

APPA VALVE

APVSK WAFER STYLE SLURRY KNIFE GATE VALVE

2" to 24" (DN 50 to 600)

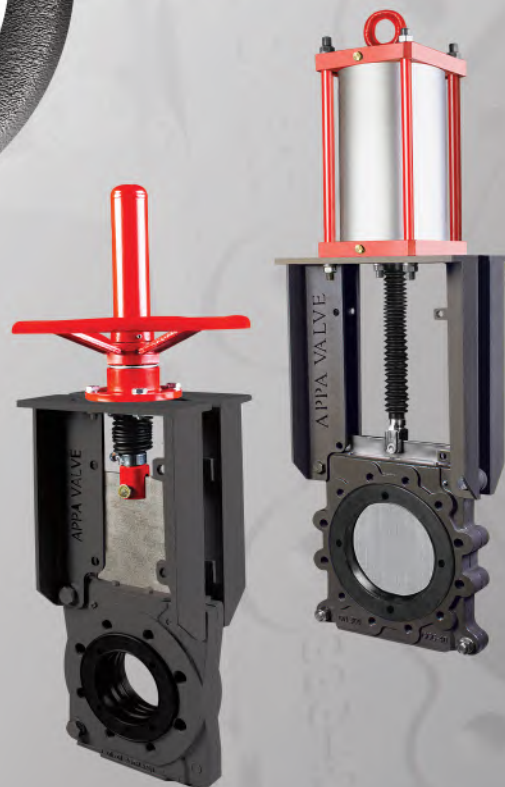


HIGH DURABILITY
SECURED SEALING
LOW MAINTENANCE





APPA VALVE



Content

About Us.....	1
Features.....	3
Technical Data.....	4
Sealing Performance.....	5
Flange Drilling.....	6-7
Acting & General Dimensions.....	8
Part Numbering.....	9-10
How to Order.....	12
Contact Us.....	13

