This product is represented in Australia, New Zealand, and PNG by:

InKorr Pty Ltd

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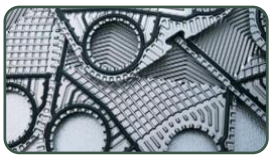
Contact InKorr Pty Ltd for:

Heat Exchangers
- Shell & Tube Heat Exchangers
- Gasketed Plate Heat Exchangers
- Brazed Plate Heat Exchangers
- Crossflow Welded Plate Heat Exchangers
- Plate & Shell Heat Exchangers
- Non Metallic Heat Exchangers
- Corrugated Tube Heat Exchangers
- Spiral Heat Exchangers
- Air-Cooled Heat Exchangers

Vessels, Columns, and Equipment manufactured from:
- Exotic Alloys (Ta, Zr, Ti)
- Graphite and Silicon Carbide
- PTFE Lining

Plastic Lined Valves and Piping
- PTFE
- PVDF
- PP
- and many more!



Servicing and reburbishment of heat exchangers!
- Plate cleaning
- NDE for crack testing
- Spare parts, both OEM and aftermarket

FLUONICS

FLUONICS Co.,Ltd
#163-2, Gwanghak-ro, Hojeo-myeon, Wonju-si, Kangwon-Do, Korea T82.33.731.3550 F82.33.731.3559

www.fluonics.com

BUTTERFLY VALVE

High Performance and Creative Technology company

FLUONICS

Fluonics is...

Fluonics is manufactor of PFA lined valves
and PFA, PTFE lined fittings & pipes.
From start, Fluonics never stopped developing.
New solution for clients and supply best quality product under motto
of Fluonics "High Performance and Creative Technology company"

Feature

High tension coil spring

Ensures a stable seal at both the upper and lower gland even at extreme temperature or when thermal shock occurs.

Minimum 3mm PFA Thickness

Seamfree PFA Lining on the Liner and disc to minimum thickness of 3mm prevents permeation of dangerous fluids.

Flange seal

Stable flange sealing performance is ensured by concentric circular grooves on the flange faces thereby eliminating the need for a special gasket when operating under specified temperatures

Safety sealing

The upper and lower stem housing of the fluonics butterfly valve have same length high tension coil springs which provide stable sealing performance in cases of temperature change. The sealing design features a triple acting sealing mechanism controlled by the balanced spring forces.

