

PFA LINED BALL VALVE

CHANGE AND IMPRESSION



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INTRODUCTION OF VALVE

PFA LINED BALL VALVE



Features of Valve | 밸브의 특징

- SKY PFA lined ball valve can be used for almost every liquid cause of durable PFA Lining, and it has no corrosive action by liquid.
- SKY PFA lined ball valve is safe from a chemical reaction and an effluent of impurities, it is a translucent and high purity grade body.
- SKY PFA lined ball valve have exceptional heat resistance than normal plastic valves. It can be used wide service temperature range.
- SKY PFA lined ball valve is easy to open-close than the other valves, because it has non stick characteristics that prevent minimize the effect of friction.
- SKY PFA lined ball valve have high flow rate because of the same as pipe size and keeps straight design.
- SKY PFA lined ball valve는 접액부 전면에 PFA Lining이 되어 있기 때문에 내약품성이 매우 뛰어나며, 밸브가 유체에 의하여 부식될 위험이 없어 거의 모든 유체에 사용가능하다.
- SKY PFA lined ball valve는 반투명으로서 유해물질을 함유하고 있지 않으며 거의 모든 유체에 화학적 변화를 일으키지 않음으로 불순물의 용출로 부터 안전하다.
- SKY PFA lined ball valve는 특히 내열성이 우수하기 때문에 Valve의 최고사용온도 조건도 일반 플라스틱제품에 비하여 높다.
- SKY PFA lined ball valve는 불소수지 특유의 비점착성을 유지하고 있기 때문에 유체 및 이물질등이 Valve 내부에 고착 되지 않으며 마찰계수가 낮아서 Valve의 개폐가 용이하다.
- SKY PFA lined ball valve는 Pipe의 내경과 거의 동일한 내경으로 설계되어 있고, 직선의 유로형상을 유지하고 있어 유량계수가 높다.

Applications and Specifications of Valve

밸브의 일반적 용도 및 사양

Applications

Semiconductor / LCD chemical manufacturing
Petrochemistry
Polysilicon / silicon
Steel manufacturing plant / paper manufacturing
Chemical plant
Food and medicine

일반적 용도

반도체 / LCD 제조용 CHEMICAL 산업
석유화학공업
폴리실리콘 / 실리콘 산업
철강 / 제지산업
일반화학공업
식품 / 의약품 산업 등

Specifications

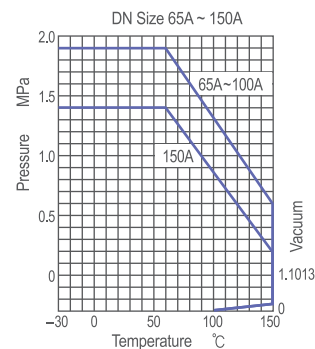
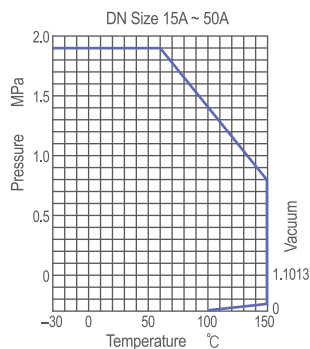
Model : SKY PFA lined ball valve
Size : 15A(1/2") ~ 150A(6")
Dimension : Table(P.5)
Flange standard : JIS10K / 150lbs/Etc.
Temperature range : -30°C ~ 150°C
Maximum pressure : 1.5MPa

사 양

모델 : SKY PFA lined ball valve
사이즈 : 15A(1/2") ~ 150A(6")
면간 : Table 참조(P.5)
FLANGE규격 : JIS10K / 150lbs/Etc.
사용온도범위 : -30°C ~ 150°C
최고사용압력 : 1.5MPa

Flow Rates

Nom. size [mm]	Cv [US gpm]	K _v [m³/h]
15A	38	32
20A	38	32
25A	70	60
40A	220	189
50A	345	296
65A	631	541
80A	842	722
100A	1455	1247
150A	3124	2677

