

Figure 517 Standard Rectangular Port Eccentric Plug Valves

Data Sheet 517.04B

Description

The GA Industries Figure 517 Eccentric Plug Valve is a rugged, field-proven valve that will provide many decades of trouble-free service. The valve's "standard" port area is at least 80% of the nominal inside area of the adjacent pipe, significantly greater, and with a corresponding lower headloss, than other standard rectangular port plug valves.

Also, the Figure 517 Eccentric Plug Valve's unique shaft and thrust bearing arrangement is designed so the valve does not stick or bind and is easily operable after long periods of inactivity.

The valve can be supplied with Class 125 flanged or mechanical joint ends with a manual worm gear and handwheel or square nut or with automatic actuation.

Standard Features

- Internal and external epoxy coated, high strength iron body and cover
- Minimum 80% port area, up to 42% less head loss than other standard rectangular port plug valves
- Bi-directional zero leakage seating up to full rated pressure
- Shaft packing adjustable and replaceable without removing the actuator
- PTFE coated 316SS upper and lower shaft bearings
- Lifting eyes and feet to facilitate handling and installation

Standard Materials

- Body and Cover Cast Iron, ASTM A126 Class B
- Body Seat Weld Overlaid 95% Pure Nickel
- Plug Ductile Iron, ASTM A536 Grade 65-45-12
- Plug Coating Buna-N Rubber, Molded and Vulcanized to the Plug
- Shaft Bearings Self-Lubricating PTFE Coated 316SS
- Thrust Bearings PTFE
- External Fasteners Zinc Plated Steel (Exposed Valves)
316 Stainless Steel (Buried Valves)

Corrosion Protection

- Standard: Internal and External PPG/Amerlok 400 2-Part Epoxy, Minimum 6 mil DFT
- Optional See Option P2

Ordering Data

- Figure Number 517
- Size
- Connection (Class 125 flanged or Mechanical Joint)
- Handwheel or 2" Operating Nut (Exposed Valves Only)
- Options/Accessories



Approvals & Certifications

- Fully complies with AWWA Standard C517

Options and Accessories

- Option P2 – 316 Stainless Steel External Fasteners (standard on buried service valves)
- Option CW – With Chainwheel – Facilitates Operation of Overhead Worm Gear Operated Valves

Non-Shock Working Water Pressure at up to 180F (82C)		
Figure Number	517	
Connections	Class 125 Flanged	Mechanical Joint
Manual Operation	Worm Gear with Handwheel or 2" Nut	Worm Gear with 2" Nut
Size	24" to 48"	24" to 42"
Max Working Pressure	150 PSI	
Hydro Test	225 PSI	

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Installation Dimensions

SIZE		24"	30"	36"	42"	48"
A	FLG	42	51	60	72	84
	MJ	42	51	60	72	----
B		22	26 $\frac{3}{8}$	28 $\frac{3}{4}$	32 $\frac{3}{4}$	36
C		32	39 $\frac{1}{8}$	46	53	59 $\frac{1}{2}$
D		33 $\frac{3}{4}$	39 $\frac{1}{2}$	37 $\frac{1}{4}$	42 $\frac{3}{8}$	43 $\frac{3}{8}$
E		22	24	28	28	29
F		32	24	24	32	36
G		22	24	28	28	29
WGT	FLG	3,000	5,600	7,750	11,000	15,150
	MJ	2,960	5,950	7,650	10,750	----

- D, E, F and G dimensions represent standard worm gear actuator
- Worm gear actuator can be rotated in 90-degree increments about valve centerline
- Buried service worm gear actuators are grease packed and sealed against water entry
- Consult factory for valves with automatic actuators
- Dimensions in inches and weight in pounds and are approximate. Request certified drawings if critical.

Flow Coefficients

SIZE	24"	30"	36"	42"	48"
C_v	25,000	40,000	57,000	77,000	100,000
K	0.42	0.41	0.42	0.44	0.44