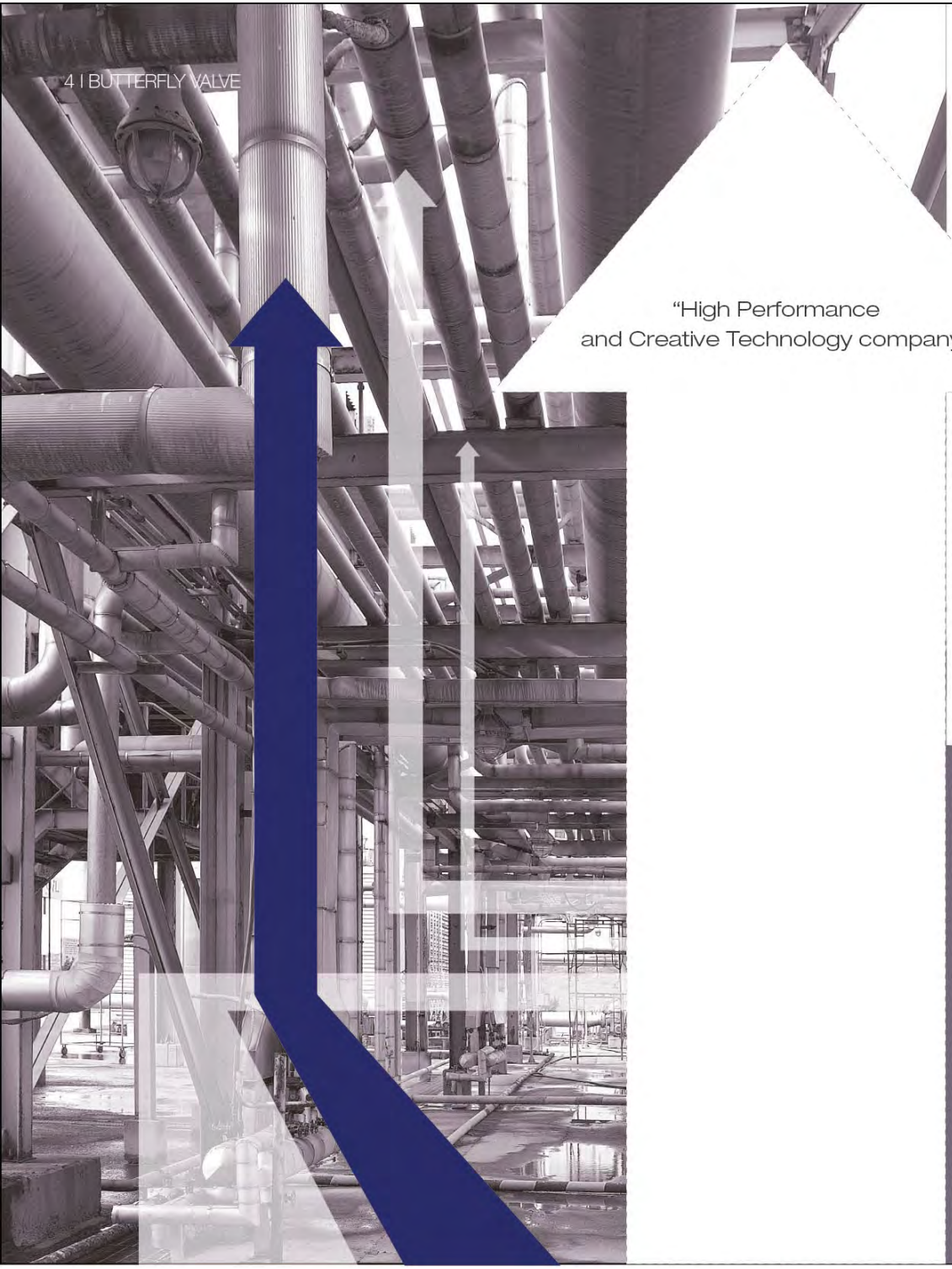
Materials

PFA

PFA exhibits thermal characteristics like to PTFE, being able to withstand super low to high temperatures (260℃ Maximum temp. for continuous use). It is also transparent and mechanically strong under high temperature. It is easily workable besides applicable with extrusion molding to the same degree as general thermoset plastics. It is used where purity is important, such a semiconductor wafer baskets, piping couplings and non-corrosive linings. PFA has better mechanical strength at high temperatures than FEP, and excellent moldability for easy processing by extrusion, compression, blow, transfer and injection molding methods. Due to the high bonding strength of the carbon, fluorine and oxygen atoms, PFA demonstrates nearly the same outstanding capabilities as PTFE in temperatures ranging from - 200℃ to +260℃.

PTFE

The fluorine atoms completely cover the carbon chain backbone and protect the carbon-carbon bond from attack. The fluorine atoms are also responsible for the low surface energy and exceptional frictional characteristics of PTFE. Because of very high melt viscosity, PTFE does not flow above its melting point.
It requires special polymer processing like paste extrusion, compression molding and sintering. Among all the fluoroplastics products, PTFE offers the highest heat resistances at 260℃ (maximum temp. for continuous use). It is not corroded by most chemicals and has good electrical insulation and dielectric characteristics. Moreover, it has a unique non-stick property and the lowest coefficient of friction amongst solids.It is the most widely used fluoroplastics, now found in O-rings, gaskets, bearings, tube, wiring, hot plates and irons because of its non-stick property, as well as chemical tank linings.



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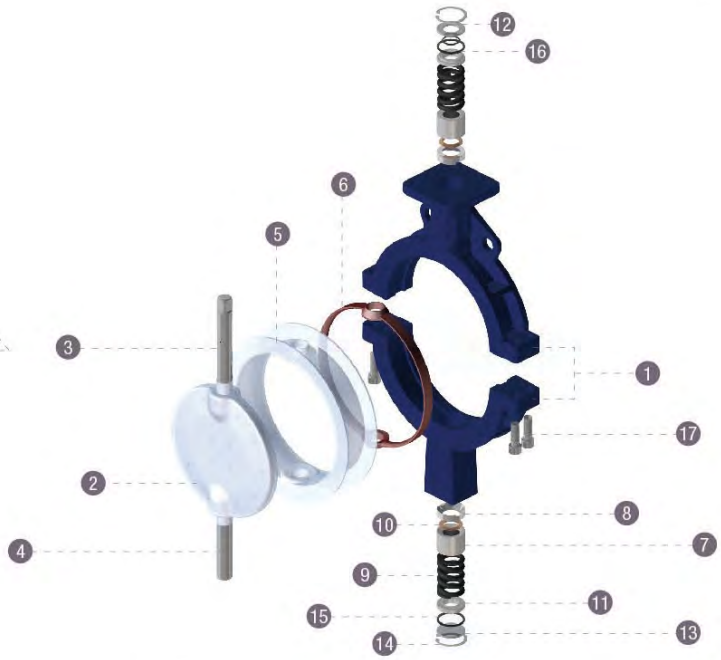
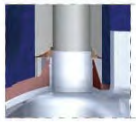