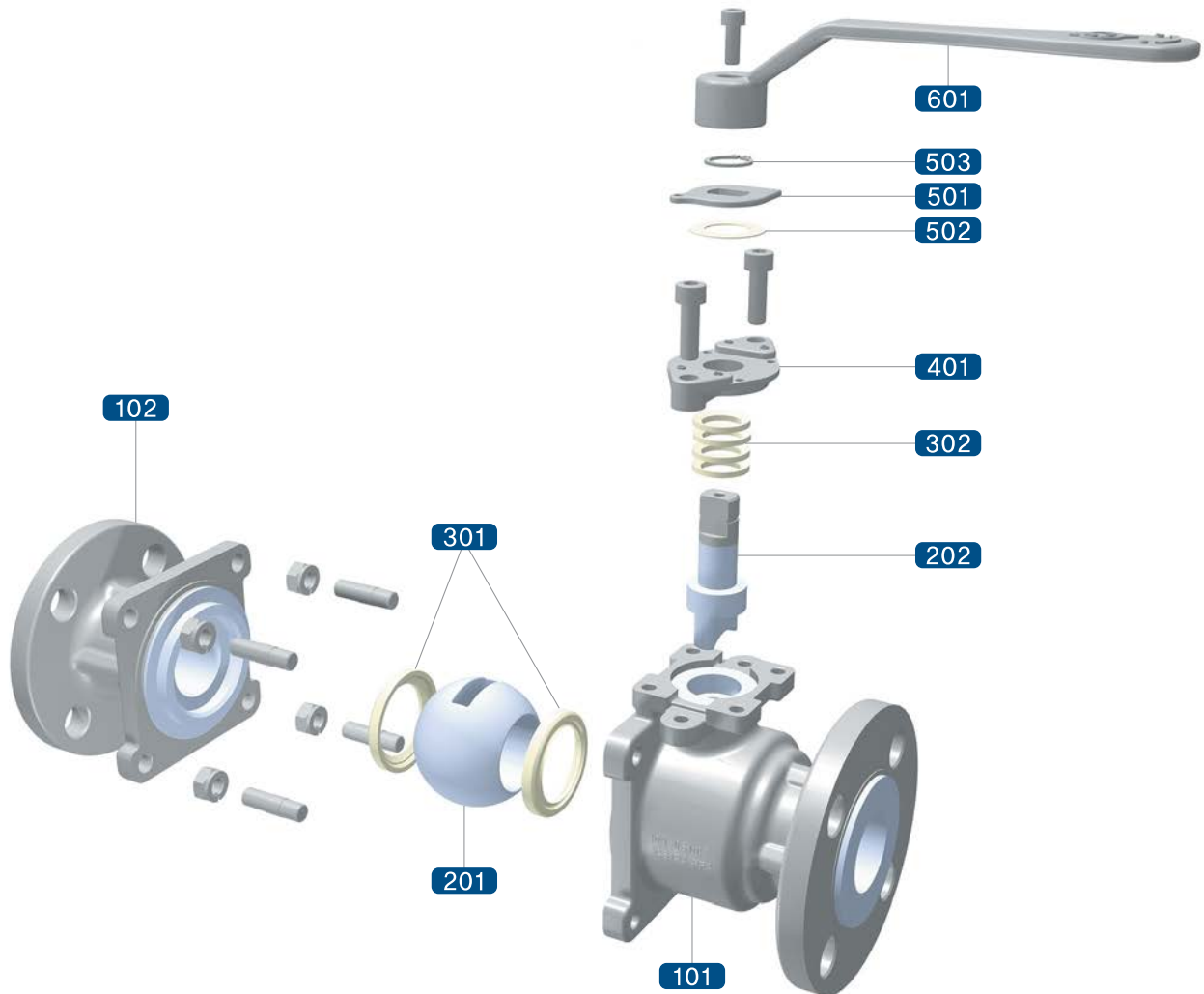


LINING MATERIAL PROPERTIES TABLE

ITEM		TEST METHOD	UNIT	PFA	PTFE	FEP	ETFE
		ASTM					
PHYSICAL	SPECIFIC GRAVITY	D792	-	2.12~2.17	2.13~2.20	2.15~2.17	1.73~1.74
	MELTING POINT	-	°C	310	327	260	270
MECHANICAL	TENSILE STRENGTH	D638	MPa	25~35	20~35	20~30	38~42
	TENSILE ELONGATION PERCENTAGE	D638	%	300~350	200~400	250~300	300~400
	COMPRESSION STRENGTH	D695	MPa	15~20	10~15	14~19	40~50
	HARDNESS	D2240	-	60~64	54~58	55~65	75
	KINETIC FRICTION COEFFICIENT	0.69MPa, 3m/min		0.2	0.1	0.3	0.4
THERMAL	HIGHEST TEMPERATURE FOR CONTINUOUS USE	-	°C	260	260	200	150
	HEAT DISTORTION TEMPERATURE	D648	°C	47	55	50	74
	LINEAR EXPANSION COEFFICIENT	D696	10 ⁻⁶ (-5)°C	12	10	9	6
ELECTRICAL	VOLUME RESISTIVITY	D257	Ω-cm	>10 ¹⁸	>10 ¹⁸	>10 ¹⁸	>10 ¹⁷
	BREAK DOWN VOLTAGE	D149	MV/m	20	19	22	16
	DIELECTRIC CONSTANT	D150	-	2.1	2.1	2.1	2.6
	DIELECTRIC LOSS TANGENT	D150	-	0.0003	0.0002	0.0005	0.005

