



BOILER CONTROL, COMBUSTION MANAGEMENT & HARDWARE FOR THE STEAM POWER INDUSTRY

VALVES

# Automatic/Manual Valves

CSA/FM/API APPROVED

Fossil Power Systems Inc. is pleased to announce the release of our new line of manual and automatic valves which offer unsurpassed quality and components at an affordable price. Based on our past customer experience, this line of valves is intended to be available for quick delivery.

## AVAILABLE MODELS

- Sizes 1/2"– 2" with NPT or Socket Weld connections
- Sizes 1/2"–6" with ANSI B16.5 150# or 300# flanged connections
- Explosion-proof limit switch and solenoid coil for hazardous locations
- Water-tight limit switch and solenoid coil for wet locations
- Optional low power solenoid coil specifically for solar powered gas field applications
- Available in either a "Fail Closed" or "Fail Open" configuration upon the loss of either the power or air supplies
- CF8M valve bodies



FPS FAILSAFE 6"  
150# FLANGE VALVE

Controlling  
the **power**  
of **steam**

# KEY FEATURES OF FPS AUTOMATIC VALVES

## GENERAL

- Highly visible beacon type open/closed indicator for ease of viewing at a distance and in dark environments
- Direct valve to actuator mounting via ISO 5211 Standard, eliminating the need for brackets and couplers which could become bent or broken
- Direct connection of the limit switch shaft to the actuator pinion

## VALVE

- Three piece valve body design on threaded and socket weld connections allows the center section to be removed for easy replacement of the ball, seats and seals without disturbing pipe connections
- Ball valve seals in both directions ensuring successful pre-start leak testing
- The valve stem is tensioned using Belleville washers to allow for automatic compensation of normal seal wear and temperature fluctuations
- 316 SS ball, stem and hardware

## ACTUATOR

The pneumatic rack and pinion actuator consists of:

- Precision anodized and fluoropolymer impregnated aluminum alloy body
- Die cast aluminum alloy end caps
- Die cast aluminum alloy pistons
- One piece aluminum alloy shaft and pinion
- Nitrile seals
- Nylatron piston bearings
- Carbon steel springs on spring return model
- Stainless steel fasteners

## SOLENOID

- Anodized aluminum bodies and direct actuator mounting via the accepted NAMUR standard mounting patterns
- Various voltages available for seamless system integration
- Available in 12 VDC, 24VDC, 120VAC, 240VAC
- Available in explosion-proof or watertight models
- Available in Low Power Option (24VDC only)



FPS FAILSAFE 1" NPT VALVE

# SPECIFICATIONS

## SPRING RETURN OR DOUBLE ACTING VALVE OPERATING SPECIFICATIONS

- Max. Operating Pressure: Consult factory
- Max. Ambient Operating Temperature: Consult factory
- Min. Ambient Operating Temperature: -45°C (-49°F)
- Mounting: Multi-position
- Flow: Bi-directional
- Materials: CF8M Valve Body; 316 S/S Ball; Stem and Hardware
- Actuator: Spring Return or Double Acting

# SPECIFICATIONS

## CSA AUTOMATIC GAS VALVE OPERATING SPECIFICATIONS

- Max. Operating Pressure: 1380kPa (200 psig)
- Max. Ambient Operating Temperature: 50°C (122°F)
- Min. Ambient Operating Temperature: -45°C (-49°F)
- Mounting: Multi-position
- Flow: Bi-directional
- Materials: CF8M Valve Body; 316 S/S Ball; Stem and Hardware
- Actuator: Spring Return

## AVAILABLE CERTIFICATIONS

- CSA 6.5-2000/ANSI  
Z21.21 – Automatic Valves for Gas Appliances
- CGA 3.9-M94 – Automatic Safety Shut-off Gas Valves
- CSA – Commercial/Industrial (C/I)
- CSA Interim Requirement No. 60  
Lever Operated Gas Shut-off
- API 607 4th Edition Firesafe  
on all valves
- FM Class 7400 - Liquid and Gas Safety Shutoff Valves  
(Sept. 2004)

