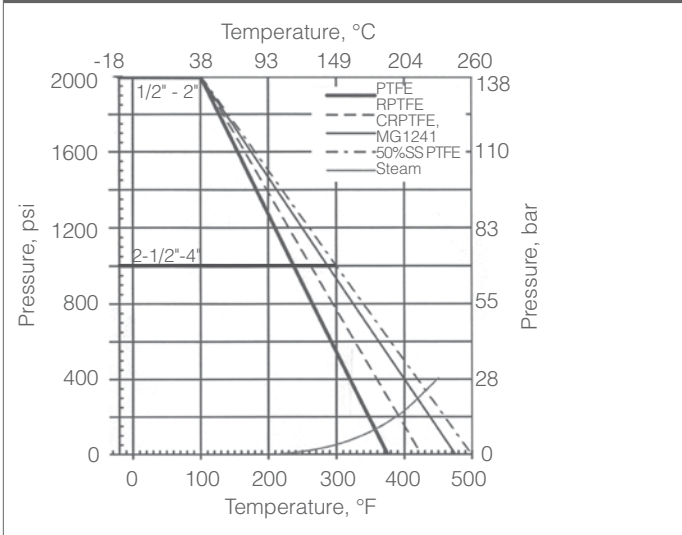



Features

- Investment cast body construction
- ISO 5211 actuator mounting pad
- Blow-out proof stem
- Reinforced PTFE seats
- Graphoil packing
- API 598 inspection and testing
- API 607 5th Edition fire tested
- Locking lever operator

Series4700 Pressure-Temperature Ratings

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
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
Thread 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		
Handle, Locking		
Nut, Stem	AISI 304	
Stop Screw		
Locking Tab		
Cover, Handle	Vinyl	
Bolt, Body	A2-70	8.8
O-Ring Stem	Viton	
Antistatic Ball	AISI 316	
Antistatic Spring		
Name Plate	SS	

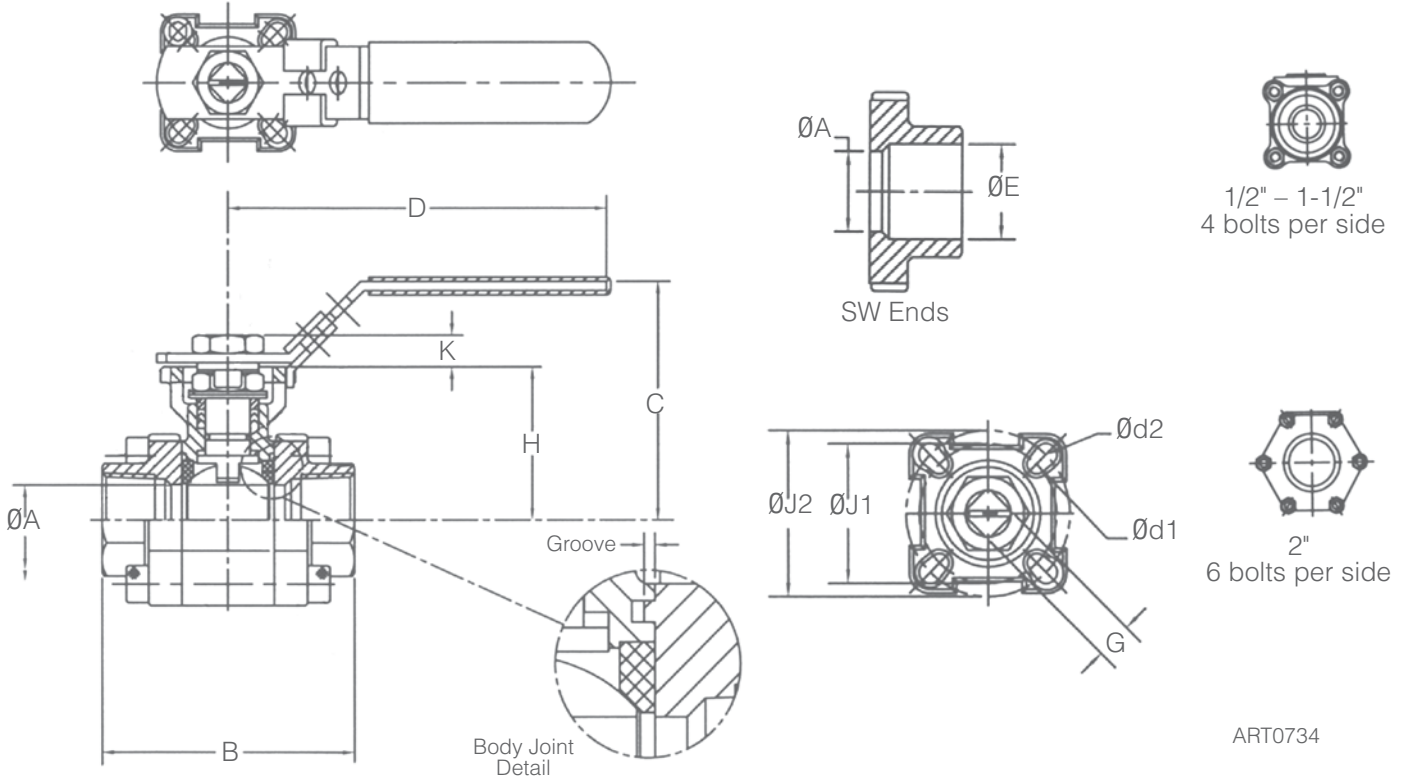
Refer to page 4 for 2-1/2" – 4" size Materials of Construction