PFA LINED BALL VALVE

EXPLODED VIEW AND MATERIALS | 밸브의 전개도 및 재질

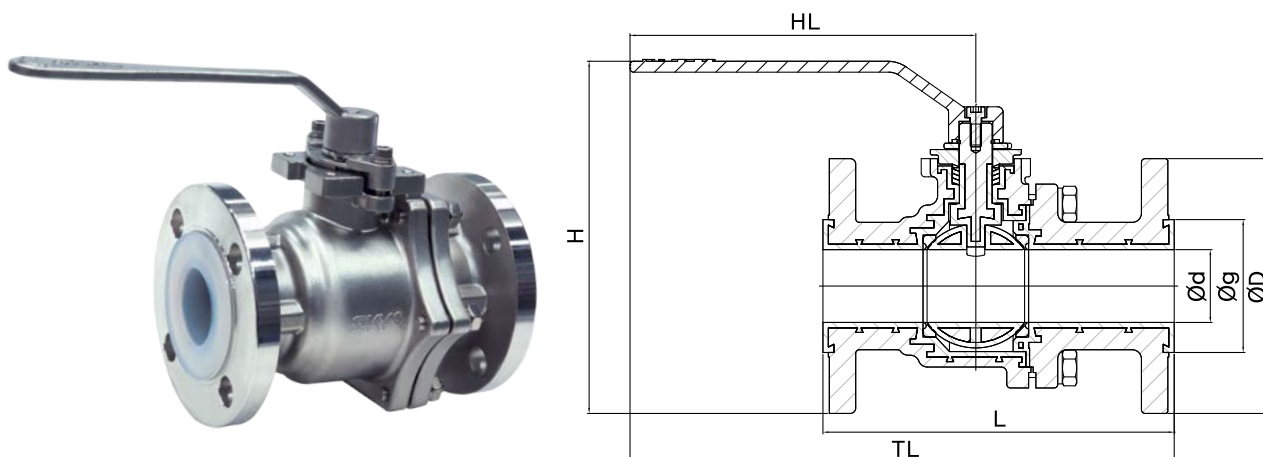


No.	DESIGNATION	STAINLESS STEEL	CARBON STEEL / IRON
101	BODY	SCS13A PFA LINED	SCPH2/WCB/DI PFA LINED
102	CAP	SCS13A PFA LINED	SCPH2/WCB/DI PFA LINED
201	BALL	SCS13A PFA LINED	SCS13A PFA LINED
202	STEM	SCS13A PFA LINED	SCS13A PFA LINED
301	SEAT RINGS	PTFE	PTFE
302	V-RING	PTFE	PTFE
401	GLAND	SCS13A	SCPH2
501	INDICATOR	SUS304	SUS304
502	GASKET	PTFE	PTFE
503	SNAP RING	SUS304	SUS304
601	HANDLE(LEVER)	SCS13A	SCPH2
W/O No.	BOLT / NUT / WASHER	SUS304	SUS304

* This table is standard for SKY PFA lined ball valve, please contact us the other materials.

* SKY PFA lined ball valve 표준사양이며, 그외 재질은 당사와 협의 바랍니다.

DIMENSIONS



DN SIZE			L(mm)			HL(mm)	TL(mm)			Ød(mm)			Øg(mm)			ØD(mm)			H(mm)	WEIGHT (kg)
JIS10K	ANSI150#	DIN PN16	JIS10K	ANSI150#	DIN PN16		JIS10K	ANSI150#	DIN PN16	JIS10K	ANSI150#	DIN PN16	JIS10K	ANSI150#	DIN PN16	JIS10K	ANSI150#	DIN PN16		
15A	1/2"	DN15	140	127	140	120	197	186	197	20	20	20	52	49	52	95	89	95	158.5	3.7
20A	3/4"	DN20	152	127	152	120	202	192	202	20	20	20	52	49	52	100	98.5	105	158.5	3.7
25A	1"	DN25	165	127	165	165	252	242	252	25	25	25	60	51	60	125	108	115	172.5	4.8
40A	1-1/2"	DN40	191	165	191	190	299	283	299	36	36	36	79	70	79	140	127	150	193.5	7.7
50A	2"	DN50	216	178	216	230	342	329	342	50	50	50	96	96	95	155	152	165	226	12.7
65A	2-1/2"	DN65	240	203	240	260	395	393	395	64	70	64	112	112	112	175	178	185	257	18.5
80A	3"	DN80	250	203	283	280	420	393	420	74	70	74	123	123	123	185	191	200	267	19.7
100A	4"	DN100	280	229	305	300	440	413	440	92	92	92	147	147	147	210	229	220	314.5	33.8
150A	6"	DN150	267	267	267	-	-	-	-	138	138	138	210	210	210	280	279	285	-	88

* The carbon steel valve of JIS 10K's flange is applied to ANSI 150lbs dimension. Please contact us the other combination.

* CARBON STEEL(FCD) 재질의 JIS 10KG 면간거리는 ANSI 150# 면간거리가 당사의 표준사양이며 JIS10KG 면간거리의 CARBON STEEL(FCD)제품은 당사와 협의 바랍니다.

* The valve 150A(6") is installed a worm gear. * 150A(6") 제품은 Worm gear 장치가 표준사양 입니다.

ORDERING INFORMATION

①

Valve Type	Code
Ball Valve	B
Diaphragm Valve	D
Ball Check Valve	BC
Wafer Check Valve	WC
Bottom Flush Valve	BTF

②

Connections	Code
JIS 10K	J
ANSI 150lbs	A
DIN PN16	D
etc.	E

③

Operating	Code
Manual	M
Auto	A

④

Material	Code
Stainless	S
Carbon Steel	C

⑤

Surface Finish	Code
Acid Cleaning	A
Painting	P

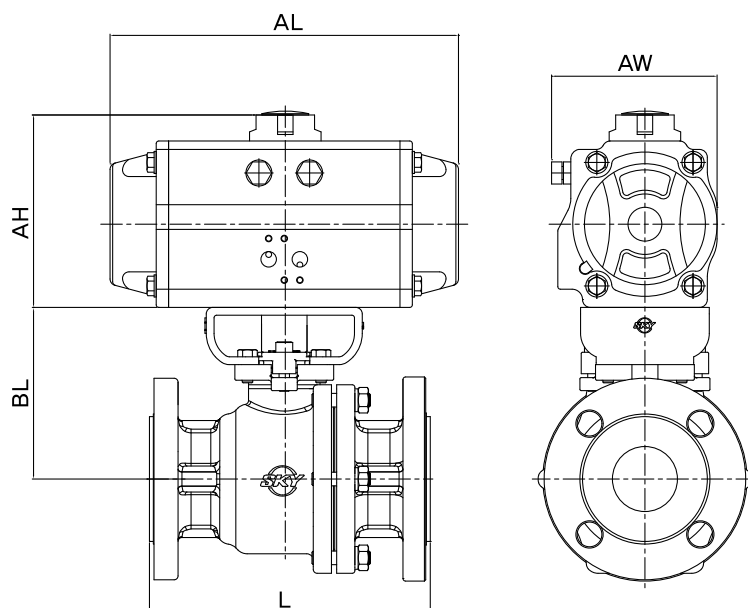
⑥

DN Size(mm)

Ordering Example	B	J	M	S	A	25
① Valve Type	B					
② Connections	J					
③ Operating	M					
④ Material	S					
⑤ Surface Finish	A					
⑥ DN Size	25					