## SPECIFICATIONS

### FM AUTOMATIC LIQUID & GAS VALVE OPERATING SPECIFICATIONS

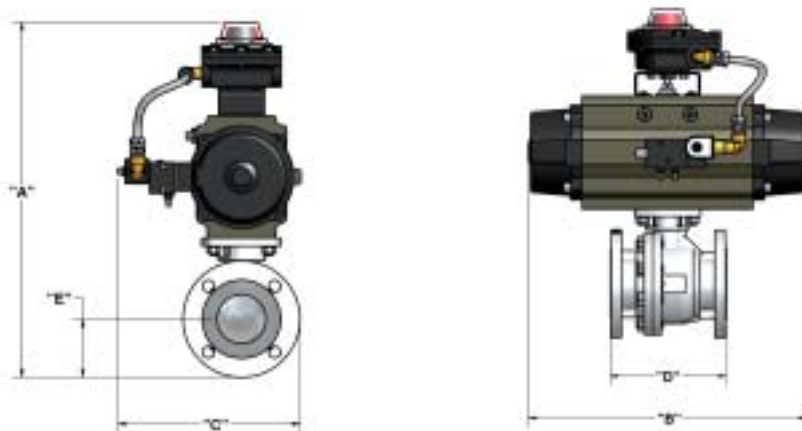
- Max. Operating Pressure:  
1380kPa (200 psig)
- Max. Ambient Operating Temperature: 60°C (140°F)
- Min. Ambient Operating Temperature: -10°C (14°F)
- Mounting: Multi-position
- Flow: Bi-directional
- Materials: CF8M Valve Body;  
316 S/S Ball;  
Stem and Hardware
- Actuator: Spring Return

AUTOMATIC VALVES THREADED - SPRING-RETURN/EXPLOSION-PROOF							
Size	Cv	"A" in (mm)	"B" in (mm)	"C" in (mm)	"D" in (mm)	"E" in (mm)	Weight lbs (kg)
1/4"	8	12.1 (308.2)	7.7(194.6)	10.6 (270)	3 (75)	1 (25.6)	11.9 (5.4)
3/8"	8	12.1 (308.2)	7.7 (194.6)	10.6 (270)	3 (75)	1 (25.6)	11.9 (5.4)
1/2"	8	12.1 (308.2)	7.7 (194.6)	10.6 (270)	2.9 (72.5)	1 (25.6)	11.9 (5.4)
3/4"	15	12.5 (317.6)	7.7 (194.6)	10.6 (270)	3.4 (85.4)	1.2 (30.7)	13 (5.9)
1"	34	13.8 (352)	8.1 (205.6)	10.6 (270)	4.1 (105.3)	1.3 (33.8)	16.7 (7.6)
1-1/4"	56	14 (355.4)	8.1 (205.6)	10.6 (270)	4.4 (111)	1.5 (38.6)	18.2 (8.3)
1-1/2"	85	15.9 (404.3)	9.8 (250)	10.6 (270)	5 (127.3)	1.7 (43.3)	26.1 (11.8)
2"	125	17 (431.1)	9.8 (250)	10.6 (270)	5.7 (145)	2.4 (61.4)	29.3 (13.3)

\*For other dimensions consult factory  
\*\*Dimensions are approximate



AUTOMATIC VALVES FLANGED – ANSI 150#, SPRING RETURN, EXPLOSION-PROOF							
Size	Cv	"A" in (mm)	"B" in (mm)	"C" in (mm)	"D" in (mm)	"E" in (mm)	Weight lbs (kg)
1/2"	28	13.8 (350.2)	8.1 (205.6)	10.6 (270)	4.3 (108.3)	1.8 (44.5)	13 (5.9)
3/4"	50	14.2 (359.5)	8.1 (205.6)	10.6 (270)	4.6 (117.3)	1.9 (49.3)	13.9 (6.3)
1"	95	14.6 (371.8)	8.1 (205.6)	10.6 (270)	5 (127.1)	2.1 (54)	15.7 (7.1)
1-1/2"	260	17.1 (434.6)	8.1 (205.6)	10.6 (270)	6.5 (165.1)	2.5 (63.5)	27.8 (12.6)
2"	485	17.9 (454.8)	9.8 (250)	10.9 (277.5)	7 (178.3)	3 (76.2)	33.7 (15.3)
2-1/2"	800	19.9 (506.9)	9.8 (250)	10.9 (277.5)	7.5 (190)	3.5 (88.9)	55.1 (25)
3"	1250	20.9 (529.8)	14 (355)	12.7 (322.2)	8 (203.5)	3.8 (95.3)	65.5 (29.7)
4"	2250	22.6 (573.3)	14 (355)	13.5 (341.8)	9 (228.6)	4.5 (114.3)	90.8 (41.2)
6"	5400	28.2 (716.7)	16.6 (422)	14.8 (375.2)	15.5 (393.7)	5.5 (139.7)	203.7 (92.4)



