RELIABLE VALVES & PNEUMATICS



KNIFE EDGE
GATE VALVE

RELIABLE VALVES & PNEUMATICS

ABOUT OUR **COMPANY**

We are proud to introduce Reliable Valves & Pneumatics leading manufacturer and supplier of high-quality valves and fluid control solutions. As a key subsidiary of our esteemed group of companies, we harness collective experience and resources to deliver outstanding products and services across various sectors.

With a legacy spanning over 14 years, our parent group has grown into a dynamic conglomerate driven by innovation, quality, and a strong commitment to sustainability. At Reliable Valves, we continue this tradition of excellence under the visionary leadership of Mr. V R Rathod , who brings more than 14 years of specialized expertise in the valve industry.

Reliable Valves serves a wide range of industries, including pulp & paper, cement, pharmaceuticals, oil & gas, chemicals, power, and more.

Delivering reliable solutions that meet the highest standards of performance and durability.

OUR GROUP OF COMPANY

adani

ACC | Ambuja Cement

bilt

ARISTO PHARMACEUTICALS PVT. LTD.

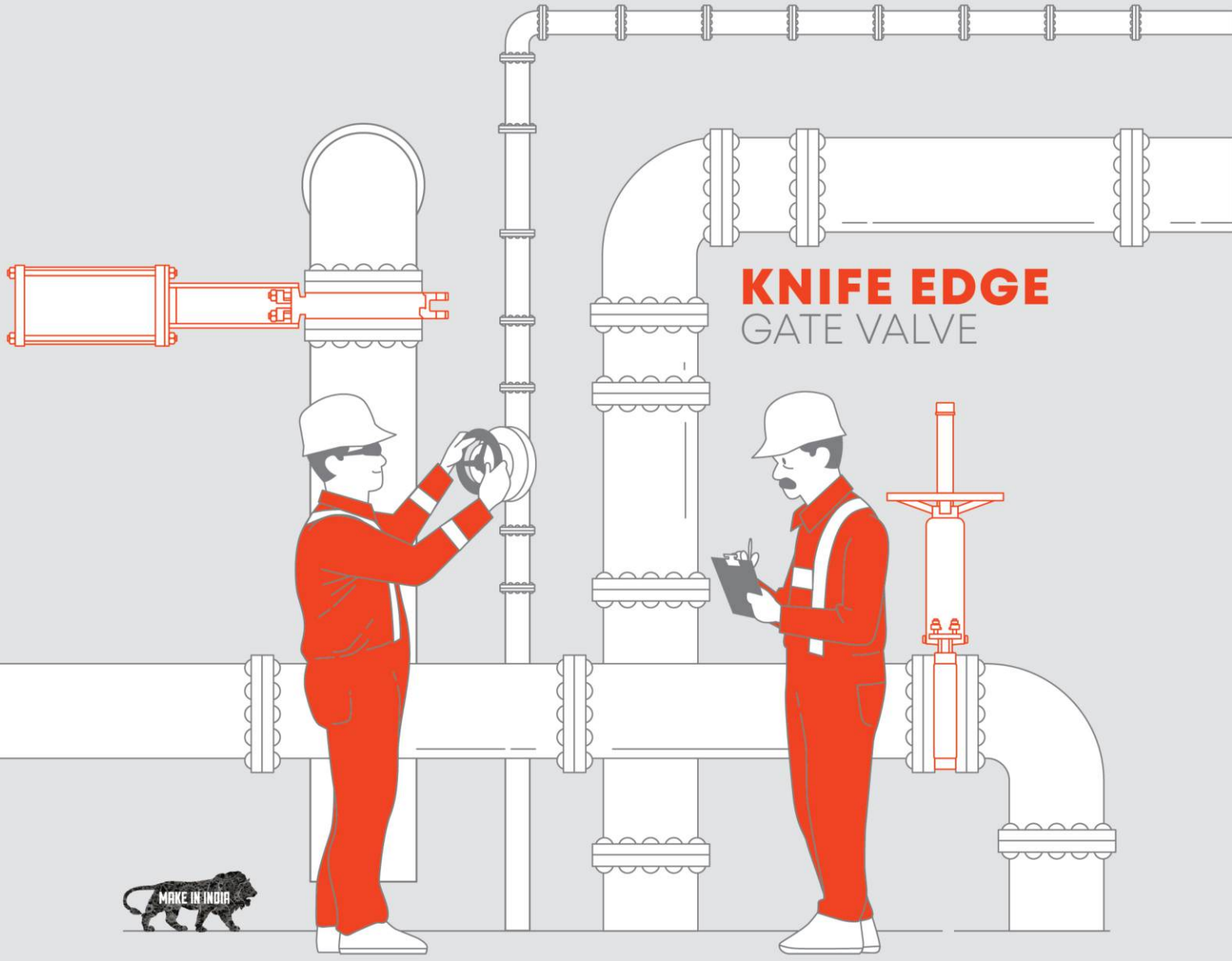
UltraTech CEMENT The Engineer's Choice

JINDAL STEEL

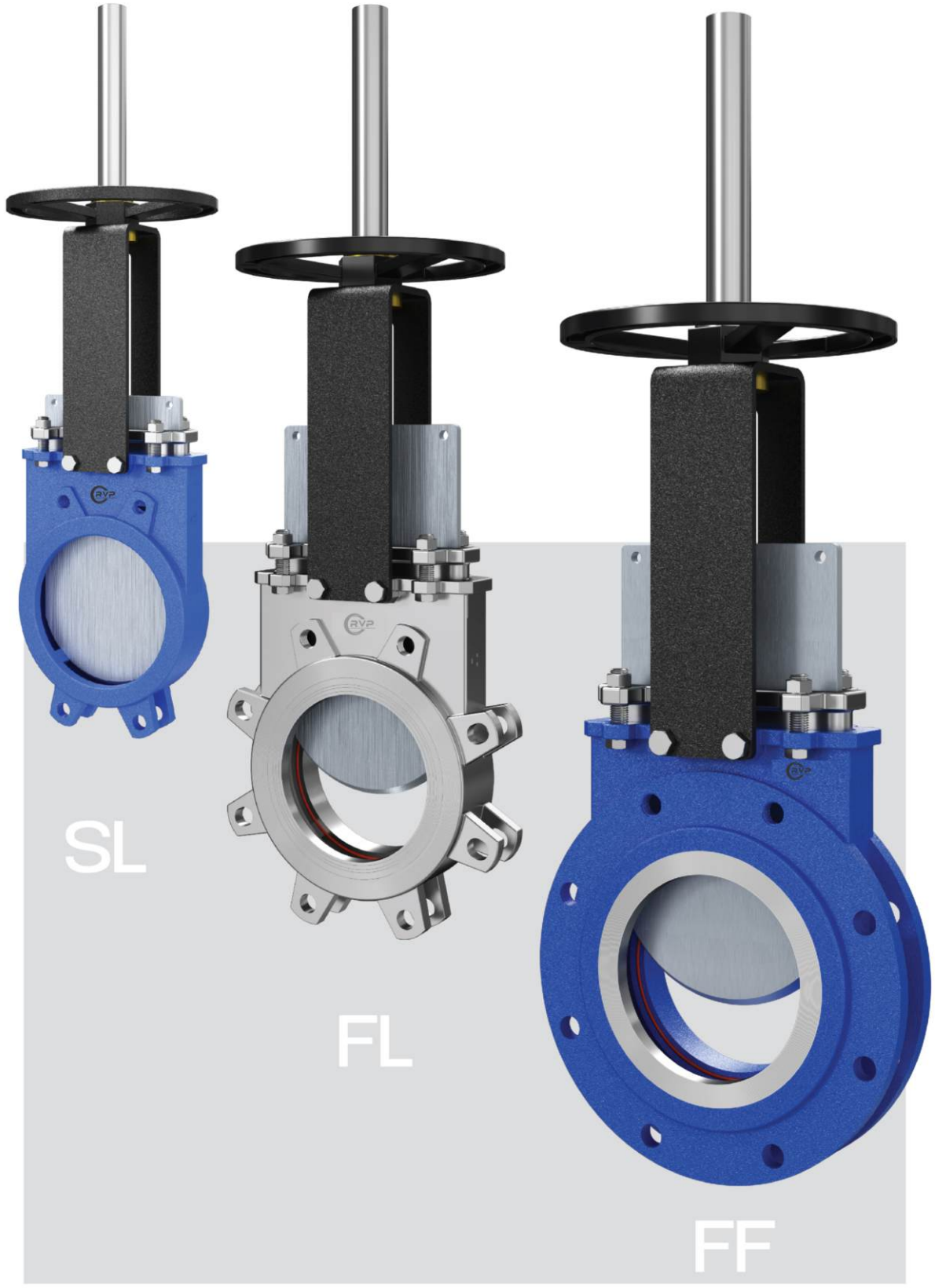
colourtex® The Dyestuff Company

JK LAKSHMI™ CEMENT LTD.

KNIFE EDGE
GATE VALVE

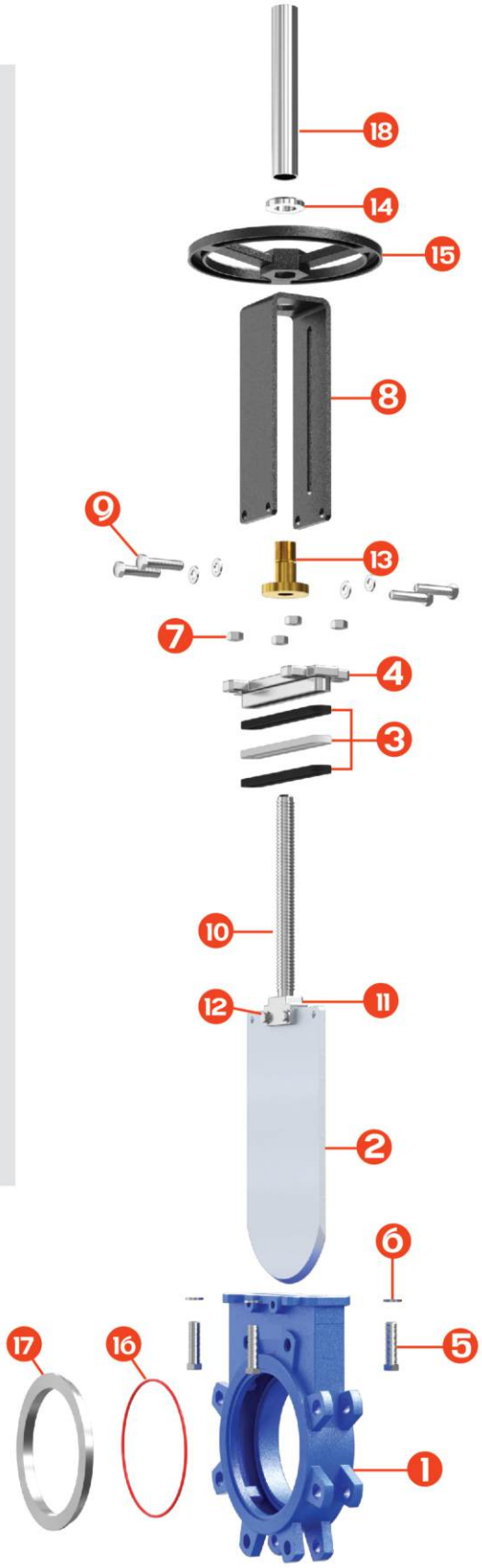


OUR SERIES



MATERIALS OF CONSTRUCTION

1	Body	Carbon Steel(WCB)
2	Gate	Stainless Steel
3	Packing Set	Synthetic Fiber PTFE Impregnated
4	Gland	Stainless Steel
5	Gland Bolt	High Tensile
6	Gland Washer	Mild Steel
7	Gland Nut	High Tensile
8	Yoke	Mild Steel
9	Mounting Bolt	High Tensile
10	Stem	Stainless Steel
11	Fork	Stainless Steel
12	Fork Fastener	Stainless Steel
13	Yoke Sleeve	Forged Brass
14	Stem Nut	Stainless Steel
15	Hand Wheel	Cast Iron
16	Seat	EPDM
17	Seat Ring	Stainless Steel
18	Stem Protector	Mild Steel



Note : 1 Optional replaceable resilient seat.