Material of Parts

No	DESCRIPTION	MATERIAL	
1	BODY	ASTM A395 D.I	ASTM A395 D.I
2	DISC	Stainless Steel with PFA lining	Polished Stainless Steel
3	UPPER STEM	Stainless Steel	Stainless Steel
4	LOWER STEM	Stainless Steel	Stainless Steel
5	BODY LINER	PFA / PTFE	PFA / PTFE
6	BACK-UP RING	VITON	VITON
7	BEARING	SUS 304	SUS 304
8	SECONDARY RING	SUS 304	SUS 304
9	SPRING	SPRING STEEL	SPRING STEEL
10	GLAND PACKING	VITON	VITON
11	DUST SEAL	SUS 304	SUS 304
12	TOP GLAND	SUS 304	SUS 304
13	BOTTOM PLATE	SUS 304	SUS 304
14	C-RING	SUS 304	SUS 304
15	OUTER O-RING	VITON	VITON
16	INNER O-RING	VITON	VITON
17	WRENCH BOLT	SUS 304	SUS 304

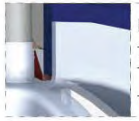
Butterfly Valve Features

Same length high tension coil springs provide stable sealing performance in cases of temperature change.



The seal to atmosphere is established where the Viton elastomer band encircles the base of the shaft.

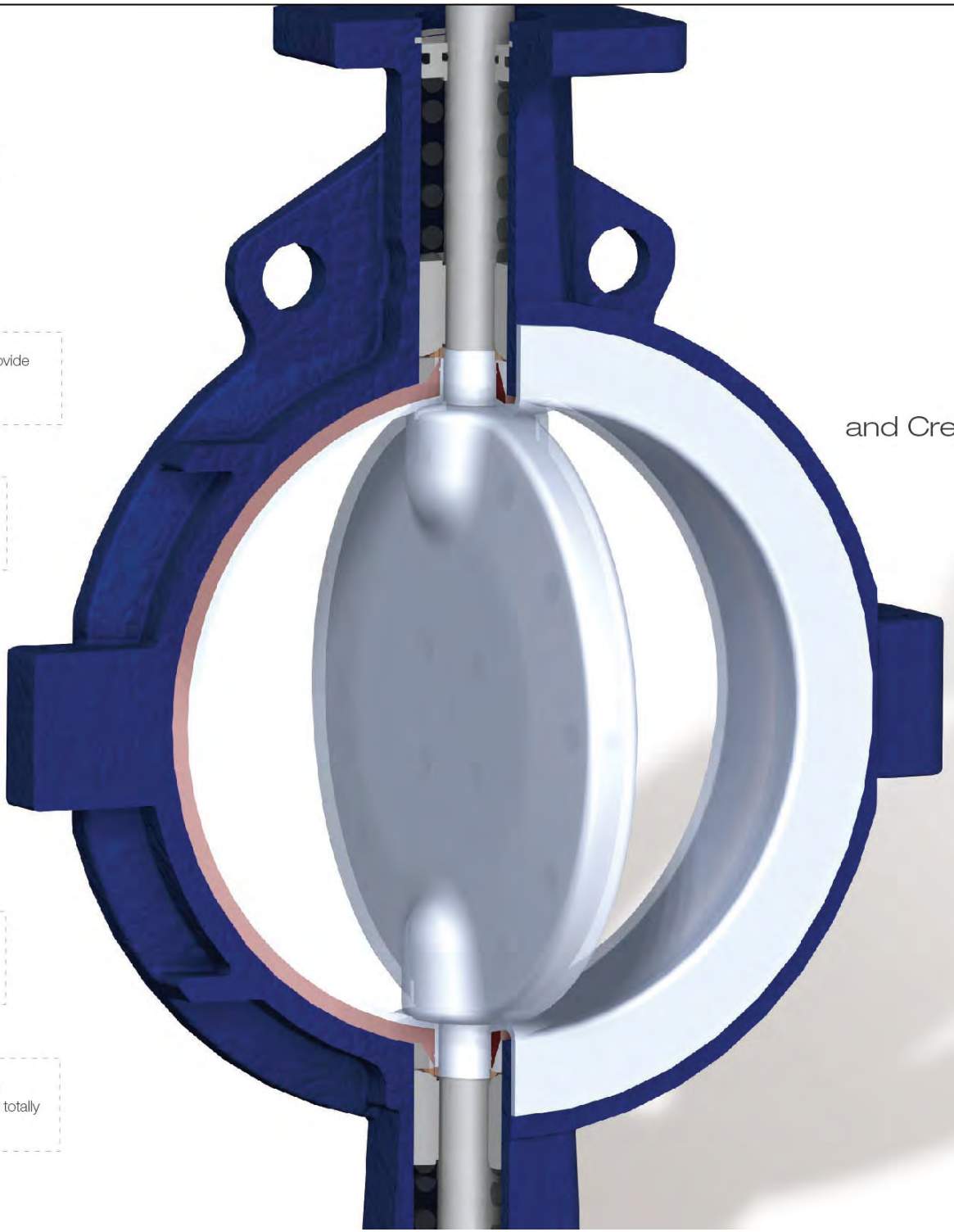
The electrostatic epoxy coating resists atmospheric corrosion.