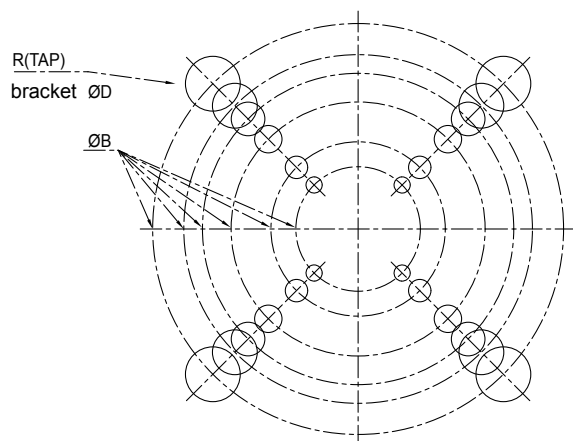
PFA LINED BALL VALVE

AUTOMATED BALL VALVE



DN SIZE		L(mm)		BL	AL		AH		AW		TORQUE	BRACKET
JIS10K	ANSI150#	JIS10K	ANSI150#		S/A	D/A	S/A	D/A	S/A	D/A	N.M	ISO 5211
15A	1/2"	140	127	99	208	163	127	109	96	85	11	F05/F07
20A	3/4"	152	127	99	208	163	127	109	96	85	11	F05/F07
25A	1"	165	127	100	208	163	127	109	96	85	12	F05/F07
40A	1-1/2"	191	165	114	247	208	139	127	108	109	21	F05/F07
50A	2"	216	178	132	268	247	151	139	123	108	28	F07/F10
65A	2-1/2"	240	191	154	316	268	169	151	141	123	42	F07/F10/FF12
80A	3"	250	203	159	316	268	169	151	141	123	50	F07/F10/F12
100A	4"	280	229	184	347	316	182	169	151	141	58	F10/F12
150A	6"	267	267	261	555	467	277	226	227	190	225	F12/F14/F16

ACTUATOR BOTTOM VIEW. ISO 5211

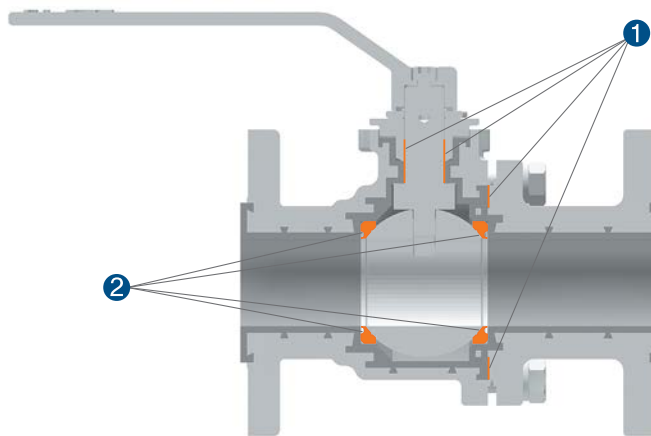


ISO 5211	ØB	BRACKET	R(TAP)
		ØD	
F05	Ø50	Ø6.5	M6
F07	Ø70	Ø9	M8
F10	Ø102	Ø11	M10
F12	Ø125	Ø13.5	M12
F14	Ø140	Ø18	M16
F16	Ø165	Ø22	M20

DIRECTION FOR THE USE OF VALVE | 제품선정 및 사용상 주의사항

- Please, contact us when the SKY valves are used out of condition that writing down this catalogue.
- PFA lined ball valve is sorted strategic goods. If you want to sell or export this valve, please make a declaration at the government and write down the vendor.
- In case using operating condition, please don't use this valve.
 - ㉠ melting alkali liquid and metal, a high temperature fluorine
 - ㉡ Including slurry ,or becoming stiff liquid.
 - ㉢ a halogen like a high temperature and strong permeability liquid.
- Please, contact us to choose a ball and seat ring . It could be damaged ball seat rings when opening or closing state and operating a high temperature and pressure for a long time
- Please use this valve full-open or close. Middle openig or close could be the cause of valve's leak and damaged a ball or seat ring. Also it is possible to take a unintened ball open.
- 본 Catalogue에 기재된 이외의 압력, 온도 및 특수한 유체조건등에서의 사용은 본사와 협의하여 제품을 선정하여 주시기 바랍니다.
- PFA lined ball valve는 전략물자로 분류되어 있으며, 이로인하여 국내판매시에는 그 사용처와 목적을 기재하여 관리하여야하며, 해외수출시에는 산업통상자원부 산하 전략물자관리원의 통제 및 신고허가를 득하여야 합니다.
- PFA 수지는 거의 모든 화학약품에 우수한 내식성을 가지고 있지만 하기와 같은 유체에는 적용이 어려울 수 있습니다.
 - ㉠ 용융 알카리 금속과 용액, 고온의 불소와 불소화합물
 - ㉡ Slurry를 함유하고 있는 용액, 또는 고착성(고체화)이 있는 유체
 - ㉢ 할로겐과 할로겐화합물 등과 같이 투과성이 강한 유체이면서 사용온도가 고온일 경우
- Valve의 사용압력, 온도, 유체가 사용기준내에 있더라도 장시간 고온, 고압하에서 사용하거나 장시간 닫혀있는 경우에는 Ball seat ring의 손상이 있을 수 있으므로 Ball seat ring 선정등에 있어서 당사와 협의해 주시기 바랍니다.
- Ball valve의 사용시에는 가급적 Full open 또는 Full close 상태로 사용해주세요. 중간정도의 개폐는 일시적으로는 무리가 없지만 장시간 사용시에는 Lined ball과 Ball seat ring의 면이 손상되어 유체의 Passing 원인이 되기도 하며, 유체에 의해서 의도하지 않는 개폐가 될 수도 있습니다.