PRODUCTS



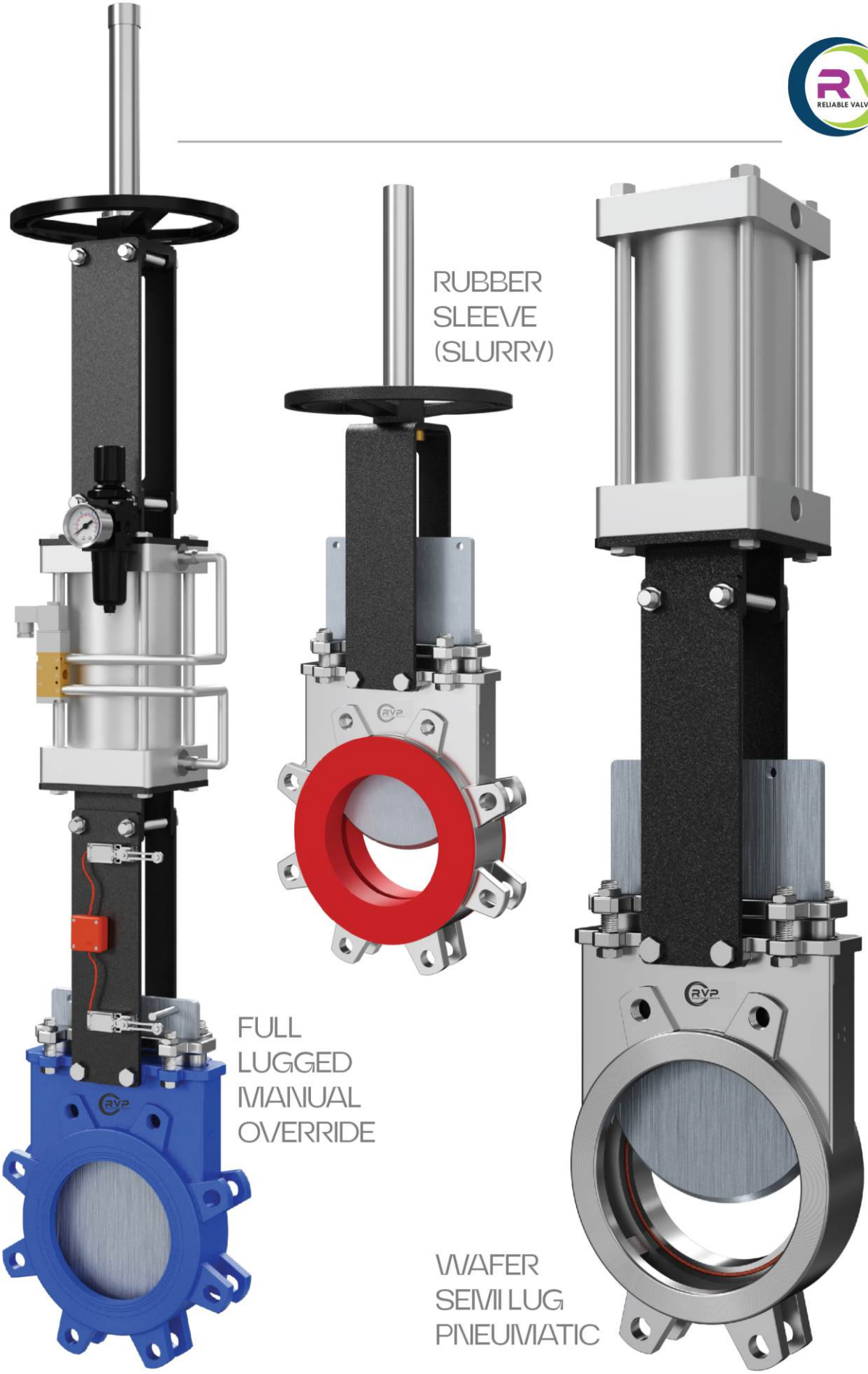
FULL
LUGGED
LEVER
TYPE



DOUBLE
FLANGED
BEVEL
GEAR



WAFER
SEMI LUG
MANUAL



RUBBER
SLEEVE
(SLURRY)