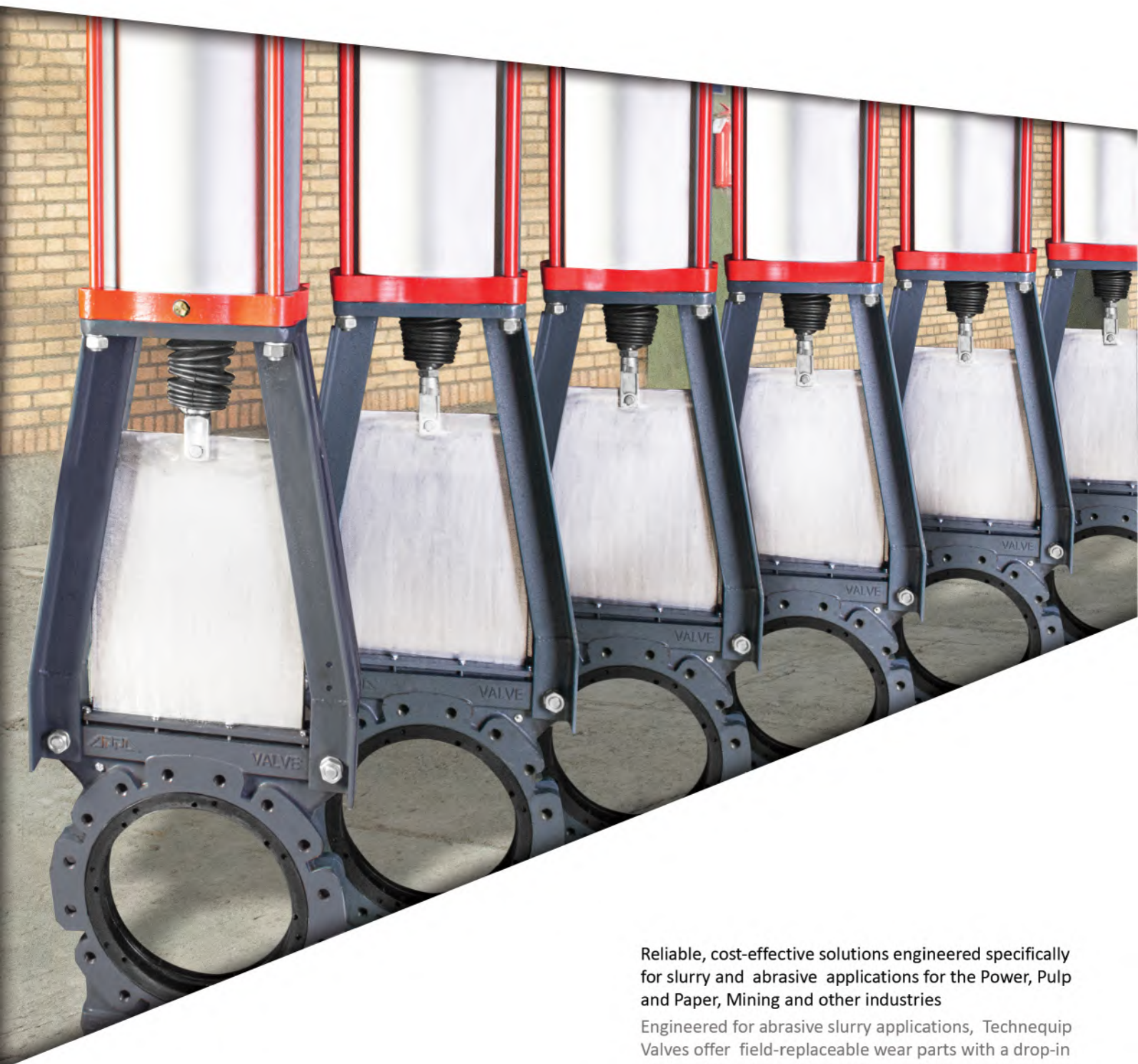




APPA SLURRY KNIFE GATE VALVE

The Mining Industry's first choice for High slurry isolation performance

APPA VALVE high performance slurry isolation and control valves have led the Industry in elastometric sleeve technology for about a decade. the comprehensive line of slurry knife gate valves leads the market in the mining, mineral processing and general process industries. valves come standard as self-purging bidirectional shut-Off, ensuring repeatable positive isolation in critical application



Reliable, cost-effective solutions engineered specifically for slurry and abrasive applications for the Power, Pulp and Paper, Mining and other industries

Engineered for abrasive slurry applications, Technequip Valves offer field-replaceable wear parts with a drop-in design. The universal frame design allows you to change actuation without removing the valve from service

Key Benefits:

- Safe
- Productive
- Reliable
- Long service life
- Cost effective



The APPA valve wafer style slurry gate valve offers the latest technology with the mark II sleeve design for all valves

APPA Company at a glance

APPA is a subsidiary registered brand owned by Hami Faravar Alvand Company which is established in 2014 as one of the providers of technical and engineering services and EPC project contractor with the aim of localizing technical knowledge, services and manufacturing equipment in order to serve the local industries. APPA company provides all services in the form of equipment supply and manufacturing, mining equipment industrial design, and guarantee course services. APPA VALVES are now the well-known products of this firm in Iran mining industry and have successfully gained the trust of its customers in upstream industries.



FEATURES

- Heavy duty frame designed for mounting stem nut, bevel gear, pneumatic or hydraulic actuators without change.
- Standard open and closed lockout/ tagout positions.
- Standard gate made from stainless steel grade 316 is completely withdrawn from the process flow in the open position and can be inspected or replaced without taking the valve out of service.
- Dynamic self-adjusting secondary seal retains long lasting internal lubrication.
- Replaceable elastomer sleeves with improved installation capacity.
- Unobstructed flow eliminate turbulence, minimizes pressure drop across valve.
- No seat cavity where solids can collect and prevent full gate closure.
- No metal to metal contact, no guides or wedges.
- Double sleeved design provides a 'blind flange' shut-off when the gate is closed. Tight fit between sleeves contains internal pressure.
- No need for flange gaskets.
- Universal body housing designed compatible with ASME B16.5 #150 or En 1092-2 PN 10/16 drilling pattern.
- Controlled stroke prevents gate from penetrating too far into the sleeves in the closed position. This minimizes stress on sleeve, reduces chances of tearing.
- Lockwashers used on all bolting.
- No metal parts in contact with flowing slurry.



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TECHNICAL DATA

Size Range:	2" to 24" (DN 50 to 600)
Standard Pressure Ratings:	Up to 150 psi (10 bar)
Temperatures:	Standard sleeve rated to 160°F (70°C), up to 300°F (150°C) with optional elastomer selection
Sleeve:	By default is natural rubber and other elastomers can be orderd optionally
Acting:	Manual Handwheel Manual Bevel Gear Double Acting Penumatic Cylinder Hydraulic Cylinder (Custom built) Electrical Act. (Custom built)
Secondry Seal:	NBR / EPDM

GENERAL APPLICATIONS

- Mining
- Power
- Pulp and paper
- Phosphates
- Steel/Metals
- Chemical
- Cement
- Food

STANDARD CONFIGURATION

- Ductile cast iron body housings
- 316 stainless steel gate
- Universal body housing drilled and tapped to match ANSI B16.5 Class 150 companion flanges
- High wear resistance Natural rubber sleeves with integral support discs
- NBR secondary seal

OPTIONS

General Options:

- Body Material
- Gate Material
- Fange drilling ANSI/ EN
- Sleeves
- Actuators
- Drainage Plate/ Flushing
- Stem covers
- Control accessories

Body Materials:

- Ductile Cast irons
- Stainless Steels

Gate Materials:

- Mild Steels
- Wear resistance steels
- SS 304L/ 316/ 316L
- Hastelloy

Sleeve Material:

- | | |
|-------------------------------------|-------|
| • Natural Rubber (NR) | 75°C |
| • Nitrile Butadiene Rubber (NBR) | 100°C |
| • Styren Butadiene Rubber (SBR) | 110°C |
| • Hypalon (Chloro Sulphone Etylene) | 110°C |
| • Neoprene | 110°C |
| • EPDM | 150°C |
| • Polyurethane | 150°C |
| • Viton (Flourine Rubber) | 200°C |

