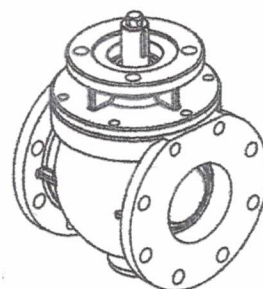
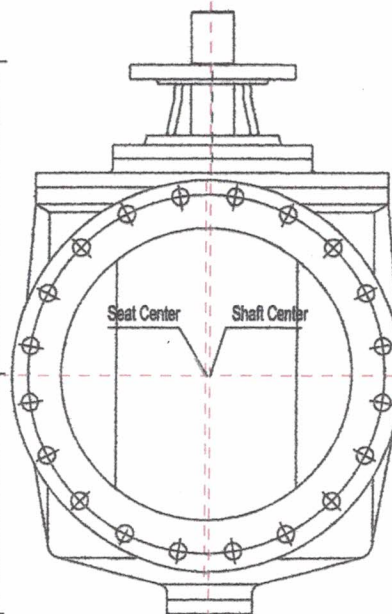
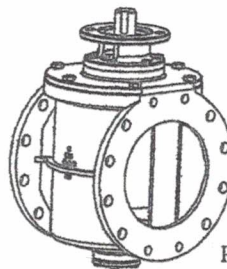


Provide with Gear and Handwheel



Round Port Available up to 16"



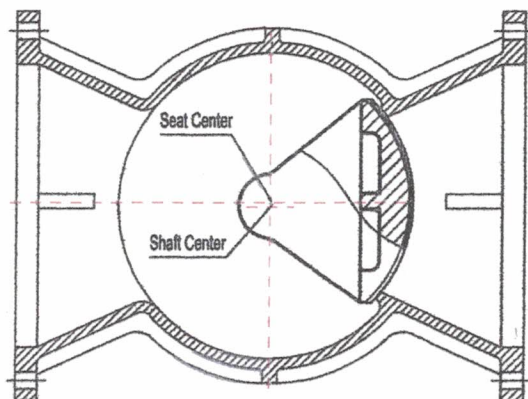
Rectangular Port Available up to 72"

Valve Sizes	Main Dimensions (mm)					
	A		B		C	D
	Flange	MJ	Flange	MJ		
2"	178	-	18	-	184	81
2.5"	190.5	-	20	-	196	88
3"	203	292	21	63	195	90
4"	228	362	17	63	220	113
5"	266	400	19	63	270	165
6"	266	400	19	63	270	165
8"	292	441	20	63	312	209
10"	330	492	22	63	354	261
12"	355	527	23	63	386	296
14"	431	622	25	89	426	329
16"	460	692	27	89	454	383
18"	546	743	28	89	486	399
20"	596	787	30	89	537	437
24"	1067	1067	47	89	562	465

Bill of Material		
Item	Description	Material
1	Body	Ductile Iron ASTM A536 Grade 65-45-12
2	Plug	Ductile Iron ASTM A536 Grade 65-45-12 + Buna-N
3	Cover	Ductile Iron ASTM A536 Grade 65-45-12
4	Yoke	Ductile Iron ASTM A536 Grade 65-45-12
5	Packing Gland	Ductile Iron ASTM A536 Grade 65-45-12
6	Packing	EPDM
7	Bushing	Nylon + PTFE
8	Gasket	PTFE
B1	Hex Bolt	Stainless Steel Type 304
B2	O ring	EPDM
B3	Hex Bolt	Stainless Steel Type 304
B4	Hex Bolt	Stainless Steel Type 304
B5	Inner Hex Bolt	Stainless Steel Type 304
B6	O ring	EPDM

Note: Other materials are available upon request.

Materials listed are of our Standard Valve construction. Materials will be modified as required to fully meet the specifications.



AWWA C517 Full Port Eccentric Plug Valves



Flange to ANSI B16.1 Class 125
 MJ to ANSI/AWWA C111/A21.11
 Plug fully encapsulated with EPDM/NBR
 Full Port Flow Area
 Design Conform to AWWA C517
 Coating conform to AWWA C550
 Seat test up to 400psi zero leakage

March 26, 2019

Jefferson Parish, LA
Bid No. 5000125975
(3) 12" x 14" and (2) 20" x 36" Plug Valves
Bids Due 3/27/2019

Specification Checklist

Plug Valves – WTR – 100% Port. Design as manufactured by Water Technology Resources – WTR Valves is a WBE Manufacturer Company.

Three (3) 12" x 14" Face to Face Flanged – Eccentric Iron Body

Two (2) 20" x 36" Face to Face Flanged – Iron Body

Both Sizes to include:

- Solid Ductile Iron Plug with Nitrile Elastomer Coating
- 100% Port Size
- Nickel Seat

WTR Models

- 12" PVAWF-G-HW-12
- 20" PVAWF-G-HW-20

Valves are manufactured to be 100% capable of pigging operation.

Non-Lubricated Eccentric Type with Buna Nitrile Elastomer covering on all seating surfaces.