FULL
LUGGED
MANUAL
OVERRIDE

WAFER
SEMI LUG
PNEUMATIC

PRODUCTS



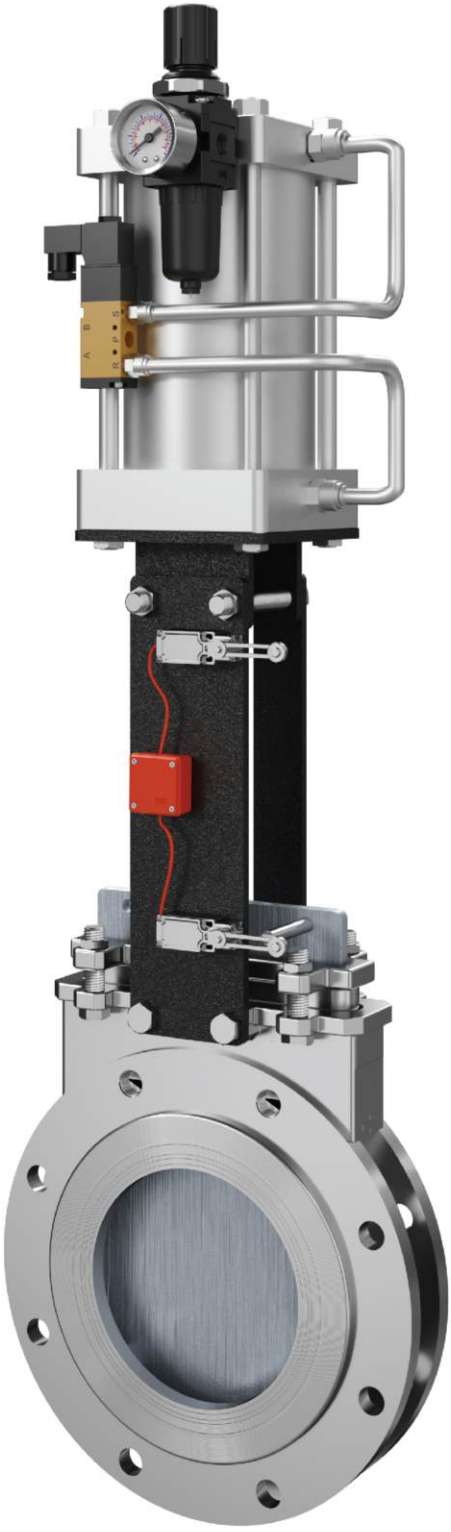
FULL
LUGGED
ELECTRICAL
ACTUATOR



NON
RISING
STEM



WAFER
SEMI LUG
CHAIN
WHEEL



FULL
LUGGED
MANUAL



SEMI LUG
BEVEL
GEAR



DOUBLE
FLANGED
PNEUMATIC

OPTIONS & ACCESSORIES



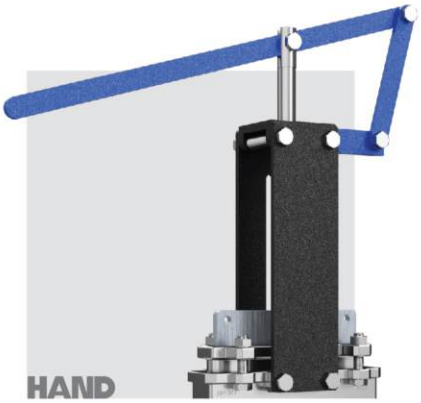
BEVEL
GEAR



GUARD
GATE



PNEUMATIC
CYLINDER



HAND
LEVER



HYDRAULIC
CYLINDER



ELECTRICAL
ACTUATOR

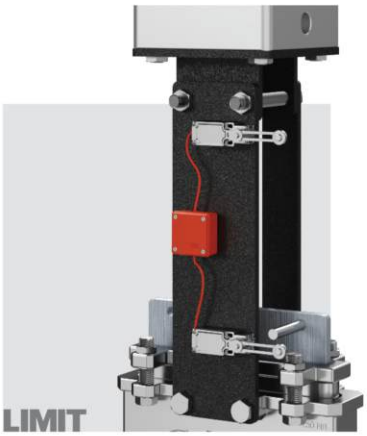
OPTIONS & ACCESSORIES



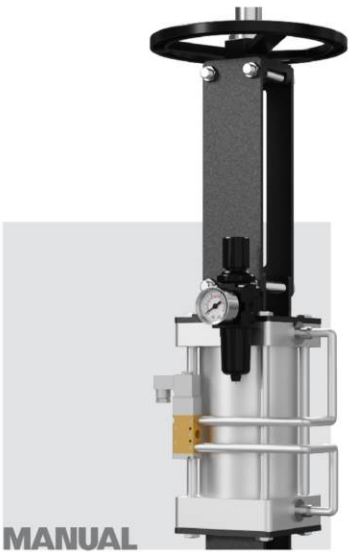
CHAIN WHEEL



HAND WHEEL



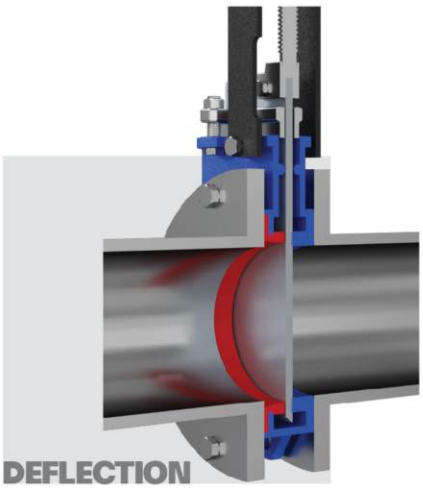
LIMIT SWITCH & JUNCTION BOX



MANUAL OVERRIDE

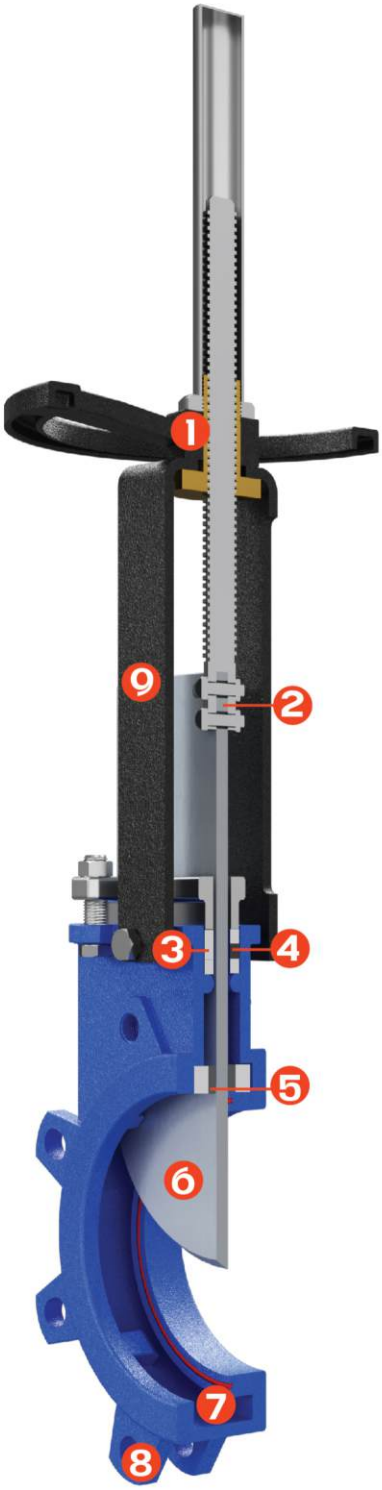


NON RISING STEM



DEFLECTION CONE

FEATURES & BENEFITS

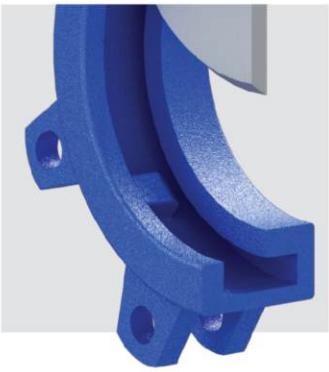


DESIGN FEATURES

Engineered for general purpose on/off service and isolation of clean, dirty, corrosive, abrasive, viscous and high temperature media.

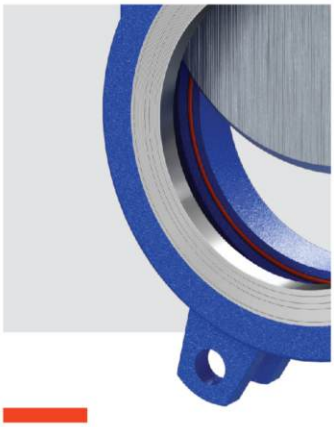
1. Topworks designed for easy, quick-conversion between manual and pneumatic actuation.
   Manual valves include a lubricant injection port for continuous, smooth operation with minimal maintenance.
2. Clevis design and horizontal bolting stabilizes gate ensuring proper alignment.
3. Standard multi-layer square packing provides exceptional gland sealing.
4. Optional energized quad seal packing for additional leak prevention.
5. Standard integral metal seat and optional replaceable zero leakage resilient seats.
6. Gate design ensures consistent alignment throughout the length of the stroke.
7. Unique body design with no dead pockets enables self-draining of valve.
8. Lugged body suitable for all mounting orientations including dead-end service.
9. Cast yoke super structure ensures robustness in valve design for different operators/ orientation.

DIRECTIONAL OPTIONS



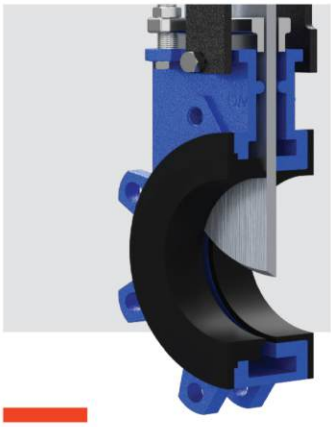
UNI - DIRECTIONAL

This knife gate valve range have been designed with uni-directional flow in mind even though some of them can deal with certain reverse flow as standard. Installation position and pressure direction are important factors to consider when choosing uni-directional knife gate valves. Independent if it is dry media or liquids, the uni directional knife gate valves will provide high operation reliability and zero leakage isolation.



BI - DIRECTIONAL

This is the range to choose if you are searching for allround and compact knife gates valves for liquids. All provide a smooth flow path with minimal flow impact and bi-directional zero leakage shut-off. Some of them are also available in fully lugged versions for dead-end services.