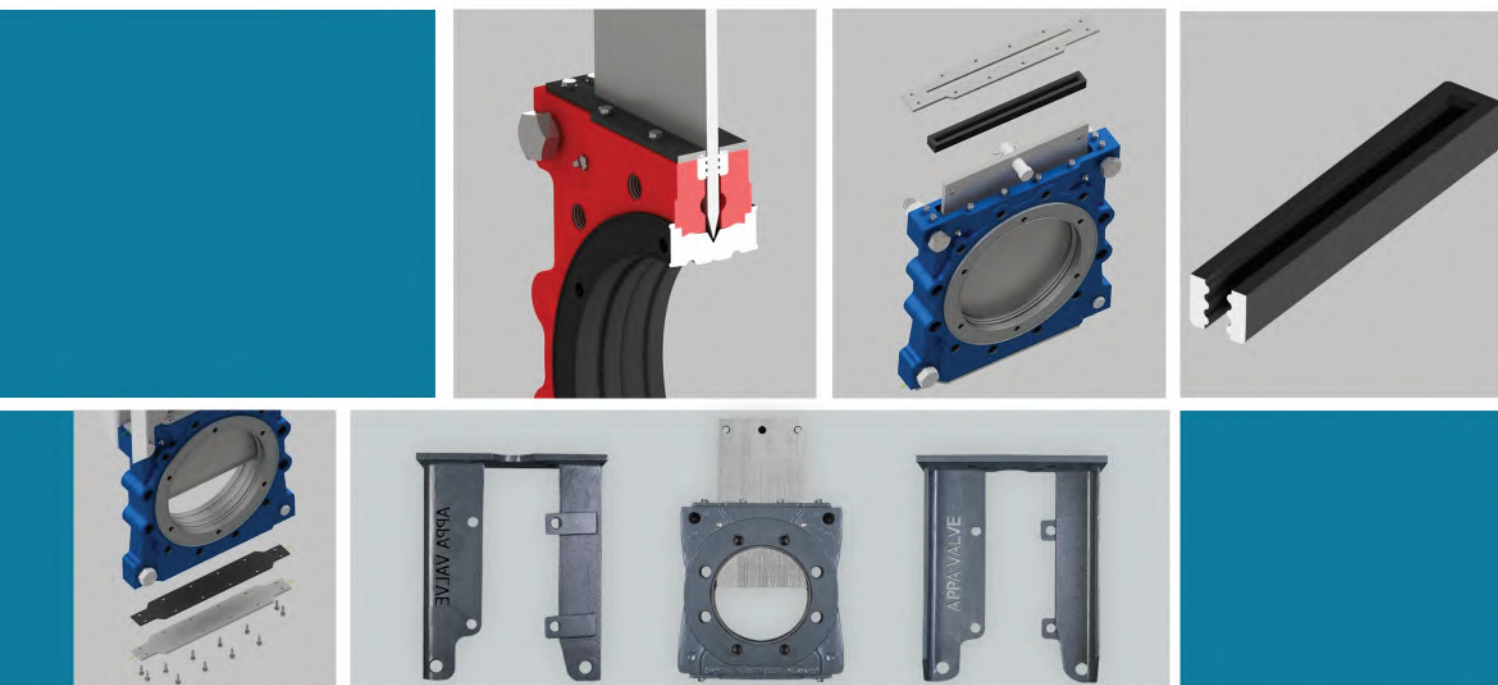
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SECONDARY SEAL

- Eliminating any leakage between the knife gate and top of the valve body in any orientation
- Preventing any outside contaminants from getting inside the valve
- Dynamically self-adjusting, eliminating the need for continual adjustment required with conventional style packing
- Lubricating the gate as it cycles through the seal, providing smoother gate movement and longer seal life, as well as reducing the force required to actuate the gate
- The seal is replaceable and can be changed while the valve is in the line.

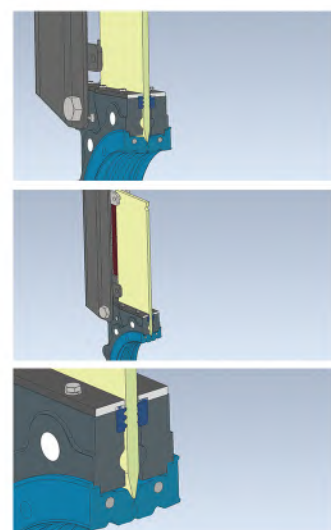


SLEEVE

Elastomer sleeves placed in this type of valves are used to prevent contact of slurry flow with the main body of valve and protect the body of valve against wearing. Also, sleeves prevent leaking of the slurry flow to the body of valve and locking of the gate.

The sleeves used in our valves provide more performance because of:

- Stiffening rings made of special steel placed at the sleeve profile make high stability of sleeve against movement of gate.
- 100% isolating against bidirectional slurry flow
- Reduce drag and provide longer service life.
- Prevent of using gaskets between flanges
- Have a sufficient pressure for sealing performance in long time.