Flanged x Flanged End Connections ANSI B16.1 Class 125/150.

Rectangular Port Design – Capable of “Pigging” Operation.

Valve Body – ASTM A536 Grade 65-45-12 – Ductile Iron.

Valve Design and Construction per AWWA C517-09 Standards.

Seat – Welded – In Overlay – 1/8" Thickness – 99% Nickel.

Plug Construction – ASTM A536 Grade 65-45-12 Ductile Iron.

Plug – One Piece Design – Solid construction provided with PTFE Thrust Bearings on the upper and lower bearing journals designed to reduce torque and to prevent dirt and grit from entering the bearing and seal area, provided with Nitrile Vulcanized Rubber Cover.

Bearings – Sintered, Oil Impregnated, Type 316 Stainless Steel – ASTM A743 Grade CF-8M.

March 26, 2019

Valve Shaft Seals – “U” WP design in accordance with AWWA C517-09 Standards. Self adjusting and replaceable without removing the bonnet form the valve.

Worm Gear Operator – Includes Heavy Duty construction with ductile iron quadrant supported on top and bottom by oil impregnated bronze bearings. The Worm Gear and Shaft shall be manufactured of hardened steel and include high efficiency Roller Bearings.

Valve Design – Shall provide Bubble tight shutoff at 150 psi operating pressure.

Valves shall be factory tested to include hydrostatic and seat tests – and include certified copies of test results.

Proof of Design test reports to be provided per AWWA C517.

Valves are as manufactured by WTR Plug Valve Partnership – Bloomington, MN.

Water Technology Resources (WTR Valves) – A Woman Owned Business Enterprise (WBE) located in Bloomington, Mpls, Minnesota.

This technical drawing is a cross-sectional view of a mechanical assembly, possibly a pump or a valve. The central component is a vertical shaft (20) with a central bore. The shaft is surrounded by a complex housing (1) with various internal passages and components. The housing is shown in a red color, while the shaft and internal passages are in a grey color. The drawing includes numerous numbered callouts (1-15, 2a, 2b, 3, 4, 5, 6, 7, 10, 11, 12, 13, 14, 15, 20) pointing to specific parts of the assembly. The assembly is shown in a cross-sectional view, revealing the internal structure and components.

PAGE 7

Additional material options available as special order.



'OPEN WINDOW' YOKE DESIGNED FOR EASY ADJUSTMENT OF PACKINGS.

There are two opened windows on the yoke for adjusting the packing gland without moving the actuator. This could save the cost of fixing the valves on site and ensure a longer life of sealing. For underground applications, the windows will be closed to protect the packings.

V-type Packing

Field adjustable V-type packing rings ensure a reliable seal and maintenance free for most applications.

Full Top Access Cover

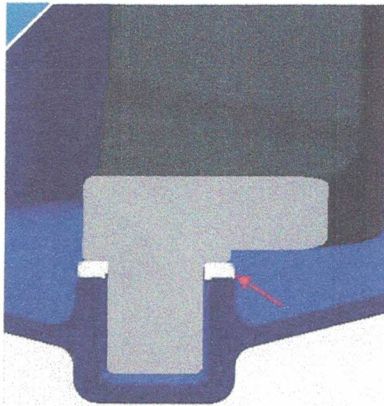
Allows inspection or maintenance without removing the valve from the line.

Corrosion Resistant Bearings

Heavy duty stainless steel 316 bearings are permanently lubricated. And used in both up and bottom journals.

Corrosion Resistant Coatings

Various corrosion resistant coatings are available upon request. Coating thickness can be determined by applications.



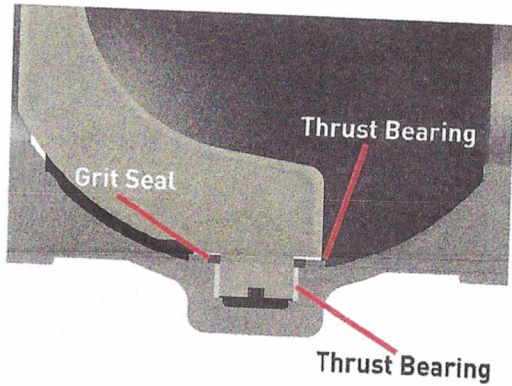
GRIT PREVENTERS EXTEND PACKING AND BEARING LIFE BY MINIMIZING CONTACT WITH ABRASIVE LINE MEDIA

WIDE RANGE OF SIZES, PRESSURES, MATERIALS

We offer from 4inch (DN100) to 72inch (DN1800) eccentric plug valves in pressure rating 150/250 class (PN10/PN16) and various materials to choose upon customers' requests or application needs.