MAINTENANCE | 긴급



Leak / Faulty (누수/고장)	Cause (원인)	Clearance (해결)
1 <ul style="list-style-type: none"> - Valve leaks (밸브 누수) - Body & cap (몸체 누수) - Gland part (그랜드 누수) 	<ul style="list-style-type: none"> - Body & cap bolting faulty (몸체 볼팅 고장) - Gland part packing, bolting faulty (그랜드 부위 고장) 	<ul style="list-style-type: none"> - Tighten the body bolt (몸체 볼트 조임) - Tighten the gland part or replace item (그랜드 볼트 조임) - Replace V-Ring (V-Ring 교체)
2 <ul style="list-style-type: none"> - Closed valve fluid passing (유체 누수) 	<ul style="list-style-type: none"> - Seat ring faulty (시트링 고장) - Ball liner faulty (볼 라이닝 고장) - Body liner faulty (몸체 라이닝 고장) 	<ul style="list-style-type: none"> - Replace seat ring (시트링 교체) - Replace ball (볼 교체) - Replace body or cap (몸체 교체)

(주)케이투엔 K2N Co.,Ltd

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E-mail : sky@skyvalve.co.kr Website : <http://www.skyvalve.co.kr>



CHANGE AND IMPRESSION

PFA LINED DIAPHRAGM VALVE

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Features of Valve | 밸브의 특징

- SKY PFA lined diaphragm valve can be used for almost every liquid cause of durable PFA Lining, and it has no corrosive action by liquid.
- SKY PFA lined diaphragm valve is safe from a chemical reaction and an effluent of impurities, it is a translucent and high purity grade body.
- SKY PFA lined diaphragm valve have exceptional heat resistance than normal plastic valves. It can be used wide service temperature range.
- SKY PFA lined diaphragm valve is easy to open-close than the other valves, because it has non stick characteristics that prevent minimize the effect of friction.
- SKY PFA lined diaphragm valve is able to control the flow in process that requires a fine works. It is also easy to sampling.
- SKY PFA lined diaphragm valve는 접액부 전면에 PFA Lining이 되어 있기 때문에 내약품성이 매우 뛰어나며, 밸브가 유체에 의하여 부식될 위험이 없어 거의 모든 유체에 사용가능하다.
- SKY PFA lined diaphragm valve는 반투명으로서 유해물질을 함유하고 있지 않으며 거의 모든 유체에 화학적 변화를 일으키지 않음으로 불순물의 용출로 부터 안전하다.
- SKY PFA lined diaphragm valve는 특히 내열성이 우수하기 때문에 Valve의 최고사용온도 조건도 일반 플라스틱제품에 비하여 높다.
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- SKY PFA lined diaphragm valve는 미세한 작업을 요구하는 공정에서 유량조절이 가능하고 유체의 sample을 추출하는데 용이하다.

Applications and Specifications of Valve

밸브의 일반적 용도 및 사양

Applications

Semiconductor / LCD chemical manufacturing
Petrochemistry
Polysilicon / silicon
Steel manufacturing plant / paper manufacturing
Chemical plant
Food and medicine

일반적 용도

반도체 / LCD 제조용 CHEMICAL 산업
석유화학공업
폴리실리콘 / 실리콘 산업
철강 / 제지산업
일반화학공업
식품 / 의약품 산업 등

Specifications

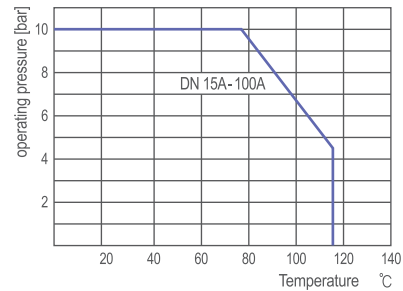
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Temperature range : -30°C ~ 100°C
Maximum pressure : 1.5MPa

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모델 : SKY PFA lined diaphragm valve
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FLANGE규격 : JIS10K / 150lbs/Etc.
사용온도범위 : -30°C ~ 100°C
최고사용압력 : 1.5MPa

Flow Rates

SIZE		Kv valve water [m³/h]
DN [mm]	DN [inch]	
15	1/2"	7.2
20	3/4"	7.2
25	1"	12.5
40	1 1/2"	45
50	2"	56
65	2 1/2"	110
80	3"	165
100	4"	265

