





# KNIFE EDGE **GATE VALVES**





















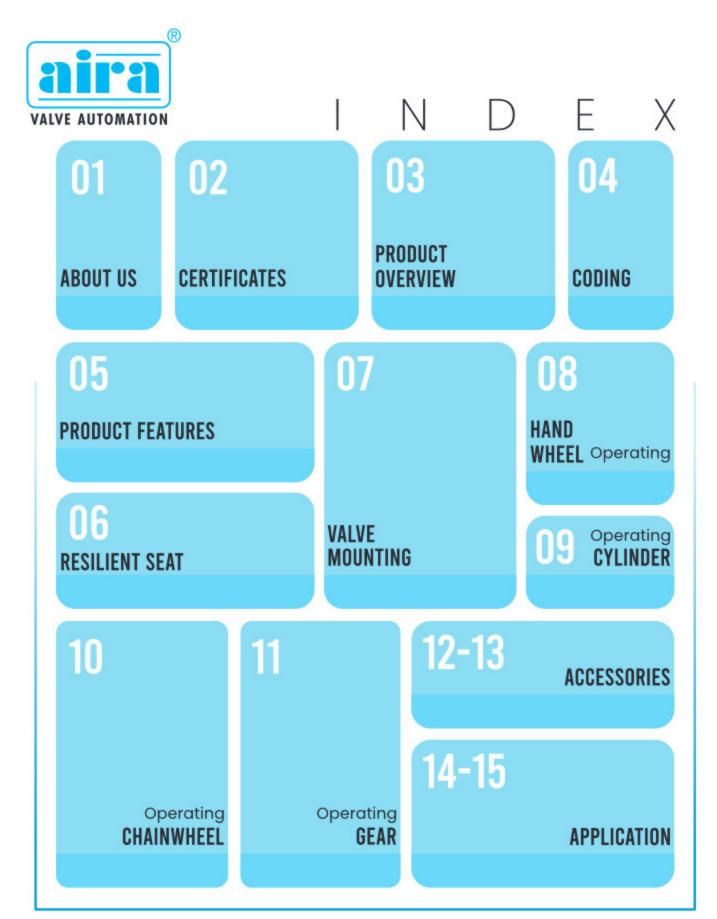




Catalogue no. - KGV-CAT-KVM-002-R00

Mfg. & Mkt by: aira Euro automation pvt. ltd. INDIA

aira

























We welcome and thank you for referring out detailed catalogue.

aira is know all over continents as a manufacturer of quality products - Ball Valves, Butterfly Valves, Plug Valves, & Control On / Off Valves with Pneumatic Actuators for Pharma, Oil & Gas, Steel, Paper, Water, Chemical and all type of processing industries.

aira has walked through more than 3 decades, gaining valuable experience, offering equipment's in the products manufactured by OEMs in all spheres of engineering. aira products have gained reputations of consultants, and approvals of users, OEMs and other as a quality product.

aira has expanding business into foreign markets specially GCC, UAE, Asian & African countries. This is because increase its customer base and revenue, leading to overall growth and success. Now foreign users come to know and believe in the services provided by the aira. Along with the same, it also helps to reach a large number of users thereby leading to the increase their business.

Being and ISO 9001 BVQI certified company has put aira in fore front. Out motto is "Value the customer" and "Superior product", one among the best in the world.

#### **Our Quality**

- In-House full scale testing facility.
- Lean manufacturing practices
- Certified by: ISO 9001: 2015 (BVQI LONDON), CE, ATEX, CIMFR, BIS, PESO, SIL 3, IBR

#### **Our Commitment**

- To understand customer's need first before proposing our products.
- To keep on providing competitive rate's by adapting to continuous process improvement, without compromising on quality.
- To provide continuous support to our customers and go beyond their expectations in terms of delivery and after sale services.

#### **Our Manufacturing Facility**

 In house R & D, manufacturing and testing facility is all located in a spread over three campuses at Ahmedabad, Gujarat, INDIA.

#### Network - Sales Office

- 60 Plus Branch Offices in different states in India.
- Sales office in the Bangladesh, Dubai, Kenya, Malaysia, Nepal, Qatar, Singapore, South Africa, Sri Lanka, Turkey, USA (Expanding).

























# CERTIFICATIONS

QMS (Quality Management) System)

ISO 9001: 2015

EMS

(Environment Management System)

ISO 14001: 2015

**OHSAS** (Occupational Health

& Safety Management System)

ISO 45001: 2018

IBR

PISTON VALVE GLOBE CONTROL VALVE (CKD/CND) DISC CHECK VALVE (DCV) PRESSSURE REDUCING VALVE (PRV) POP TYPE SAFETY VALVE BALL VALVE

Pneumatic Actuator

CE /

ATEX /

EXIDA SIL-3 / PROOF OF DESIGN Scotch & Yoke Actuator

CE / ATEX / SIL-3



Stainless Steel Actuator

CE / **IEP ATEX** 



Positioner Enclosure

CE / CIMFR / IP67 / BIS / PESO



aira's SOME OF OUR

Plug Valve

**FUGITIVE EMISSIONS** 

AS PER ISO 15848-1 / IBR



Flameproof Solenoid Valve

IEP ATEX / CE / CIMFR / IP65/ IP67 / IP68 / BIS / PESO

Limit Switch

IEP ATEX / CE / CIMFR / IP67 / BIS / PESO / EQDC IP68

Ball Valve (Floating & Trunnion)

