



# **Fixed Cone Free Discharge Valves**

**Sizes:** DN 400 - DN 2000 mm **Pressure:** PN 6 - 25 bar

Flange according: DIN EN 1092-1 (DIN 2501) Installation type: as discharge, end of pipe line Actuators: electro mechanical, hydraulic

End connection type: Flanged type according to DIN EN standard, (other standards as request).

#### **Product Features:**

Mirab Fixed Cone Free Discharge valves are used at the end of pipe lines, dam outlets and water power plants to discharge water These valves are capable of keeping the flow in a constant and steady condition. In addition they can increase the volume of flow in an emergency situation e.g. flood water or etc. (The reason of increasing flow, is preventing any damages to the side walls of dam.) The structure of Fixed Cone Free Discharge valves are made firmly and rigidly to eliminate any cavitation and vibration and prevention of harming to the other structures. In high speed of flow, water takes some big solid parts into the valve (such as stones, wooden parts, etc) The structure of valve is in a way that these parts can't harm the body of valve and they can pass through the valve and will not make any difficulty for free operation.

#### **Corrosion Protection:**

Powder Epoxy by Electro Static System with Minimum thickness 250 µ (inside and outside).

#### Advantages:

- Low head loss.
- Reliable design.
- Selection of best material for all applications.
- Suitable shape for flow medium and solid particles.
- Possibility of installation in valve room or end of pipeline.
- The option of selecting either Electrical or Hydraulic actuators (as request)

Hydrostatic test Pressure (bar) according to DIN EN 12266-1							
Nominal Pressure	Test Pressure, with water, (bar)						
PN (bar)	Shell Test	Closure Test					
6	12	7					
10	17	11					
16	25	18					
25	38	28					

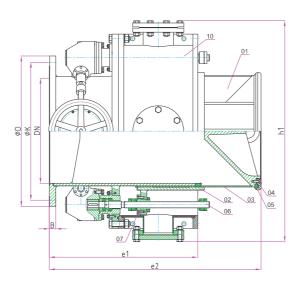


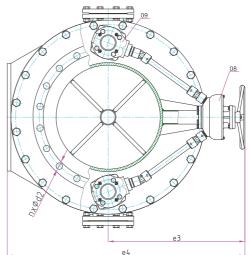
2 MB-0717



Dimensions and weight											
DN	ØD	В	ØK	Ød2	n	h1	e1	e2	e3	e4	Weight
mm	mm	mm	mm	mm		mm	mm	mm	mm	mm	(Kg)
400	565	26	515	26	16	980	687	900	591	1016	655
500	670	28	620	26	20	1143	747	1000	703	1223	1100
600	780	28	725	30	20	1233	830	1180	761	1325	1512
700	895	30	840	30	24	1440	935	1340	890	1545	2500
800	1015	32	950	33	24	1500	1020	1500	860	1580	3300
900	1115	34	1050	33	28	1629	1130	1650	910	1690	3881
1000	1230	34	1160	36	28	1993	1295	1825	1010	2020	6600
1200	1455	38	1380	39	32	2052	1390	2025	1110	2140	7450
1400	1675	42	1590	42	36	2355	1575	2307	1262	2463	11673
1500	1785	46	1700	44	36	2603	1625	2392	1333	2663	13900
1600	1915	46	1820	48	40	3290	2135	3060	2025	3530	-
1800	2115	50	2020	48	44	3700	2400	3450	2280	3975	-
2000	2325	54	2230	48	48	4110	2670	3830	2530	4415	-

The above dimensions are related for PN10, other sizes and pressure can be manufactured as requested.





### Part list:

Part No.	Part Name	Part Material	Spare parts
01	Main Body	St 37-2	
02	Obstructive cylinder	1.4301	
03	Cylinder Guide	2.0401.30 (CuZn39Pb3)F50	
04	Clamping Ring	1.4301	
05	Sealing Rubber	EPDM / NBR	•
06	Transmission Rod	1.4021	
07	Transmission Rod nut	Al.Bz	
08	Multi turn gearbox	-	
09	Bevel gearbox	-	
10	Guard body	St 37	

## MIRAB Co' PRODUCTS

Butterfly Valves Family: Double Flanged Type, Butt-weld End, Wafer Type, Lug Type, Hydraulic Actuated, Pneumatic Actuated. Gate Valves Family: Soft-Sealing Gate Valve, Metal Seat Gate Valve, Knife Gate Valve, Sluice Gate Valve.

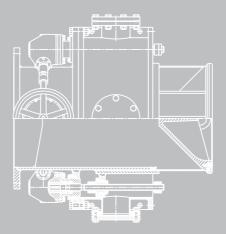
Non Return Valves Family: Tilting Disc with Counter Weight, Tilting Disk with Counter Weight and Hydraulic Damper, Swing Check Valve, Silent Check Valve, Foot Valve, Nozzle Check Valve, Wafer Pattern Check Valve, FlapValve.

Air Vent Family: Single Chamber - Double Orifices, Double Chambers - Double Orifices, Sewage Air Valves, Large - Orifice Air Valve.

Control Valves Family: Automatic Control Valves, Needle Valve, Globe Valve, Fixed Cone Free Discharge Valve, Hollow Jet Valve, Sleeve Valve.

Hydrant Valves Family: Standing Type, Pit Type, Wet Barrel Fire Fighting Valve, Post Indicator Valve.

Strainers Family: Y Type, T Type, One Side Flanged Type. Fittings Family: Dismantling Joint F1&F2, Pipe Coupling, Flange. Actuators: Electrical, Hydraulic, Penumatic, Portable Electrical.





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