

# FB7904 Series

## Sanitary Butterfly Valves

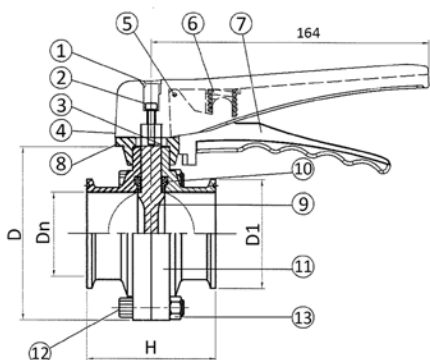
### FEATURES

- In sizes from 1/2" (DN15) through 4" (DN100)
- Pressure ratings up to 145 psi (10 bar)
- Internal finish 32 Ra
- Lockable handle prevents accidental opening or closing of valve
- Proportional control w/ 12 position SS handle
- Designed for simple maintenance
- Available with EPDM or Viton Seats
- Sanitary Clamp Connection
- Available as manual or actuated valve



Quick Spec	
Product Scope	
Size Range	1/2" - 4"
Body Type	Wafer
Pressure Rating	See Chart Below
Temperature Range / WSP	See Chart Below
Body and End Caps	Stainless Steel
Disk & Stem	Stainless Steel
Seats	3EPDM or Viton
Stem Packing & Seals	FDA Approved
End Connections	Sanitary Clamp Ends
Testing Standards	
Pressure Testing	Industry Standard

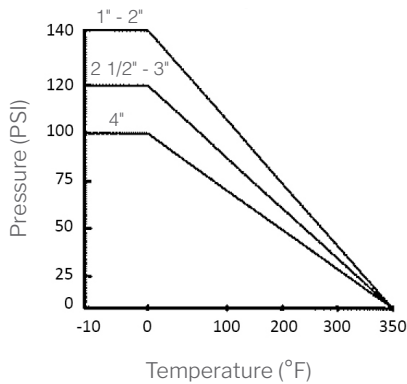
Standard Materials of Construction			
No	Part	Material	Qty
1	Cap	ABS	1
2	Screw Bolt	SS304	1
3	Spring Washer	SS304	1
4	Stainless Handle	SS304	1
5	Pin	SS304	1
6	Spring	SS304	1
7	Trigger	SS304	1
8	Multi - Positioner	SS304	1
9	Disc	SS304 / 316L	1
10	Seal	EPDM / VITON	1
11	Valve Body	SS304 / 316L	2
12	Screw Bolt	SS304	4
13	Nut	SS304	4



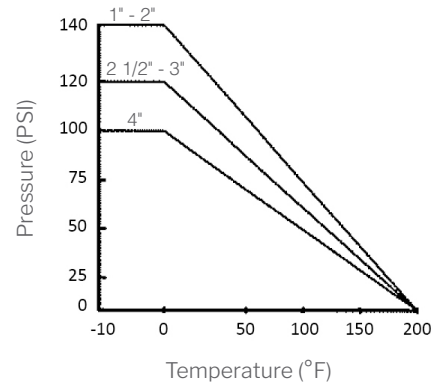
Dimensions (mm)				
Size	D	D1	Dn	H
1/2"	78	25.4	9.4	66.0
3/4"	78	25.4	15.8	66.0
1"	78	50.5	22.1	66.0
1-1/2"	86	50.5	34.8	70.0
2"	102	64.0	47.5	76.0
2-1/2"	115	77.5	60.2	80.0
3"	128	91.0	72.9	84.0
4"	154	119.0	97.4	104.0

### Pressure-Temperature Ratings

Pressure Temperature Chart (Viton Seats)



Pressure Temperature Chart (EPDM Seats)



### OPTIONAL ADD ON: SMART POSITIONER

This smart positioner is a pneumatic control head used to ensure optimal control of our valves. It is compatible with most PLC (programmable logic controller) automation systems, digital communications, or bus (as-wing).

It is mounted on the upper part of the pneumatic actuator or the process valve to start and provide remote electrical indication of the valve's working position. There is a type indication:

- Proximity sensing detector (no contact)

It can be fitted with any valve in the food, beverage and biopharmaceutical industries.

The working principle of this positioner is a signal and instruction device that contains signals and instructions for controlling all types of process valves (pistons) with the following functions:

- Pneumatic and electrical control of valves
- Feedback position indicator
- The possibility of bus communication

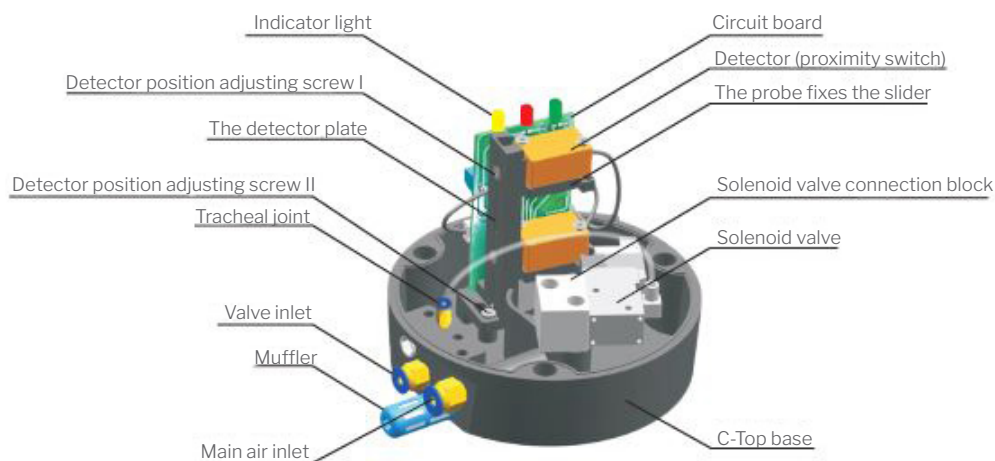
It is mounted on the valve's pneumatic actuator. It receives a signal from the control panel or PLC to control the valve and sends the signal to the PLC or control panel to indicate its status/position.



