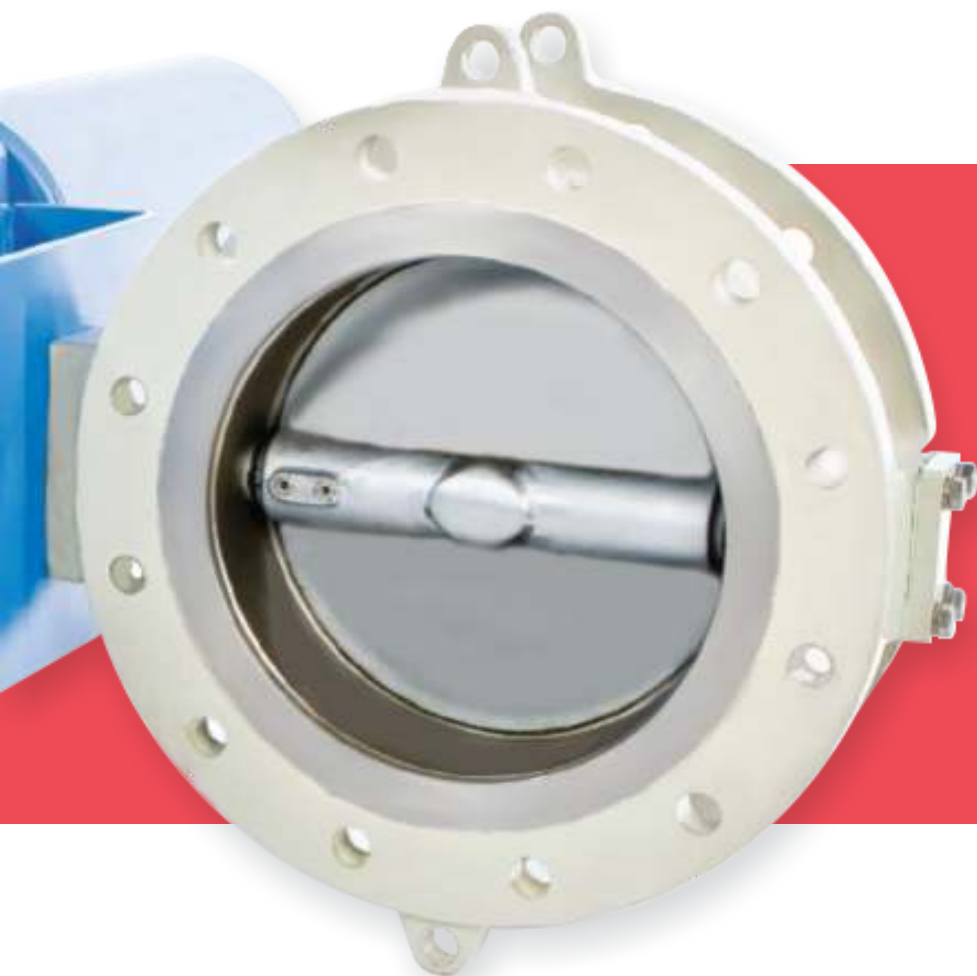


# KOSO

HIGH PERFORMANCE  
DOUBLE OFFSET BUTTERFLY VALVES  
Series AB 4001 & AB 4001S



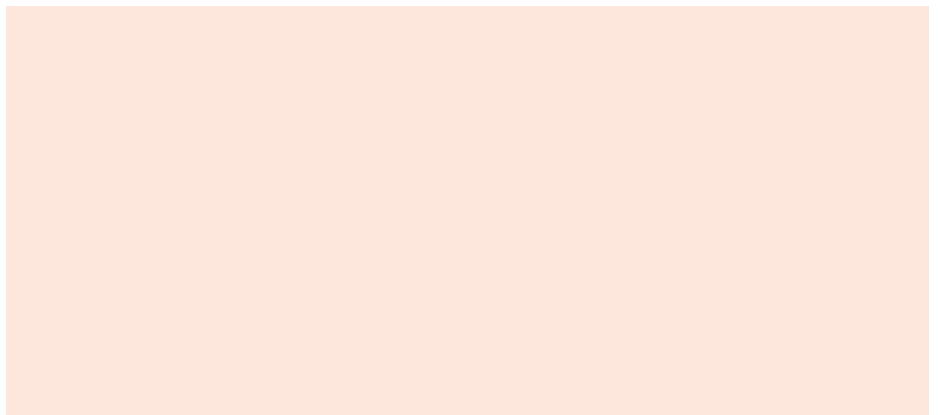
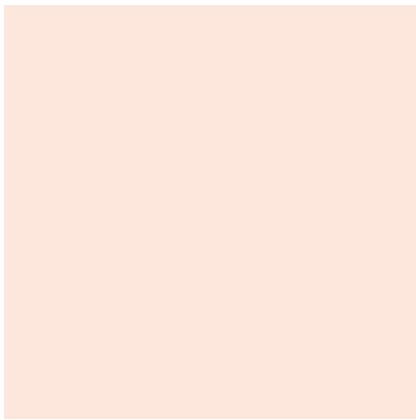
**kentintrol**



