



# SERIES E301

Ono-Piece Ball Valve



## **INTRODUCTION**

The Series E301 is a one-piece valve engineered for industrial and chemical applications. It features a reduced bore and a reliable performance under standard pressure conditions. The non-maintainable design with a PTFE seat promotes cost-effective flow control, making it ideal for on/off operations in liquid and gas systems, such as isolation points, drainage, and testing.

## **TECHNICAL SUMMARY**

### **SERIES E301-10**

- Blow-out Proof Stem Design

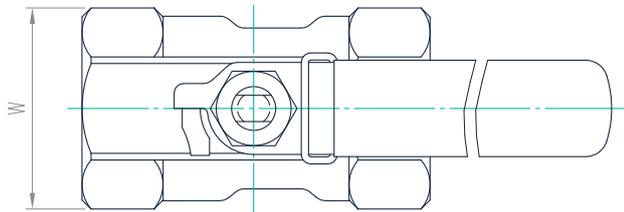


SIZE RANGE / END CONNECTIONS (REDUCED PORT)	FEMALE THREADED 800 PSI / CLASS 300 / PN 50 for 1/4"~2" ( DN8~DN50 )
PRESSURE RATING	800 PSI / CLASS 300 / PN 50
VALVE TYPE	Reduced Bore
BODY & END CAP MATERIAL ( ASTM )	CF8M, CF3M, CF8, CF3
BODY & END CAP MATERIAL ( EN )	1.4408, 1.4409, 1.4308, 1.4309, 1.0619
SEAT MATERIAL	PTFE, RTFE, CTFE, TFM1600, MG1241, STFE
HANDLE TYPE	Flat ( with / without SR Lock ), Butterfly, Oval

## **STANDARD OF COMPLIANCE**

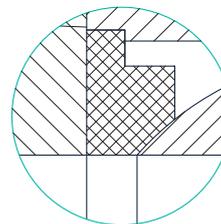
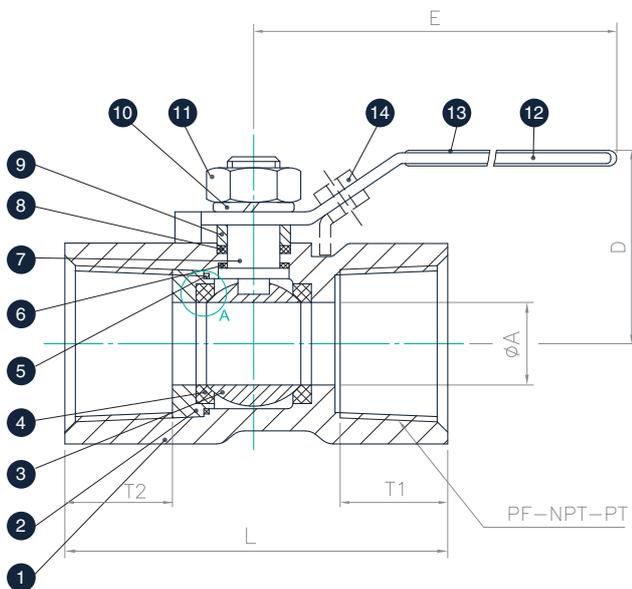
MATERIAL CERTIFICATION	EN 10204-3.1
DESIGN	EN12516-1 & EN12516-3
END CONNECTIONS	FEMALE THREADED
PRESSURE TESTING	API 598
MARKING	ISO 5209
CE APPROVAL	2014 / 68 / EU Module H
QUALITY ASSURANCE	ISO 9001:2015

**CONSTRUCTION - BILL OF MATERIAL**

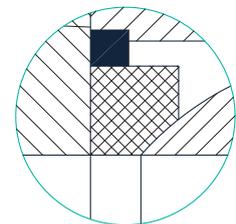


**SERIES E301-10**  
**1/4" ~ 2" Reduce port**

NO.	Parts	Material	Qty
1	Body	CF8M	1
2	Cap	CF8M	1
3	Ball	SS316	1
4	Seat	PTFE	2
5	Joint Gasket	PTFE	1
6	Thrust Washer	PTFE	1
7	Stem	SS316	1
8	Step Packing	PTFE	1
9	Gland Bush	SS304	1
10	Stem Washer	SS304	1
11	Stem Nut	SS304	1
12	Handle	SS304	1
13	Handle Cover	VINYL	1
14	Locking Plate	SS304	1



