



SERIES S501

Three-Piece Ball Valve



INTRODUCTION

The Series S501 is a three-piece, fully maintainable full-bore ball valve, providing a reliable and cost-effective solution for the isolation and shut-off of low-temperature steam, medium flows, and compatible fluids. With a blowout-proof stem and an insulated grip, it ensures secure and durable performance, making it a dependable choice for general-purpose industrial applications.

TECHNICAL SUMMARY

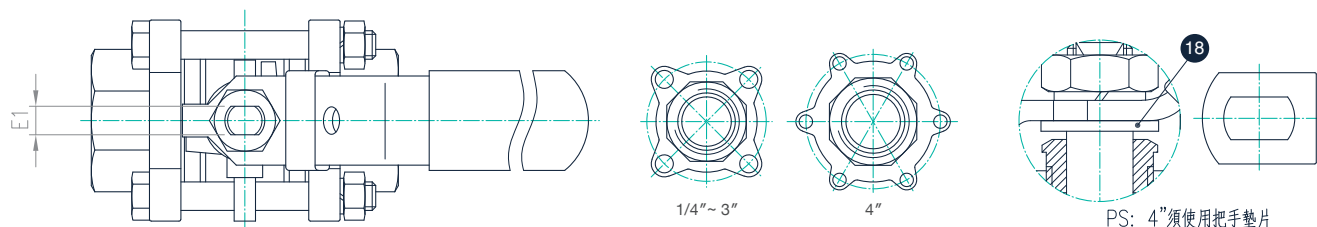
SIZE RANGE	Full port	1/4" ~ 4"	
		1/2" ~ 4"	
		1/4" ~ 1"	: 2000psi / Class 800 / PN100
		1-1/4" ~ 1-1/2"	: 1500psi / Class 600 / PN100
PRESSURE RATING	Reduced port	2" ~ 4"	: 1000psi / Class 400 / PN63
		Full port	1/2" ~ 2-1/2" : 1500psi / Class 600 / PN100
	Full port	3" ~ 4"	: 1000psi / Class 400 / PN63
		Reduced port	
END CONNECTIONS	Threaded, Butt weld, Socket weld, Flanged, Tube (ISO) Butt weld		
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, Butterfly, Oval		
V-PORT OPTION	Yes		
OPERATION	Pneumatic or electric actuated		

STANDARD OF COMPLIANCE

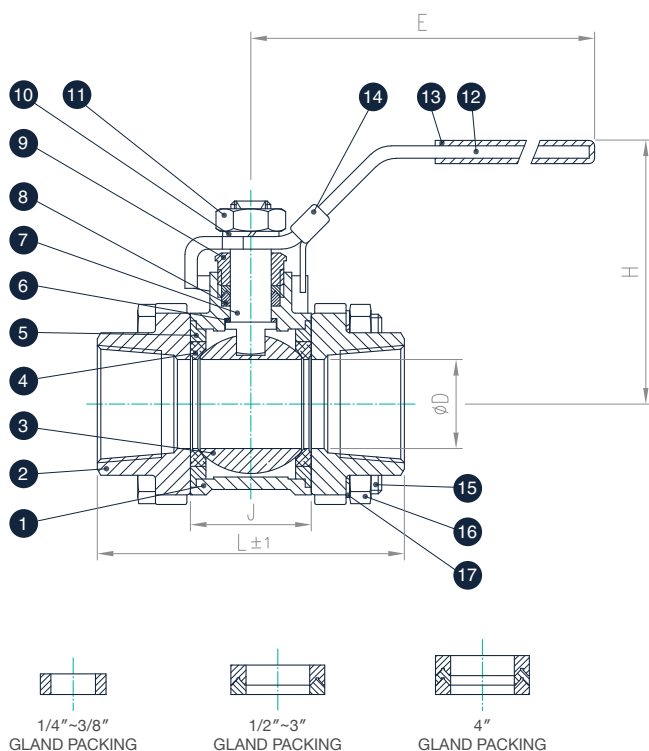
MATERIAL CERTIFICATION	EN 10204-3.1
DESIGN	ASME B16.34
THREADED END CONNECTIONS	NPT ASME B1.20.1
	BSPP ISO 228-1
	BSPT ISO 7-1
	DIN 2999
SOCKET WELD END CONNECTIONS	ASME B16.11
BUTT WELD END CONNECTIONS	ASME B16.25
FLANGED END CONNECTIONS	EN 1092-1 PN16 / PN40
	ASME B16.5 Class 150
PRESSURE TESTING	API 598
MOUNTING PAD	ISO 5211
FIRE SAFE	API 607 6 th Edition
MARKING	ISO 5209
CE APPROVAL	2014 / 68 / EU Module H
QUALITY ASSURANCE	ISO 9001:2015

