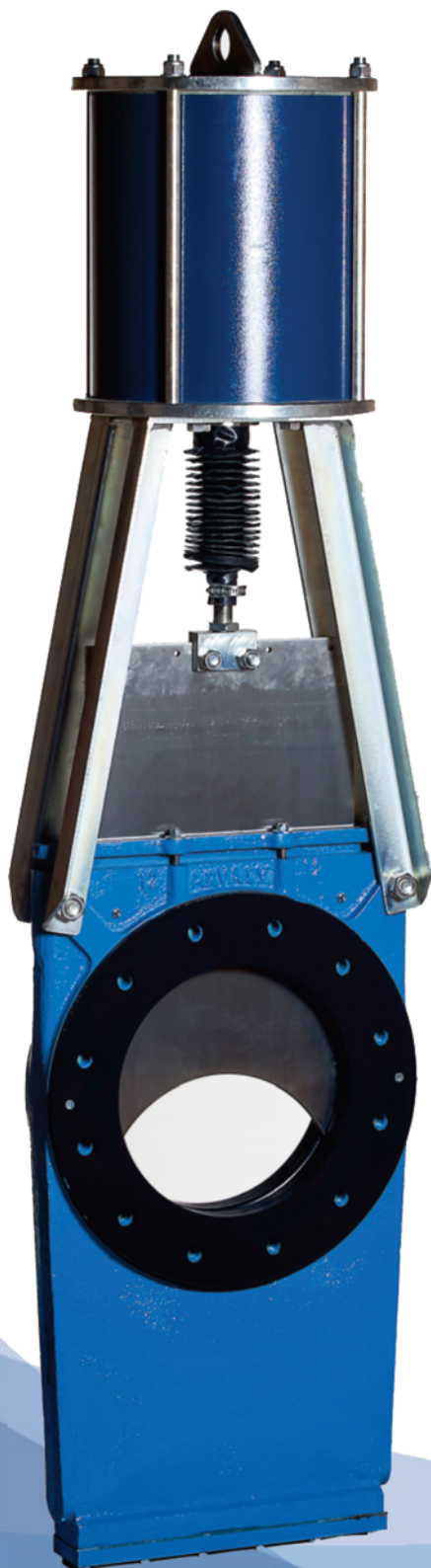


ARVALV[®]