FIRE SAFE TEST DESIGN / FUGITIVE EMISSIONS TEST AS PER ISO 15848-1 / CE / PED / EXIDA SIL-3



Butterfly Valve (centric / Double) & Triple Eccentric)

FIRE SAFE TEST DESIGN / FUGITIVE EMISSIONS TEST AS PER ISO 15848-1 / CE / PED / EXIDA SIL-3 / IBR / PROOF OF DESIGN / FOOD GRADE / BIS / ISI



Multiport Ball Valve

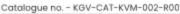
FUGITIVE EMISSIONS TEST AS PER ISO 15848-1 / CE PED / EIL



































# KNIFE EDGE GATE VALVE EXPLODED VIEW

# Uni-direcitional [KVM SERIES]

SR. NO.	PART NAME	MATERIAL	QTY.
1	Body	ASTM A536 Gr. 65-45-12 (Cast Iron,	1
		Cast Steel, Ductile Iron, S.S. 304 / 316)	
2	Gate	S. S. 304 / S. S. 316 / S. S. 316L / Duplex /	1
		as per your request	
3	Seat	Metal to Metal / EPDM / NBR / Viton	1
		as per your request	
4	Gland Packing	PTFE Impregnated Synthetic Fiber	2
	Gasket	/ Graphite	
5	Gland	ASTM A 536 Gr. 65-45-12 / Brass	1
6	Stem	S. S. 304 / S. S. 316 / S. S. 316L / 410 /	1
		titanum / EN8	
7	Sleeve	Brass / Gun Metal / AB2	1
8	Bracket	M. S. / S. S.	1
9	Ring	S. S. 304 / S.S. 316	1
10	Hand Wheel	C. I. / Ductile Iron	1
11	Bush for Pipe	Plastic / Nylon	1
12	Pipe	M. S. / Plastic	1
13	Washer	Brass / Ab2 / Gun Metal	1
14	Sleeve Lock Nut	M. S. / S. S.	1
15	Fasners	M. S. / S. S.	

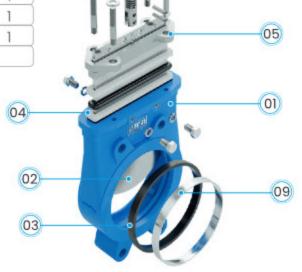
#### STANDARD FLANGE CONNECTION

- DIN PN 10 & ANSI B 16.5 ( Class 150 )
- Other Flange Connections available on request

DIN PN 6 ANSI 125 BS "D" & "E" DIN PN 25

DIN PN 16

 All valves are tested prior to shipping in accordance with the standard developed by the quality control department at "aira"



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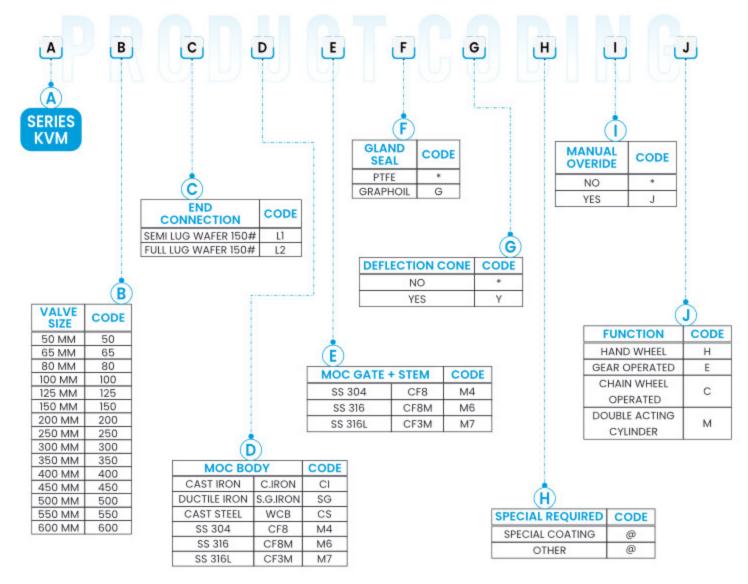
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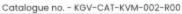


## PRODUCT CODING



NOTE						
SYMBOL	INDICATION					
@	Contact Factory.					
	By Default, Do Not Mention.					

EXAMPLE-1	I KVM 5011M4M4H	KNIFE GATE VALVE SIZE 50MM SEMI LUG WAFER TYPE CF8 BODY CF8 GATE M TO M PTFE GLAND SEAL HAND WHEEL OPERATED
EXAMPLE-2		KNIFE GATE VALVE SIZE 400MM FULL LUG WAFER TYPE DUCTILE IRON BODY CF8M GATE M TO M GRAPHOIL GLAND SEAL M.O. WITH DOUBLE ACTING CYLINDER OPERATED























## KNIFE EDGE GATE **VALVE FEATURE** Uni Directional



#### STEM

The standard stainless steel stem offers a long corrosion resistant life. For rising stem handwheel actuators only, a stem protector is provided for additional protection against dust while the valve is in the open position.