## MANUAL VALVES

- Fossil Power Systems Inc. (FPS) offers a series of CSA approved manual valves in sizes 1/2" to 2" with NPT or Socket Weld connections
- Sizes 1/2" to 6" are available with 150# or 300# flanged connections
- CF8M valve bodies
- Locking handle is standard

## KEY FEATURES OF FPS MANUAL VALVE

### GENERAL

- Three-piece swing-out valve body on threaded and socket weld connections allows the center section to be removed for easy in-line maintenance
- Insulated locking handle indicates the position of the ball
- Ball valve seals in both directions ensuring successful pre-start leak testing
- Multi-position mounting

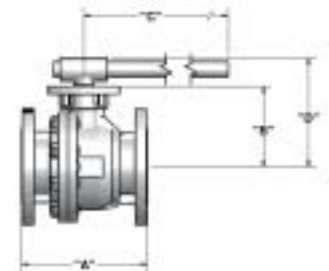
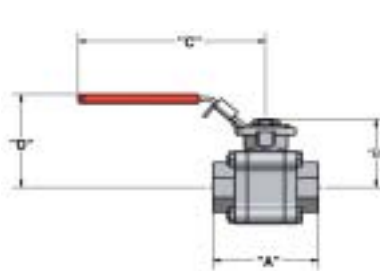
## CSA MANUAL GAS VALVE SPECIFICATIONS

- Max. Operating Pressure: 1380kPA (200psig)
- Max. Ambient Operating Temperature: 65°C (149°F)
- Min. Ambient Operating Temperature: -40°C (-40°F)
- Mounting: Multi-position
- Flow: Bi-directional
- Materials: CF8M Valve Body; 316SS Stem, Seat and Hardware

MANUAL VALVES THREADED/SOCKET WELD						
Size	Cv	"A" in (mm)	"B" in (mm)	"C" in (mm)	"D" in (mm)	Weight lbs (kg)
1/4"	8	3 (75)	1.9 (49)	5.5 (139)	3 (77)	1.96 (.89)
3/8"	8	3 (75)	1.9 (49)	5.5 (139)	3 (77)	1.94 (.88)
1/2"	8	2.9 (72.5)	1.9 (49)	5.5 (139)	3 (77)	1.83 (.83)
3/4"	15	3.4 (85.4)	2.2 (55.4)	5.5 (139)	3.2 (82)	1.85 (.84)
1"	34	4.1 (105.3)	2.7 (69.7)	6.5 (165)	3.9 (98.5)	3.30 (1.50)
1-1/4"	56	4.4 (111)	2.9 (73)	6.5 (165)	4 (102)	4.78 (2.17)
1-1/2"	85	5 (127.3)	3.6 (92.4)	8.5 (215)	5 (128)	9.41 (4.27)
2"	125	5.7 (145)	4 (101.1)	8.5 (215)	5.4 (137)	11.68 (5.30)

\*Dimensions are approximate

MANUAL VALVES ANSI FLANGED 150#						
Size	Cv	"A" in (mm)	"B" in (mm)	"C" in (mm)	"D" in (mm)	Weight • 150lbs lbs (kg)
1/2"	28	4.3 (108.3)	1.8 (46.7)	6.5 (165)	3.3 (82.7)	4 (1.81)
3/4"	50	4.6 (117.3)	2 (51.2)	6.5 (165)	3.3 (82.7)	4.8 (2.19)
1"	95	5 (127.1)	2.3 (58.8)	6.5 (165)	3.8 (96.8)	6.4 (2.91)
1-1/2"	260	6.5 (165.1)	3.5 (89.1)	10.3 (262)	5.8 (147.1)	14.1 (6.4)
2"	485	7 (178.3)	3.8 (96.6)	10.3 (262)	6.1 (154.6)	20.2 (9.19)
2-1/2"	800	7.5 (190)	4.6 (116)	10.3 (262)	6.9 (174)	31.5 (14.3)
3"	1250	8 (203.5)	5.2 (132.5)	14.4 (365)	7.1 (178.7)	43 (19.5)
4"	2250	9 (228.6)	6.3 (160.7)	14.4 (365)	8 (203.2)	68.4 (31)
6"	5400	15.5 (393.7)	8.3 (210.2)	29.5 (750)	10.9 (276.7)	165.4 (75)



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