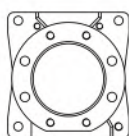
DRILLING

Universal body housing designed compatible with ASME B16.5 #150 or En 1092-2 PN 10/16 drilling pattern.

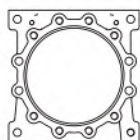
EN 1092-2 PN 10



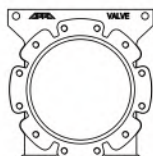
DN 50-80



DN 100-200



DN 250-300



DN 350-600

DN	INCH	n	M	⊕	◆	P	K
50	2"	4	M16	-	4	16	125
65	2 1/2"	4	M16	-	4	10	145
80	3"	8	M16	-	8	10	160
100	4"	8	M16	4	4	12	180
125	5"	8	M16	4	4	18	210
150	6"	8	M20	4	4	16	240
200	8"	8	M20	4	4	19	295
250	10"	12	M20	4	8	15	350
300	12"	12	M20	4	8	17	400
350	14"	16	M20	-	16	22	460
400	16"	16	M24	-	16	22	515
450	18"	20	M24	-	20	24	565
500	20"	20	M24	-	20	24	620
600	24"	20	M27	-	20	24	725

⊕ Through bolts

◆ Blind tapped bolts

M Bolt size

n Qty. of necessary screw

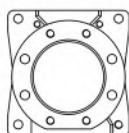
K Bolt circle diameter

P Thread depth

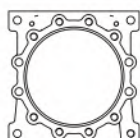
EN 1092-2 PN 16



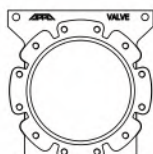
DN 50-80



DN 100-200

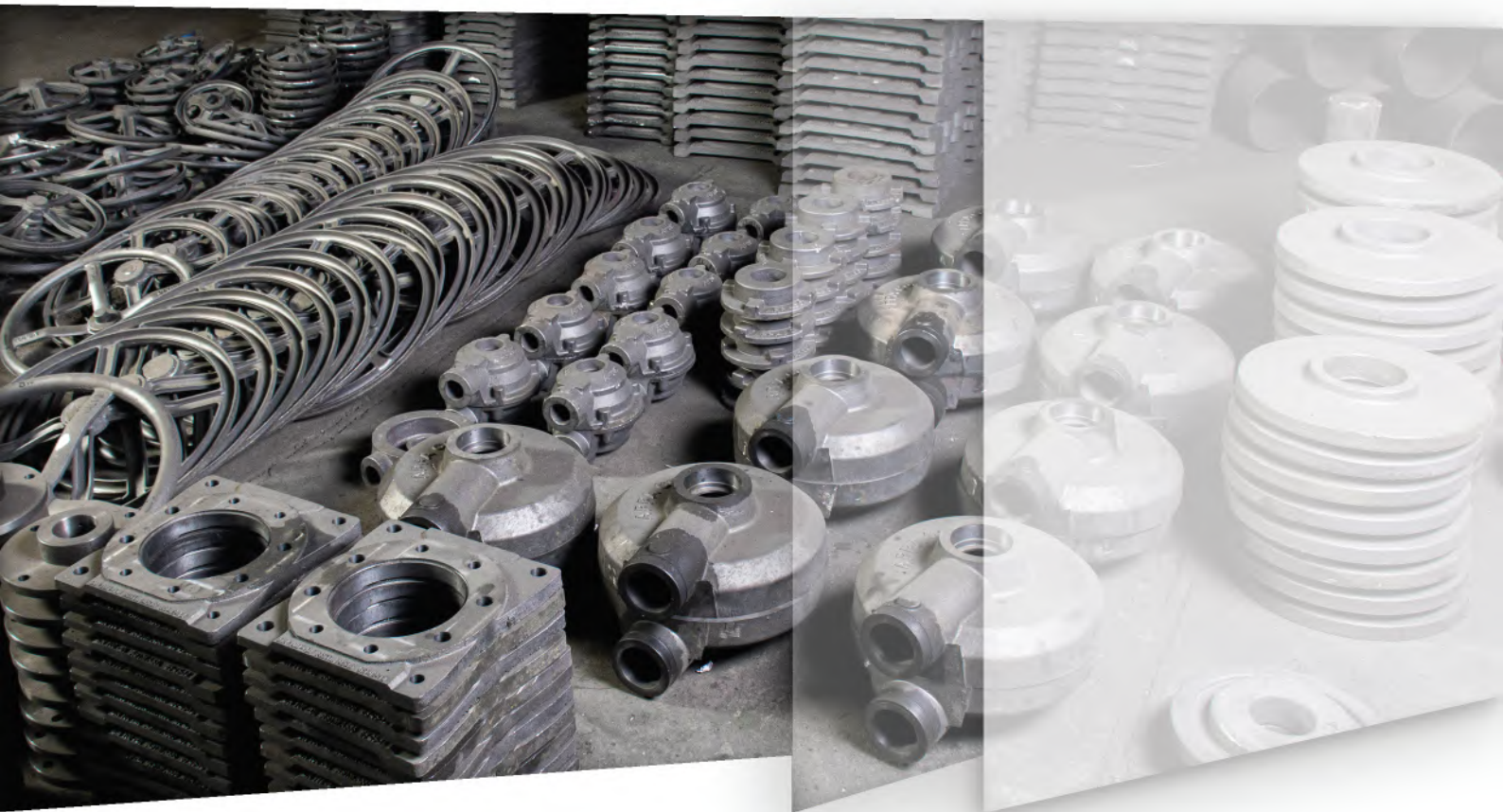


DN 250-300

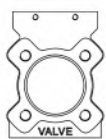


DN 350-600

