

D.I. RESILIENT SEATED GATE VALVES
D. I. METAL SEATED SLUICE VALVES
D.I. TAMPER PROOF AIR VALVES



Top Sealing Style



Normal Wedge Style



Wedge Guide Optional

*A Revolution in
Valve Technology*

KAMALA VALVES & ENGINEERING PVT.LTD

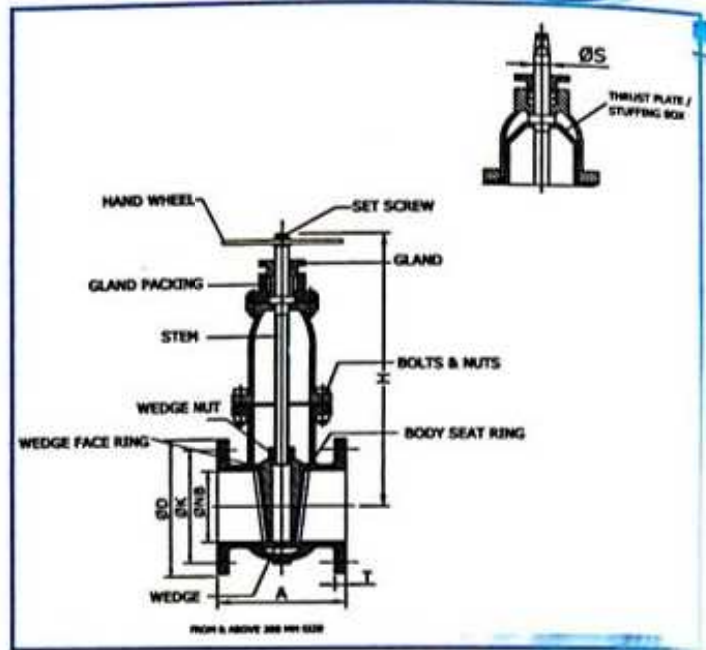
(ISO 9001:2008 CERTIFIED COMPANY)

PRODUCT GUIDE





KCE/KAMALA BRAND D.I. DOUBLE FLANGED METAL SEATED SLUICE VALVE CONFIRMING TO IS : 14846/2000



DIMENSION OF SLUICE VALVE AS PER IS:14846/2000

SIZE (MM)	N.B.	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	750	800	900	1000	1100	1200	
FACE TO FACE (L)	A	178	190	203	229	254	267	292	330	356	381	406	432	457	508	610	610	660	711	811	811	811	
CENTRE TO TOP (MAX)	H	365	380	425	470	485	595	725	835	910	1020	1110	1200	1300	1500	1670	1780	1930	2080	2200	2450	2580	
HANDWHEEL DIA (MM)																							
PN-1.0	C	225	225	225	320	320	320	360	400	400	500	640	720	720	720	800	900	900	900	900	1000	1000	
PN-1.6	C	280	280	280	360	360	360	450	640	640	640	730	800	800	800	--	--	--	--	--	--	--	
STEM DIA (MM)																							
PN-1.0	S	22	22	22	27	27	27	32	36	36	37	42	47	47	47	62	67	67	77	77	87	87	
PN-1.6	S	22	22	22	27	27	27	32	36	36	42	47	52	52	57	--	--	--	--	--	--	--	
FLANGE																							
OUTSIDEDIA	D	165	185	200	220	250	285	340	395	445	505	565	615	670	780	895	960	1015	1115	1230	1340	1455	
P.C.D.	K	125	145	160	180	210	240	295	350	400	460	515	565	620	725	840	900	950	1050	1160	1270	1380	
THICKNESS	T	16	16	21	22	22.5	23	24.5	26	27.5	29	30	31.5	33	36	38.5	40	41.5	44	47	50	53	
NO OF HOLE	n	4	4	4	8	8	8	8	12	12	16	16	20	20	20	24	24	24	28	28	32	32	
HOLE DIA	h	19	19	19	19	19	23	23	23	23	23	23	28	28	28	31	31	31	34	34	37	37	40