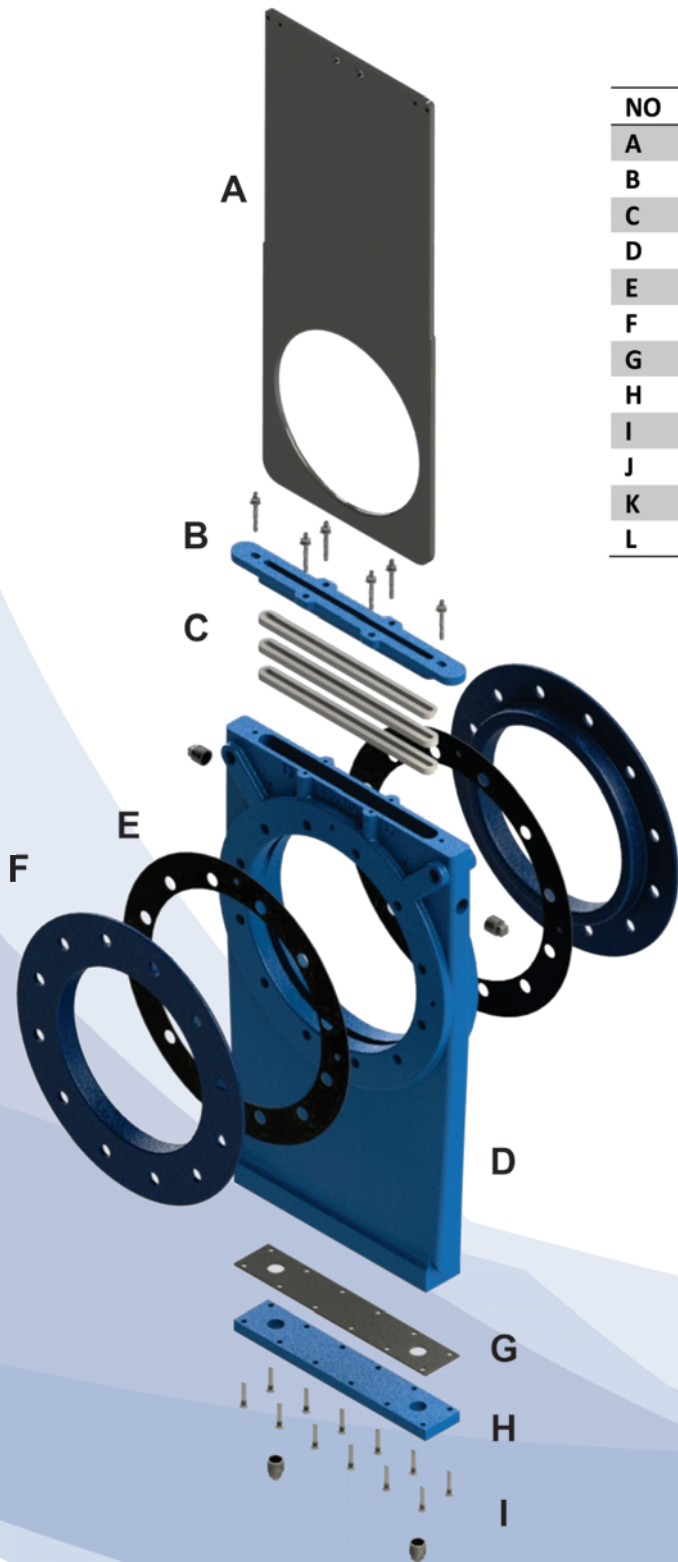
THROUGH-PORT KNIFE GATE VALVE
SALES & TECHNICAL BROCHURE



AR[®]
Controls

ARVALV[®]

THROUGH-PORT KNIFE GATE VALVE

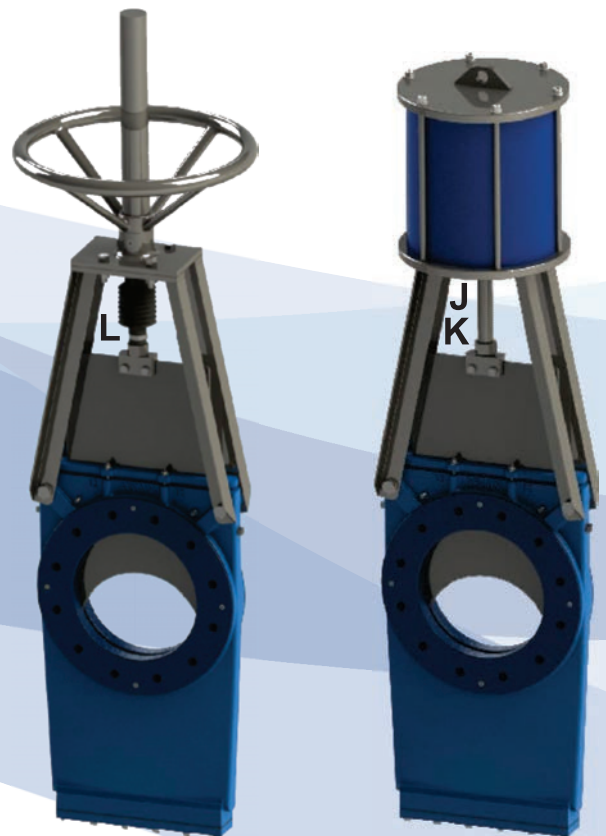


MATERIALS OF CONSTRUCTION

NO	PART DESCRIPTION	MATERIAL
A	GATE	316 SS / 2205 DUPLEX SS
B	PACKING FOLLOWER	DUCTILE IRON
C	PACKING	BRAIDED PTFE
D	BODY	DUCTILE IRON
E	SHIM	HDPE PLASTIC
F	SEAT	POLYURETHANE
G	GASKET	INSERTION RUBBER
H	BOTTOM PLATE	CARBON STEEL
I	NUTS & BOLTS	CARBON STEEL
J	SPINDLE	304 SS
K	CLEVIS	CARBON STEEL / 316 SS
L	PROTECTIVE SPINDLE BELLOW	PVC

