



KEYSTONE BUTTERFLY VALVES

FIGURE 129/239

Heavy duty lugged/wafer valve with steel reinforced cartridge design seat



GENERAL APPLICATION

With its metal-reinforced resilient seat, makes it ideally suited for most process and vacuum applications.

- Liquids
- Gases
- Bulk handling

TECHNICAL DATA

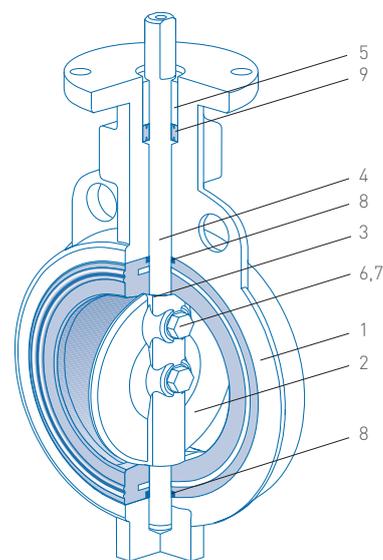
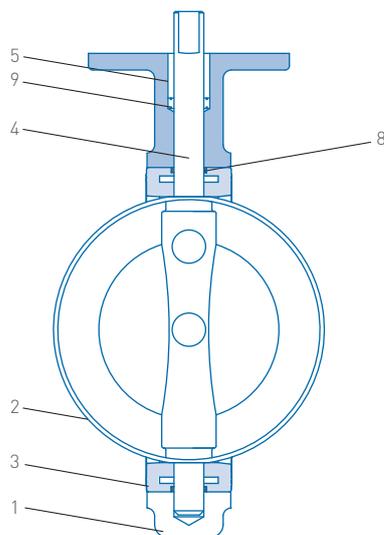
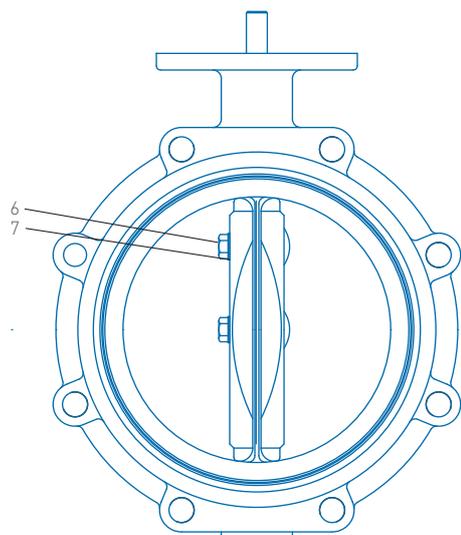
Size range:	DN 50 - 500
Pressure rating:	Full vacuum to 1400 kPa
Temperature range:	Minus 40°C to 120°C. EPDM seat Minus 18°C to 100°C. Buna N seat
Standard flange: drilling	ASME class 150 and AS. Table E

FEATURES

- Replaceable, metal-reinforced seat, completely encapsulated by rubber, isolates the stem and body from the media and eliminates seat distortion due to high vacuum or turbulence.
- Primary stem seal, formed by preloaded contact of disc hub with flatted seat surfaces, completely isolates stem and body from the line media.
- Secondary stem seal, formed by an engineered interference fit of the stem through the seat, provides additional sealing integrity.
- Rounded, polished disc edge provides full 360 degree concentric seating, minimum flow restriction, lower seating and unseating torques and maximum seat life.
- Superior, one-piece thru-shaft design provides high-strength and positive disc control. Shaft ends are standardized for operator interchangeability.
- Self-locking disc screws allow quick and easy disassembly and provide a positive connection.
- Self-adjusting, bi-directional stem seal is suitable for full industrial vacuum and pressure, preventing external contamination of the stem area.
- Heavy-duty, corrosion-resistant top bushing absorbs actuator side thrust loads.
- Each valve is factory tested to 110 percent of specified pressure rating assures drop-tight shut-off.
- Cast-in top plate is an integral part of the body and is standardized to allow direct mounting of all Keystone actuators.

KEYSTONE BUTTERFLY VALVES

FIGURE 129/239



NOTE

Figure 129 lugged butterfly valve shown

NOTE

Figure 239 wafer butterfly valve shown

PARTS LIST

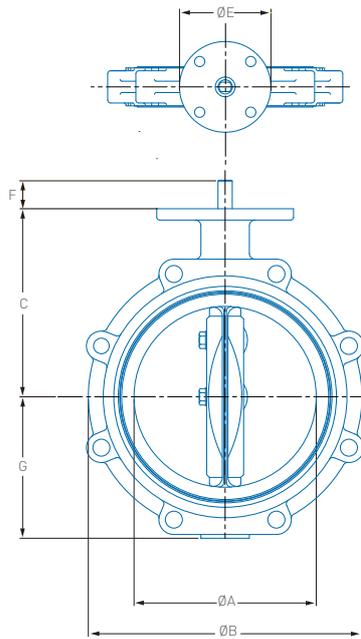
No.	Description	Material
1	Body	Cast iron
2	Disc	Air hardened S.G. iron
3	Seat	SBR elastomer
4	Shaft	17.4 P.H. S/S
5	Shaft bush	Delrin
6	Disc screw	316 S/S
7	Disc screw O-ring	Nitrile
8	Shaft O-ring	Nitrile
9	Shaft seal	Nitrile