①

WE ALSO MANUFACTURE AS PER BS, ASA, DIN AND OTHER SPECIFICATION

KAMALA VALVES & ENGINEERING PVT.LTD

e-mail : kamalavalves@rediffmail.com

KCE/KAMALA BRAND D.I. DOUBLE FLANGED METAL SEATED SLUICE VALVE CONFIRMING TO IS : 14846/2000



SIZE (MM)	FACE TO FACE (L)	HANDWHEEL DIA (MM)		STEM DIA (MM)		FLANGE				
		PN-1.0	PN-1.6	PN-1.0	PN-1.6	OUTSIDEDIA	P.C.D.	THICKNESS	NO OF HOLE	HOLE DIA
N.B.	A	C	C	S	S	D	K	T	n	h
1400*	710	1000	1000	85	90	1675	1590	62	36	43
1500	760	1000	1000	92	97	1800	1710	61	40	43
1600*	790	1000	1000	92	97	1915	1820	68	40	49
1800*	870	1000	1000	100	107	2115	2020	70	44	49
2000*	1100	1000	1000	120	127	2325	2230	74	48	49
2200*	1350	1000	1000	135	138	2550	2440	78	52	56
2400*	1650	1000	1000	143	150	2760	2650	85	56	56

BILL OF MATERIALS FOR SLUICE VALVES

SL No.	COMPONENT	MATERIALS
1	Body, Dome, Bonnet, Cover, Gland, Wedge, Hand Wheel, Cap, Thrust Plate etc.	Spheroidal Graphite Iron.
2	Body Seat ring, Wedge Seat ring Back seat bush	Leaded Tin Bronze, Stainless Steel
3	Stem Nut/Wedge nut, Shoe, Channel	Lead Tin Bronze, High Tensile Brass, Phosphor Bronze, Aluminum Bronze
4	Stem/Spindle	Stainless Steel, High Tensile Brass
5	Gear	Spheroidal Graphite Iron, Cast Steel, Cast Iron
6	Pinion & Pinion Shaft	Carbon Steel, Stainless Steel
7	Gear Housing	Grey Cast Iron, Spheroidal Graphite Iron
8	Bolts	Carbon Steel, Stainless Steel
9	Nuts	Carbon Steel, Stainless Steel
10	Gasket	Rubber, Compressed Asbestos Fiber
11	Gland Packing	Jute & Hemp, Rubber, PTFE
12	Head Stock, Guide bracket	Grey Cast Iron, Mild Steel, Cast Steel

- All dimensions are in mm
- End connection of the valve as per : IS 1538, upto 1200 mm & 1500 mm only
- * End connection of the valve as per BS: 4504 or customer requirement
- Tolerance as per specifications.
- Construction of materials as specified are standard specification we can also provide other than standard
- Bevel gear, worm gear, spur gear, electrical actuator, shoe channel position indicator, Extension Spindle with coupling and by-pass arrangement are also available
- Manufacturing range 50 mm to 2400 mm NB

WE ALSO MANUFACTURE AS PER BS, ASA, DIN AND OTHER SPECIFICATION

KAMALA VALVES & ENGINEERING PVT.LTD

e-mail : kamalavalves@rediffmail.com



KCE/KAMALA BRAND D.I. DOUBLE FLANGED RESILIENT SEATED GATE VALVES



1 Handwheel:
Valves supplied with handwheel or bare shaft with square cap.

8 Ease of Maintenance:
O-Rings are replaceable with valve fully open and even under pressure.

2 Stem Guard:
Stem seal design provides effective sealing against ingress of dirt and other impurities.

7 Stem:
Stem made of SS 410 / 420 / 431 / 316, Bronze, Forged and machined to high strength and performance.

3 Extra Protection:
SS/GLVD Bolts used to secure bonnet to valve body are further protected with Plastic Seal / Wax to provide extra sealing and protection, particularly well suited for buried service.

4 Wedge:
Cast or Ductile Iron, fully encapsulated in vulcanized EPDM / NBR rubber leaving no exposed metal surface. Central guides help to reduce friction between wedge and body during open/close operations.

