Bulletin Plug Valves 5400





FLO-E-CENTRIC® PLUG VALVES

FLOMATIC SERIES 5400

ROUND-PORT ECCENTRIC PLUG VALVES ANSI/AWWA C517

Flomatic Valves is a certified manufacturer under ISO 9001-2015 and ISO 14001-2015 quality and environmental systems

FLO-E-CENTRIC® PLUG VALVES SERIES 5400

Flomatic's Series 5400 Flo-E-Centric® Plug Valves are energy-efficient, round-port, eccentric, quarter turn plug valves designed in compliance with AWWA C517, in a fusion bonded epoxy coated Ductile Iron body.

Designed with a nickel welded seat for long service life, Flomatic Plug Valves are used in a variety of applications where slurries, solids, or grit are present:

- Wastewater and Sewage Lines
- Pulp and Paper Processing Facilities
- Food and Chemical Handling
- Wastewater Treatment Plants
- Sewage Sludge and Slurry Lines
- Mining and Irrigation Applications

FEATURES & BENEFITS

- ANSI/AWWA C517
- ANSI/AWWA C111-A21 Mechanical Joint Ends
- Certified Lead-Free NSF/ANSI 372
- Coated with NSF/ANSI 61 Fusion Bonded Epoxy
- Can be used with Bi-Directional Flow
- Stainless Steel Thrust Bearing with PTFE washers
- V-Type Packing
- Ductile Iron Body (ASTM A536 65-45-12)
- Class 150# ANSI B16.5 Flanged Ends
- 98% Welded Nickel Seat
- Stainless Steel Hardware
- 100% Full Ported (2" 8")
- 90% Ported (10" 24")
- Spherical BUNA-N Coated Ductile Iron Plug
- Size Range: 2"-12" (200 PSI); 14"-24" (150 PSI)

FOR REFERENCE USE ONLY, SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE. PLEASE REFER TO OUR WEBSITE WWW.FLOMATIC.COM FOR ADDITIONAL TECHNICAL INFORMATION

TECHNICAL DATA SERIES 5400

V-Type Packing

Convenient design with full size access cover, enabling easy removal for inspection and/or service, without removing the valve from the line, providing long service life.

ECCENTRIC PLUG (NBR Encapsulated)

The Flo-E-Centric[®] spherical plug forms a circular seat and plug face offsets from the shaft centerline to provide tight shutoff and wear resistance.

Constructed of Strong NBR-Encapasulated Ductile Iron.

FULL DISCHARGE PORT

Low flow restriction, providing exceptional flushing and very low headloss.

NICKEL-WELDED BODY SEAT

98% pure nickel body seat for corrosion and abrasion resistance

SHAFT SEALS

Multiple V-type shaft seals to protect from wear and grit infiltration. Shaft seal can be changed in-line under pressure.

FULL PORT 100%*

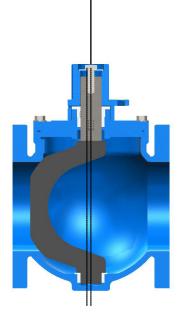
The port area is equal to the full pipe area, and the round-port valve design improves the dynamic characteristics of the flow, saving energy cost. * Sizes 10"-24" are reduced to a minimum 90%

STRONGER DUCTILE IRON BODY

Stronger body than conventional cast iron designs Body is Fusion Bonded Epoxy Coated Inside and Outside

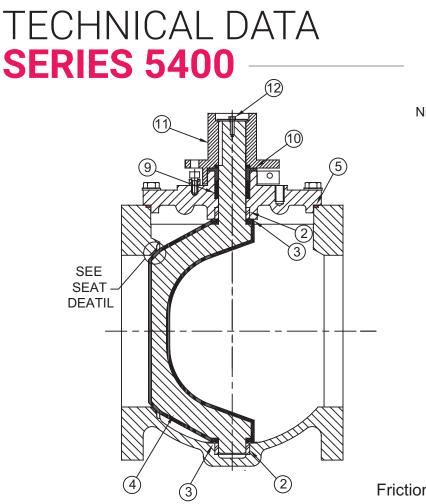
LUBRICATED BEARINGS

Permanently lubricated sintered 316 Stainless Steel bearings top and bottom supported by PTFE washers.



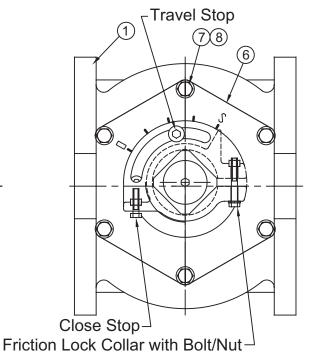
ECCENTRIC DESIGN

The plug face is designed offset from the shaft centerline resulting in lower operating torque, positive shut off, and superior wear resistance.



