



A-T Controls, Inc.



CSA Series Ball & Butterfly Valves CSA 3.16 Certified





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CSA 3.16 is a standard that certifies 1/4" – 8" valves with welded, flanged, or threaded ends for use in natural gas, manufactured gas, and liquefied petroleum gases that are suitable for use between -76°F to 356°F.

The certified pressure range for these valves is 0–125 psig, and the maximum permissible pressure of valves installed in these applications is 187 psig.

To become certified, valves must be tested in various ways such as a 625 psig Hydrostatic Shell Test, a 125 psig Aerostatic Seat Test, bending test, and flow capacity tests. Valves also undergo operation and pressure testing at both low and high temperatures dependent on the temperature rating of the testing.

Each A-T Controls CSA 3.16 certified valve has TFM™-1600 seats installed, is production tested (seat leak tests in both directions and shell test), tagged with the date the valve was tested and CSA logo, and operation tested. The valves have been certified for service temperatures of -20°F to 149°F. A-T Controls certified 3.16:21 floating ball valves include our F88/F88C Series (1/4" - 3"), F90/F90C Series, and 6" Series 93/93C valves. A-T Controls certified High Performance Butterfly Valves include 2", 3", 4", 6" and 8" Series P1S valves.

Applications

- Natural Gas (inside the fence)
- Digester Gas (methane)
- Manufactured Gas
- Liquefied Petroleum Gas

CSA 3.16 Series Valves

Certified CSA 3.16 Valve Offering:

F88 Series	1/4" - 3"	3-Piece Ball Valve
F90 Series	1/2" - 4"	Split Body Flanged Ball Valve
93 Series	6" only	Split Body Flanged Ball Valve
P1S Series	2", 3", 4", 6" & 8"	POWER-SEAL High Performance Butterfly Valve

**API 607 - 6th Edition
CERTIFIED**



F88 Series

- API 607 Firesafe
- Sizes 1/4" - 3"
- Three Piece Design
- Available in Stainless Steel and Carbon Steel
- Full port 1000-2000 psi
- Threaded, Socket Weld, or Butt Weld Ends

**API 607 - 6th Edition
CERTIFIED**



F90 Series

- API 607 Firesafe
- Sizes 1/2" - 4"
- Split Body Flanged High Performance Ball Valve
- ASME Class 150
- Available in Stainless Steel and Carbon Steel
- Full Port Design



93 Series

- Size 6" only
- Split Body Flanged High Performance Ball Valve
- ASME Class 150
- Full Port Design
- Available in Stainless Steel and Carbon Steel



P1S Series

- Sizes 2", 3", 4", 6" & 8"
- POWER-SEAL High Performance Butterfly Valves
- Soft Seat Design (standard TFM™-1600)
- ASME Class 150 Lug and Wafer
- Available in Stainless Steel

Part Number Matrix FOR CSA 3.16 CERTIFIED VALVES

FLOATING BALL VALVES

1 Prefix	
F	Firesafe Tested (88 Series and 90 Series only)

2 Valve Series	
88	3pc. Direct Mount 2000 psi max, Full Port (1/4" - 3")
90	2pc. Flanged Full Port (Investment Cast) (1/2" - 4")
93	2pc. Flanged Full Port (Sand Cast) (6" only)

3 Body/Ball/Stem Material	
Blank	ASTM A351 Grade CF8M Stainless Steel
C	ASTM A216 Grade WCB Body, CF8M Ball

4 End Connection	
TH	NPT Ends
SW	Socket Weld Ends
BW	Valve Series Standard Butt Weld Ends
EW	4" Long, Sch. 80, Extended Butt Weld Ends
F1	150# Flanged Ends
TE	NPT x 4" Long, Sch. 80, Extended Butt Weld Ends
TS	NPT x Socket Weld

5 Valve Size			
0025	1/4"	0150	1-1/2"
0038	3/8"	0200	2"
0050	1/2"	0250	2-1/2"
0075	3/4"	0300	3"
0100	1"	0400	4"
0125	1-1/4"	0600	6"

6 Seat, Lining & Trim Materials	
T	TFM™-1600 Seats

7 Special Designations	
X	No Specials, Series Standard Handle
G	Gear Operator
H	Gear Operator with Lockout Plate
O	Oval Handle (available on some)
S	Spring Return Handle (Direct Mount only)
4	4" Lockable Stem Extension

8 Additional Specials	
X	No Specials, Series Standard
O	Oxygen Cleaned
Z	Special End Configuration
V	Vented Ball
E	Bonnet Extension Lockable Handle
F	Fugitive Emissions Bonnet
D	Degreased & Bagged
A	Vented Ball, Degreased & Bagged
B	Vented Ball, Oxygen Cleaned

9 Special Designation	
Blank	No Designation, Valve Series Standard
X	Multiple Option Designation
3	30° V-Port (v-ball)
6	60° V-Port (v-ball)
9	90° V-Port (v-ball)
A	17-4 PH® Stem
B	XM-19 (Nitronic 50) Stem
C	Duplex 2205 Stem
D	Inconel® 718 Stem

10 O-Ring	
X	Multiple Option Designation
2	Markez Z1028
4	Kalrez 4079
5	Chemraz 505
6	Kalrez 6375
7	Perlast G75M
9	Chemraz 564
B	Low Temp Buna
E	EPDM
S	Silicone

11 Additional Specials	
Blank	Standard
X	Multiple Option Designation
B	B7M Bolting
M	Marine Epoxy Coating
C	CSA 3.16 Certified (F90/F88/93 Series)

HOW TO ORDER CSA 3.16 FLOATING BALL VALVES															
1	2	3	-	4	-	5	-	6	7	8	-	9	-	10	11
↓	↓	↓		↓		↓		↓	↓	↓		↓		↓	↓
F	88	C	-	TH	-	0150	-	T	X	X	-	X	-	X	C

POWER-SEAL HIGH PERFORMANCE BUTTERFLY VALVES

1 Valve Series	
P1S	Power-Seal Soft Seat

2 Body Material	
Blank	(No Designation) = CF8M (316 SST) Body

3 End Connection	
L1	Class 150 Lug
W1	Class 150 Wafer with Guide Holes

4 Valve Size			
0200	2"	0600	6"
0300	3"	0800	8"
0400	4"		

5 Seat Material	
T	TFM™-1600 Seats

6 Disc Material/Style	
S	CF8M (316 SST) (Standard on CS or SST body)

7 Stem Bearing	
R	PTFE Composite (Standard on P1S)

8 Operator Designation	
H	Standard 10 point Handle

9 Stem	
A	17-4 PH® Stem (Standard)

10 Packing (Live Loaded)	
P	PTFE V-Ring (Standard on P1S)

11 Additional Options	
C	CSA 3.16 Certified (with CSA Marking)

HOW TO ORDER CSA 3.16 POWER-SEAL HIGH PERFORMANCE BUTTERFLY VALVES															
1	2	-	3	-	4	-	5	6	7	-	8	9	10	-	11
↓	↓		↓		↓		↓	↓	↓		↓	↓	↓		↓
P1S		-	L1	-	0300	-	T	S	R	-	H	A	P	-	C