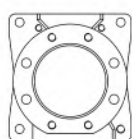
DN	INCH	n	M	⊕	◆	P	K
50	2"	4	M16	-	4	16	125
65	2 1/2"	4	M16	-	4	10	145
80	3"	8	M16	-	8	10	160
100	4"	8	M16	4	4	12	180
125	5"	8	M16	4	4	18	210
150	6"	8	M20	4	4	16	240
200	8"	12	M20	4	8	19	295
250	10"	12	M24	4	8	15	355
300	12"	12	M24	4	8	17	410
350	14"	16	M24	-	16	22	470
400	16"	16	M27	-	16	22	525
450	18"	20	M27	-	20	24	585
500	20"	20	M30	-	20	24	650
600	24"	20	M33	-	20	24	770



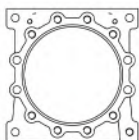
ANSI B16.5 #150



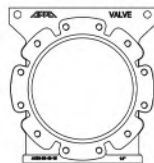
2" TO 3"



4" TO 8"



10" & 12"



14" TO 18"

⊕ Through bolts

● Blind tapped bolts

M Bolt size

n Qty. of necessary screw

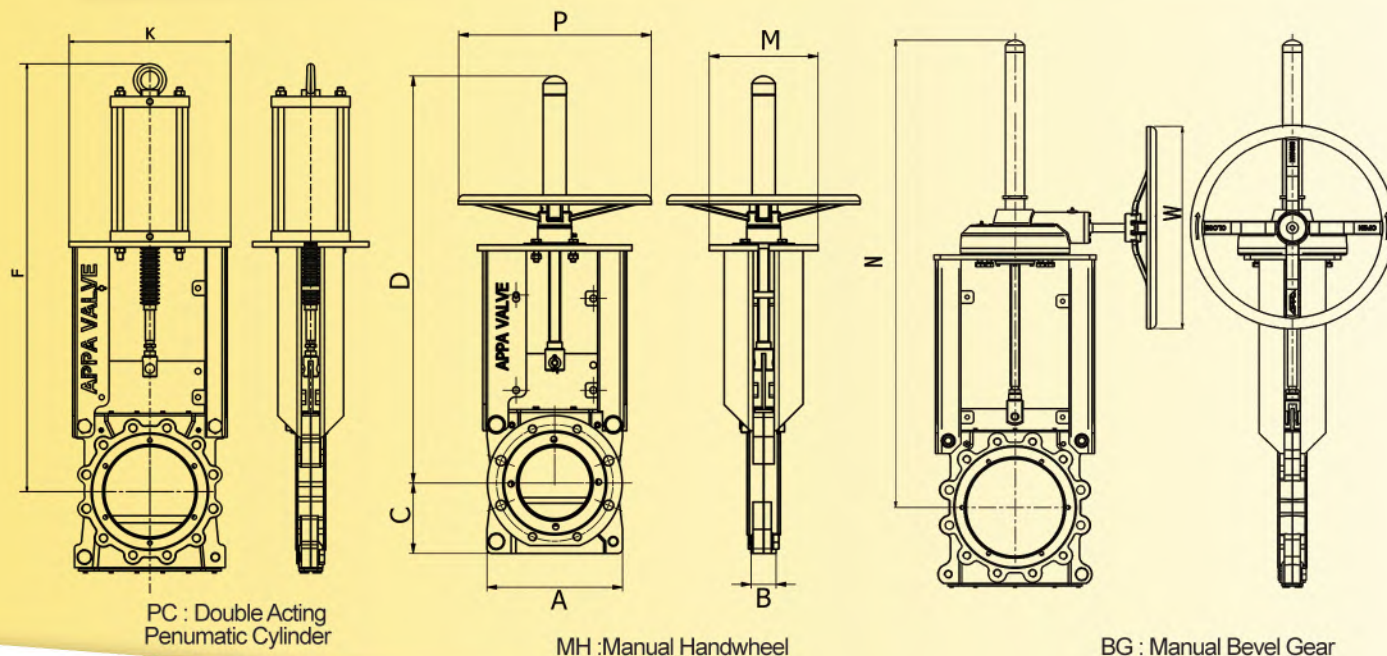
K Bolt circle diameter

P Thread depth

DN	INCH	n	M	⊕	●	P	K
50	2"	4	M16	-	4	16	121
65	2 1/2"	4	M16	-	4	10	139.7
80	3"	4	M16	-	4	10	152.4
100	4"	8	M16	4	4	12	190.5
125	5"	8	M20	4	4	18	216
150	6"	8	M20	4	4	16	241
200	8"	8	M20	4	4	19	298.5
250	10"	12	M24	4	8	15	362
300	12"	12	M24	4	8	17	431.8
350	14"	12	M24	-	12	22	476
400	16"	16	M24	-	16	20	540
450	18"	16	M30	-	16	24	578
500	20"	20	M30	-	20	24	635
600	24"	20	M30	-	20	24	750