SPECIFICATIONS

SIZE RANGE	2" – 18"
PRESSURE RATING	10 BAR / 150 PSI
FLANGE DRILLING	AS REQUIRED
ACTUATION	MANUAL, PNEUMATIC, ELECTRIC, HYDRAULIC
TEMPERATURE RATING	-30°C TO 80°C
pH RANGE	4 - 9



ARVALV[®]

ADVANTAGES

The ARVALV[®] is ideally suited for the most abrasive and scaling applications. The ARVALV[®] is specifically designed for on/off and isolation services, and is available with a handwheel or gearbox for manual operation, or with a pneumatic, hydraulic or electric actuator.

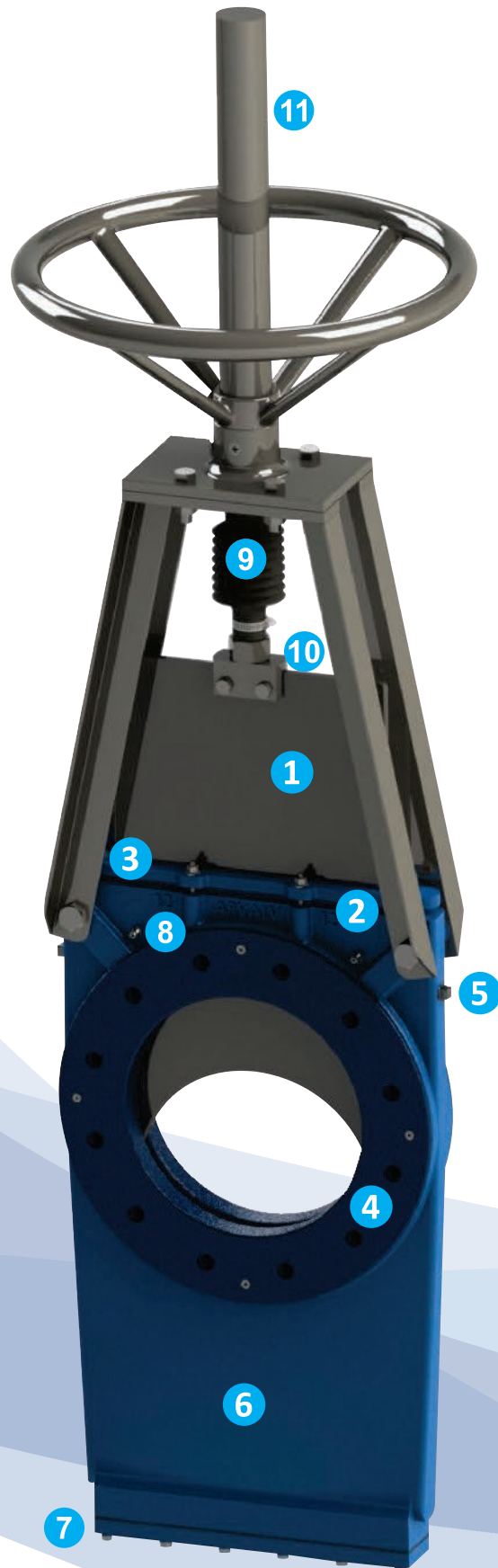
Operational advantages of the ARVALV[®] include:

- When the ARVALV[®] is fully open, there is no hindrance to the flow, and no body cavities to collect slurry build-up.
- Features an adjustable packing providing a superior seal, and rounded gate edges, ensuring a long packing life.
- The ARVALV[®] sleeves remain in their natural spacing when the valve is operated - no compressing of the rubber as with diaphragm valves.
- The unique ported gate design ensures that the gate is in constant contact with the seats, virtually eliminating the problems of clogging, binding and build-up both in the chest area and closing position.
- ARVALV[®]'s remarkable wear resistance in tough applications sets it apart from its competitors.
- Lower cost of ownership and operation, and maximizes plant availability.
- Easy to inspect and clean without removing the valve from the line.
- Bi-directional bubble tight shut-off.
- Simple design and rugged construction.
- Fully refurbishable and easy to maintain.