Stainless steel gate. Gate is polished on both sides to avoid jamming and seat damage. Bottom of the gate edge is machined to a bevel to cut through solids for a tighter seal in the closed position. The thickness and / or material of the gate can be changed on request for higher pressure requirements.

#### PACKING

Long - Life packing with several layers of braided fiber plus an EPDM 'O'- Ring, with an easy access packing gland ensuring a tight seal. Long - Life braided packing is available in a wide range of materials.

#### SEAT: (RESILIENT)

Unique design that mechanically locks the seal in the material of the valve body with a stainless steel retainer ring. Standard EPDM also available in different materials such as Viton / PTFE Etc...

#### YOKE OR ACTUATOR SUPPORT

Made of EPOXY coated steel (stainless steel available on request). Compact design makes it extremely robust even under the most severe conditions.

#### BODY

Wafer style cast monoblock with raised faces and reinforcing ribs in large diameters for extra body strength. Internal cast-in gate wedges and guides allow for a tighter shutoff between gate and seat. Full port design for greater flow capacity and minimal pressure drop. The internal body design avoids any accumulation of solids that would prevent the valve from closing.

#### **EPOXY COATING**

The epoxy coating on all "aira" cast iron & carbon steel valve bodies and components is applied by means of an electrostatic process, making the valves corrosion-resistant with a high quality finished surface. The "aira" standard colour is RAL-5015 blue.

#### ACTUATORS

All actuators supplied by "aira" are interchangeable, & supplied with a standard mounting kit for installation purposes on site. \*Contact Factory for Actuator More Info.



























## RESILIENT SEAT

#### SEAT MATERIALS

MATERIAL	MAX. T (°F)	(°C)	APPLICATIONS
Metal / Metal	>482	>250	High Temp. / Low Tightness
EPDM (E)	248	120	Acids & Non Mineral Oils
Nitrile (N)	176	80	Resistance to Petroleum Products
Viton (V)	392	200	Chemical Service / High Temp.
Silicon (S)	482	250	Food Service / High Temp.
PTFE (T)	482	250	Corrosion Resistance

#### PACKING OPTIONS

MATERIAL	MAX. T (°F)	(°C)	PH
Dry Cotton (AS)	>122	>50	6-8
PTFE Impregn. Synth. Fiber (ST)	464	240	2 - 13
Braided PTFE (TH)	500	260	0 - 14
Graphited (GR)	1112	600	0 - 14

Note: All types include an elastomere 'O' - Ring (Same material as seal), Excluding TH, GR & FC.

More details & other material on request.

#### **SEAT TYPE**



#### **RESILIENT TYPE "A"**

- Standard resilient seat.
- Temperature limitation according to the selected seat material. Review the above chart or contact our technical department for more information.
- Seat with replaceable retainer ring.

#### METAL TO METAL FOR, APPLICATION WITH

- High Temperature.■
- High density media application.
- In those cases when full tightness is not required.





#### TYPE "B" SEAT (RESILIENT)

- Temperature limitations according to the selected seat material. Review the above chartor contact our Technical Department for more information.
- Replaceable & Reinforced seat ring available in different material such as: Stainless Steel / CA1 5, Ni Hard...

#### TYPE "B" SEAT (METAL TO METAL) FOR, APPLICATION WITH:

- High Temperature ■
- High Density Media Application ■
- In those cases when full tightness is not required
- Replaceable design without disassembling the valve .





- Deflection the media away from any valve internal exposed parts (Gate / Seat)
- Material: AISI 316 / CA15 / Ni-Hard Etc...
- Face to Face dimension increases :

DN 50 to DN 250 X = 9 mm DN 300 to DN 600 X = 12 mm Large diameter on request





























# VALVE MOUNTING Details

SIZE (DN)	N <sup>2</sup>	K	M	T	$\bigcirc \oplus \oplus \oplus$
2"	4	4.3/4	5/8" - 11 UNC	3/8"	4-0-0
2.1/2"	4	5.1/2"	5/8" - 11 UNC	3/8"	4-0-0
3"	4	6"	5/8" - 11 UNC	3/8"	4-0-0
4"	8	7.1/2"	5/8" - 11 UNC	3/8"	4-0-4
5"	8	8.1/2"	3/4" - 10 UNC	3/8"	4-0-4
6"	8	9.1/2"	3/4" - 10 UNC	1/2"	4-0-4
8"	8	11.3/4"	3/4" - 10 UNC	1/2"	4-0-4
10"	12	14.1/2*	7/8" - 9 UNC	3/4"	6-0-6
12"	12	17"	7/8" - 9 UNC	3/4"	6-0-6
14"	12	18.3/4"	1" - 8 UNC	7/8"	4-4-4
16"	16	21.3/4"	1" - 8 UNC	1"	6-4-6
18"	16	22.3/4"	1.1/8" - 7 UNC	1"	6-4-6
20"	20	25"	1.1/8" - 7 UNC	1"	8-6-6
24"	20	29.1/2"	1.1/4" - 7 UNC	1"	8-6-6
28"	28	34"	1.1/4" - 7 UNC	3/4"	12 - 6 - 10
30"	28	36"	1.1/4" - 7 UNC	3/4"	12 - 8 - 8
32"	28	38.1/2"	1.1/2" - 7 UNC	3/4"	12 - 8 - 8
36"	32	42.3/4"	1.1/2" - 7 UNC	3/4"	14 - 12 - 10
40"	36	47.1/4"	1.1/2" - 7 UNC	3/4"	14 - 12 - 10
42"	36	49.1/2"	1.1/2" - 7 UNC	3/4"	14 - 12 - 10
48"	44	56"	1.1/2" - 7 UNC	13/16*	26 - 10 - 8