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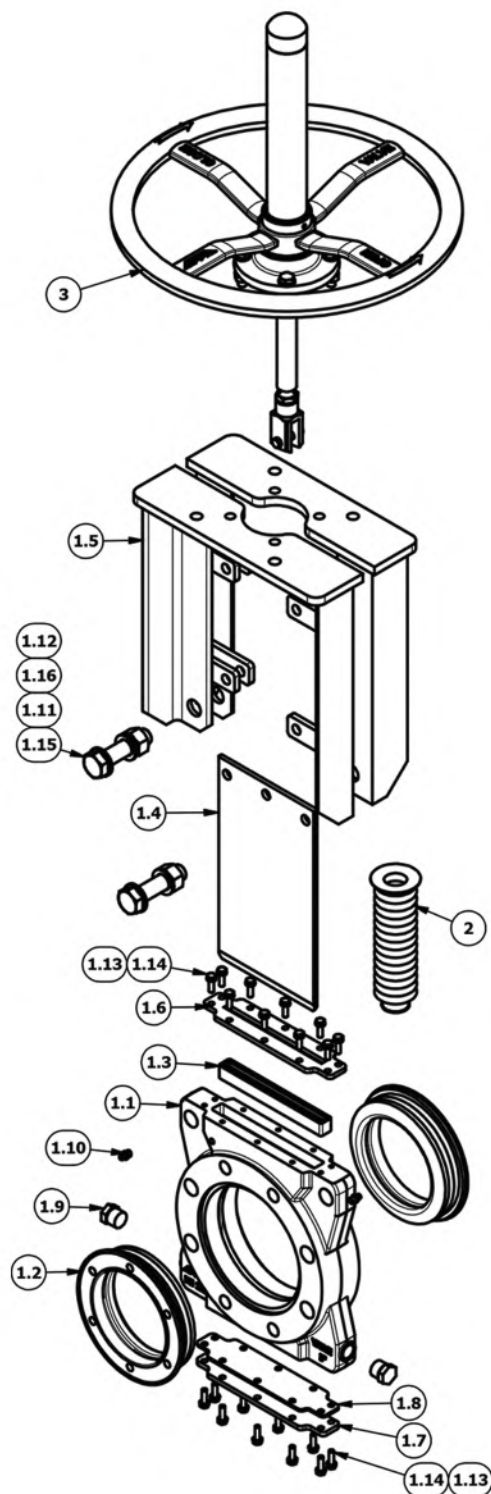
Dimensions (mm)

Weight (kg)

Valve Size	A	B1*	B2*	C	D	F	K	M	P	N	MH	PC	BG
2	147	59	54	83	634	556	116	116	324	-	11	11	-
2 1/2	170	58	54	78	649	591	116	116	324	-	12	13	-
3	185	64	57	98	700	680	136	136	324	-	16	18	-
4	245	66	53	129	727	726	263	177	324	-	27	30	-
5	291	72	64	138	826	800	322	180	427	825	40	43	51
6	281	72	59	155	853	852	320	226	427	852	42	46	53
8	345	82	70	187	915	978	375	238	427	914	57	67	68
10	415	84	71	218	1055	1183	445	234	427	1054	73	84	84
12	485	94	80	246	1375	1400	510	304	529	1470	111	-	164
14	460	89	82	285	-	1705	350	350	-	1705	-	132	209
16	515	102	95	312	-	1904	420	420	-	825	-	195	232
18	570	102	95	338	-	1985	420	420	-	1855	-	248	269
20	612	132	115	355	-	2100	445	460	-	-	-	278	332
22	680	146	125	370	-	2300	470	520	-	-	-	-	-
24	712	156	135	410	-	2550	490	620	-	-	-	435	466

MANUAL HANDWHEEL

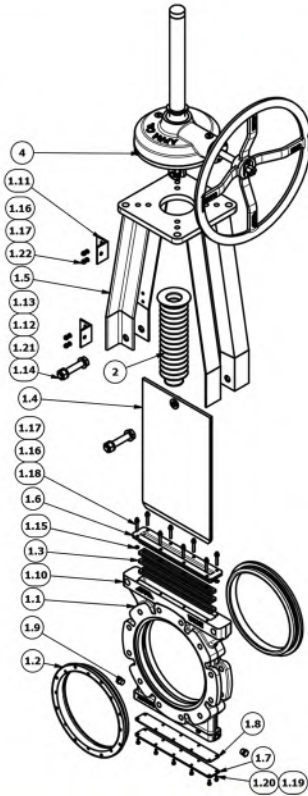
Item	Description
1	Valve Body & Frame Ass.
1.1	Body
1.2	Sleeves
1.3	Secondary Seal
1.4	Gate
1.5	Frame
1.6	Back Up Plate
1.7	Drainage Plate
1.8	Drainage Washer
1.9	Flushing Plugs
1.10	Lubricating Nipple
1.11	Plain Washer
1.12	Hex Nut
1.13	Spring Washer
1.14	Hex-Head Bolt
1.15	Hex-Head Bolt
1.16	Spring Washer
2	Flexible Dust Cover
3	Manual Handwheel Ass.