ARVALV[®]

THROUGH-PORT KNIFE GATE VALVE

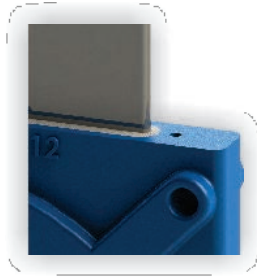


ARVALV[®]

DESIGN FEATURES

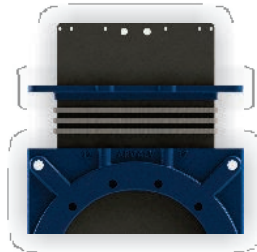
1 ARVALV GATE

ARVALV[®] gates are specially manufactured to produce an exceptional surface finish with rounded edges, preventing cutting or damage of the packing. The result is a gate that moves through the packing with minimum friction. Standard gates are 316 Stainless Steel, and hardened gates are optional.



2 PACKING

The ARVALV[®] features 3 layers of high quality lubricating braided PTFE packing. The packing is installed in a rounded packing chamber, encapsulating the rounded gate edges. The result is increased packing life, reduced operating forces, and leaking through the valve packing chamber.



3 PACKING FOLLOWER

The ARVALV[®] features an adjustable packing gland. All packing followers are cast as one piece, resulting in high strength and rigidity. The equal distribution of forces on the packing material prevents leakage through the packing chamber.



4 SEATS

The ported gate slides between two easily replaceable seats that form a bi-directional, bubble tight seal when closed. The ported gate is in constant contact with the seats, virtually eliminating the problems of clogging, binding and build-up both in the chest area and closing position. ARVALV[®] sleeves are made from polyurethane. The ARVALV[®] seats act as integral flange gaskets. No extra gaskets are required.



5 PURGE PORTS

The ARVALV[®] is provided with 4 flush ports on its sides and bottom, which can be connected to a clean water source approximately 1 Bar higher than the line pressure. The flush water is not necessary in applications where the ARVALV[®] is installed in the vertically upright position, and the bottom plate is removed.



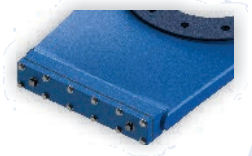
6 BODY

Solid one piece body casting provides strength and rigidity to handle pipeline stresses.



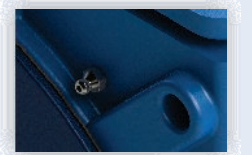
7 DETACHABLE BOTTOM PLATE

Removable bottom plate enables easy internal inspection and cleaning without removing the valve from the line.



8 GREASE NIPPLES

The ARVALV[®] can be provided with grease nipples in the chest area for wet service applications to counter solidification by greasing regularly.



9 PROTECTIVE SPINDLE BELLOW

All ARVALV[®] ported gate valves come standard with a spindle protective bellow, be it manually, pneumatically, electrically or hydraulically actuated. The bellow protects the valve spindle and prevents it from collecting dust or other particles that may be transported into the valve actuator or drive nut.



10 CLEVIS

The high strength clevis ensures smooth force transfer between the actuator and gate.



11 SPINDLE COVER

Manually actuated valves come standard with a spindle cover, further isolating the spindle from environmental dust and other particles. This ensures that the ARVALV[®] opens and closes with minimal operating torque, every time.