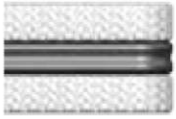
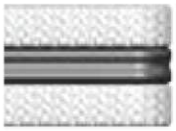
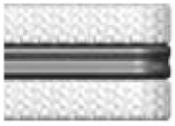
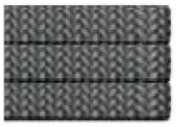
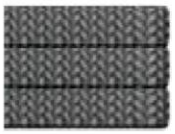


BI- DIRECTIONAL RUBBER SLEEVE

In tough abrasive mineral processing applications, the most durable knife gate valves are the push through slurry valves. These form a rubber lined extension of the pipe line when they are in opened position. When cycling to closed position, the two seats are displaced axially forming a seal with the gate until it forms a complete closure and provide 100% bi-directional zero leakage shut-off.

PACKING OPTIONS

MAXIMUM TEMPERATURE RANGE

Pure PTFE	500° F 260° C	
PTFE impregnated Synthetic Fiber	450° F 232° C	
PTFE W/H Nitrile Quad Seal	194° F 90° C	
PTFE W/H Viton Quad Seal	392° F 200° C	
PTFE W/H EPDM Quad Seal	248° F 120° C	
PTFE W/H COPPER Quad Seal	500° F 260° C	
Graphite	1202° F 650° C	
HD Packing	536° F 280° C	



1. PTFE packing with energized elastomer
2. PTFE packing with copper wiper. Copper wiper not applicable for F 752 / 755

SEAT & GATE OPTIONS

TECHNICAL SPECIFICATIONS

Size Range	NPS 2 to 24
	DN 50 to 600
Body Style	Full Flange | Semi Lug | Full Lug
Pressure Rating	2-24 150psi | 50-600mm 10 bar
Drilling	ASME B16.5 CL150 | PN 10 | Table E
Face to Face	MSS SP-81
Design Standard	MSS SP-81
Testing Standard	MSS SP-151

STANDARD CONSTRUCTION

Body	CF8 (304)	CF8M (316)
Gate	304	316
Seat	Integral	Integral
Stem	304	304
Gland	304	304
Packing	PTFE Impregnated Synthetic Fiber	PTFE Impregnated Synthetic Fiber
Topworks	Cast Steel	Cast Steel

GATE OPTIONS

- 304, 316, 317 Stainless Steel
- SAF 2507 Duplex
- 17-4PH Stainless Steel
- Hastelloy®C
- Monel®
- Titanium

BODY OPTIONS

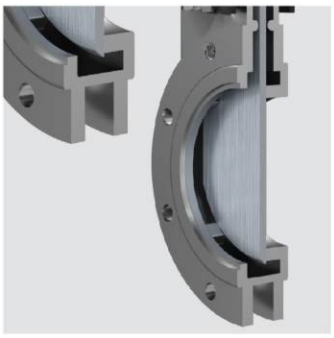
- Carbon Steel (WCB)
- CF8 Stainless Steel
- CF8M Stainless Steel
- CF3M Stainless Steel
- SAF 2205 Duplex
- SAF 2507 Duplex

SEAT / SEALS

MATERIAL	Tª MAX (ºC)	APPLICATIONS
Metal/Metal	>250	High temp./Low watertight integ.
EPDM (E)	90*	Non-mineral acids and oils
Nitrile(N)	90*	Hydrocarbons, oils and greases
FPM (V)	200	Hydrocarbons, oils and greases
Silicon (S)	200	Food Poroducts
PTFE (T)	250	Corrosion resistant

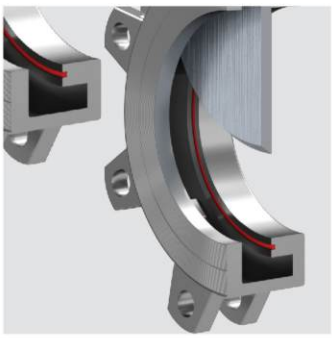
NOTE : More details and other materials available to order.

SEAT OPTIONS



Standard integral metal seat and optional replaceable zero leakage resilient seat.

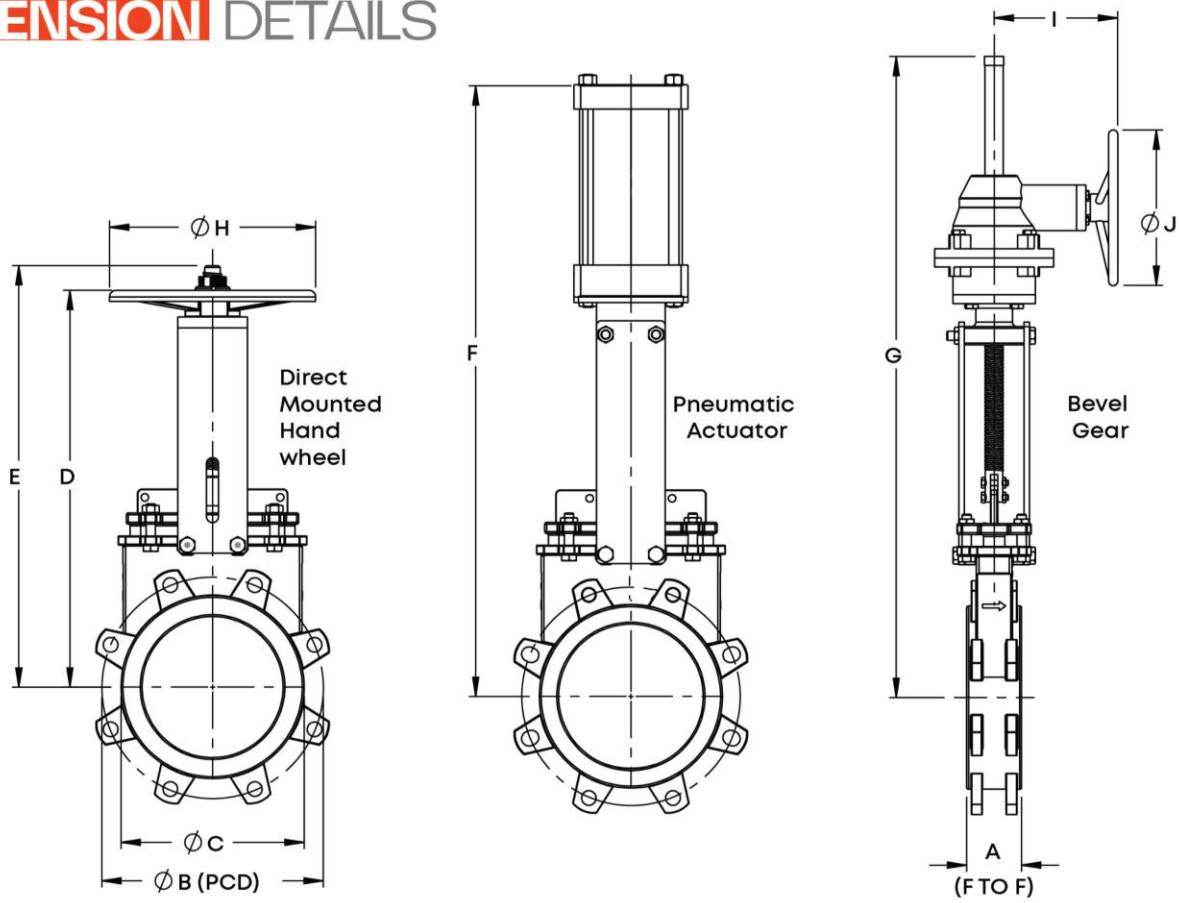
Buna-N	-34 to 194°F
	-36 to 90°C
EPDM	-65 to 248°F
	-54 to 120°C
Viton®	-15 to 392°F
	-26 to 200°C