1/4" ~ 1"  
A VIEW



1-1/4" ~ 2"  
A VIEW

**DIMENSIONS(mm)**

SIZE	øA	D	E	L	T1	T2	W
1/4"	5.0	35	74	39	11.0	7.0	17
3/8"	7.0	37	82	44	11.0	8.0	21
1/2"	9.2	43.5	90	56.5	16.0	14.0	25
3/4"	12.5	47	90	58	15.0	10.7	32
1"	15.0	50	110	71	17.4	17.0	38
1-1/4"	20.0	57	110	78	19.0	16.7	48
1-1/2"	25.0	69	127	83	19.1	16.6	53
2"	32.0	74.5	135	100	22.5	19.7	66

## INTRODUCTION

The Series E301 is a one-piece valve engineered for industrial and chemical applications. It features a reduced bore and a reliable performance under standard pressure conditions. The non-maintainable design with a PTFE seat promotes cost-effective flow control, making it ideal for on/off operations in liquid and gas systems, such as isolation points, drainage, and testing.

## TECHNICAL SUMMARY

### SERIES E301-30

- Blow-out Proof Stem Design



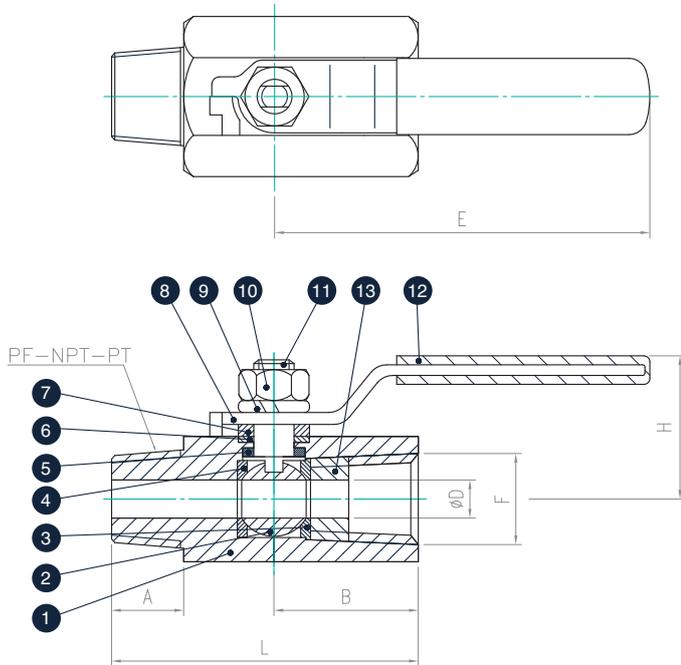
SIZE RANGE / END CONNECTIONS (REDUCED PORT)	FEMALE & MALE THREADED 800 PSI / CLASS 300 / PN 50 for 1/4"~1" ( DN8~DN25 )
PRESSURE RATING	800 PSI / CLASS 300 / PN 50
VALVE TYPE	Reduced Bore
BODY & END CAP MATERIAL ( ASTM )	CF8M, CF3M, CF8, CF3
BODY & END CAP MATERIAL ( EN )	1.4408, 1.4409, 1.4308, 1.4309
SEAT MATERIAL	PTFE, RTFE, CTFE, TFM1600, MG1241, STFE
HANDLE TYPE	Flat ( with / without SR Lock )

## STANDARD OF COMPLIANCE

MATERIAL CERTIFICATION	EN 10204-3.1
DESIGN	EN12516-1 & EN12516-3
END CONNECTIONS	FEMALE & MALE THREADED
PRESSURE TESTING	API 598
MARKING	ISO 5209
CE APPROVAL	N/A
QUALITY ASSURANCE	ISO 9001:2015

**CONSTRUCTION - BILL OF MATERIAL**

**SERIES E301-30**  
1/4" ~ 1" Reduce port



NO.	Parts	Material	Qty
1	Body	CF8M	1
2	Ball	SS316	1
3	Seat-A	PTFE	1
4	Seat-B	PTFE	1
5	Thrust Washer	PTFE	1
6	Stem Packing	PTFE	1
7	Gland Bush	SS304	1
8	Handle	SS304	1
9	Washer	SS304	1
10	Nut	SS304	1
11	Stem	SS316	1
12	Cover	VINYL	1
13	Cap	CF8M	1