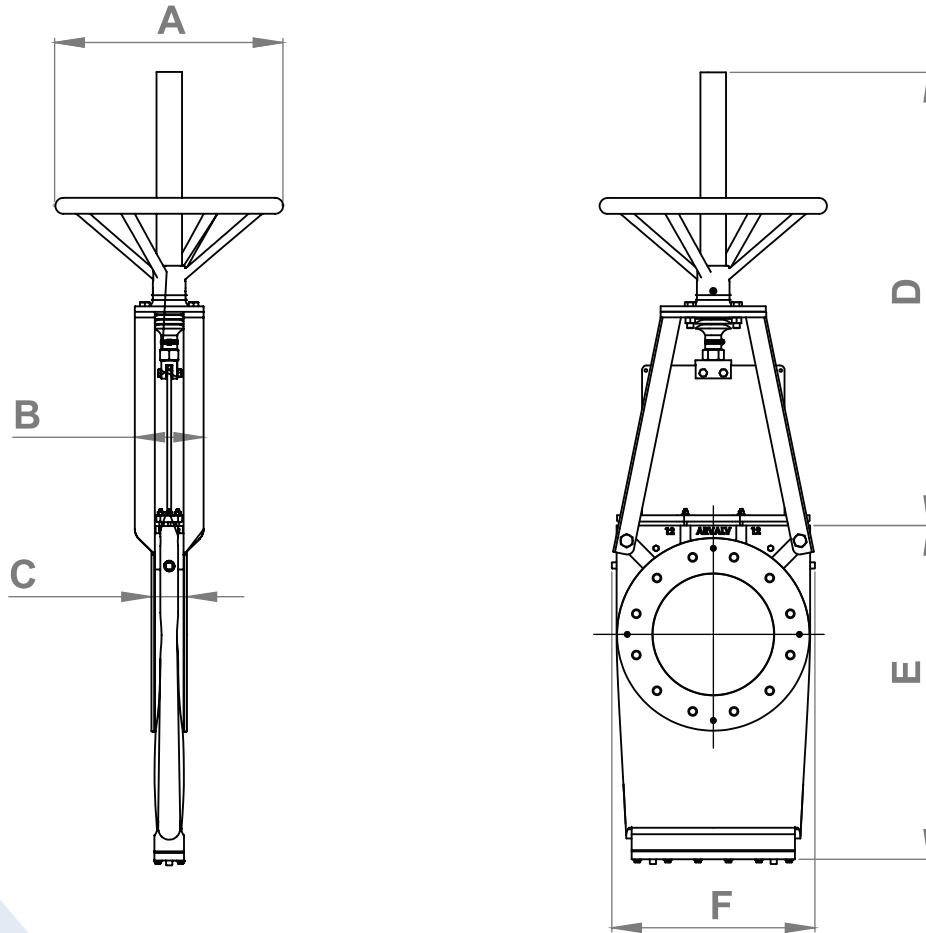
ARVALV[®]

MANUAL VALVE DIMENSIONS

Manual Actuation

Handwheel for sizes 12" (300mm) and smaller

Bevel Gear for sizes 14" (350mm) and larger



Valve Size (NB)		Basic Dimensions (mm)						Mass kg	Flange Bolt Torque Nm
		A	B	C*	D	E	F		
2"	50 NB	300	125	56	685	165	160	25	80
3"	80 NB	300	125	60	730	206	194	29	120
4"	100 NB	300	130	64	800	250	232	37	120
6"	150 NB	300	130	67	880	365	281	50	170
8"	200 NB	430	165	80	1170	458	358	81	170
10"	250 NB	430	165	84	1260	520	409	103	200
12"	300 NB	430	168	85	1360	590	482	135	200
14"	350 NB	400	175	92	1530	685	492	193	270
16"	400 NB	400	186	108	1600	740	602	262	270
18"	450 NB	400	186	108	1800	850	613	318	340

