

PVGX-Eccentric Plug Valve Data Sheet

The PVGX-Eccentric Plug Valve is a robust and versatile solution for sewage water systems, featuring advanced design elements that ensure low torque operation, long service life, and ease of maintenance. With customizable options for plug encapsulation and a broad size range, it meets diverse application requirements while providing superior performance and reliability

Features:

• Design Compliance:

- o Conforms to the AWWA C517 standard, ensuring high reliability and industry compatibility.
- o Flange drilling is compliant with ANSI B16.1 or EN1092-1, providing versatile installation options.

• Seat Material:

- o The valve seat is constructed with 99% Nickel, welded to offer superior corrosion resistance, enhancing the valve's longevity and performance in harsh environments.

• Advanced Design:

- o The design incorporates low torque operation, which minimizes the operational effort required and prolongs the life of the valve components.

• Plug Encapsulation:

- o The plug is fully encapsulated with rubber, protecting it from direct exposure to the flow media.
- o Optional rubber materials include NBR (Nitrile Butadiene Rubber), EPDM (Ethylene Propylene Diene Monomer), Neoprene, or Viton, allowing customization based on specific media and temperature requirements.

• Port Configuration:

- o Valves ranging from DN100 to DN300 feature round ports, while those from DN350 to DN600 are designed with square ports.
- o The eccentric plug design ensures a full, unobstructed flow path, optimizing fluid dynamics and reducing turbulence.

• Operational Efficiency:

- o The eccentric plug mechanism allows the plug to move in or out of the body seat during operation, enabling quick opening and closing.
- o This feature reduces contact and wear on the valve seat, significantly extending the service life of the valve.

• Safety Feature:

- o An optional external screen can be fitted to prevent insects, birds, and other debris from entering the valve, ensuring safety and operational integrity.

• Maintenance:

- o Designed for easy in-line maintenance, the valve allows for on-site installation and servicing of gear operators, power actuators, or extension rods.
- o This feature reduces downtime and maintenance costs, as the valve does not need to be removed from the pipeline for servicing.



Service Applications:

- Specifically engineered for use in sewage water systems, the PVGX-Eccentric Plug Valve is ideal for managing wastewater flows, providing reliable performance in demanding conditions.

Technical Data:

• Size Range:

- o Available in sizes from DN 50 to DN600 mm, accommodating a wide range of pipeline diameters.

• Pressure Ratings:

- o Rated for 1.0 MPa and 1.6 MPa pressures for flanged connections, ensuring suitability for various pressure requirements.