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IZE (DN)	N <sup>2</sup>	K	M		$\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$
50	4	125	M - 16	11	4-0-0
65	4	145	M - 16	11	4 - 0 - 0
80	8	160	M - 16	11	4-0-4
100	8	180	M - 16	11	4-0-4
125	8	210	M - 16	11	4-0-4
150	8	240	M - 20	14	4-0-4
200	8	295	M - 20	14	4-0-4
250	12	350	M - 20	18	6 - 0 - 6
300	12	400	M - 20	18	6-0-6
350	16	460	M - 20	22	6-4-6
400	16	515	M - 24	24	6-4-6
450	20	565	M - 24	24	8 - 6 - 6
500	20	620	M - 24	24	8-6-6
600	20	425	M - 27	24	8-6-6
700	24	840	M - 27	20	10 - 6 - 8
800	24	950	M - 30	20	10 - 6 - 8
900	28	1050	M - 30	20	12 - 8 - 8
1000	28	1160	M - 33	20	12 - 8 - 8
1200	32	1380	M - 36	30	22 - 6 - 4

# ANSI B16.5, **CLASS 150#** DN 20" - 24" **BUND TAPPED HOLES** TAPPED THROUGH EN 1092-2 PN 10 DN 50-65 DN 80-200

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Catalogue no. - KGV-CAT-KVM-002-R00













DN 700-800





DN 900-1000



DN 1200





# HAND WHEEL (RISING STEM) OPERATED KNIFE EDGE GATE **VALVE** Uni directional

Discover unparalleled precision with our uni-directional hand wheel operated knife edge gate valve. Engineered for advanced durability and reliable sealing, it excels in demanding applications. Its smooth operation and robust design ensure optimal performance. Elevate your industrial processes with the innovation and quality of aira.

ND WHEEL Operated

SIZE RANGE DN 50 TO DN 2000



#### STANDARD MANUAL ACTUATOR

#### CONSISTS OF:

- Handwheel: Epoxy Coated Cast Iron
- Stem
- Stem Nut
- Stem Protector

#### **OPTIONS**

- Locking Device
- Extension

SIZE in mm	WORKING PRE.		
50 to 250	10 bar		
300 to 400	6 bar		
450	5 bar		
500 to 600	4 bar		
700 to 1200	2 bar		

HMEN	6111	VIG.		_			
SIZE (DN)	A	В	C	D	E	F	Н
50	40	119	100	105	133	47	420
65	40	134	100	115	148	47	450
80	50	149	100	125	162	47	475
100	50	169	100	142	186	47	520
125	50	180	100	150	210	47	600
150	60	210	100	176	235	47	652
200	70	262	119	210.5	314.5	67	822
250	70	318	122	256	365	67	1022
300	70	372	122	300	415	67	1122
350	100	431	197	338	486	66	1323
400	100	486	197	392	530	66	1427
450	106	540	201	432	577	66	1594
500	110	602	201	485	637	66	1707
600	110	708	201	590	748	66	2022
700	110	834	380	686	890	74	2778
750	110	884	380	760	945	74	2900
800	110	1015	320	791	989	74	2980
900	110	1040	320	895	1118	74	3215
1000	110	1146	320	975	1220	74	3400

1000 & Above On Request. All dimensions are in mm

























# PNEUMATIC CYLINDER OPERATED KNIFE EDGE GATE VALVE

#### Uni directional



Operated

Elevate your operations with our uni-directional pneumatic cylinder operated knife edge gate valve. Engineered for high precision and durability, it ensures seamless automation and dependable sealing. Ideal for tough applications, aira delivers innovative valve solutions that enhance efficiency and performance. \*\*Air receiver tank also can be

SIZE RANGE

THE STANDARD PNEUMATIC ACTUATOR (DOUBLE ACTING ON-OFF CYLINDER) CONSISTS OF :

S G Iron End Cover

Stainless Steel Shaft

Hi-Nitrile Seals

Supply Pressure: Min. 3.5 Bar Max. 10 Bar. Actuator

designed with 6 Bar air supply.

For valves installed in a horizontal position, We recommend

U-type support plates and / or actuator support.

