	AISI 304	
Cover, Handle	Vinyl	
Bolt, Body	A2-70	8.8
Centering Ring, Seat	AISI 316	
O-Ring, Stem	Viton	
Locking Tab	AISI 304	
Antistatic Ball	AISI 316	
Antistatic Spring	AISI 316	
Handle	AISI 304	
Bolt, Handle	AISI 304	
Name Plate	SS	

Refer to page 1 for 1/2" – 2" size Materials of Construction

Enclosed Stem Extension, 1/2" - 4" 4700F



Size	Dimensions, in.		
	C'	E'	F
1/2"		2.39	4.38
3/4"	5.28	2.39	4.47
1"	5.95	2.64	5.16
1 1/4"	6.16	2.64	5.42
1 1/2"	7.69	3.38	6.85
2"	8.06	3.38	7.22
2 1/2"	10.6	4.12	9.00
3"	11.0	4.12	9.41
4"	11.6	4.12	10.00

ART1353

Model	Size	Body Mat'l	1	2	3	4	5	6	7	8	9	10	11	12

	Model Number
4700F	3 Piece Ball Valve

	Size
05A	1/2"
07A	3/4"
10A	1"
12A	1-1/4"
15A	1-1/2"
20A	2"
25A	2-1/2"
30A	3"
40A	4"

	Body Material
CS	Carbon Steel
S6	Stainless Steel

1	Packing / Seat
F	Grafoil/RPTFE (Standard)
S	Grafoil-EPDM / 50% SS PTFE
A	PTFE/PTFE
B	PTFE/RPTFE
C	PTFE/CRPTFE
D	PTFE/UHMWPE
E	Grafoil/PTFE
G	Grafoil/CRPTE
H	Grafoil/UHMWPE
J	UHMWPE/UHMWPE

2	End Connections
A	FNPT
B	FSW

3&4	Operation		
HL	Lever		
NN	None		
P1	UT-0A-DA STD	S6	UT-3.5-SR STD
P2	UT-0-DA STD	S7	UT-4-SR STD
P3	UT-1-DA STD	SF	UT-4.5-SR STD
P4	UT-2-DA STD	S8	UT-5-SR STD
P5	UT-2.5-DA STD	S9	UT-6-SR STD
P6	UT-3-DA STD	M1	ER-1-2.5-4 110 VAC
P7	UT-3.5-DA STD	M2	ER-2-5-4 110 VAC
P8	UT-4-DA STD	M3	ER-3-5-4 110 VAC
S1	UT-0-SR STD	M8	ER-4-10-4 110 VAC
S2	UT-1-SR STD	M4	ER-6-15-4 110 VAC
S3	UT-2-SR STD	M5	ER-10-15-4 110 VAC
S4	UT-2.5-SR STD	M9	ER-15-30-4 110 VAC
S5	UT-3-SR-STD	MA	ER-20-12-4 110 VAC
ZZ	Non-Standard		

5&6	Actuator Pressure
60	60 psi
80	80 psi
NN	N/A (no pneumatic actuator)
ZZ	Non-Standard

7&8	Solenoid Feature	Act. Type
00	None	
3A	3W 8551-120VAC N4 UT-0/5	SR
3C	3W EF8551-120VAc N7 UT-0/5	SR
3J	3W 8317G35-120VAC N4 UT-0/2.5	SR
3M	3W 8321G1-120VAC N4 UT-3/5	SR
3Q	3W EF8317G35-120VAC N7 UT-0/2.5	SR
3R	3W EF8321G1-120VAC N7 UT-3/5	SR
4A	4W 8551-120VAC N4 UT-0A	DA
4B	4W 8551-120VAC N4 UT-0/5	DA
4D	4W EF8551-120VAC N7 UT-0A	DA
4E	4W EF8551-120VAC N7 UT0/5	DA
ZZ	Non-Standard	

9&10	Limit Switch
00	None
AA	LS FMYB-5120-N4 to UT-0/3
AB	LS FMYB-5120-N4 to UT-3.5/7
AC	LS AMYB-5120-N7 to UT-0/3
AD	LS AMYB-5120-N7 to UT-3.5/7
ZZ	Non-Standard

11&12	Fail Position
NN	Fail Position N/A (No "SR" Actuator)
01	Fail Closed
02	Fail Open