The positioner has three signal light-emitting diodes that can provide information about valve status at any time:

- A green light: Indicates that the valve is in an open position
- Red light: Indicates that the valve is in the closed position
- Yellow light: Said position 3 is already active (for example: the mixing valve)

## POSITIONER FEATURES



## POSITIONER SPECIFICATIONS

### The Material:

- Base: reinforced PPO black
- Top cover: clear blue
- Seal: EPDM
- Weight: 0.5KG

### Pneumatic Joint

- Connection: air inlet: G1/8" - equipped with plug connector for 1/4 pipe
  - Exhaust outlet: G1/8" - equipped with muffler
  - Air outlet: G1/8" - equipped with an insert connector or plug for 6/4 pipes
- Medium: compressed air
- Temperature: <50°C
- Pressure of work: 0.15 to 0.7Mpa (22-102PSI)
- Traffic: 200NI/min (0.6Mpa, 20°C, 0.1Mpa); (87PSI, 20°C, 87PSI)
- Operation: minimum stroke induction height: 30mm
  - Maximum stroke induction height: 92mm
  - Minimum operating height: 18mm

### Electrical Specifications:

- Protection level: Ip66
- Power supply: DC 24V or through ASI field bus
- Connection: threaded terminal with M12 wire (standard)
  - Many connector
  - AS the -1 bus

### Solenoid Valve

- Up to three solenoid valves are available
- Type: One solenoid valve (normally open/normally closed)
  - Two solenoid valves (double acting)
  - Three solenoid valves (anti-mixing valve)
- Air pressure: 0.15 to 0.7Mpa (22-10PSI)
- Power: DC 0.55W
- DC: 1.9VA
- The reaction time: <25ms
- Optical index: red

### Detector (inductive)

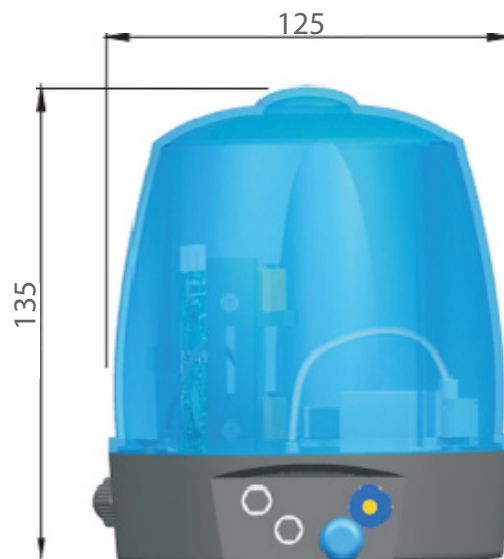
- The power supply: 24V DC
- Protection level: Ip66

Note: To ensure good valve performance, compressed air must be supplied in accordance with the conditions described in this article. Otherwise, the smart head may cause irreparable damage.

## SMART POSITIONER CHARACTERISTICS

The Connection	Solenoid Valve	Detector number	Power Supply	Description
The Connector	0	2 The Probe	24V DC	Control head with PCB.  The power supply is provided directly to the connector.  M12 traverse.
	1			
	2			
	3			
	0	2 Proximity Switch	24V DC	
	1			
	2			
	3			
More Needles	0	2 The Probe	24V DC	Control head with PCB.  Electrical connection of prewired factory.  The Electrical connection is made through the eight terminals.
	1			
	2			
	3			
	0	2 Proximity Switch	24V DC	
	1			
	2			
	3			
As-I Bus Connection	0	2 The Probe	24V DC	Control head with PCB  Connect the smart plug directly to the field bus signal cable.
	1			
	2			
	3			

## SMART POSITIONER DIMENSIONS



## FB7904 SANITARY BUTTERFLY VALVES

## ORDERING SCHEMATIC

FB7904		1	2	3	4	5	6

	Series
FB7904	Sanitary Butterfly Valve

3	Material
A	316L

1	Size
1	1/2"
2	3/4"
3	1"
4	1-1/2"
5	2"
6	2-1/2"
7	3"
8	4"

4	Seat
1	EPDM
2	Viton

5	Option 1
0	No Selection
A	Actuator

2	End Connection
A	ASME Tri-Clamp

6	Option 2
0	No Selection
A	Positioner

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3170 Wasson Road • Cincinnati, OH 45209  
 513.533.5600 • 800.543.7311 • 513.871.0105 (f)  
 foodandbev@richardsind.com