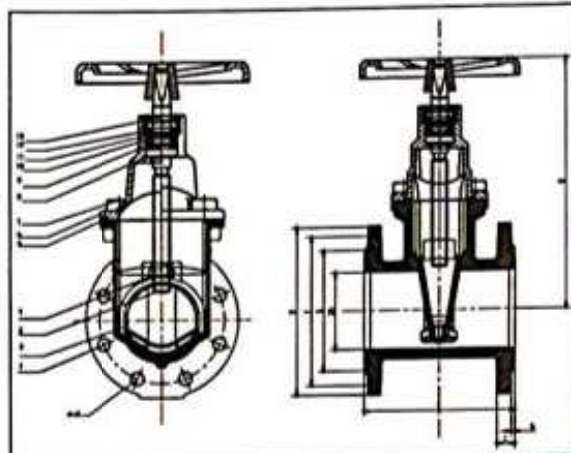
5 Waterway:
Smooth waterway well rounded, provides superior flow characteristics and venturi effect.

6 Coating:
Fusion bonded epoxy coating to a min DFT of 250 microns provides an effective Corrosion Protection

3 WE ALSO MANUFACTURE AS PER BS, ASA, DIN AND OTHER SPECIFICATION
KAMALA VALVES & ENGINEERING PVT.LTD

e-mail : kamalavalves@rediffmail.com

KCE/KAMALA BRAND D.I. DOUBLE FLANGED RESILIENT SEATED GATE VALVES



Product Features:

1. Replaceable O-Ring
2. Rubber Encapsulated Wedge
3. Clockwise Closing direction
4. Low Torque operation
5. Fusion bonded epoxy coated inside and outside for superior corrosion protection
6. Product Colour : RAL 5005 or Customer requirement
7. Maximum Operating Temperature : 80°C

Normal Features:-

1. Ductile Iron Body & Bonnet with high strength and impact resistance
2. Rubber Encapsulated DI wedge to ensure drop tight sealing
3. Rubber bonnet gasket for longevity and protection of bonnet bolts
4. Stainless Steel stem with high strength and corrosion resistance.
5. Black sealing facility to allow for replacement of seals under full operating pressure
6. Straight through full bore to avoid debris traps
7. Isolated fasteners for corrosion protection
8. Wiper ring to prevent impurities from entering the stem sealing systems
9. Anti friction thrust washer for flow operating torque. Integral cast in foot for safe and easy storage
10. Full diameter waterway hand wheel, square cap operation

Application: -

Resilient Seated Gate Valves are suitable for use in drinking water and waste water, which can be installed under ground or above under ground. Flange End Gate Valves are normally used in fire service application and socket end resilient seated gate valve are normally used in PVC pipelines.

Optional Extra: -

- Stem Cap / Hand Wheel
- Position Indicator
- Extension Spindle
- Actuator Operated
- By Pass Arrangement
- Gear Arrangement

Technical Specification:

- Design: BS / EN / DIN / IS Standard
- Face to Face : BS/ANSI/IS Standard
- Flange End: drilling - IS / BS / ANSI Standard
- Pressure Rating: PN-10, PN-16 & PN-25
- Manufacturer Range 50mm to 1200 mm N.B.



KCE/KAMALA BRAND D.I. DOUBLE FLANGED RESILIENT SEATED GATE VALVES

DIMENSION OF RESILIENT SEATED GATE VALVES

NOMINAL SIZE (MM)	Face to Face	Flange Details				
		O.D.	P.C.D.	Thickness	No. of Hole	Hole dia
	L	D	F	C	N	D
40	165	165	110	16	4	19
50	178	165	125	16	4	19
65	190	185	145	16	4	19
80	203	200	160	21	4	19
100	229	220	180	22	8	19
125	254	250	210	22.5	8	19
150	267	285	240	23	8	23
200	292	340	295	24.5	8	23
250	330	400	350	26	12	23
300	356	445	400	27.5	12	23
350	381	505	460	29	16	23
400	406	565	515	30	16	28
450	432	615	565	32	20	28
500	457	670	620	33	20	31
600	508	780	725	36	20	31

