KEYSTONE SLURRY CONTROL VALVES

FIGURE 2000

Wafer style valve with steel reinforced resilient seat for control of light/medium slurries

FEATURES

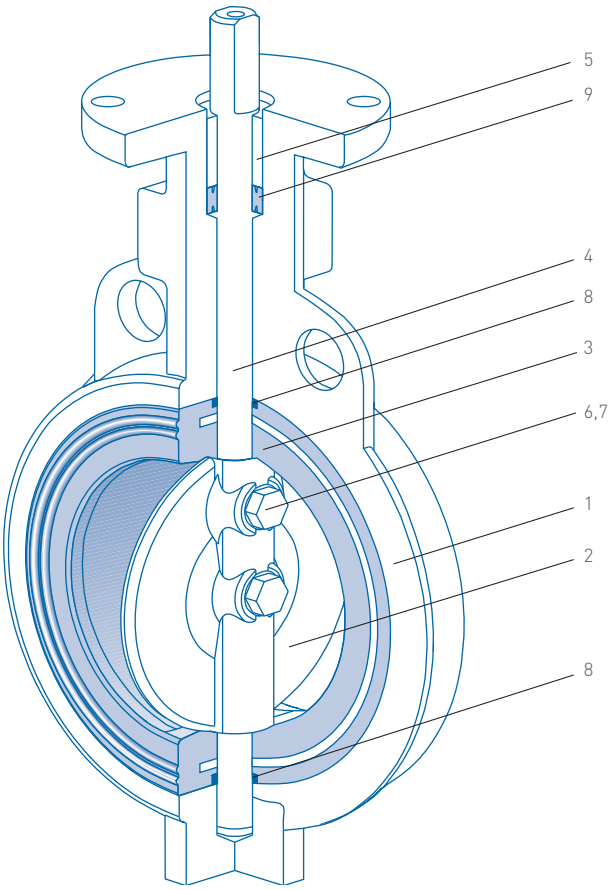
- Wafer style body.
- Bi-directional tight shut off up to 1400 kPa.
- Steel reinforced seat.
- Extensive size range available.
- High wear resistance materials.
- Replaceable components.
- Maintenance friendly.
- Direct mounting to Keystone actuators eliminates the need for mounting brackets.
- Top bushing absorbs actuator side thrust loads.
- Body locating holes provide easy installation and centering between flanges.

GENERAL APPLICATION

Ideal for the control of light to medium density mineral processing slurries where tight shut-off is required.

TECHNICAL DATA

Size range:	DN 50 - 500
Temperature rating:	Minus 20°C to +120°C
Pressure rating:	Full vacuum to 1400 kPa Tight shut-off
Standard flange drilling:	AS 2129 table E, ASME B 16.5 Class 150



PARTS LIST

No.	Description	Material
1	Body	Cast iron
2	Disc	Air hardened S.G. Iron
3	Seat	SBR elastomer
4	Shaft	17.4 P.H. S/S
5	Shaft bush	Delrin
6	Disc screw	316 S/S
7	Disc screw	O-ring nitrile
8	Shaft O-ring	Nitrile
9	Shaft seal	Nitrile

OPTIONS

- F79U Hard anodized aluminium pneumatic actuator, double acting or spring return.
- F79S Stainless steel pneumatic actuator, double acting or spring return.
- F79B Ductile iron pneumatic actuator, double acting or spring return.
- Icon 2000 Electric actuators.
- F427 Manual gear operators.
- F793 Positioners.
- F792 Switch boxes.
- F791 Solenoid valves.