PTFE w/Viton Back up Ring**	-235 to 500°F
	-148 to 260°C

** Allowable seat leakage as per MSS SP-151 metal seated valves

DIMENSION DETAILS



DIMENSIONS (mm)

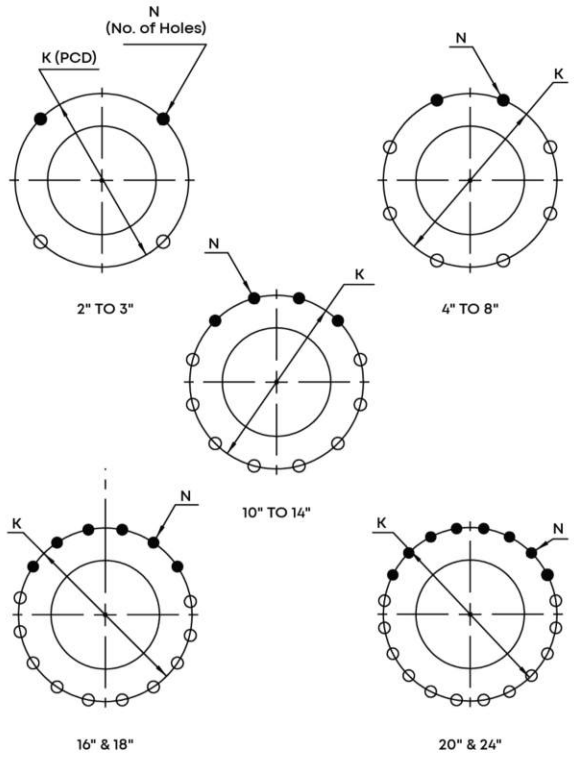
DN/ INCH	A	B*	ØC	D	E	F	G	ØH	I	ØJ
50/2"	48	121	88	263.5	272	456.5	-	190	-	-
65/2.5"	48	140	112	300	327	508	-	190	-	-
80/3"	51	152	120	311.5	342	529.5	-	190	-	-
100/4"	51	191	153	361	392	624	-	225	-	-
125/5"	57	216	166	383	412	661	-	225	-	-
150/6"	57	241	200	433	460	768	-	225	-	-
200/8"	70	298	251	532	570	917	905	310	200	300
250/10"	70	352	322	622	656	1077	1043	310	200	300
300/12"	76	432	375	712	746	1217	1214	310	200	300
350/14"	76	476	420	812	863.5	1367	1265	410	270	450
400/16"	89	540	459	833	930	1488	1400	410	270	450
450/18"	89	578	528	1082.5	1119	1757.5	1573	500	270	450
500/20"	114	635	592	1172	1212	1882	1734	500	280	450
600/24"	114	749	690	1314	1369	2139	2033	500	290	650

NOTE

1. Consult factory for hydraullic and electric actuator dimensions.
2. Dimensions are approximate and subject to change, consult factory for certified drawing.

*IN CONFORMANCE with ASME B16.5, Class 150 for sizes NPS 2(DN50) Through NPS 24 (DN600)

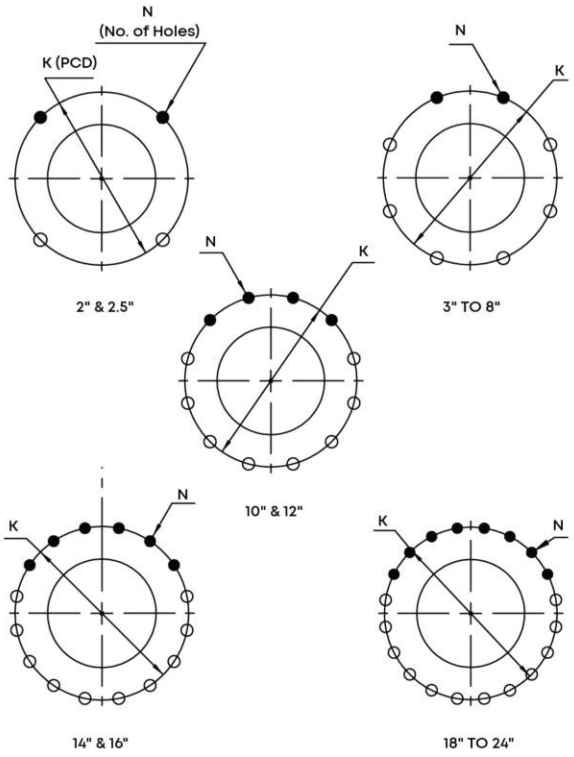
VALVE MOUNTING DETAILS



150 CLASS DIMENSIONS (mm)

VALVE SIZE	PCD (mm)	NO OF HOLES	TAPPING SIZE
2”	121	4	5/8”
2.5”	140	4	5/8”
3”	152	4	5/8”
4”	191	8	5/8”
5”	216	8	3/4”
6”	241	8	3/4”
8”	298	8	3/4”
10”	362	12	7/8”
12”	432	12	7/8”
14”	476	12	1”
16”	540	16	1”
18”	578	16	1.1/8”
20”	635	20	1.1/8”
24”	749	20	1.1/4”

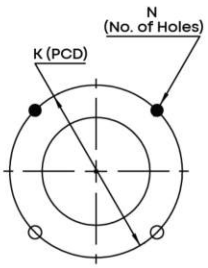
- TAPPED HOLE THROUGH HOLES



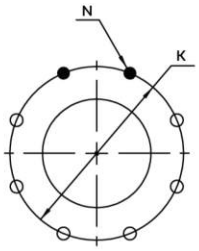
BS4505 PN 10 DIMENSIONS (mm)

VALVE SIZE	PCD (mm)	NO OF HOLES	TAPPING SIZE
2”	125	4	16 mm
2.5”	145	4	16 mm
3”	160	8	16 mm
4”	180	8	16 mm
5”	210	8	16 mm
6”	240	8	20 mm
8”	295	8	20 mm
10”	350	12	20 mm
12”	400	12	20 mm
14”	460	16	20 mm
16”	515	16	24 mm
18”	565	20	24 mm
20”	620	20	24 mm
24”	725	20	27 mm