CONSTRUCTION-BILL OF MATERIAL

SERIES S501 1/4"~3" Full port



PS: 4"須使用把手墊片



NO.	Parts	Material	Qty
1	Body	CF8M	1
2	End Cap	CF8M	1
3	Ball	SS316	1
4	Seat	PTFE / RTFE	2
5	Joint Gasket	PTFE	1
6	Thrust Washer	RTFE	1
7	Stem	SS316	1
8	Gland Packing	PTFE	*
9	Gland Bush	SS304	1
10	Stop Washer	SS304	1
11	Stem Nut	SS304	2
12	Handle	SS304	1
13	Handle Cover	VINYL	1
14	Stem Washer	SS304	1
15	Belleville Washer	SS301	2
16	Stop Pin	SS304	1
17	Pin Nut	SS304	1
18	Gland Packing	25% GLASS FIBER FILED+PTFE	1
19	Locking Device	SS304	1
20	O-Ring	VITON	1
21	Washer	SS304	1
22	Anti-static Device	SS316	2

1/4"~1/2" (1pcs) , 3/4"~2" (2pcs) , 2-1/2"~3" (3pcs)

DIMENSIONS(mm)

SIZE	øA	B	C	D	øE	øF	G	G1	H	H1	L	øM	øN	ISO5211
1/4"	11.5	9	139	74	6	6	1/4" NPT or BSP	15	38.6	6.6	65	36	42	FOR F03 / F04
3/8"	12.5	9	139	74	6	6	3/8" NPT or BSP	15	38.6	6.6	65	36	42	FOR F03 / F04
1/2"	15	9	139	74	6	6	1/2" NPT or BSP	16	38.6	6.6	65	36	42	FOR F03 / F04
3/4"	20	9	139	82	6	6	3/4" NPT or BSP	17	46.1	7.1	74.6	36	42	FOR F03 / F04
1"	25	11	165	96	6.5	7	1" NPT or BSP	21	56.6	10.9	88	42	50	FOR F04 / F05
1-1/4"	32	11	165	100	6.5	7	1-1/4" NPT or BSP	22	61	10.9	102	42	50	FOR F04 / F05
1-1/2"	38	14	215	127	7.5	9	1-1/2" NPT or BSP	22.5	77.5	13.9	110	50	70	FOR F05 / F07
2"	50	14	215	134	7.5	9	2" NPT or BSP	26	85.2	13.9	125	50	70	FOR F05 / F07
2-1/2"	65	17	263	167	10	12	2-1/2" NPT or BSP	31	108.7	16.8	160.6	70	102	FOR F07 / F10
3"	80	17	313	175	10	12	3" NPT or BSP	34	117.4	18.1	178	70	102	FOR F07 / F10

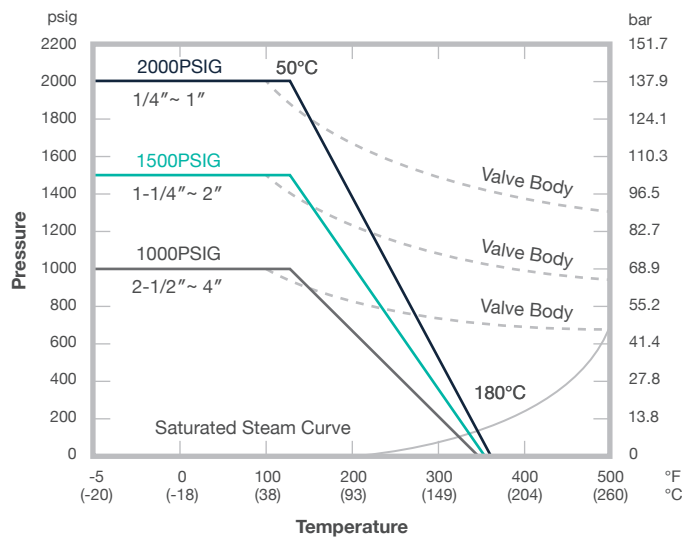
TECHNICAL DATA | Breakaway torque / Cv and Kv values / Weight

