



SERIES R701

API 607 FIRE SAFE

Two-Piece Ball Valve



INTRODUCTION

The Series R701 is a two-piece full bore ball valve designed for applications requiring fire safety and reliability. It features a seal-welded construction without the use of body gasket for enhanced durability and structural integrity. Certified to meet API 607 7th Edition fire-safe standards, the valve includes a blowout-proof stem and anti-static design for added safety. Equipped with carbon-reinforced seats, the R701 is ideal for fire-critical environments such as oil and natural gas applications, ensuring dependable performance and robust functionality.

TECHNICAL SUMMARY

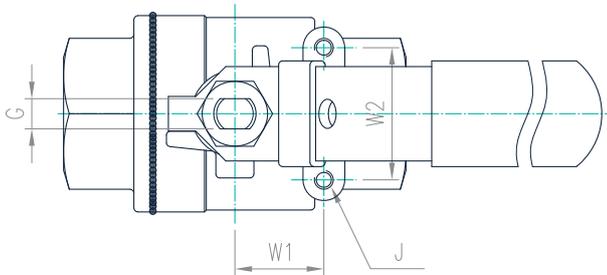
SIZE RANGE	1/4" to 3" (DN8 to 80)
PRESSURE RATING	1000 WOG : 1/4" to 1-1/2" 、 3" (DN8 to 40 、 DN80) 800 WOG : 2" (DN50)
VALVE TYPE	Full Bore
BODY & END CAP MATERIAL (ASTM)	CF8M, CF3M, CF8, CF3, WCB
BODY & END CAP MATERIAL (EN)	1.4408, 1.4409, 1.4308, 1.4309, 1.0619
SEAT MATERIAL	PTFE, RTFE, CTFE, TFM1600, MG1241, STFE
HANDLE TYPE	Flat (with / without SR Lock), Economical Stem Extension
HANDLE MATERIAL	Flat - 304, 316
V-PORT OPTION	N/A
WITH ANTI-STATIC DEVICE OPTION	Yes

STANDARD OF COMPLIANCE

MATERIAL CERTIFICATION	EN 10204-3.1
THREADED END CONNECTIONS	NPT ASME B1.20.1 BSPP ISO 228-1 BSPT ISO 7-1 DIN 2999
PRESSURE TESTING	API 598
MOUNTING PAD	ISO 5211
MARKING	ISO 5209
CE APPROVAL	2014 / 68 / EU Module H
QUALITY ASSURANCE	ISO 9001:2015
EUROPEAN DIRECTIVES APPLIED	ATEX, 2014/34/EU
SAFETY INTEGRITY LEVEL, SIL	IEC 61508
FIRE-SAFE STANDARD	API 607 、 ISO 10497
FACE TO FACE	DIN 3202 M3 (Optional)