#### **OPTIONS**

- aluminum barrel for smaller cylinder upto 250mm
- Stainless Steel barrel cylinder above 250mm
- SG Iron end cover for rigid application
- Over / Undersized cylinder
- Manual Override
- Fail safe system
- Limit Switches

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SIZE in mm	WORKING PRE
50 to 250	10 bar
300 to 400	6 bar
450	5 bar
500 to 600	4 bar
700 to 1200	2 bar

**DN 50 TO DN 2000** 

request

provided based on the customer

#### INSTRUMENTATION (ON REQUEST):

- Positioners
- Solenoid Valves
- Flow Regulators
- Air Preparation Units

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SIZE (DN)	A	В	C	D	E	F	Н	STANDARD Cyl.	AIR CONNECTION
50	40	119	100	105	129	178	412	C100/62	1/4° G
65	40	134	100	115	146	193	454	C100/77	1/4° G
80	50	149	100	124	162	211	497	C100/95	1/4° G
100	50	169	100	140	187	231	558	C100/115	1/4° G
125	50	180	100	150	211	271	632	C125/143	1/4° G
150	60	210	100	175	237	296	708	C125/168	1/4° G
200	70	262	119	205	309	358	872	C160/220	1/4° G
250	70	318	122	250	364	428	1042	C200/270	3/8" G
300	70	372	122	300	414	478	1192	C200/320	3/8" G
350	100	431	197	338	500	549	1387	C250/375	3/8" G
400	100	486	197	392	550	599	1541	C250/425	3/8" G
450	106	540	270	432	598	680	1710	C300/475	1/2" G
500	110	602	270	485	658	730	1873	C300/525	1/2" G
600	110	708	270	590	758	830	2178	C300/625	1/2" G
700	110	834	380	686	875	985	2546	C350/730	3/4" G
750	110	884	380	760	930	1035	2725	C350/780	3/4" G
800	110	1015	320	791	974	1085	2850	C350/830	3/4" G
900	110	1040	320	895	1105	1202	3202	C400/930	3/4" G
1000	110	1146	320	975	1217	1296	3488	C400/1030	3/4" G

1000 & Above On Request.

www.airaindia.com

Catalogue no. - KGV-CAT-KVM-002-R00





















All dimensions are in mm





# CHAINWHEEL OPERATED KNIFE EDGE GATE VALVE

#### Uni directional

Transform your operations with our uni-directional chain wheel operated knife edge gate valve. Meticulously designed for superior reliability and effortless operation, it ensures precise control and robust sealing even in the most demanding industrial environments. With aira's innovative valve solutions,

experience unparalleled efficiency and optimized performance, setting new standards

in industrial excellence.

SIZE RANGE DN 50 TO DN 2000





#### CONSISTS OF:

- Chainwheel: Epoxy Coated Cast Iron
- Stem
- Stem Nut
- Stem Protector

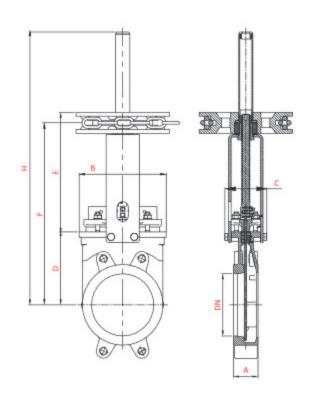
#### OPTIONS

- Extension
- Rising Stem & Non - Rising Stem

SIZE in mm	WORKING PRE.
50 to 250	10 bar
300 to 400	6 bar
450	5 bar
500 to 600	4 bar
700 to 1200	2 bar



SIZE (DN)	A	В	C	D	E	F	Н
50	40	119	100	105	129	253	420
65	40	134	100	115	146	280	450
80	50	149	100	124	162	305	475
100	50	169	100	140	187	347	520
125	50	180	100	150	211	380	600
150	60	210	100	175	237	431	652
200	70	262	119	205	309	538	822
250	70	318	122	250	364	638	1022
300	70	372	122	300	414	738	1122
350	100	431	197	338	486	856	1323
400	100	486	197	392	536	960	1427
450	106	540	201	432	588	1052	1594
500	110	602	201	485	648	1165	1707
600	110	708	201	590	748	1370	2022



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## **GEAR OPERATED** KNIFE EDGE GATE VALVE

#### Uni directional



Unlock unparalleled performance with our uni-directional gear operated knife edge gate valve. Meticulously engineered for heavy-duty applications, it ensures precise control and superior sealing, maintaining reliability in the most demanding environments. AIRA's cutting-edge technology guarantees exceptional durability and efficiency, optimizing operational longevity and productivity. Designed for reliability and efficiency, this valve elevates your industrial

redefine standards in industrial valve performance.

SIZE RANGE DN 200 TO DN 2000

#### OPTIONS:

- Locking Device
- Extension
- Chainwheel
- Rising Stem & Non Rising Stem

 Recommended for valves larger than DN 350 & working pressure greater than 3.5 Bar.