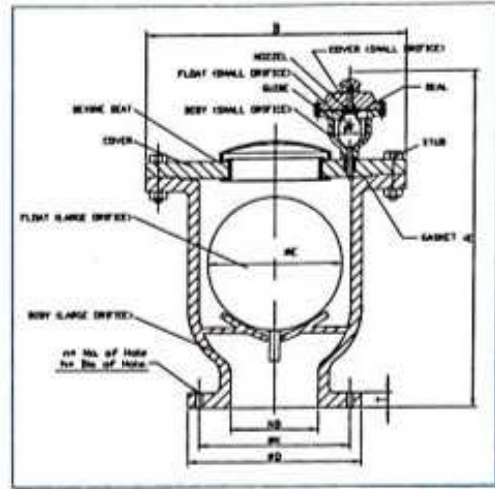
MATERIALS OF CONSTRUCTION

SL. No.	Parts Name	Materials
1	Body	Spheridal Graphits Iron
2	Disc	Spheridal Graphite Iron + EPDM
3	Stem	Stainless Steel / High Tensile Brass
4	Stem Nut	GUN METAL / BRASS
5	Gasket	NBR/EPDM
6	Bolts	Stainless Steel / Carbon Steel
7	Bonnet	Spheridal Graphite Iron
8	Washer	POD
9	O Ring	NBR
10	Oring	NBR
11	Seal Cover	POM

5 WE ALSO MANUFACTURE AS PER BS, ASA, DIN AND OTHER SPICIFICATION
KAMALA VALVES & ENGINEERING PVT.LTD

e-mail : kamalavalves@rediffmail.com

KCE/KAMALA BRAND DI TAMPER PROOF AIR RELEASE VALVES



DIMENSIONS OF TAMPER PROOF AIR VALVES

SIZE (MM)	TOTAL HEIGHT (APPROX)	TOTAL WIDTH (APPROX)	BALL DIA (FLOAT)		FLANGE				
			LP CHAMAMBER	HP CHAMAMBER	OUTSIDE DIA	P.C.D.	THICK	NO. OF HOLE	HOLE DIA
NB	A	B	∅ E	∅ F	D	K	T	h	n
40	355	225	40	45	150	110	16	4	19
50	360	225	65	45	165	125	16	4	19
80	400	250	90	45	185	160	21	4	19
100	430	275	100	45	200	180	22	8	19
150	480	320	125	45	285	240	23	8	23
200	610	400	200	45	340	295	24.5	8	23

BILL OF MATERIALS OF TAMPER PROOF AIR RELEASE VALVES

SL No.	COMPONENT	MATERIALS
1	Body Large orifice	Spheroidal Graphite Iron
2	Body Small Orifice	Spheroidal Graphite Iron
3	Cover Small Orifice	Spheroidal Graphite Iron,
4	Cover Large Orifice	Spheroidal Graphite Iron
5	Cowl	Mild Steel / Spheroidal Graphite Iron
6	L.P. Seat Ring	EPDM
7	H.P. Orifice	EPDM
8	Float (L.P. Chamber)	Stainless Steel
9	Float (H.P.Chamber)	Stainless Steel
10	Ferrule	Carbon Steel
11	Fastners	Carbon Steel / Stainless Steel
12	Nozzel	Gun Metal

- * All dimension are in mm
- * Construction of Materials Specified as standard as per Mfg. we can also provide other than standard.
- * Flange end as per IS :1538 or customer's requirement
- * Tolerance as per specification
- * Manufacturing range : 40 mm to 200 mm, higher size as per customer requirement.

WE ALSO MANUFACTURE AS PER BS, ASA, DIN AND OTHER SPICIFICATION

KAMALA VALVES & ENGINEERING PVT.LTD

e-mail : kamalavalves@rediffmail.com


COMMERCIAL - IN - CONFIDENCE
FLUID CONTROL RESEARCH INSTITUTE, PALAKKAD
 An ISO 9001 Establishment
 (A Unit of India Project with UNIP Assistance)
 Under Ministry of Heavy Industries & Public Enterprises
 KANJIKODE WEST PALAKKAD - 57623, KERALA, INDIA.
 Tel: +91 2384120 2384208 or +91 497 2565226 Fax: +91 2384120 2384121 www.fcricol.com

FCRI
 A CENTRE OF EXCELLENCE
 IN FLUID ENGINEERING

CERTIFICATE OF TESTING
AIR RELEASE VALVE for
MR. KAMALA VALVES & ENGINEERING PVT. LTD.,
WEST BENGAL.