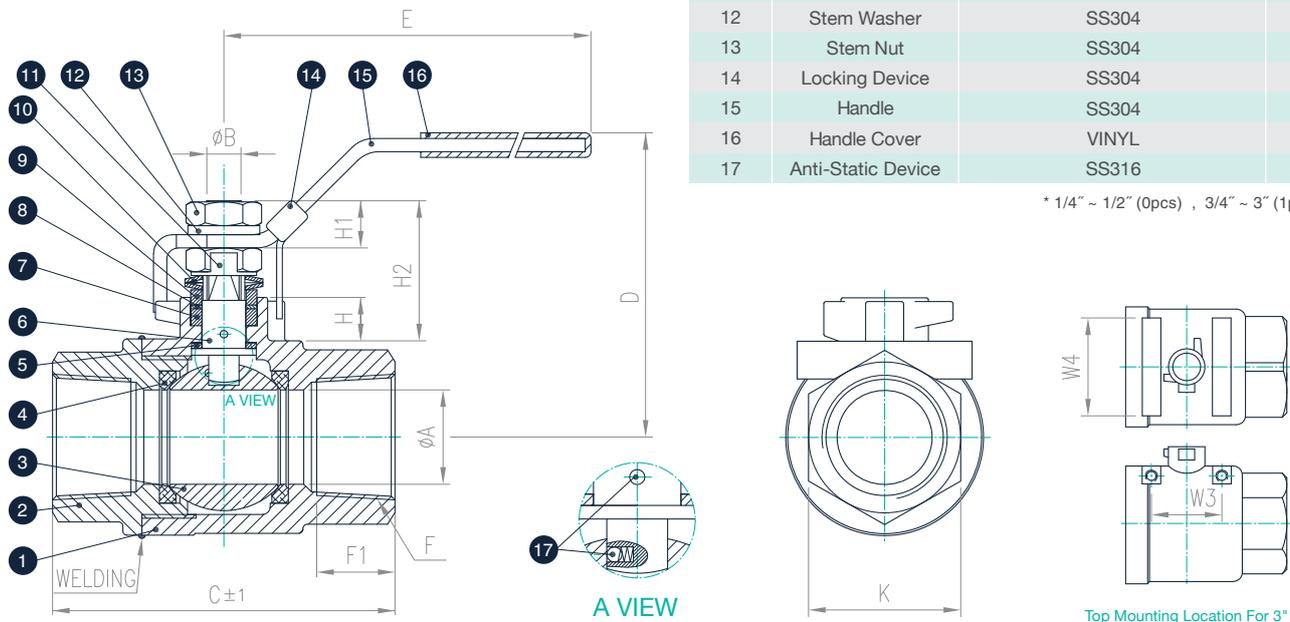
CONSTRUCTION-BILL OF MATERIAL

SERIES R701
1/4" ~ 3" Full bore



NO.	Parts	Material	Qty
1	Body	CF8M	1
2	End cap	CF8M	1
3	Ball	SS316/CF8M	1
4	Seat	25% CARBON+PTFE	2
5	Thrust Washer	50% S.S.	1
6	Stem	SS316	1
7	Stem Packing	GRAPHITE	1
8	Stem Packing	RTFE	1
9	Follower	SS304	1
10	Belleville Washer	SS301	2
11	Tab Washer	SS304	1
12	Stem Washer	SS304	*
13	Stem Nut	SS304	2
14	Locking Device	SS304	1
15	Handle	SS304	1
16	Handle Cover	VINYL	1
17	Anti-Static Device	SS316	2

* 1/4" ~ 1/2" (0pcs) , 3/4" ~ 3" (1pcs)



DIMENSIONS(mm)

SIZE	øA	B	C	D	E	F1	F	J	G	H	H1	H2	W1	W2	W3	W4	K	C DIN 3202 M3 (Optional)
1/4"	11.5	9.5	65	69.5	130	16	1/4" PF-NPT-PT	10-24UNC	6.5	10	5.8	25.1	12.7	28.5	-	-	26	60
3/8"	12.5	9.5	65	69.5	130	16	3/8" PF-NPT-PT	10-24UNC	6.5	10	5.8	25.1	12.7	28.5	-	-	26	60
1/2"	15	9.5	65	69.5	130	16	1/2" PF-NPT-PT	10-24UNC	6.5	10	5.8	25.1	12.7	28.5	-	-	26	75
3/4"	20	9.5	74.6	72.5	130	17	3/4" PF-NPT-PT	10-24UNC	6.5	11	10.2	32.1	22.4	35	-	-	32	80
1"	25	11	88	78.8	165	20.4	1" PF-NPT-PT	10-24UNC	8	11.5	10.8	36.8	23.4	35	-	-	40	90
1-1/4"	32	11	102	84.3	165	22	1-1/4" PF-NPT-PT	1/4-20UNC	8	11.5	10.8	33.9	25.4	38.1	-	-	49	110
1-1/2"	38	14	110	100.8	190	22.5	1-1/2" PF-NPT-PT	1/4-20UNC	9.7	12	12.3	41.1	25.4	38.1	-	-	56	120
2"	50	14	125	108.6	190	26	2" PF-NPT-PT	1/4-20UNC	9.7	9.5	12.3	38.6	25.4	38.1	-	-	70	140
3"	80	19	178	152	250	34	3" PF-NPT-PT	1/4-20UNC	12	10.5	22.3	51.3	-	-	70	70.5	104	-

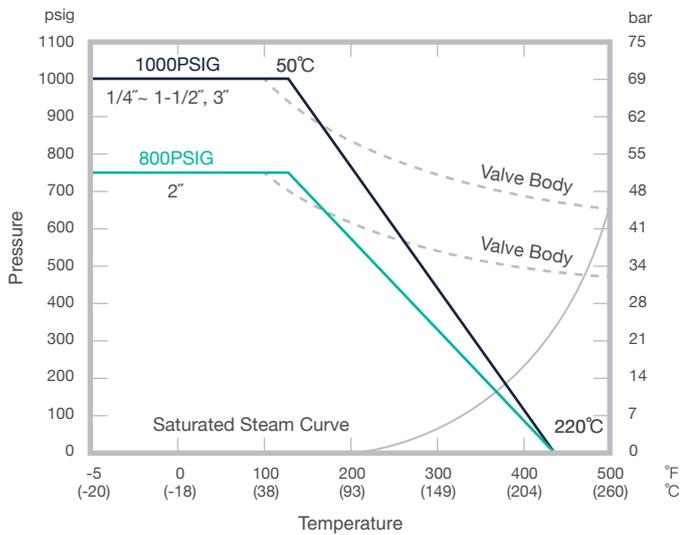
TECHNICAL DATA | Breakaway torque / Cv and Kv values / Weight

Size	Torque (N.m)	Torque (lbs.in)	Cv values	Kv values (M ³ /h)	Weight (Kg)	
					Standard	M3 End Cap
1/4"	7	62	7	6	0.5	0.5
3/8"	7	62	8	7	0.5	0.5
1/2"	8	71	15	13	0.4	0.5
3/4"	9	80	40	34	0.6	0.6
1"	17	151	70	60	1.0	1.0
1-1/4"	21	186	110	94	1.4	1.4
1-1/2"	30	266	250	213	2.0	2.2
2"	39	346	430	366	3.1	3.3
3"	85	753	1100	935	9.7	-

25%Carbon seat With Grease

TECHNICAL DATA | Pressure-Temperature diagram

1/4" ~ 3" Full port
Seat material : CTFE



OPTIONAL ACCESSORIES

| Handle options



Oval handle



Economical stem extension



Spring return sliding lock



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Established in 1992
TAWD has dedicated over 30 years to
manufacturing premium ball valves

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