Technical Specifications

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

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



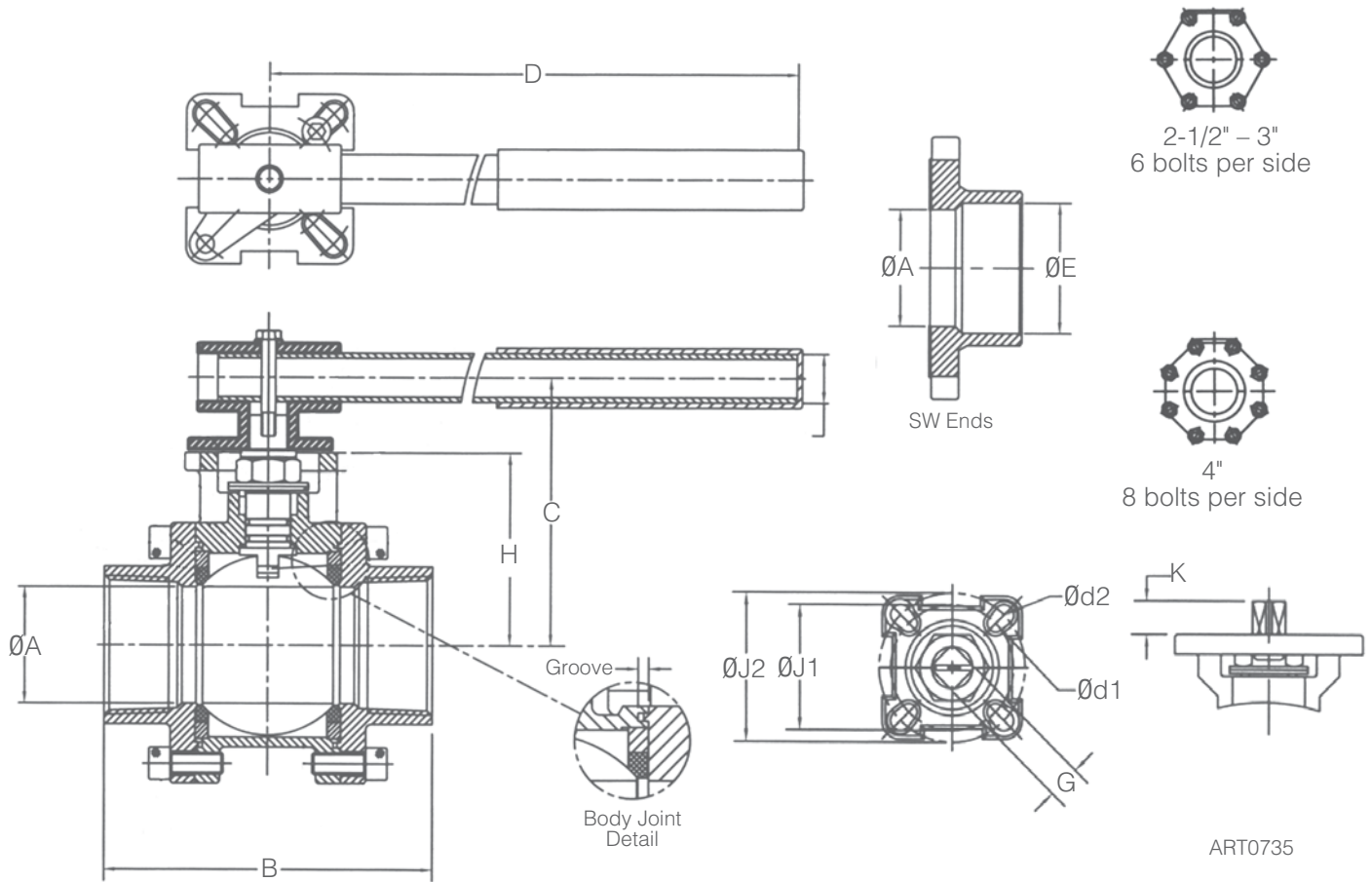
ART0734

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"														
Inches	ØA	B	C	D	E	G Sq.	H	ISO Pattern	ØJ1 (BC)	ØJ2 (BC)	Ød1	Ød2	ISO Pattern	K	Weight, lbs
2-1/2"	2.56	7.28	5.9	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	6.3	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	6.9	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														
NPS	ØA	B	C	D	E	G Sq.	H	ISO Pattern	ØJ1 (BC)	ØJ2 (BC)	Ød1	Ød2	ISO Pattern	K	Weight, kgs
DN65	65,0	185	150	265	77,0	17	107	F07	70,1	102	9,0	11,0	F10	17,1	10,3
DN80	80,0	205	160	365	89,9	17	117	F07	70,1	102	9,0	11,0	F10	17,1	16,1
DN100	100	240	175	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

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

Body Material	CS	S6
Carbon Steel		
Stainless Steel		

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

End Connections	2
FNPT	A
FSW	B

Operation	3&4
Lever	HL
None	NN
UT-0A-DA STD	P1
UT-0-DA STD	P2
UT-1-DA-STD	P3
UT-2-DA STD	P4
UT-2.5-DA STD	P5
UT-3-DA-STD	P6
UT-3.5-DA STD	P7
UT-4-DA STD	P8
UT-0-SR STD	S1
UT-1-SR STD	S2
UT-2-SR STD	S3
UT-2.5-SR STD	S4
UT-3-SR STD	S5
Non-Standard	ZZ

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

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

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

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