Page 1 of 1 pages
 DATE OF RECEIPT: 16.07.2008
 DATE OF TEST: 16.07.2008
 DATE OF ISSUE: 16.07.2008
 CERTIFICATE NUMBER: TAI 001 007 011
 TAX: 001 007 011

MADE IN INDIA
 Approved Signatory: 

SUMMARY
 Item: Air release valve
 M. No.: 68021
 Model: CS Tripartite vent air valve
 Size: 4" NB
 Make: Kamala
 Witnessed by: Mr. Amit K. Ghosh, Mr. Tammy Datta
 Laboratory: Air Flow Laboratory
 Reference meter: Calibrated Flow Venturi Nozzle
 Testing medium: Air
 Procedure used: IS 14844 / ARV
 Reference standard: IS 14844 : 2006, ISO 5167 : 2003

Results
 The stainless steel ball is properly seating and giving seat pressure between 1 to 10 bar g.
 The valve body is water tight at 16 bar g.
 The valve gives a discharge capacity of 500 m³/h @ 0.53 bar g at an expanded uncertainty, U=0.21%.
 The valve performance is satisfactory.
 The workmanship is satisfactory.

Tested by: 
 Report Prepared by: 
 Report Checked by: 


COMMERCIAL - IN - CONFIDENCE
FLUID CONTROL RESEARCH INSTITUTE, PALAKKAD
 An ISO 9001 Establishment
 (A Unit of India Project with UNIP Assistance)
 Under Ministry of Heavy Industries & Public Enterprises
 KANJIKODE WEST PALAKKAD - 57623, KERALA, INDIA.
 Tel: +91 2384120 2384208 or +91 497 2565226 Fax: +91 2384120 2384121 www.fcricol.com

FCRI
 A CENTRE OF EXCELLENCE
 IN FLUID ENGINEERING

CERTIFICATE OF TESTING
GATE VALVE for
MR. KAMALA VALVES & ENGINEERING PVT. LTD.,
WEST BENGAL.

Page 1 of 1 pages
 DATE OF RECEIPT: 16.07.2008
 DATE OF TEST: 16.07.2008
 DATE OF ISSUE: 16.07.2008
 CERTIFICATE NUMBER: TAI 001 007 012
 TAX: 001 007 012

MADE IN INDIA
 Approved Signatory: 

SUMMARY
 Item: Gate Valve
 Serial No.: 68021
 Model: DN Non-vented Stated Double Flange Gate Valve
 Size: 4" NB
 Make: Kamala
 Witnessed by: Mr. Amit K. Ghosh, Mr. Tammy Datta
 Laboratory: Air Flow Laboratory
 Reference Meter: Turbine meter
 Testing medium: Air
 Reference Standard: ISRI/ISA-875.02-1996, ISO 9901:2003

Results
 Valve coefficient, Cv: 1718.43 @ 95.2% Stroke and the Flow rate 9041 kg/h @ 16.22 bar g at an expanded uncertainty, U=0.21%.
 The valve performance is satisfactory.
 The workmanship is satisfactory.
 No leak was observed.

Tested by: 
 Report Prepared by: 
 Report Checked by: 



KAMALA VALVES & ENGINEERING PVT. LTD.

Factory: 41/2 'Q' Road, Belgachia, Howrah-711108, W.B., INDIA

Office: 27A, Siraj-Ud-Doula Sarani (Waterloo Street) Kolkata-70069,

Phone : +91 33-26512392, 26516283, 22311775

Fax: +91 33-26515598, 22311299

E-mail: kamala1@vsnl.net # kamalavalves@rediffmail.com

Visit us: www.kamalavalves.in