## Butterfly Valves

### Series AB 4001 / AB 4001S

- ✓ Sizes 2 inches to 48 inches (50mm to 1200mm)
- ✓ Ratings ANSI B 16.5, 150, 300, 600, 900, 1500, 2500 LB
- ✓ Wafer type body with four flange bolt holes for installation between pipeline flanges.
- ✓ Lugged type and flanged type construction.
- ✓ All standard flange dimensions.
- ✓ Outboard roller bearings not in contact with flow medium and inboard slide bearing may be metallic or Teflon
- ✓ Disc design for minimum dynamic torque.
- ✓ Standard Body Materials:  
WCB/WCC/WC6/WC9/LCB/LCC/CF8M/CF3M/Duplex/ Super Duplex/Aluminium Bronze etc.
- ✓ Temperature Range:  
-196°C to + 600°C





Valves supplied for Oil & Gas plant in Middle East  
Cryogenic valves supplied to LNG plant in Russia

## Actuators:

- ✓ Pneumatic Spring Return Diaphragm Actuator
- ✓ Quarter Turn Spring Return Piston Actuator
- ✓ Quarter Turn Double Acting Piston Actuator
- ✓ Electrical Actuator
- ✓ Electro Hydraulic Actuators

## Body:

- ✓ Wafer type body with four flange bolt holes.
- ✓ Flange facing according to ANSI B 16.5

## Materials:

- ✓ ASTM A216 Gr. WCB / WCC
- ✓ ASTM A 352 GR. LCB/LCC
- ✓ ASTM A 995 GR. 4A/5A/6A
- ✓ ASTM A217 Gr. WC6 / WC9
- ✓ ASTM A351 Gr. CF8M / CF8/ CF3M/CF3
- ✓ ASTM A 494 GR.CU5MCuC

## Disc:

- ✓ Designed for minimum torque requirements at any open position.
- ✓ Step-seat design for low leakage rates. Max. Leakage is 0.5% of rated Cv.

## Materials:

- ✓ ASTM A216 Gr. WCB / WCC
- ✓ ASTM A 352 GR. LCB/LCC
- ✓ ASTM A 995 GR. 4A/5A/6A
- ✓ ASTM A217 Gr. WC6 / WC9
- ✓ ASTM A351 Gr. CF8M / CF8/ CF3M/CF3
- ✓ ASTM A 494 GR.CU5MCuC

## Shaft:

### Materials:

- ✓ AISI 316
- ✓ AISI 410
- ✓ 17-4-PH
- ✓ Inconel 718
- ✓ UNS S32760 / S31803

## Bearings:

- ✓ The out board roller bearings are fully enclosed. They are not in contact with the flow medium and are free of maintenance.
- ✓ The inboard slide bearings are in contact with the flow medium they are designed for subsequent high loads when valve is closed.

## Materials:

- ✓ AISI 316 + PTFE
- ✓ AISI 316 + Stellite

## Seals:

Nitrile seal is provided as standard. Seal of Viton/EPDM/ Neoprene etc. can be given depending on flow medium & temperature.

## Tight shut off:

For leakage class VI with soft seat  
For leakage class V with metal seat

CV values at Nominal Opening Angle 75° & 60°

For Rating Class 150 / 300

Nominal Size		Cv (75° Opening)	Cv (60° Opening)
mm	inch		
50	2"	80	52
80	3"	198	126
100	4"	355	230
150	6"	950	620
200	8"	1750	1140
250	10"	2850	1850
300	12"	4550	2950
350	14"	6140	3990
400	16"	7730	5025
450	18"	9620	6200
500	20"	12040	7810
600	24"	17800	11570
750	30"	26820	17430
900	36"	38840	25245