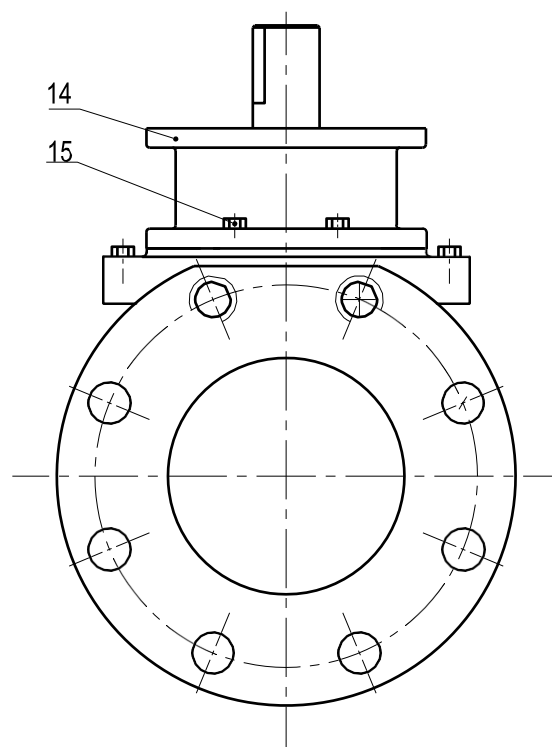
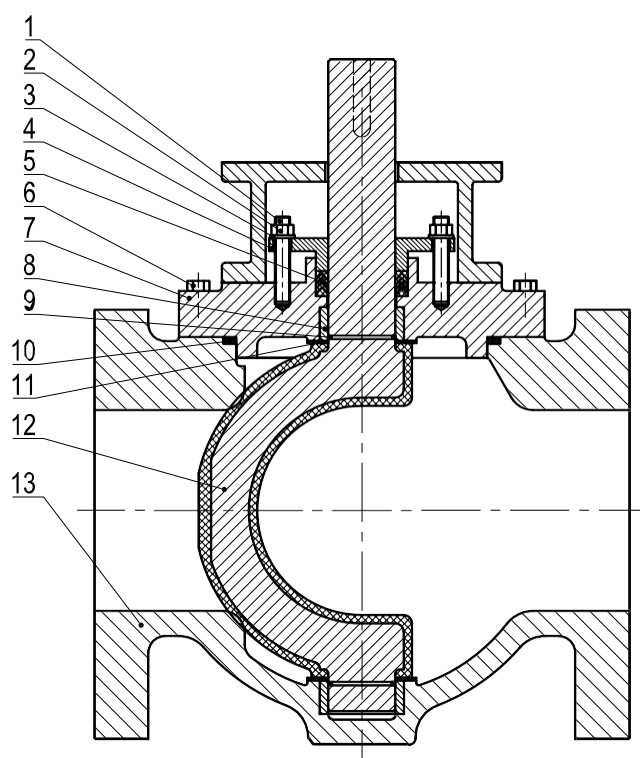
• Working Temperature:

- o Capable of operating within a temperature range of -10°C to 80°C, making it versatile for different environmental conditions.

• Flow Media:

- o Designed for use with sewage water, the valve materials and construction are optimized to handle the aggressive nature of wastewater.

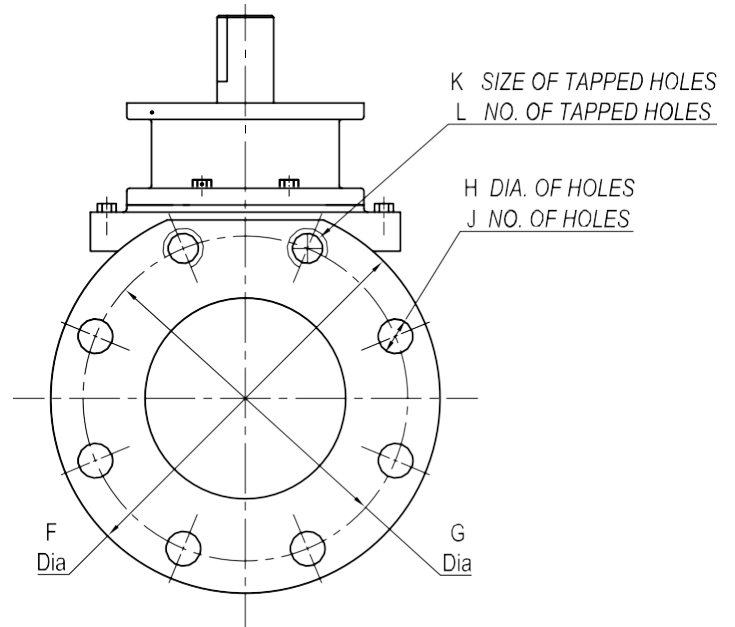
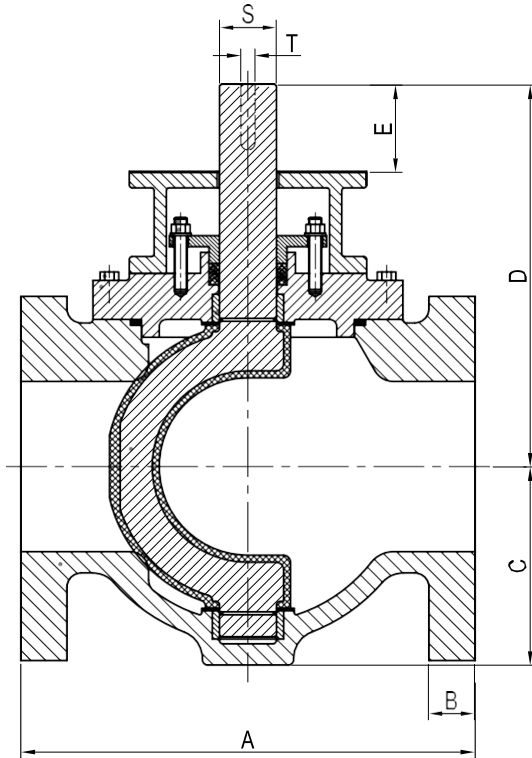
Plug Valve-DN50-600



