### Government of Maharashtra Water Resources Department Chief Engineer

## (Mechanical) Water Resources Department, Nashik BUDEGETORY NOTICE NO. 01 OF 2024-25

Budgetary offer for the following items are invited by the Executive Engineer, Chief Gate Erection Unit No. 5 Nashik Phone no.0253-2970339 on behalf of Governor of Maharashtra for estimation purpose from the Original Valve Manufacturer or their Authorised dealers.

Interested agencies are requested to send the budgetary offers for following. The rates should cover all taxes and duties applicable. The rates should be given with the basic price and tax fonding. The interested parties are requested to quote the offer up to 27.05.2024 By post / Hand delivery / E mail on <a href="mailto:eggu5nsk@email.com">eggu5nsk@email.com</a> Further it is requested to forward relevant technical literature, brochures of valves and your comments if any in this matter.

Sr. No	Description	Quantity	Rate
	Design. Manufacture & supply of Slanted seat, Tilting Dise, Non- slam type check Valve with internal or External Damping Unit conforming to Latest Check Valve Technology which are used & acceptable internationally for following sizes including loading, lifting and unloading at site (As per specification attached herewith)		
	Dia = 1000mm, P.N. rating = 1.6	1 No	
	Dia = 1200mm, P.N. rating = 1.6	1 No	

This information is required for the purpose of framing of working estimates and hence the urgency.

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Date: 17.05.2024

( Dr. S.N. Joshi )
Executive Engineer
Chief Gate Erection Unit No. 5
Nashik.

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#### **TECHNICAL SPECIFICATION**

#### GENERAL-

Each pump will be provided with one Non Slam type slanted seat check Valve with Damping Unit in its delivery pipe.

#### GENERAL SPECIFICATION-

- Pressure Rating -PN 1.6
- Double flanged, with face to face length as per EN 558 1, with flanges as per EN 1092 –2 /PN 16 / IS 1538
- The valves are to be manufactured as per latest check valve technology which are used & acceptable internationally.

#### **TECHNICAL FEATURES**

- Slanted seat should be of minimum 52 deg. For fast opening and closing.
- Disc design shall conform to double eccentric with Monoblock design and shall have 100% tightness at fully closed condition
- Metallic sealing/Resilient Sealing should be as per EN 12334.
- These valves should have better closing characteristics due to smaller swing angle.
- · Should have corrosion resistant and wear resistant sealing seat.
- No moving parts outside the valves.
- Shaft in stainless steel, 1.4021 (AISI 420)
- Bronze radial bearings.
- · To be coated internally and externally with epoxy paint.
- Manufacturer shall design & supply the damping unit along with lever & counterweight.
   Damping unit shall facilitate initial crack opening of valve (up to 10% of valve opening) & shall support smooth closing of the valve during power failure condition to achieve non-slamming characteristics.

#### Materials-

Sr.No	Parts	Material	
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1	Body	Ductile Iron EN-GJS-400-15 ( GGG -40)	
2	Disc	Ductile Iron EN-GJS-400-15 ( GGG -40)	
3	Check Valve Shaft	Stainless Steel AISI 420	
4	Retaining ring	Ductile Iron DIN 1693 GGG50 / SS304	
5	Disc sealing ring	EPDM rubber	
6	Shaft Bearing	Zinc Free Bronze or Equallant	
7	Seat	Integral Body seat, SS 304 / Alloy weld overlay	

#### TESTING-

The valves shall be subjected to seat and body test in accordance with EN 12266 - 1 at the manufacturer's works.

- Seat Test. The valves shall be placed in the horizontal position and the outlet end shall be
  fitted with water completely. With the inlet end open to atmosphere, there shall be no
  leakage when the outlet end of the valve is subjected to hydrostatic, non-shock seat test
  pressure as 16 Kg/Cm2 for minimum 2 minutes. There shall be no leakage of water through
  the seats.
- Body Test- Water shall be filled completely in the body. When the body is subjected to hydrostatic, non-shock body test pressure as 24 Kg/cm2.
- Tested according to EN12266-1.

These tests shall be carried out at manufacture's work in presence of Engineer or his representative, before delivery. Material Test Certificates and Hydrostatic test report shall be furnished in triplicate