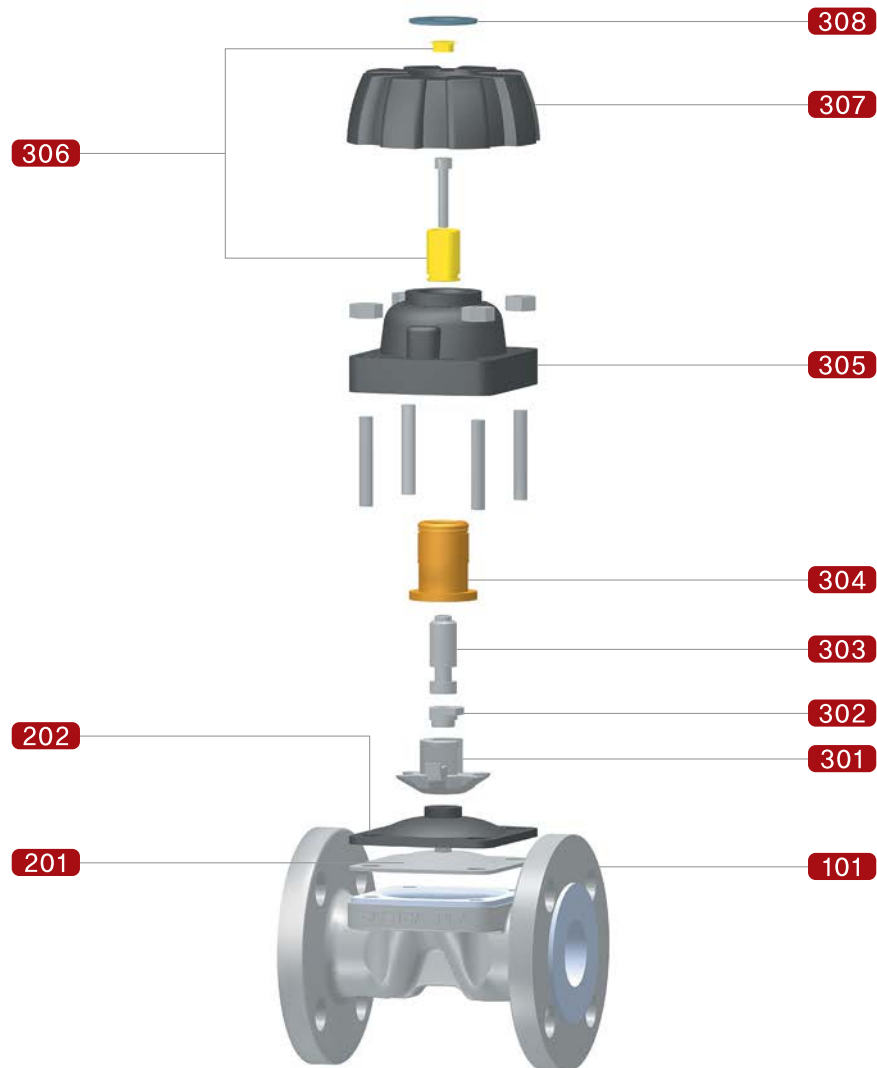


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	TENSILE ELONGATION PERCENTAGE	D638	%	300~350	200~400	250~300	300~400
	COMPRESSION STRENGTH	D695	MPa	15~20	10~15	14~19	40~50
	HARDNESS	D2240	-	60~64	54~58	55~65	75
	KINETIC FRICTION COEFFICIENT	0.69MPa, 3m/min		0.2	0.1	0.3	0.4
THERMAL	HIGHEST TEMPERATURE FOR CONTINUOUS USE	-	°C	260	260	200	150
	HEAT DISTORTION TEMPERATURE	D648	°C	47	55	50	74
	LINEAR EXPANSION COEFFICIENT	D696	10 ⁻⁶ (/°C)	12	10	9	6
ELECTRICAL	VOLUME RESISTIVITY	D257	Ω-cm	>10 ¹⁸	>10 ¹⁸	>10 ¹⁸	>10 ¹⁷
	BREAK DOWN VOLTAGE	D149	MV/m	20	19	22	16
	DIELECTRIC CONSTANT	D150	-	2.1	2.1	2.1	2.6
	DIELECTRIC LOSS TANGENT	D150	-	0.0003	0.0002	0.0005	0.005

PFA LINED DIAPHRAGM VALVE

EXPLODED VIEW AND MATERIALS | 밸브의 전개도 및 재질

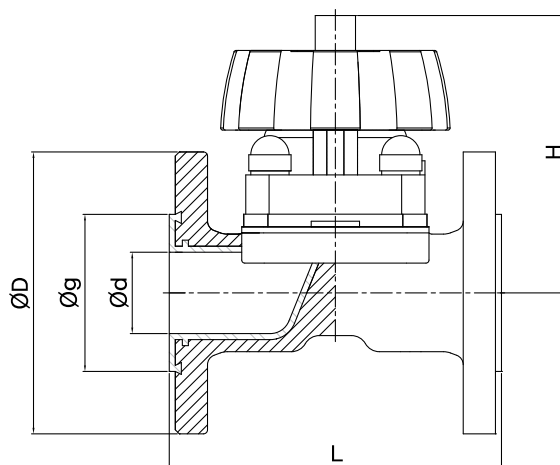


No.	DESIGNATION	STAINLESS STEEL	CARBON STEEL
101	BODY	SCS13A, A351 CF8, 1.4308/PFA LINED	SCPH2, A216 WCB, GS-C25N/PFA LINED
201	SEAT	PTFE	PTFE
202	RUBBER	EPDM	EPDM
301	COMPRESSOR	SUS304	SUS304
302	COUPLER	SUS304	SUS304
303	SPINDLE	SUS304	SUS304
304	BUSHING	COPPER	COPPER
305	BONNET	PPS	PPS
		SCS13A	SCS13A
306	INDIGATOR	PP	PP
307	HANDWHEEL	PPS	PPS
		SCS13A	SCS13A
308	COVER	PP	PP
W/O No.	BOLT / NUT / WASHER	SUS304	SUS304

* This table is standard for SKY PFA lined diaphragm valve, please contact us the other materials.

* SKY PFA lined diaphragm valve 표준사양이며, 그외 재질은 당사와 협의 바랍니다.