**DIMENSIONS(mm)**

SIZE	øD	A	D	E	L	L	F
1/4"	5	11	20	60	37.9	46	1/4" PT-NPT-PF
3/8"	7	12	24	80	40	51	3/8" PT-NPT-PF
1/2"	9	15	29	90	47.2	66	1/2" PT-NPT-PF
3/4"	12.5	17	33	100	51.5	74	3/4" PT-NPT-PF
1"	15	20	39	110	53.5	86	1" PT-NPT-PF

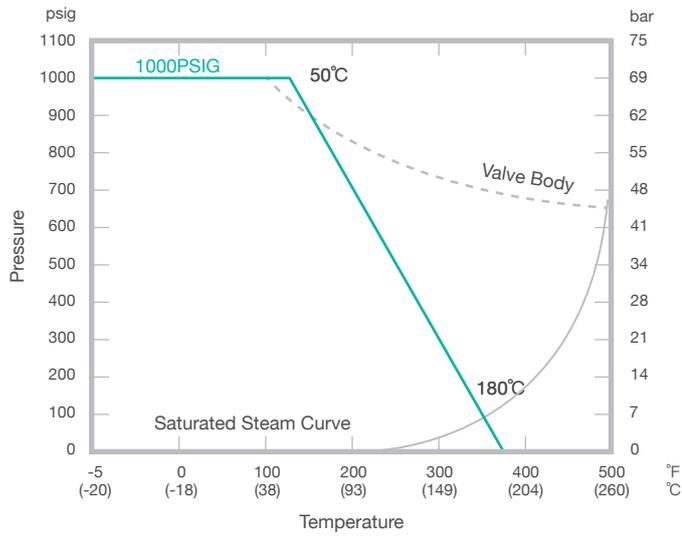
**TECHNICAL DATA | Breakaway torque / Cv and Kv values / Weight**

E301-10			
Valve size	Cv values	Kv values (M <sup>3</sup> /h)	Weight (Kg)
1/4"	2.5	2.1	0.07
3/8"	3.5	3.0	0.11
1/2"	4.8	4.1	0.19
3/4"	9.5	8.1	0.26
1"	14.0	11.9	0.43
1-1/4"	33.0	28.1	0.66
1-1/2"	45.0	38.3	0.86
2"	58.0	49.3	1.42

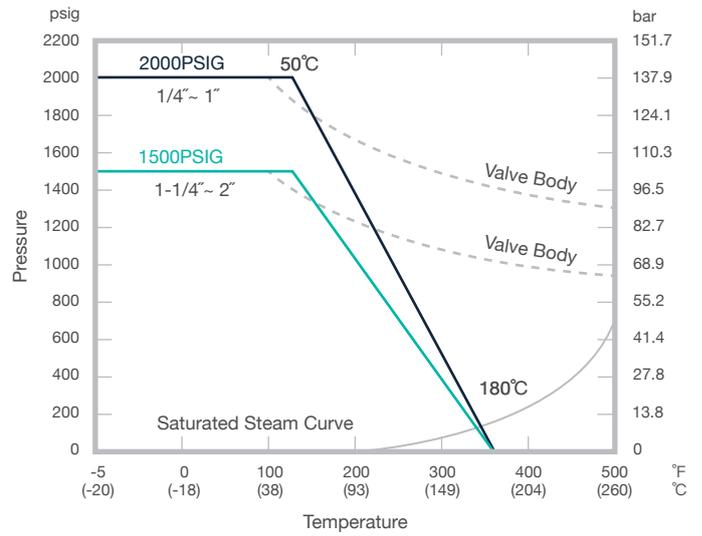
E301-30			
Valve size	Cv values	Kv values (M <sup>3</sup> /h)	Weight (Kg)
1/4"	2.5	2.1	0.08
3/8"	3.5	3.0	0.13
1/2"	4.8	4.1	0.24
3/4"	9.5	8.1	0.40
1"	14.0	11.9	0.62

**TECHNICAL DATA** | Pressure - Temperature diagram

**R301-10 / R301-20**  
**Seat material : PTFE / RTFE**



**R301-30**  
**Seat material : PTFE / RTFE**



**OPTIONAL ACCESSORIES**

**| Handle Options**



Butterfly Handle



Oval Handle



Flat ( with / without Spring Return Lock )



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

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