OPTIONS

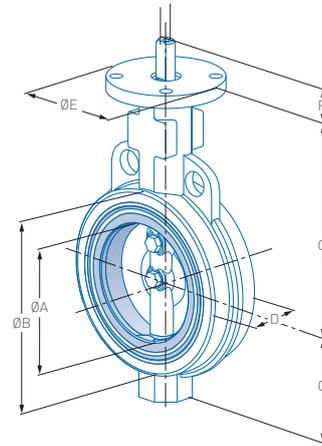
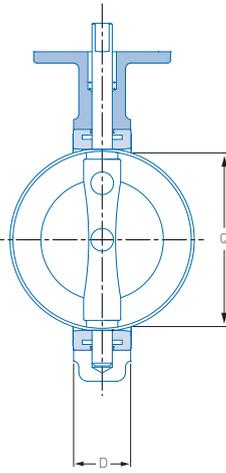
- F89U Hard anodized aluminium pneumatic actuator, double acting or spring return.
- F79S Stainless steel pneumatic actuator, double acting or spring return.
- F79B Ductile iron pneumatic actuator, double acting or spring return.
- Icon 2000 Electric actuators.
- F427 Manual gear operators.
- F793 Positioners.
- F792 Switch boxes.
- F791 Solenoid valves.

KEYSTONE BUTTERFLY VALVES

FIGURE 129/239



NOTE
Figure 129 lugged butterfly valve shown



NOTE
Figure 239 wafer butterfly valve shown

FIGURE 239 WAFER BUTTERFLY VALVE (mm)

Valve size DN	Stem conn. code	ØA	ØB	C	D	ØE	F	G	Q	Shaft dia (inches)	Stem conn. dia. x A.F.(inches)	Key (inches)	Top plate data			Mass (kg)
													PCD.	No. holes	Hole dia.	
50	BAB	51	98	140	41	102	32	70	36	3/16	3/16 x 3/8	-	83	4	11	2.3
65	BAB	64	117	152	45	102	32	79	51	3/16	3/16 x 3/8	-	83	4	11	2.8
80	BAB	76	133	159	45	102	32	89	67	3/16	3/16 x 3/8	-	83	4	11	3.2
100	BAC	102	162	178	51	102	32	105	94	5/8	5/8 x 7/16	-	83	4	11	5.9
125	BAC	127	187	191	54	102	32	117	120	5/8	5/8 x 7/16	-	83	4	11	6.4
150	BAD	152	217	203	54	102	32	137	148	3/4	3/4 x 1/2	-	83	4	11	7.7
200	CAE	203	271	241	64	152	32	168	202	7/8	7/8 x 3/8	-	127	4	14	15.9
250	CAF	254	330	273	64	152	51	203	254	1 1/8	1 1/8	1/4 x 1/4	127	4	14	21.3
300	CAF	305	394	311	76	152	51	235	304	1 1/8	1 1/8	1/4 x 1/4	127	4	14	34
350	CAG	330	426	305	76	152	76	270	330	1 3/8	1 3/8	5/16 x 5/16	127	4	14	52.2
400	CAH	381	483	329	102	152	76	319	377	1 5/8	1 5/8	3/8 x 3/8	127	4	14	95.3
450	DAJ	432	540	368	108	203	108	343	427	1 7/8	1 7/8	1/2 x 3/8	165	4	21	108.9
500	DAJ	483	597	403	127	203	108	378	475	2 1/8	1 7/8	1/2 x 3/8	165	4	21	143.3

FIGURE 129 LUGGED BUTTERFLY VALVE (mm)

Valve size DN	Stem conn. code	ØA	ØB	C	D	ØE	F	G	Q	Shaft dia (inches)	Stem conn. dia. x A.F.(inches)	Key (inches)	Top plate data			Mass (kg)
													PCD.	No. holes	Hole dia.	
50	BAB	51	105	100	41	102	32	67	36	3/16	3/16 x 3/8	-	83	4	11	3.6
65	BAB	64	124	114	45	102	32	75	51	3/16	3/16 x 3/8	-	83	4	11	4.1
80	BAB	76	137	124	45	102	32	81	67	3/16	3/16 x 3/8	-	83	4	11	4.5
100	BAC	102	175	152	51	102	32	103	94	5/8	5/8 x 7/16	-	83	4	11	8.2
125	BAC	127	197	152	54	102	32	119	120	5/8	5/8 x 7/16	-	83	4	11	9.5
150	BAD	152	222	165	54	102	32	133	148	3/4	3/4 x 1/2	-	83	4	11	10
200	CAE	203	279	211	64	152	32	159	202	7/8	7/8 x 3/8	-	127	4	14	20
250	CAF	254	340	229	64	152	51	197	254	1 1/8	1 1/8	1/4 x 1/4	127	4	14	21.8
300	CAF	305	392	270	76	152	51	229	304	1 1/8	1 1/8	1/4 x 1/4	127	4	14	43.6
350	CAG	330	446	305	76	152	76.2	270	330	1 3/8	1 3/8	5/16 x 5/16	127	4	14	59.4
400	CAH	381	511	329	102	152	76.2	309	377	1 5/8	1 5/8	3/8 x 3/8	127	4	14	100
450	DAJ	432	546	368	108	203	108	346	427	1 7/8	1 7/8	1/2 x 3/8	165	4	21	119.7
500	DAJ	483	603	403	127	203	108	379	475	2 1/8	1 7/8	1/2 x 3/8	165	4	21	167

- NOTE**
- Q is the dimension at the face of the valve for disc clearance into pipe or flange.
 - Dimensions are nominal to ±1mm.
 - Masses are dependent upon materials used.

KEYSTONE BUTTERFLY VALVES

FIGURE 129/239

TYPICAL SPECIFYING SEQUENCE

100	F129	CNPS	AS 2129E
Valve size	Figure no.	Trim code	End connection

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

NOTE

Other trims available upon request.

End connections to suit:

- AS 2129 Table E (std).
- ASME Class 150.
- Others available on request.

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