SEAT DETAIL

Ni WELDED SEAT



Max Temp 180°F (82°C) Max Pressure 200psi (14bar)

ltem #	Qty	Description	Material	ASTM	Item #	Qty	Description	Material	ASTM
1	1	Body	Ductile Iron	A536 (65-45-12)	7	6	Bolt	Stainless Steel	304
2	2	Bushing	Stainless Steel	316	8	6	Washer	Stainless Steel	304
3	2	Washer	PTFE		9	5	V-Packing	NBR	
4	1	Plug	Ductile Iron/NBR	A536 (65-45-12)	10	1	Gland	Brass	B16
5	1	O-Ring	EPDM		11	1	Nut*	Ductile Iron	A536 (65-45-12)
6	1	Bonnet	Ductile Iron	A536 (65-45-12)	12	1	Bolt/Washer	Carbon Steel	

*Operating handle part # 1105-200-09 (2 1/2" - 8") and part # 1105-50-11 (2")

ACTUATION

Gear - Flomatic's standard Model 54-0 and Model 54-3 are equipped with a totally enclosed and sealed worm gear actuator and position indicator (for above ground service) and externally adjustable "open" and "close" stops.

All gear actuators are designed to withstand, without damage, a rim pull of a 200 lb. on the hand wheel or optional chain wheel and an input torque of 300 ft-lbs. for the 2" operating nuts.

2" Operating Nut - Optional Model 54-4 is equipped with a 2" square operating nut for direct quarter-turn operation or replacing hand-wheel for gear operation. Additionally, an optional wrench handle for use with a direct 2" operating nut is available.

ISO mount - Model 54-6 is equipped with a standard ISO mount flange for an optional electric actuator.

Bare Stem - Model 54-B is also available for any bare shaft connection.



FLO-E-CENTRIC® MODELS



MODEL 54-B Plug Valve with Bare Stem

ANSI B16.1, class 150 Ductile iron Body ASTM A536 65-45-12. Epoxy Powder, Buna-N Plug, V-Type Packing, Self Lubricating Type 316 Stainless Steel thrust bearing. TEMP MAX: 180°F (80°C)
 PRESSURE MAX: 200 PSI
 SIZES: 2" THRU 12"



MODEL 54-4 Plug Valve with 2" AWWA Operating Nut

ANSI B16.1, class 150 Ductile iron Body ASTM A536 65-45-12. Epoxy coated, Buna-N Plug, V-Type Packing, Self Lubricating Type 316 Stainless Steel thrust bearing

HANDLE Flo-E-Centric[®] Plug Valve Handle

For 2" Operating Nut (for Model 54-4)





MODEL 54-3 MJ Plug with Buried Service Gear

Series 5400 valves are Ductile iron Body Epoxy coated, Buna-N Plug, V-Type Packing, Self Lubricating Type 316 Stainless Steel thrust bearing. Mechanical Joint Valves comply with ANSI/ AWWA C111/A21.11. TEMP MAX: 180°F (80°C)

PRESSURE MAX: 4" - 12" 200 PSI PRESSURE MAX: 14" - 24" 150 PSI





MODEL 54-A Plug Valve with Actuator

Electric actuated plug valve, for open/close service manual with hand-wheel override.

SMART CARD AVAILABLE- Fits Flomatic's FCEL Electric Actuator for modulating service, basic 4-20 ma input and output, providing 450 points of resolution. Able to be configured for 1-5 V, 0-5 V, 0-10 V or digital command. Provides default setting upon loss of command. Provides easy setting of open/closed positions for reverse or direct acting without wiring changes.

\bigcirc	TEMP MAX: 180°F (80°C)
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PRESSURE MAX: 200 PSI

SIZES: 2" THRU 12"



MODEL 54-0 Plug Valve with Gear Box (Model 54-0 Direct Mounted) ANSI B16.1, Class 150

Ductile iron Body ASTM A536 65-45-12. Epoxy coated, Buna-N Plug, V-Type Packing, Self Lubricating Type 316 Stainless Steel thrust bearing.



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PRESSURE MAX: 200 PSI

SIZES: 3" THRU 12"

FLMATIC[®] valves

Since 1933, Manufacturing The Most Complete Line of Valves for Water and Wastewater Applications



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WWW.FLOMATIC.COM

FLOMATIC CORPORATION

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LIMITED ONE YEAR WARRANTY: The Flomatic Corporation warrants that its Plug Valves in all sizes are free from defects in materials and workmanship. Flomatic will replace any valve covered by this warranty found to be defective within one year from time of sale. This warranty will be void if the product has been modified in any way by the purchaser, or is subject to unreasonable use.