DIMENSIONS



DN SIZE			L(mm)		ØD(mm)			Ød(mm)	Øg(mm)			H(mm)	Weight (kg)
JIS10K	ANSI150lbs	DIN PN16	STANDARD	ISO	JIS10K	ANSI150lbs	DIN PN16		JIS10K	ANSI150lbs	DIN PN16		
15A	1/2"	DN15	123	150	95	89	95	20	48	49	48	154	2.5
20A	3/4"	DN20	123	150	100	98.5	105	20	54	49	54	154	2.5
25A	1"	DN25	132	160	125	108	115	25	64	57	64	170	3.6
40A	1 1/2"	DN40	165	200	140	127	150	39	79	75	79	208	6.2
50A	2"	DN50	197	230	155	152.5	165	48	95	95	95	232	8.2
65A	2 1/2"	DN65	222	290	175	178	185	63	110	110	110	258	19
80A	3"	DN80	260	310	185	191	200	76	125	127	125	258	21.5
100A	4"	DN100	313	350	210	229	220	96	145	162	145	274	32
125A	5"	DN125	364	—	250	254	250	96	181	181	181	274	36

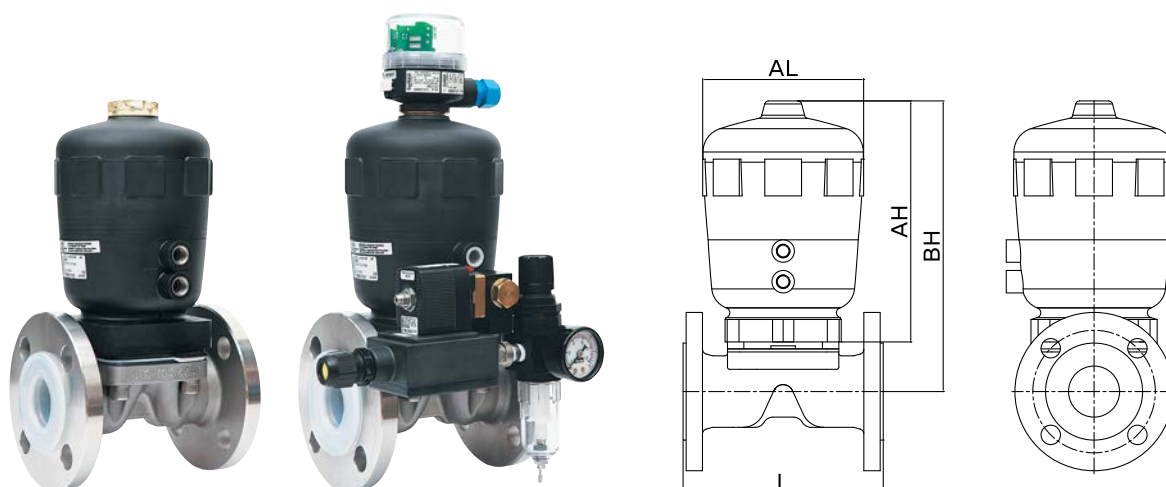
ORDERING INFORMATION

①		②		③		④	
Valve Type	Code	Connections	Code	Operating	Code	Material	Code
Ball Valve	B	JIS 10K	J	Manual	M	Stainless	S
Diaphragm Valve	D	ANSI 150lbs	A	Auto	A	Carbon Steel	C
Ball Check Valve	BC	DIN PN16	D				
Wafer Check Valve	WC	etc.	E				
Bottom Flush Valve	BTF						
⑤							
Surface Finish	Code						
Acid Cleaning	A						
Painting	P						
⑥							
DN Size(mm)							

Ordering Example	D	J	M	S	A	25
① Valve Type	D					
② Connections		J				
③ Operating			M			
④ Material				S		
⑤ Surface Finish					A	
⑥ DN Size						25

PFA LINED DIAPHRAGM VALVE

AUTOMATED DIAPHRAGM VALVE



DN SIZE			L(mm)		BH(mm)	AH(mm)	AL(mm)
JIS10K	ANSI150#	DIN PN16	STANDARD	ISO			
15A	1/2"	DN15	123	150	152	125	80
20A	3/4"	DN20	123	150	152	125	80
25A	1"	DN25	132	160	176	148	100
40A	1 1/2"	DN40	165	200	238	198	126
50A	2"	DN50	197	230	285	236	158
65A	2 1/2"	DN65	222	290	387	316	210
80A	3"	DN80	260	310	393	318	260
100A	4"	DN100	313	350	410	318	260
125A	5"	DN125	364	—	410	318	260