Standard Reduction Ration of 4:1

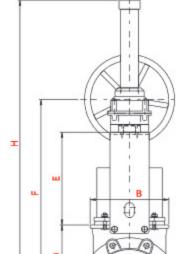
#### CONSISTS OF:

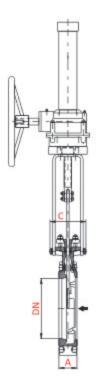
■ Stem

processes to new levels of excellence. Trust AIRA to deliver advanced solutions that

- Stem Protector
- Bevel Gear Actuator with Handwheel

SIZE in mm	WORKING PRE.
50 to 250	10 bar
300 to 400	6 bar
450	5 bar
500 to 600	4 bar
700 to 1200	2 bar





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50 to 250	10 bar
300 to 400	6 bar
450	5 bar
500 to 600	4 bar
700 to 1200	2 bar

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	<b>CHILLIA</b>	/BUCKERS			-		
SIZE (DN)	A	В	C	D	E	F	н
200	70	262	119	205	309	584	994
250	70	318	122	250	364	684	1094
300	70	372	122	300	414	784	1194
350	100	431	197	338	486	857	1657
400	100	486	197	392	522	961	1761
450	106	540	201	432	574	1053	1853
500	110	602	201	485	634	1166	1966
600	110	708	201	590	748	1371	2171
700	110	834	380	686	890	1623	2423
750	110	884	380	760	945	1755	2555
800	110	1015	320	791	993	1886	2926
900	110	1040	320	895	1123	2120	3160
1000	110	1146	320	975	1220	2302	3342
1200	150	1390	450	1037	1522	2695	3935

1200 & Above On Request. All dimensions are in mm

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# PNEUMATIC ROTARY **ACTUATOR ACCESSORIES**

#### AIR FR + L SETS 2PC WITH **PRESSURE GAUGE**



Model size body seals pressure temperature media

:JHFRCLM

:1/4", 3/8", 1/2", 3/4", 1"

:Aluminium Pressure Die Cast

:NBR

:10kg/cm2 :50 C

:Compressed air

#### **Pneumatic - Pneumatic & Electro Pneumatic LINEAR Valve Positioner**



Model AEP-1000-LSN

Supply Air Pressure

Standard Stroke

Input Signal



Model



Air Pipe Connection **Ambient Temperature** Degree of Protection **Out-put Characteristics** Conduit Connection

**Body Material** 

: 3 ~ 15 (0.2 ~ 1.0 Kgf/cm3) : 100 psi Max. (7.0 Kgf/cm2)

: 10 ~ 80 mm

: 1/4" NPT : -20 °C to 70 °C

: IP 65

: Linear : 1/2" NPT

: Aluminium Die Cast

#### **SMART Positioner LINEAR**





Model Body Set Point Signal **Ambient Temperature** 

: Aluminium : 4 - 20mA DC : Normal Version : -20 °C ~ 70 °C

: IP 6000 Series

Optional Version : -40 °C ~ 70 °C Supply Pressure : 0.14 - 0.7 MPa

Flow : 55L/min (Sup=0.14MPa)

Flameproof Limit Switch Box

#### Weatherproof Limit Switch Box



Switch

Model

MMLS-BX-WP-01-C : Honeywell ZM / NJ2-V3-N / NBB-V3-Z4 : 1 NO + 1 NC / 2 Switch

: MMLS-BX-WP-01-A MMLS-BX-WP-01-B

Type Enclosure Protection Ambient Temperature

: -20 °C to 80 °C

: IP 67

Conduit Entry : 1/2\* - NPT Terminal : 8 Point

: Namur VDI / VDE3845 / Mounting

Bracket ISO 5211 : Aluminium, S.S - CF8M Material

#### Weatherproof Limit Switch Box (Big Box)



Model

: MLS-BX-FLP-01-A MLS-BX-FLP-01-B MLS-BX-FLP-01-C MLS-BX-FLP-01-D

: Honeywell V15 / Honeywell V 15 PCB Type / NCB2-V3-NO / NJ2-V3-N

NBB-V3-Z4 / NBB3-V3-Z4 :1 NO +1 NC / 2 NO + 2 NC

2 Switch : IP 67

Enclosure Protection

Ambient Temp. Conduit Entry Terminal

Mounting Bracket Material

: -20 °C to 80 °C : 1/2" - NPT

: Namur VDI / VDE3845 / ISO 5211 : Aluminium, S.S - CF8M

: 8 Point

CE





Model : MLS-BX-01-A

MLS-BX-01-B MLS-BX-01-C MLS-BX-01-D

: Honeywell V 15 / NJ2-V3-N / Switch NBB-V3-Z4 / NCB2-V3-NO : 1 NO + 1 NC / 2 NO + 2 NC

: -20 °C to 80 °C

2 Switch : IP 67

Protection Ambient Temperature Conduit Entry

Enclosure

: 1/2" - NPT

Terminal 8 Point Mounting Namur VDI / VDE3845 /

Bracket ISO 5211 Material : Aluminium, S.S - CF8M

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# PNEUMATIC ROTARY **ACTUATOR ACCESSORIES**