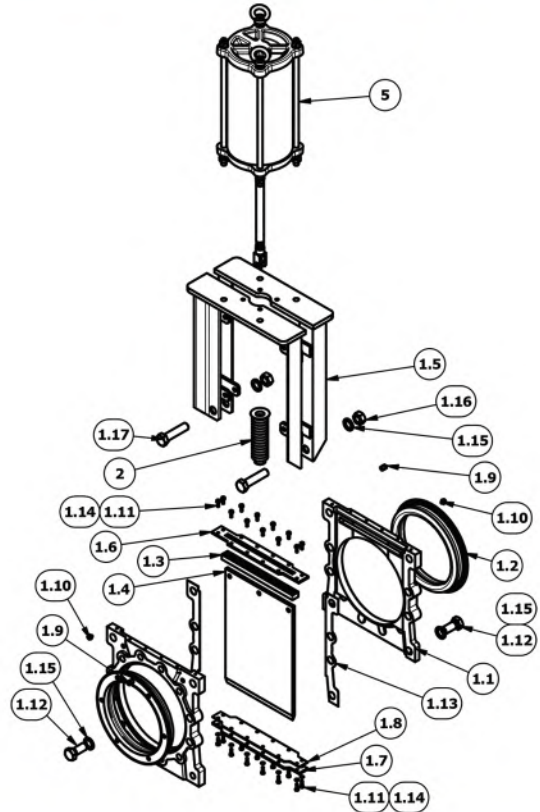
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MANUAL BEVEL GEAR



DOUBLE ACTING PENUMATIC CYLINDER



Item	Description	Item	Description
1	Valve Body & Frame Ass.	1.13	Plain Washer
1.1	Body	1.14	Hex-Head Bolt
1.2	Sleeves	1.15	Hex Nut
1.3	Secondary Seal	1.16	Spring Washer
1.4	Gate	1.17	Hex Nut
1.5	Frame	1.18	Stub Bolts
1.6	Back Up Plate	1.19	Spring Washer
1.7	Drainage Plate	1.20	Hex-Head Bolt
1.8	Drainage Washer	1.21	Hex Nut
1.9	Flushing Plugs	1.22	Hex-Head Bolt
1.10	Lubricating Nipple	2	Flexible Dust Cover
1.11	Proximity Switch Base	4	Manual Bevel Gear Ass.
1.12	Spring Washer		

Item	Description	Item	Description
1	Valve Body & Frame Ass.	1.13	Gasket
1.1	Body	1.14	Spring Washer
1.2	Sleeves	1.15	Spring Washer
1.3	Secondary Seal	1.16	Hex Nut
1.4	Gate	1.17	Hex-Head Bolt
1.5	Frame	2	Flexible Dust Cover
1.6	Back Up Plate	5	Pneumatic Acting Ass.
1.7	Drainage Plate		
1.8	Drainage Washer		
1.9	Flushing Plugs		
1.10	Lubricating Nipple		
1.11	Hex-Head Bolt		
1.12	Hex-Head Bolt		

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Your ideal high pressure valve delivered by APPA Co.