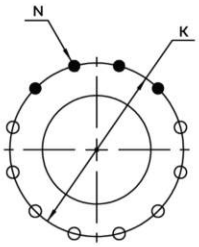
VALVE MOUNTING DETAILS



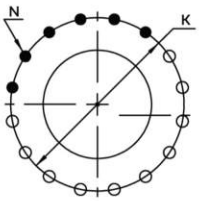
2" TO 3"



4" TO 8"



10" TO 16"



18" TO 24"

BS 10 TABLE "E" DIMENSIONS (mm)

VALVE SIZE	PCD (mm)	NO OF HOLES	TAPPING SIZE
2"	114	4	5/8"
2.5"	127	4	5/8"
3"	146	4	5/8"
4"	178	8	5/8"
5"	210	8	5/8"
6"	235	8	3/4"
8"	292	8	3/4"
10"	356	12	3/4"
12"	406	12	7/8"
14"	470	12	7/8"
16"	521	12	7/8"
18"	584	16	1"
20"	641	16	1"
24"	756	16	1"

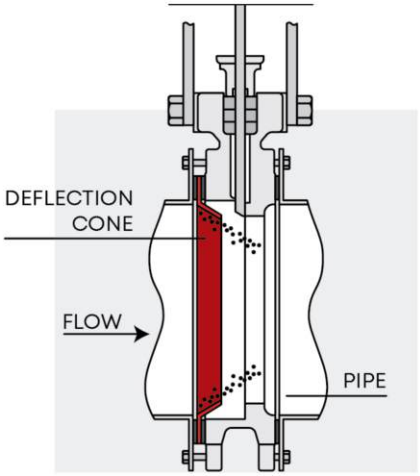
- TAPPED HOLE

THROUGH HOLES

DEFLECTION CONE
APPLICATION GUIDE

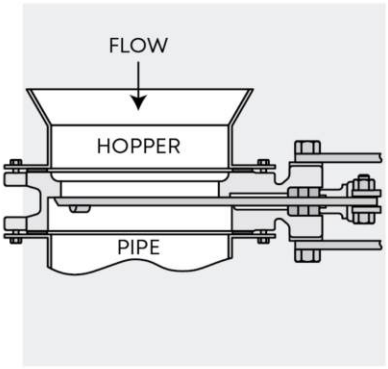
PUMPED FLOW

- Liquid Flow Is Towards The Seat.
- Deflection Cone Recommended For Abrasive Slurry Media, Installed On The Upstream Side Of The Valve.



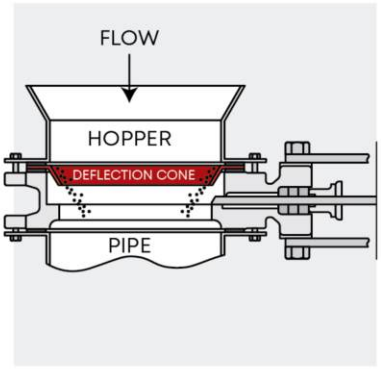
GRAVITY FLOW

- Gravity Flow Of Dry Powder From Silo; Valve Is Inverted; Seat Faces Down, Away From Flow
- Deflection Cone Is Not Used In This Application.
- Applies For Sizes NPS 8 (Dn 200) Or Smaller.
- Backing Rings Are Required For Sizes NPS 10 (Dn 250) And Larger.



PRESSURIZED FLOW

- Pressurized Flow Of Dry Powder From Silo; Seat Faces Up, Toward The Flow.
- Deflection Cone Should Be Used When The Flow Velocity Is High And Media Is Abrasive.
- Recommended Sor Sizes NPS 10 (DN 250) And Larger, If Backing Rings Are Not Used.



NOTE
Pressuired flow can be upstream pressure or downstream vacuum.

ORDERING INFORMATION

RVP	DESIGN	SIZE	PRESSURE RATING	DIRECTION	BODY MOC
KGV					
	FL	150	P4	D10	B5

EXAMPLE : 6 INCH , FULL LUG, 150 CLASS, UNI DIRECTION, METAL TO METAL, WCB BODY, SS304 GATE, WITH EPDM+ PTFE PACIKING, SS304 STEM, WITH DEFLECTION CONE & PROTECTION GUARD

DMAC

KGV

DESIGN	CODE
FULL LUG	FL
SEMI LUG	SL
DOUBLE FLANGE	DF
SQAURE TYPE	SF

SIZE	CODE
2" (50MM)	O50
2.5" (65MM)	O65
3" (80MM)	O80
4" (100MM)	100
5" (125MM)	125
6" (150MM)	150
8" (200MM)	200
10" (250MM)	250
12" (300MM)	300
14" (350MM)	350
16" (400MM)	400
18" (450MM)	450
20" (500MM)	500
22" (550MM)	550
24" (600MM)	600
26" (650MM)	650
28" (700MM)	700
30" (750MM)	750
32" (800MM)	800
36" (900MM)	900
40" (1000MM)	1000

PRESSURE RATING	CODE
PN6	P1
PN10	P2
PN16	P3
150#	P4

DIRECTION	CODE
UNI	D10
BI	D20

BODY MOC	CODE
S.G IRON	B1
DUCTILE IRON	B2
CAST IRON	B3
ALLOY 20	B4
WCB	B5
CF8	B6
CF8M	B7
CF3M	B8
CK20	B9
DUPLEX	B10
SUPER DUPLEX	B11
OTHER (SPECIFIY)	XX

GATE MOC	CODE
MILD STEEL	G1
SS 410	G2
SS 304	G3
SS 304L	G4
SS 316	G5
SS 316L	G6
SS 310	G7
DUPLEX	G8
SUPER DUPLEX	G9
OTHER (SPECIFIY)	XX

SEAT TYPE	CODE
INTREGAL METAL	ST1
METAL TO METAL	ST2
SOFT SEAT / EPDM	ST3
SOFT SEAT / PTFE	ST4
SOFT SEAT / TEFLON	ST5
SOFT SEAT / VITON	ST6
SOFT SEAT / SILICON	ST7
SOFT SEAT - POLY	ST8
SOFT SEAT - NITRILE	ST9
CERAMIC	ST10
GRAPHITE	ST11
V PORT	ST12
OTHER (SPECIFIY)	XX

GATE MOC	SEAT TYPE	GLAND PACKING	STEM / PISTON TYPE	DRILLING	OPERATION	OPTIONS
		/ /				/ /
G3	ST2	3B / 3A / 3B	R2	O6	MW	1 / 20

GLAND PACKING	CODE
EPDM	3A
PTFE	3B
TEFLON	3C
VITON	3D
SILICON	3E
POLYURETHANE	3F
GRAPHITE	3G
NITRILE	3H
CERAMIC	3I
OTHER (SPECIFIY)	XX