#### 3/2 Way Internal Pilot Operated STAINLESS STEEL 316 Single Namur Solenoid Valve



Model Coil Voltage Frequency

Connection Type

Ambient Temp. MOC Seals

Working Pressure

: MPT-S6-32

: All Std. Voltage Available : 50 - 60 Hz

:1/4" (NPT) : PF 1/2" Coil Insulation Grade : Class "F" & "H" : -20 °C - 70 °C

: ASTM A351 Gr. CFBM : NBR ( Viton On Request ) : Upto 2.5 to 10 Kg/cm<sup>2</sup>

#### 5/2 Way Poppet Type STAINLESS STEEL 316 Single Namur Solenoid Valve



Model OTX-\$6-52 Coll Voltage : All Std. Voltage Available

:50 - 60 Hz Frequency :1/4" (NPT) Connection Type Conduit : PF 1/2" Coil Insulation Grade : Class "F" & "H"

: -20 °C ~ 70 °C Ambient Temp. : ASTM A351 Gr. CF8M MOC : NBR ( Viton On Request ) Seals **Working Pressure** : Upto 2.5 to 10 Kg/cm2

#### 5/2 way single solenoid valve



2ADDS Model :1/4", 1/2"

body :Aluminium, S.S - CF8M :NBR / Nitrile seals :1 to 10kg/cm2 pressure temperature :5 to 50 C media :Compressed air (filtered & Lubricated)

#### 3/2 way single solenoid valve



2ADDS Model :1/4", 1/2"

body :Aluminium, S.S - CF8M :NBR / Nitrile seals :1 to 10kg/cm2 pressure :5 to 50 C temperature :Compressed air media (filtered & Lubricated)

#### 2/2 & 3/2 Way Direct Acting Solenoid Valve



AMV, AJ Model :1/4" size

body :Aluminium Hard anodized :0 to 8kg/cm2 pressure :Compressed air media

(filtered & Lubricated)

#### **Manual Direction Control Valve**

5/2 Way Hand Lever Valve Spring Return



2ARMHLV Model :1/4", 1/2" size

body :Aluminium, S.S - CF8M :Upto 10kg/cm2 pressure :Compressed air media (filtered & Lubricated)

#### Filter + Regulator Air Combination



Model Air Connection Max. Supply

: 4FQ / 8 FQ / FRJ : 1/4"

Pressure FRJ: 1 to 9 Kg/cm : 1/8"

Gauge Connection Ambient Temp. Mini Filtering Size

Material

: 4FQ: 0.5 to 4 Kg / cm3 8FQ: 0.5 to 8 Kg / cm2

: -20 °C ~ 70 °C : 5 Micron

: Aluminium, Stainless steel - CF8M

#### Air Volume Booster



Model Size MOC

Seals Supply Pressure **Output Pressure**  : 1/4" to 1" : Aluminium, S.S - CF8M : NBR

: 10 Bar : 7 Bar Temperature :-20 °C~70 °C

: VLB

#### Single & Double Air Lock Valve





· SAIV **Model Single** Model Double : DALV : 1/4" to 3/4"

: Aluminium, S. S - CF8M MOC Seals

: 10 Bar Supply Pressure Output Pressure: 7 Bar : -20 °C ~ 70 °C Temperature

#### Manual Override Clutch Type (MO)



Model

Torque : 200 Nm to 10000 Nm : Aluminium . S. G. Iron, MS Body

: Stainless Steel Lever Wheel Hand Wheel : S.S. / M.S. (Fabricated)

Catalogue no. - KGV-CAT-KVM-002-R00



























## MAIN MARKETS

#### **Usage & Applications**

Knife gate and slurry valves are rarely used where conventional valve designs such as gate, globe, ball, plug or butterfly valves would work well, in particular, these designs are seldom used in services involving clean liquids or gases as their limitations far outweigh the advantages. However, where solids (Free flowing powders), mixtures of liquids and solids. or solids and gases are involved, these valves provide superior functional features. and service life compared to conventional valve designs.

Knife gate and slurry valves are predominantly used for shut-off/isolation services as "On/Off" valves. They are seldom used to throttle flow or as control valves as the media they handle are not suitable for throttling However, few exceptions and some special designs do exist for these limited throttling applications. Major industrial sectors where these valves are applied are shown in Fig-5.

#### Liquid + solid

These mixtures occur in a variety of industries and form the primary area of use for knife gate and slurry valves, the mixtures vary widely in composition and are usu? ly referred to as sludge on slurry. Typically, sludge contains relatively soft solid components whereas slurry has harder and more abrasive solid components. The composition of the solid component may vary from very small percentages to as high as 70 percent. The solid component, may be present in the form of very fine powder or as a mixture of fine powder and coarse lumps. Most of these media remain homogeneous only when kept agitated and mixed well, when kept still (as in stagnant pipes or vessels)they tend to settle and form separate solid and liquid layers. Many of them dewater and harden on cement I the liquid component drains off in the service All these factors create challenges to the effective functioning of these vales

#### Solid (Powders)

Primary toe with powders are to extract materials rom storage vessels like silos. This application is used across a wide variety of industries.