PFA linings are more flexible than PTFE lining.
They facilitate more reliable, tighter sealing.

The wider sealing area ensures minimum creep at high temperature.

Lining materials are locked to the disc by molding through holes in the disc and by totally encapsulating it.



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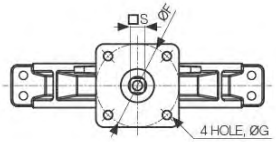
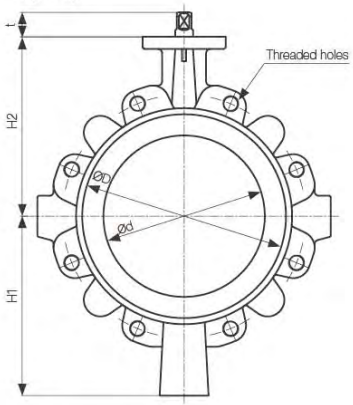
Butterfly Valve Dimensions

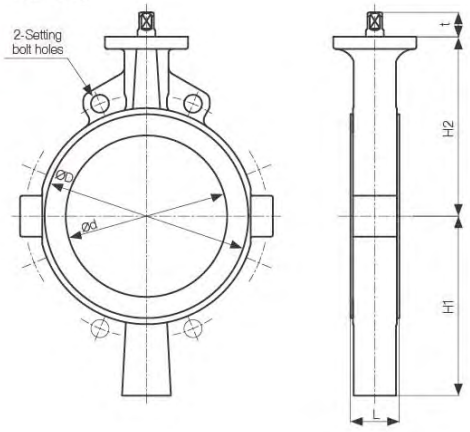
Nominal size		Dimension (mm)									
mm	inch	ød	øD	L	H1	H2	t	S	øF	øG	Ref
50A	2"	53	96	43	62	119	23	12	70	9	E
80A	3"	80	125	46	132.5	132.5	23	12	70	9	G
100A	4"	102	142	52	148	148	28	14	70	9	H
150A	6"	151	208	56	183	183	28	14	102	11	J
200A	8"	197	247	60	220	220	31	18	102	11	K
250A	10"	247	320	68	260	260	35	24	102	11	L
300A	12"	296	370	78	297	297	35	24	125	13	M
350A	14"	349	418	78	335	335	45	30	140	18	N
400A	16"										O
450A	18"										P
500A	20"										Q
600A	24"										R



Lug Body



Wafer Body



Ordering information

Connections	Ref.
JIS 10K	J
ANSI 150lbs	A

Body type	Ref.
Wafer	W
Lug	L

Body materials	Ref.
Ductile Iron(A395)	F

Valve type	Ref.
Butterfly valve	BF

Disc Material	Ref.
SUS 304, PFA Lined	01
SUS 304L, PFA Lined	02
SUS 316, PFA Lined	03
SUS 316L, PFA Lined	04
SUS 304 Polished	05
SUS 304L Polished	06
SUS 316 Polished	07
SUS 316L Polished	08