DRILLING	CODE
TABLE "E"	O1
TABLE "D"	O2
PN6	O3
PN10	O4
PN16	O5
150#	O6
OTHER (SPECIFIY)	XX

OPTIONS	CODE
DEFLECTION CONE	1
FLUSING PORT	2
SEAT RING	3
RETAINER RING	4
RUBBER SLEEVE	5
NITRING COATING ON BODY	6
STELLITE WELD ON GATE	7
HARD CHROME ON GATE	8
NITRING ON GATE	9
LOCKING ARRANGEMENT	10
SPECIAL PAINT	11
WITHOUT PAINT	12
MECHANICAL LIMIT SWITCH	13
PROXIMITY SENSOR	14
SOLENOIED VALVE	15
JUNCTION BOX	16
AIR FILTER REGULATOR	17
SS TUBING	18
PU TUBING	19
PROTECTION GUARD	20
ELECTRO PNE. POSITIONER	21
STEM PROTECTOR	22
STAINESS STEEL FASTENERS	23
STAINESS STEEL YOKE	24
CORROSIVE COATING	25
LIFTING LUG	26
EXTENDED FLUSH OUT PORT	27
POSITION INDICATOR SCALE	28
CYLINDER COATING	29
OTHER (SPECIFIY)	XX

STEM / PISTON TYPE	CODE
SS 410 - RISING	R1
SS 304 - RISING	R2
SS 316 - RISING	R3
SS 316L - RISING	R4
SS 310 - RISING	R5
DUPLEX - RISING	R6
SUP DUPLEX - RISING	R7
SS 410 - NON RISING	NR1
SS 304 - NON RISING	NR2
SS 316 - NON RISING	NR3
SS 316L - NON RISING	NR4
SS 310 - NON RISING	NR5
DUPLEX - NON RISING	NR6
SUP DUPLEX - NON RISING	NR7
EN8 CHROME PLATED	PR1
SS 304	PR2
SS 316	PR3
OTHER (SPECIFIY)	XX

OPERATION	CODE
MANUAL	MW
PNEUMATIC - SINGLE ACTING	PS
PNEUMATIC - DOUBLE ACTING	PD
BEVAL GEAR	BG
CHAIN WHEEL	CW
ELECTRICAL ACTUATOR	EA
LEVER TYPE	LT
BARE SHAFT	BS
MANUAL OVERRIDE	MO
HYDRAULIC CYLINDER	HC
BODY + GATE ONLY	BG
BARE YOKE	BY
EXTENSION SPINDLE	ES
OTHER (SPECIFIY)	XX

PRODUCTS



EPDM
RUBBER
SLEEVE

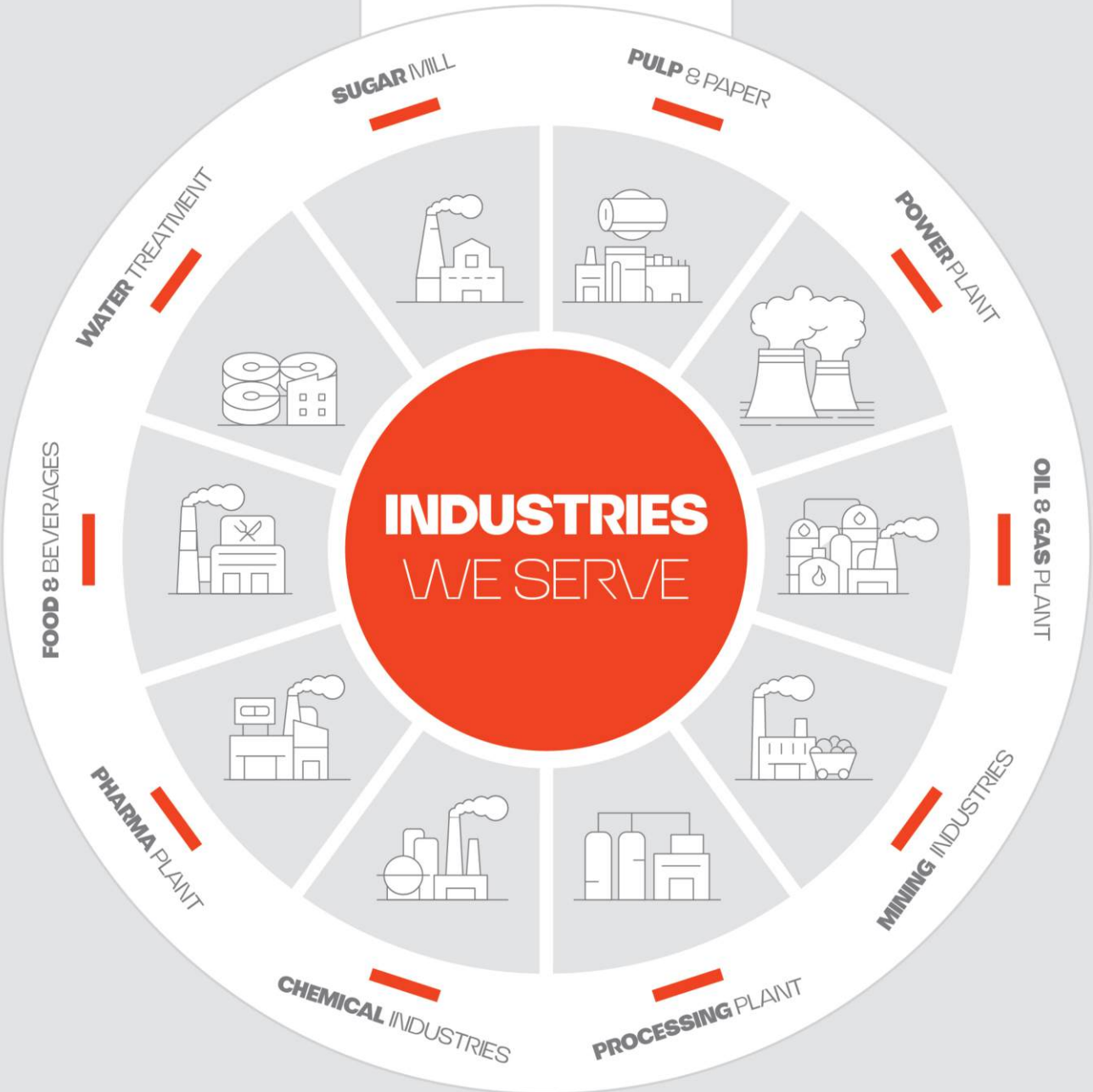


FULL LUGGED
TYPE WITH
GATE GUARD



MOULDED
RUBBER
SLEEVE

RVP
RELIABLE VALVES & PNEUMATICS





RVP
RELIABLE VALVES & PNEUMATICS

RELIABLE HOUSE NO: 682/3,
NEAR JAMIYA NAZIRIYAH DARUL ULOOM,
AT & POST: KAKOSHI,PIN NO.384290 TA: SIDDHPUR,
DIST: PATAN (N.Gujarat-India)
OFFICE NO.02767 296653 (099248-41653, 99248-44465)
EMAIL ID: reliablevalves88@gmail.com
www.reliablevalves.co.in

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