#### Media handled

Typical types of media where these valves are used:

#### Solid (Powders) + Gas

Inmarty these applications ivolve pneumatic conveying systems winerspowders are transported, these also pocuracross many industreis

Some of the knife gate vale designs can handle high temperatures as well as thermal cycling better than other valve designs. Exhaust gas heat regeneration and carbon black processing are typical sectors with such services. examples of typical media that knife gate and slurry valves handle are:

Paper mil





Wastewater

Chemical



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Power















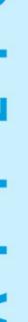








# Z O







#### Pulp & Paper

- >> Paper Stock
- >> Liquor Services
- » Recycle Project

#### Wastewater

>> Slurry / Sludge Lines

#### **General Industry**

- >> Pneumatic Conveyance
- >> Raw & Treated Water
- >> Water Conveyed Solids
- >> Dry Media / Cement
- >> Hot Gases

## Power

- >> Fly Ash
- Bottom Ash
- Branch Lines

#### Steel

- >> Slog
- >> Iron or Slurry

#### Chemical

- Pellets
- Processing Fluids & Chemicals
- Petroleum Products

#### Food & Beverage

- ₩ Winery
- Drain Processing
- Brewery
- **Grain**
- Storage Silo
- >> Spent Grain













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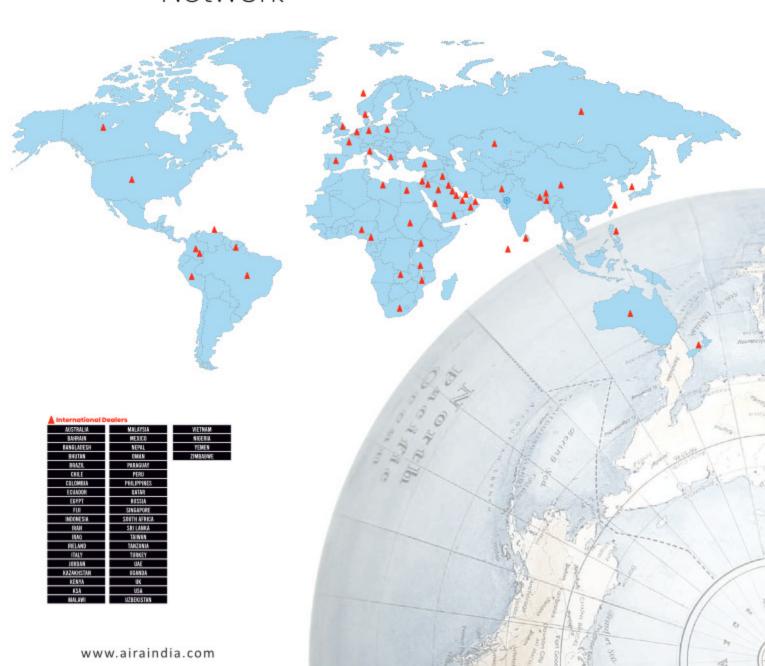






# GLOBAL Network

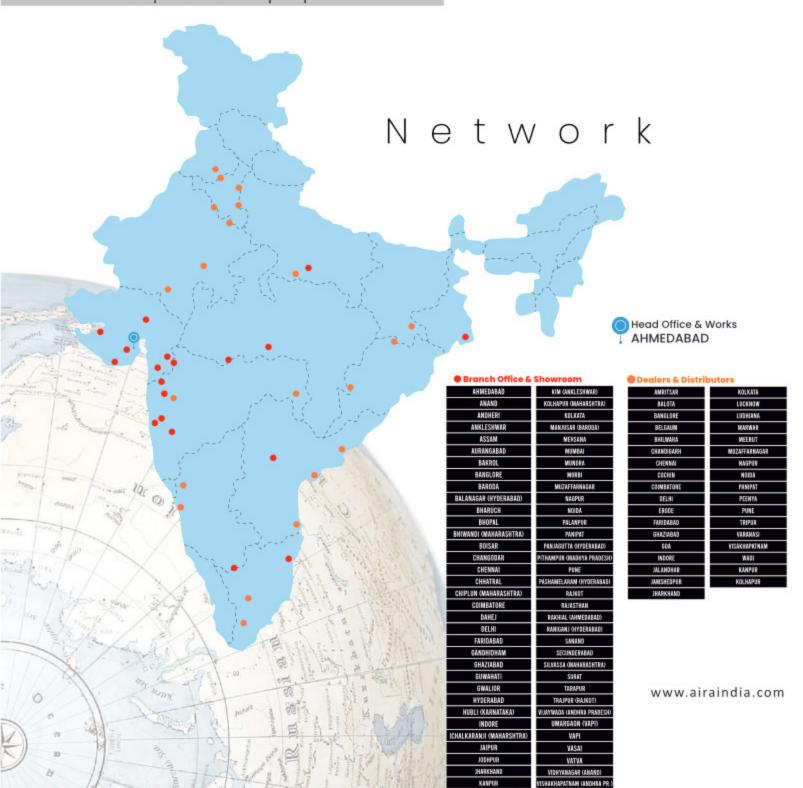
time tested designs with superior performance







# industrial value automation



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