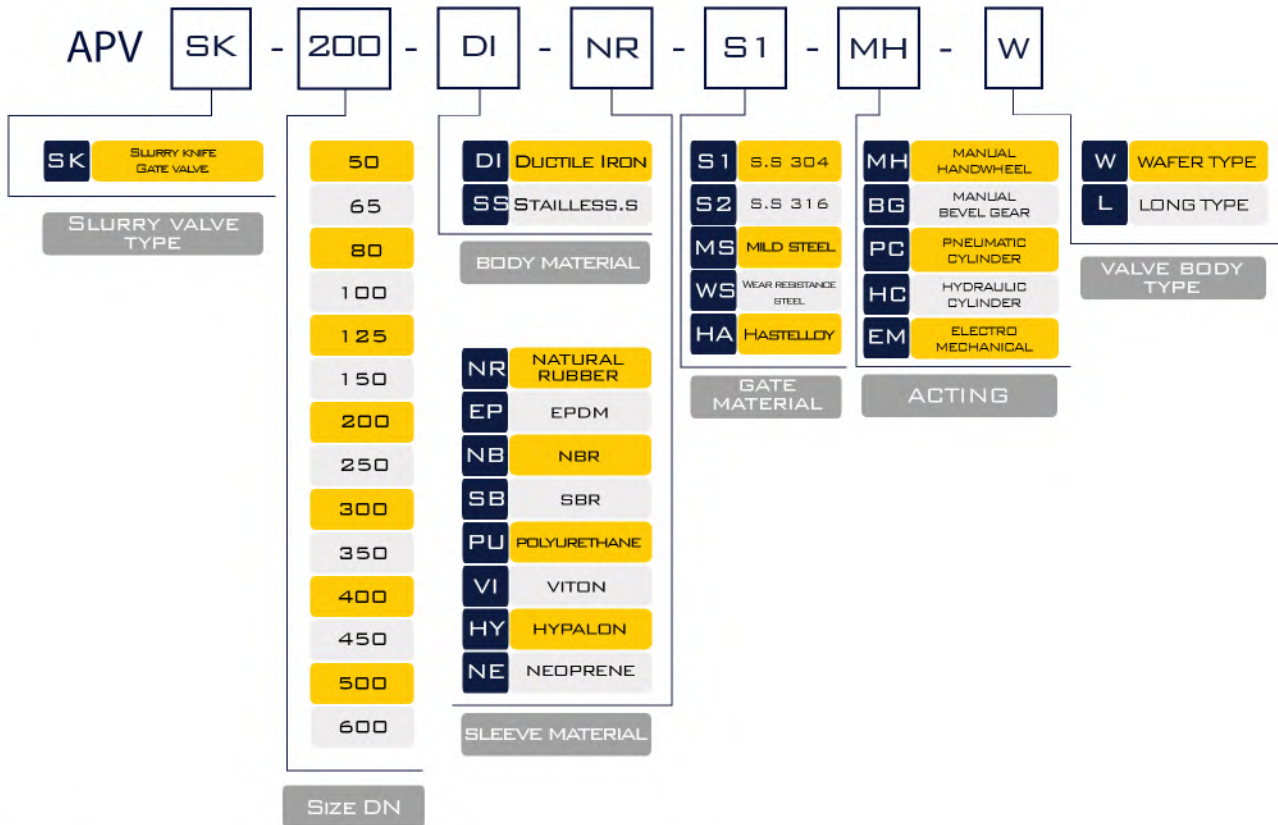
The APVSK is a heavy duty, wide-body, slurry knife gate valve designed specifically for highly abrasive applications. It features a full-port, open-body design, which allows the gate to create a path for solid to exit through the bottom of the valve as it passes between the massive elastomer sleeves, which are longer than the valve body, to provide a 100% bubble-tight seal, resulting in zero downstream leakage when the valve is in fully open or the fully closed position. Our valves are available in Gearbox Hydraulic, Air Cylinder, Handwheel and Electric actuator with a high pressure rating up to 300 PSI. Our main goal in this industry was and always is to provide you with such a product in which you'll only have to change the sleeves and sometimes retainer flanges if needed so that you can keep your main valve body as long as possible in order to run a more cost-effective and consistent business.

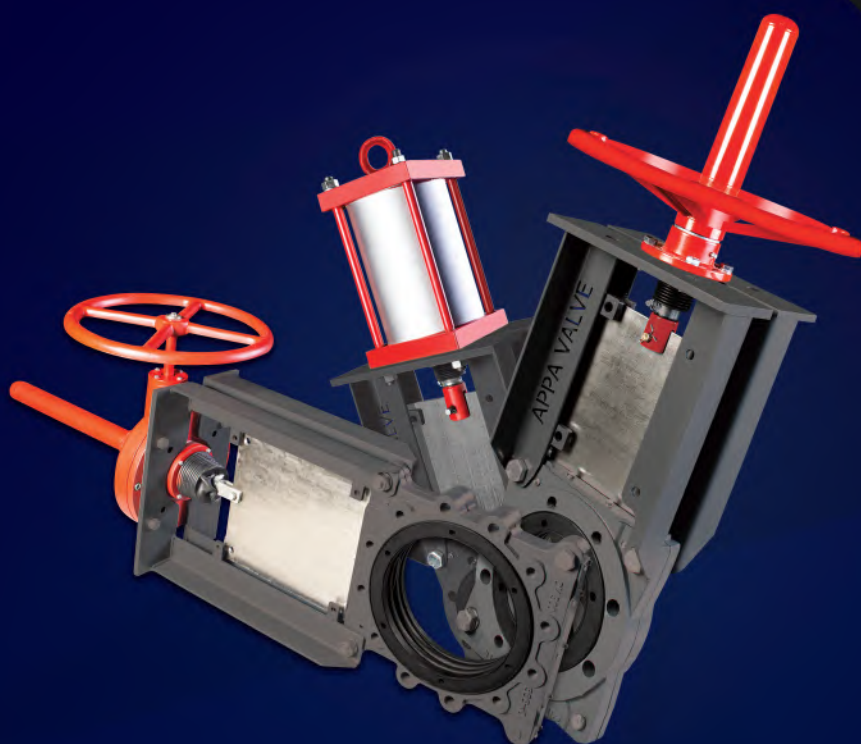


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HOW TO ORDER





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