Parts List

No.	Part Name	Material	Standard
1	Cover Stud	Stainless Steel	AISI 304
2	Cover Stud Nut	Stainless Steel	AISI 304
3	Washer	Stainless Steel	AISI 304
4	Gland	Grey Iron	A125 CL B
5	V-seal	Rubber	NBR
6	Cap Screw	Stainless Steel	AISI 304
7	Cover	Ductile Iron	ASTM 65-45-12
8	O-ring	Rubber	NBR
9	Sleeve Bearing	Stainless Steel	AISI 304
10	O-ring	Rubber	NBR
11	Thrust Washer	PTFE	Commercial
*12	Plug	DI + NBR	ASTM 65-45-12 + NBR
13	Body	Ductile Iron	ASTM 65-45-12
14	Gear Adaptor	Ductile Iron	ASTM 65-45-12
15	Cap Screw	Stainless Steel	AISI 304

Dimension



Unit: MM

DN	A	B	C	D	E	F	ISO7005-2 PN10								ISO7005-2 PN16								S	T
							d	f	G	H	J	K	L	d	f	G	H	J	K	L				
DN80	203	19	111	215	38	200	132	3	160	N/A	N/A	M16	8	132	3	160	N/A	N/A	M16	8	24	8×7		
DN100	229	24	132	238	45	230	156	3	180	N/A	N/A	M16	8	156	3	180	N/A	N/A	M16	8	31	10×8		
DN150	267	25	171	288	42	285	211	3	240	N/A	N/A	M20	8	211	3	240	N/A	N/A	M20	8	31	10×8		
DN200	292	28	207	345	50	345	266	3	295	N/A	N/A	M20	8	266	3	295	N/A	N/A	M20	12	38	10×8		
DN250	330	30	226	392	78	406	319	3	350	23	8	M20	4	319	3	355	28	8	M24	4	41.3	11.1×11.1		
DN300	356	32	254	436	78	483	370	4	400	23	8	M20	4	370	4	410	28	8	M24	4	50.8	12.7×12.7		

DN	A	B	C	D	E	F	ISO7005-2 PN10								ISO7005-2 PN16								S	T
							d	f	G	H	J	K	L	d	f	G	H	J	K	L				
DN350	432	35	350	440	38	534	429	4	460	23	12	M20	4	429	4	470	28	12	M24	4	63.5	5/8×7/16		
DN400	451	37	385	460	42	597	480	4	515	28	8	M24	8	480	4	525	31	8	M27	8	63.5	5/8×7/16		
DN450	546	40	420	490	42	635	530	4	565	28	12	M24	8	548	4	585	31	12	M27	8	63.5	5/8×7/16		
DN500	597	43	440	570	51	715	582	4	620	28	12	M24	8	609	4	650	34	12	M30	8	63.5	5/8×7/16		
DN600	1067	48	525	610	76	840	682	5	725	31	20	N/A	N/A	720	5	770	37	20	N/A	N/A	95.2	7/8×5/8		

* AFC keeps the right to change dimension without further notice.

Ordering Code

Model:
PVGX- Plug Valve, worm gear
operated

