

SEGMENTED CONTROL VALVES MODEL 920 KEYED SHAFT AND 940 DIRECT MOUNT



SUPERIOR PERFORMANCE, LONGER LIFE

The FNW Segmented Ball Valve is specifically engineered to provide tight control and long service life. Rugged construction allows for service in a wide range of applications, such as steam, paper stock, slurry, hot oil and hot gases, in a variety of industries, including chemical, fiber, pulp and paper, and pharmaceutical. Proper selection of construction materials will ensure resistance to corrosion and erosion.

The inherent V-shape of the segment provides for much tighter control than standard ball valves. The segmented style of ball has the advantage of a free flow path for the fluid to keep Cv's as high as possible. It also means there is less surface area in contact between the ball and the seat, so torques remain low.

The direct mount option of the Model 940 means bracket sets are not required, thereby reducing overall cost and size of the valve assembly.

MODEL 920: KEYED SHAFT; MODEL 940: DIRECT MOUNT

KEY FEATURES

MODEL 920 - KEYED SHAFT: 1" through 12", Class 150 and 300

MODEL 940 - DIRECT MOUNT: 1" through 8", Class 150 and 300

Additional sizes and pressure classes are available on request.

- ISA face to face
- Multiple seat options
- Bolted retainer for ease of repair
- Standard hard chrome plated ball

- Live loaded adjustable packingSplined shaft
- Low torque
- Low profile mounting option

• Flanged or wafer options

SEAT OPTIONS

Seat Type B

Standard Metal Seat Temp Range -20°F to 392°F

| No | Name | Standard Material |
|----|-----------------|-------------------|
| 1 | Retainer | WCB/CF8M |
| 2 | Seat | 316SS + Stellite |
| 3 | O-Ring | Aflas® |
| 4 | Seat Spring | 17-7PH/X750 |
| 5 | Ball | CF8M w/Chrome |
| 6 | Retainer Gasket | 316SS+Graphite |

Seat Type C

High Temperature Metal Seat Temp Range -20°F to 797°F

| No | Name | Standard Material |
|----|-----------------|--------------------|
| 1 | Retainer | WCB/CF8M |
| 2 | Seat Spring | 17-7PH/X750 |
| 3 | Back-Up Ring | 316SS |
| 4 | Graphite Ring | Graphite |
| 5 | Metal Seat | 316SS w/Stellite 6 |
| 6 | Ball | CF8M w/Chrome |
| 7 | Retainer Gasket | 316SS+Graphite |



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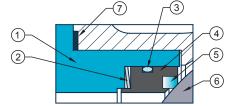
Seat Type D

Temp Range -20°F to 302°F

Soft Seat

Seat Spring17-7PH/X750O-RingAflas®Back-Up Ring316SSSeatDevlon®BallCF8M w/ChromeRetainer Gasket316SS+Graphite

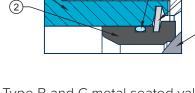
Standard Material WCB/CF8M



Type B and C metal seated valves comply with ANSI/FCI 70.2 Class IV Shutoff. Class V is available.

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Type D soft seats comply with ANSI/FCI 70.2 Class VI Shutoff.





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OPTIONS

Materials of Construction

A wide variety of material options for valve body and segment. Contact your FNW representative for assistance in selecting the correct material for long valve life.

Cortex Hardening

Special CORTEX treatment is available to increase hardness of the body and/or ball. CORTEX resists abrasion and erosion and can reduce the amount of product buildup on the valve parts.

Low Flow Trim Option

For precise control at very low flow conditions, 1" and smaller valves are available with Low Flow trim. Specific shape varies based on valve size and specific flow characteristic requirements.



Low Flow Trim Option

AUTOMATION

FNW has the capability to provide fully automated segmented ball valve assemblies.

The Model 940 Direct Mount Valve is ideal for low profile and economical automation.

Pneumatic actuators, electric actuators, positioners, limit switches, gear operators—we can do it all. Let us know what you need, and we can provide it!

FEATURED: ASD Spring-Diaphragm Actuator

The ASD Spring-Diaphragm Actuator is specifically designed for quarter turn valve automation and is ideally suited for precise control. The actuator can either direct mount to the model 940 or to the bracket set of the 920 valve. For enhanced control and reduced hysteresis, we can provide a squeeze coupler that clamps to the square of the valve shaft for the tightest connection.



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ORDER CODES



| MODEL | PRESSURE CLASS | CONNECTION TYPE |
|-------------------------------------|------------------------|----------------------------------|
| 920 = Segmented V-Ball Valve | A = Class 150, ISA F/F | F = Flanged ★ |
| 940 = Direct Mount Segmented V-Ball | B = Class 300, ISA F/F | W = Wafer - 150#/300# Dual Rated |

| BC | DY MATERIAL | SEGMENT MATERIAL | TRIM |
|--|---|---|--|
| C = WCB CC = WCB with CORTEX S = CF8M (316SS)★ SC = CF8M with CORTEX 4 = CF8 (304SS) 4C = CF8 with CORTEX | 7 = CG8M (317SS) 7C = CG8M with CORTEX L = LCB Low Temp Carbon Steel 6 = WC6 Alloy Steel D = Duplex Stainless T = Titanium Gr. 2 | S = CF8M H = CF8M + Chrome \star 7 = CG8M W = CF8M + Tungsten Carbide T = Titanium N = CF8M + Nickel Alloy | S = Standard Cv Full Trim ★ A = Abrasion Resistant for Slurry 6 = Reduced Cv Trim (60% of full) 4 = Reduced Cv Trim (40% of full) |

| SEAT MATERIAL | SHAFT MATERIAL | PACKING MATERIAL | AUTOMATION | VALVE | SIZE |
|---|---|--------------------------------|---|---|--|
| D = Devlon Soft Seat W = 316SS + Tungsten Carbide B = 316SS + Stellite \star P = PEEK Soft Seat N = 316SS + Nickel Alloy C = 316SS + Stellite High Temp M = TFM Soft Seat T = Titanium | P = 17-4PH ★ 6 = 316SS D = Duplex 2205 T = Titanium Gr. 4 X = XM-19 | P = TFM-1600 ★ G = Graphite | B = Bare Shaft ★ G = Gear Operator Consult factory for automation options. | $\begin{array}{l} G = 1"\\ J = 1 - 1/2"\\ K = 2"\\ M = 3"\\ P = 4"\\ U = 6"\\ X = 8"\\ \end{array}$ | 10 = 10" 12 = 12" 14 = 14" 16 = 16" 18 = 18" 20 = 20" |

 \star Indicates standard stock materials of construction