48inch (DN1200) Full Port Eccentric Plug Valve

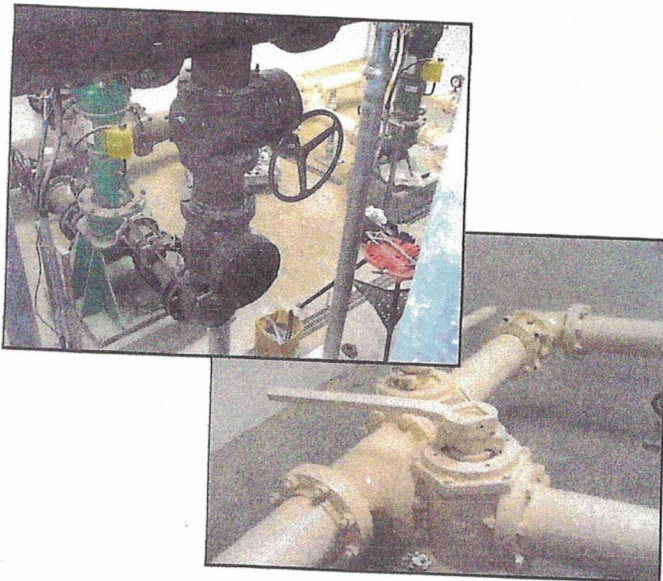
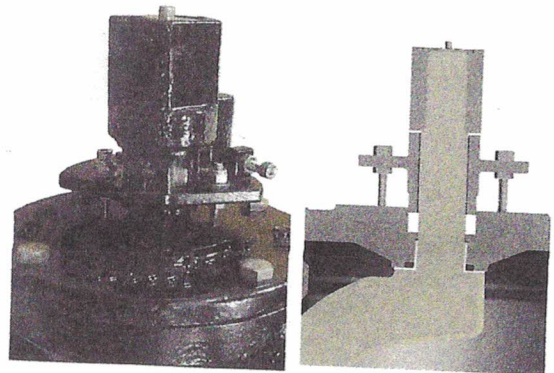


Double Sealed Bearings

The permanently lubricated Type 304 stainless steel bearings are double sealed on the upper and lower journals. The thrust bearings ensure the plug is centered in the seat for accurate sealing while also keeping debris from the journals. The grit seal ensures that any debris that makes it past the thrust bearings never impact the bearings.

V-Packing

The pull down type multiple v-ring style packing ensures easy adjustment and long packing life. No special shims needed, all adjustment can be made with simple spanner wrenches. The packing gland is easily accessed on all above ground applications without removal of the gearbox or operator.



Applications

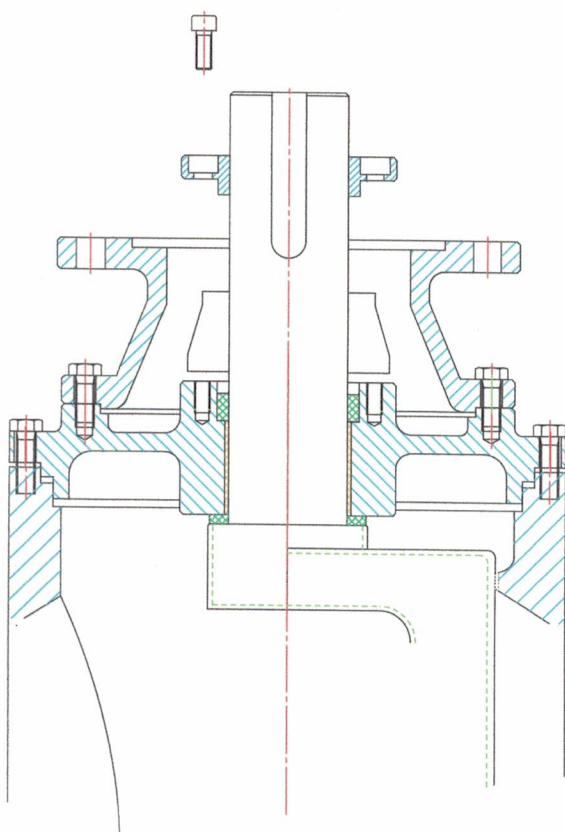
The Series PVII 100% full port eccentric plug valve can be used in many applications when solids, grit, or slurries may be present. They are capable of providing either on-off or process control functions in many industries.

- Raw water or Sewer lines
- Lift station pump discharge isolation
- Wastewater treatment plant control
- Sludge lines
- Mining
- Industrial fluids with suspended solids
- Many others

Design Features

Simple Packing Replacement

AWWA C517 Series Valves use a standard ISO valve stem size. This combined with industry standard stack heights allows for the use of off-the-shelf packing. The packing gland and retention design further allows for the replacement of the packing without removing the valve from the line. In some cases the line pressure can be maintained. All service can be performed without any special training.



Easy Packing Removal

Design Standards

Construction	AWWA C517 ASME B16.34 API 598
Coatings	AWWA C550
Connections	ANSI B16.1 Class 125* ANSI B16.5 Class 150 ANSI/AWWA C111/A21.11 ISO 7005
Laying Length	AWWA C517 Short* ISO 5752
Classifications	150A 150B* 250B
Bonnet	MSS SP-101* ISO 5211
Stem Diameter	ISO 5211
Key Size	ISO R773

*Standard Option



**American Water Works
Association**









04/01/2013