*Seats included

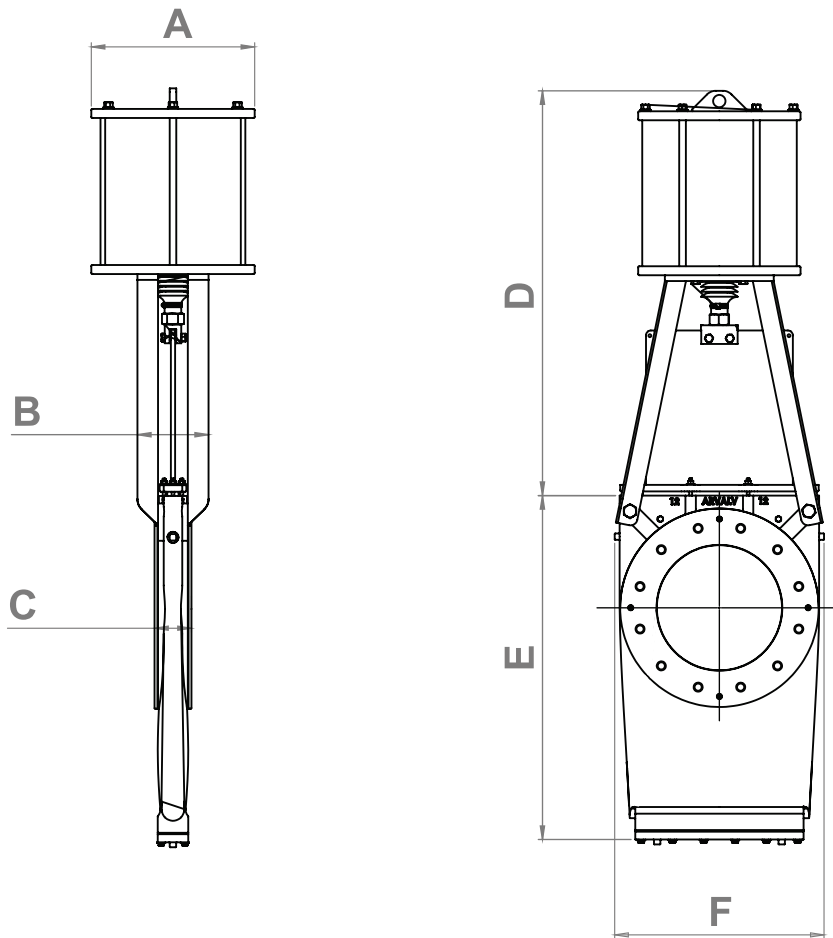
**For larger sizes, please contact AR Controls

ARVALV[®]

DOUBLE ACTING VALVE DIMENSIONS

Double Acting Actuation

2" (50mm) - 18" (450mm)



Valve Size (NB)		Basic Dimensions (mm)						Mass kg	Flange Bolt Torque Nm
		A	B	C*	D	E	F		
2"	50 NB	148	125	56	510	165	160	22	80
3"	80 NB	220	125	60	610	206	194	35	120
4"	100 NB	220	130	64	690	250	234	43	120
6"	150 NB	260	130	67	820	365	281	61	170
8"	200 NB	260	165	80	955	458	358	91	170
10"	250 NB	316	165	84	1120	520	409	135	200
12"	300 NB	380	168	85	1320	590	482	184	200
14"	350 NB	380	175	92	1450	685	492	237	270
16"	400 NB	482	186	108	1600	740	602	339	270
18"	450 NB	482	186	108	1830	850	613	405	340

*Seats included

**For larger sizes, please contact AR Controls

ARVALV[®]

PRODUCT WARRANTY

AR Controls will at its discretion repair or replace without charge or refund the purchase price for products supplied, which prove to be defective in matter or workmanship provided that, in each case the product has been properly installed and is used in the service for which it was recommended, and that the written claim, specifying the alleged defect is presented to AR Controls within 18 months from the date of shipment or within 12 months from date of installation, whichever date occurs first. AR Controls shall in no event be liable for the following cost, which includes but is not limited to costs associated with; consequential damages, labour, equipment or engineering costs related to the repair or replacement of defective equipment.

The warranty stated in this paragraph is in lieu of all other warranties, either express or implied. With respect to warranties, this paragraph states the buyer's exclusive remedy and AR Controls' exclusive liability.

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