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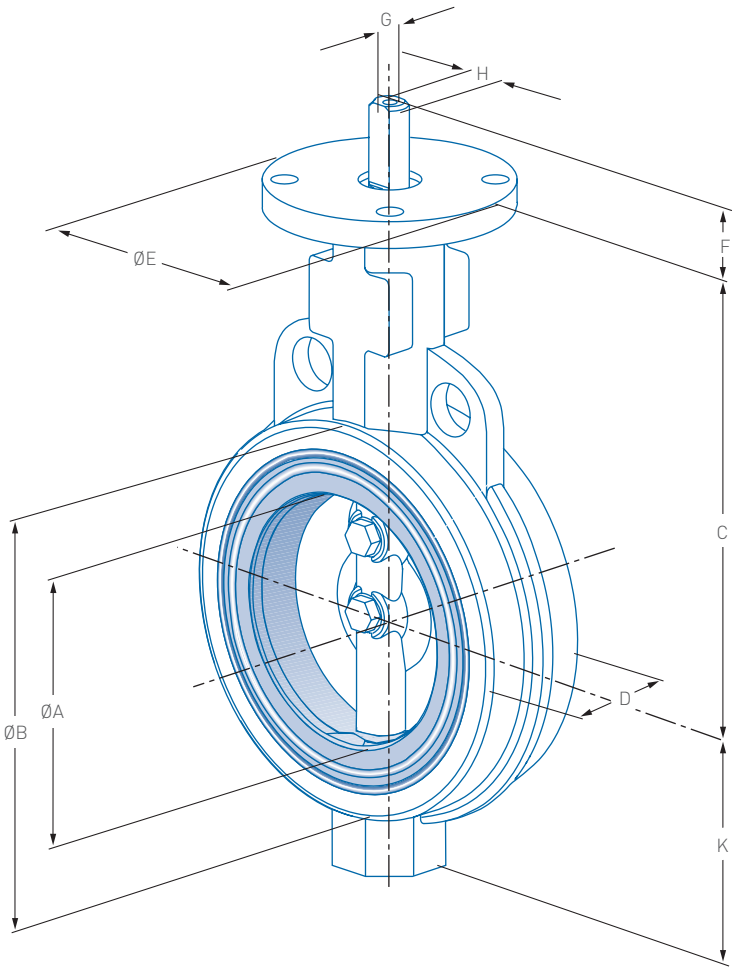

DIMENSIONS (mm)

Valve size DN	Stem code	Shaft dia inches	ØA	ØB	C	D	ØE	F	K	Q	Stem conn. H x G / ØH inches	Keyway inches	Top plate PCD mm	Top plate No. holes	Top plate Hole dia mm	Mass (kg)	K_v at full open
50	BAB	9/16	51	105	140	41	102	32	65	37	9/16 x 3/8	-	83	4	11	4	190
80	BAB	9/16	76	137	159	44	102	32	81	68	9/16 x 3/8	-	83	4	11	5	430
100	BAC	5/8	102	175	178	51	102	32	111	95	5/8 x 7/16	-	83	4	11	8	710
150	BAD	3/4	152	222	203	54	102	32	143	151	3/4 x 1/2	-	83	4	11	11	1630
200	CAE	7/8	203	279	241	64	152	32	171	200	7/8 x 5/8	-	127	4	14	20	2840
250	CAF	1 1/8	254	340	273	64	152	51	203	252	1 1/8	1/4 x 1/4	127	4	14	28	4640
300	CAF	1 1/8	305	422	311	76	152	51	238	302	1 1/8	1/4 x 1/4	127	4	14	43	6880
350	CAG	1 3/8	330	446	305	76	152	76	267	325	1 3/8	5/16 x 5/16	127	4	14	60	8600
400	CAH	1 5/8	381	511	329	102	152	76	319	375	1 5/8	3/8 x 3/8	127	4	14	100	11200
450	DAJ	1 7/8	432	546	368	108	203	108	343	424	1 7/8	1/2 x 3/8	165	4	21	120	15500
500	DAJ	2 1/8	483	603	403	127	203	108	378	473	1 7/8	1/2 x 3/8	165	4	21	167	18900

NOTES:

Q = The chordal dimension at face of valve for disc clearance into pipe or flange.

H = The dimension of the stem connection.

ØH = Drive dog connection, changes to a round shaft on valve sizes DN 150 - 500

G = The dimension across the stem flats.

Dimensions are nominal to ±1 mm.

K_v = The flow rate of water in m^3/hr that will pass through a valve with a differential pressure drop of 1 bar (100 kPa) at 20°C.

C_v = 1.155 K_v

Valve size	Shut-off pressure - kPa				
DN	**0**	**350**	**700**	**1000**	**1400**
50	37	38	40	41	42
80	54	56	59	61	63
100	81	85	88	92	95
150	152	164	175	186	198
200	254	277	299	322	345
250	390	424	458	492	525
300	525	582	638	695	751
350	729	819	910	1000	1090
400	932	1068	1203	1339	1475
450	1170	1373	1576	1780	1977
500	1441	1723	2006	2288	2570

DUTY DEFINITIONS

NOTES:
These torque figures are based on slurry or dry powder services and are considered adequate for opening and closing the valve under those conditions.
- Liquid service to 3m/s.
- Light to medium slurries.
- Pneumatic conveying.

TYPICAL SPECIFYING SEQUENCE

100	F2000	CNPS	AS 2129E
Valve size	Figure no.	Trim code	End connection

Trim code	Body	Disc	Shaft	Seat	Bearing	Packing
CNPS	Cast Iron	Air hardened	17.4 P.H.	SBR	Delrin	Buna N
		S.G. Iron	S/S			

NOTE:
Other trims available upon request

End connections to suit:
- AS 2129 Table E (std).
- ASME Class 150.
- Others available on request.