Size	Torque (N.m)		Torque (lbs.in)		Cv values		Kv values (M ³ /h)	Weight (Kg)	
	F	R	F	R	F	R	F	F	R
1/4"	8	-	69	-	8	-	7	0.89	-
3/8"	8	8	69	69	8	8	7	0.89	0.89
1/2"	8	8	69	69	15	15	13	0.84	0.84
3/4"	10	10	92	92	34	34	30	1.35	0.85
1"	16	16	138	138	56	56	48	2.13	1.41
1-1/4"	23	23	207	207	85	85	73	2.76	2.17
1-1/2"	33	33	288	288	125	125	108	4.42	2.87
2"	34	34	301	301	250	250	216	# 6.93 / * 6.25	4.49
2-1/2"	62	62	553	553	320	320	277	# 12.12 / * 11	# 6.94
3"	88	88	780	780	580	580	502	# 16 / * 14.78	# 12.64 / * 11
4"	114	-	1010	-	1020	-	882	# 25 / * 23.3	# 16 / * 14.78

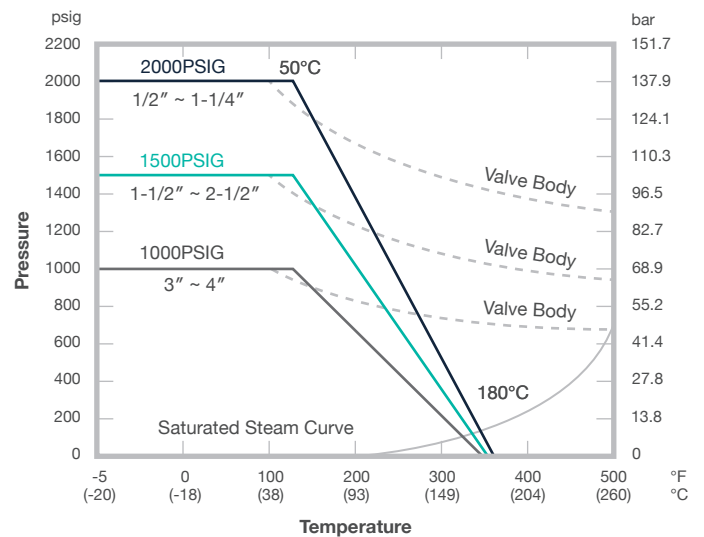
Round shape Flower shape F : Full Port R : Reduced Port

TECHNICAL DATA | Pressure- Temperature diagram

1/4" ~ 4" Full port
Seat material : PTFE / RTFE



1/2" ~ 4" Reduced port
Seat material : PTFE / RTFE



OPTIONAL ACCESSORIES

Handle Options



Oval Handle



Spring Return Sliding Lock



Economical Stem Extension



Spring Return Safety (SRS) Handle

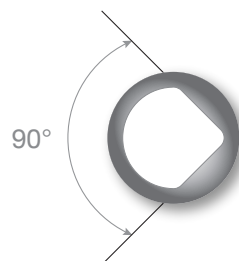
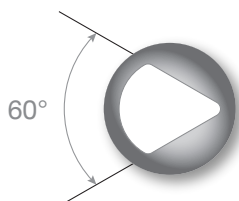
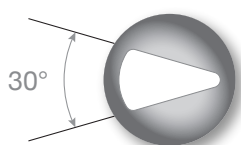


T-Bar Handle



S.S Investment Casting Handle

V-Port Ball



Accessories



TSM



TSM with Handle



Actuator



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

INNOVATION

INTEGRITY

STRICT SELECTION