Liner Material	Ref.
PFA	P
PTFE	T

Body surface finish	Ref.
Epoxy coated	P

Operating		Ref.
Manual	Lever	L
	Worm gear	W
Actuator		A

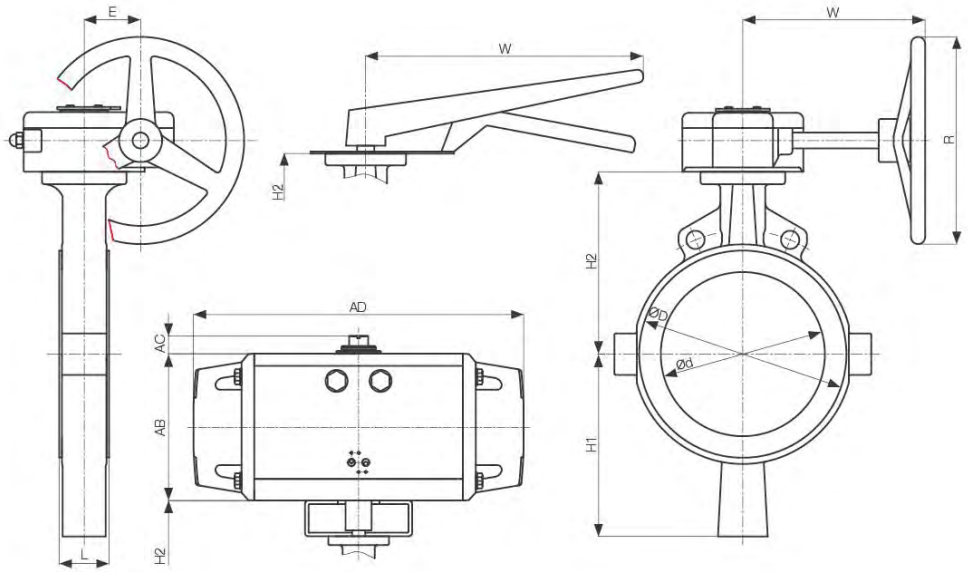
JIS 10K 200A Butterfly valve with PTFE liner, wafer type ductile cast iron body, PFA lined 316L disc, worm gear operator, body epoxy coated

Order example	K	J	BF	T	W	F	02	W	P
Nominal size	K								
Connections		J							
Valve type			BF						
Liner Material				T					
Body type					W				
Body material						F			
Disc material							02		
Operating								W	
Body surface finish									P

Operating type

Worm Gear

Nominal size		Dimension (mm)							
mm	inch	φd	φD	L	H1	H2	E	F	W
50A	2"	53	96	43	62	119	45	118	180
80A	3"	80	125	46	132.5	132.5	45	118	180
100A	4"	102	142	52	148	148	45	118	180
150A	6"	151	208	56	183	183	45	118	180
200A	8"	197	247	60	220	220	68	220	250
250A	10"	247	320	68	260	260	68	220	250
300A	12"	296	370	78	297	297	98	280	350
350A	14"	349	418	78	335	335	98	280	350
400A	16"								
450A	18"								
500A	20"								
600A	24"								



Spring Return

Nominal size		Dimension (mm)							
mm	inch	φd	φD	L	H1	H2	AB	AC	AD
50A	2"	53	96	43	62	169	221	30	497
80A	3"	80	125	46	132.5	182.5	221	30	497
100A	4"	102	142	52	148	198	247	30	555
150A	6"	151	208	56	183	243	247	30	555
200A	8"	197	247	60	220	280	247	30	555

Double Acting

Nominal size		Dimension (mm)							
mm	inch	φd	φD	L	H1	H2	AB	AC	AD
50A	2"	53	96	43	62	169	196	30	467
80A	3"	80	125	46	132.5	182.5	196	30	467
100A	4"	102	142	52	148	198	221	30	497
150A	6"	151	208	56	183	243	221	30	497
200A	8"	197	247	60	22	280	221	30	497

Lever

Nominal size		Dimension (mm)					
mm	inch	φd	φD	L	H1	H2	W
50A	2"	53	96	43	62	119	200
80A	3"	80	125	46	132.5	132.5	200
100A	4"	102	142	52	148	148	200
150A	6"	151	208	56	183	183	300