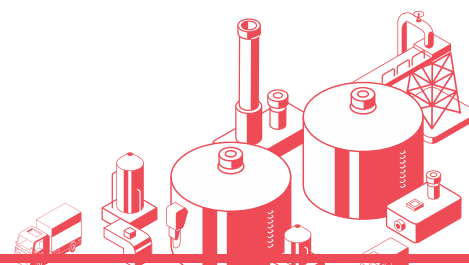
Note - For Cv Value of ASME Class 600 / 900 / 1500 / 2500 contact factory

## Leakage :

	Disc		
	Step – Seating	Metal Seating	Soft Seating
Leakage Rate	Class II	Class V*	Class VI (Bubble tight)

## Accessories :

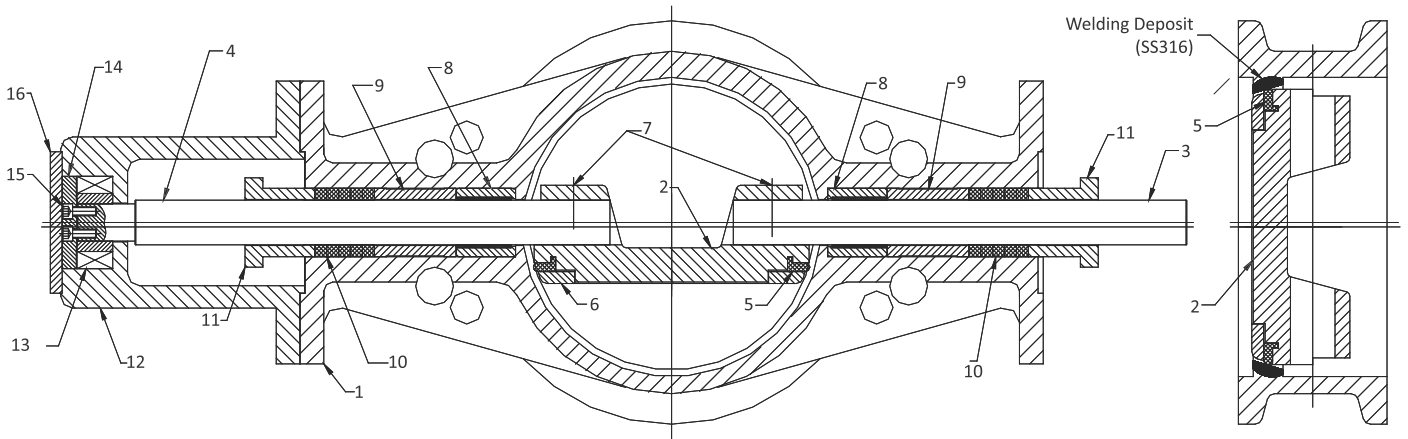
- ✓ Positioner – Pneumatic, Electro Pneumatic
- ✓ Limit switches, remote position indicator
- ✓ Solenoid valves
- ✓ Volume booster
- ✓ Airset
- ✓ Lock –up relays





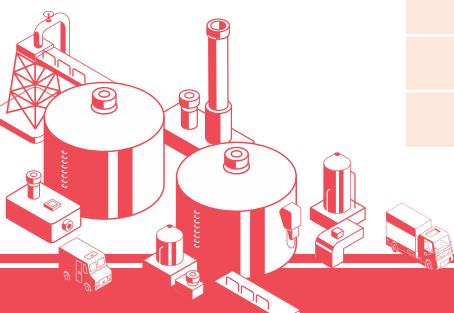
## Typical construction

42" valve supplied to Essar Refinery



## Butterfly Valve Assembly

S.No.	Description	S.No.	Description
1	Body	1	Sleeve
2	Disc	2	Gland Packing
3	Drive Shaft	3	Gland
4	Stub Shaft	4	Bearing Block
5	Seal	5	Roller Bearing
6	Seal Ring	6	Thrust Plate
7	Pin	7	Allan Cap Screw
8	Bush	8	End Cover Plate



# KOSO

## Full Range:

- ✓ Lighter weight and more compact than globe valves
- ✓ Superior Seat and stem seal integrity
- ✓ High Rangeability – exce  
5° to 90° opening
- ✓ Low operating torques
- ✓ Complete range of body materials and ratings



### For technical queries

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J-1 & J-2, MIDC, Ambad, Nashik-422010,  
India

**VECTOR**

**kentintrol**

**PARCOL**

**RSA**  
ELECTRAULIC ACTUATION

**KOSO**  
HAMMEL DAHL