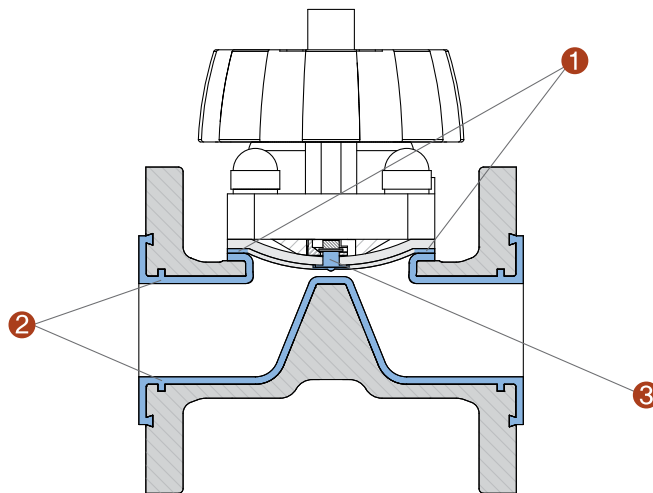
FLOW RATE FOR DIAPHRAGM VALVE

STROKE [%]	15A		20A		25A		40A		50A		65A		80A		100A/125A	
	Kv valve		Kv valve		Kv valve		Kv valve		Kv valve		Kv valve		Kv valve		Kv valve	
	[m³/h]	[%]	[m³/h]	[%]	[m³/h]	[%]	[m³/h]	[%]	[m³/h]	[%]	[m³/h]	[%]	[m³/h]	[%]	[m³/h]	[%]
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0.3	4	0.3	4	0.18	2	0.61	2	1.95	5	1.7	3	13	13	6	4
20	0.8	12	0.8	12	0.75	7	3.6	14	8.1	21	19	32	37	35	37	24
30	1.8	26	1.8	26	2.4	23	7.6	29	17.6	45	35	58	60	58	82	53
40	3.3	49	3.3	49	4.2	40	12.9	49	26.6	69	42	70	72	69	106	69
50	4.5	66	4.5	66	6	57	17.3	66	33.4	86	47	79	80	76	123	80
60	5.6	82	5.6	82	7.6	72	20.1	77	35.4	91	53	88	86	84	134	87
70	6.3	93	6.3	93	8.9	84	23.5	90	36.4	94	57	94	94	89	142	92
80	6.6	97	6.6	97	9.8	92	25.5	98	37.7	97	59	98	99	95	146	95
90	6.7	99	6.7	99	10.4	98	25.9	99	38.6	99	60	100	104	99	151	98
100	6.8	100	6.8	100	10.6	100	26.1	100	38.8	100	60	100	105	100	154	100

DIRECTION FOR THE USE OF VALVE | 제품선택 및 사용상 주의사항

- Please, contact us when the SKY valves are used out of condition that writing down this catalogue.
- PFA lined diaphragm valve is sorted strategic goods. If you want to sell or export this valve, please make a declaration at the government and write down the vendor.
- In case using operating condition, please don't use this valve.
 - ㉠ melting alkali liquid and metal, a high temperature fluorine
 - ㉡ a halogen like a high temperature and strong permeability liquid.
- SKY PFA diaphragm valve could be caused leaks and flow passing by induration of rubber when it is used conditions of high temperature and pressure.
- Valve's handwheel controls, excessive closing operation cause a damaged diaphragm's weir part.
- 본 Catalogue에 기재된 이외의 압력, 온도 및 특수한 유체조건등에서의 사용은 본사와 협의하여 제품을 선정하여 주시기 바랍니다.
- PFA lined diaphragm valve는 전략물자로 분류되어 있으며, 이로인하여 국내판매시에는 그 사용처와 목적을 기재하여 관리하여야 하며, 해외수출시에는 산업통상자원부 산하 전략물자관리원의 통제 및 신고허가를 득 하여야 합니다.
- PFA 수지는 거의 모든 화학약품에 우수한 내식성을 가지고 있지만 하기와 같은 유체에는 적용이 어려울 수 있습니다.
 - ㉠ 용융 알칼리 금속과 용액, 고온의 불소와 불소화합물
 - ㉡ 할로겐과 할로겐화합물 등과 같이 투과성이 강한 유체이면서 사용온도가 고온일 경우
- Valve의 사용압력, 온도, 유체가 사용기준내에 있더라도 장시간 고온, 고압하에서 사용할 경우, diaphragm rubber의 경화현상으로 인하여 유체의 passing 또는 leak가 발생할 수도 있습니다.
- Valve의 full close 상태로의 조작에 있어 무리한 힘을 가하여 조작할 경우, valve의 weir 부분의 손상으로 PFA liner의 crack을 유발할 수 있습니다.

MAINTENANCE | 긴급



Leak / Faulty (누수/고장)	Cause (원인)	Clearance (해결)
1 <ul style="list-style-type: none"> - Valve leaks (밸브 누수) - Diaphragm seat (다이하프램 시트 누수) 	<ul style="list-style-type: none"> - Body bolting faulty (몸체 볼팅 고장) - EPDM Rubber faulty (EPDM rubber 고장) 	<ul style="list-style-type: none"> - Tighten the body bolt (몸체 볼트 조임) - Tighten the EPDM Rubber (EPDM rubber 조임)
2 <ul style="list-style-type: none"> - Body vent hole (몸체 누수) 	<ul style="list-style-type: none"> - Body liner faulty (Body liner 고장) 	<ul style="list-style-type: none"> - Replace the valve (밸브 교체)
3 <ul style="list-style-type: none"> - Flow passing (유체) 	<ul style="list-style-type: none"> - Seat & compressor faulty (시트 결합부 고장) 	<ul style="list-style-type: none"> - Replace the seat (시트 교체)

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CHANGE AND IMPRESSION

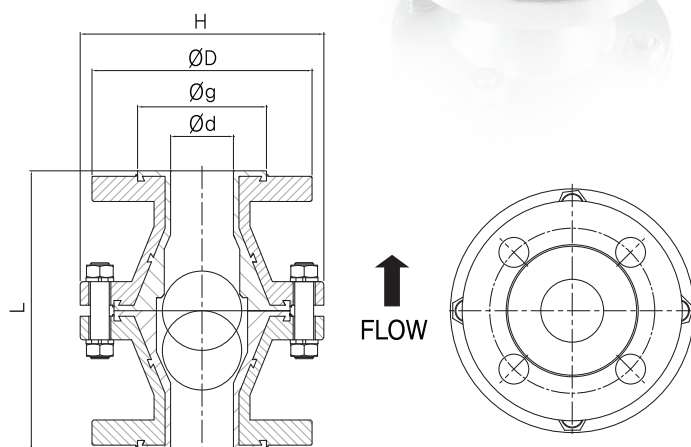
PFA Lined Ball Check Valve

Materials of construction

No.	Description	Materials	
		Stainless steel	Carbon steel
1	Body	SCS13A PFA Lined	A216 WCB PFA Lined
2	Ball	PTFE	
3	Bolt & Nut	SUS 304	

Technical Data

Size(mm) (inch)	20A, 25A, 40A, 50A, 65A, 80A, 100A, 150A 3/4, 1, 1 1/2, 2, 2 1/2, 3, 4, 6
Temperature	-30°C ~ 120°C
Flange	JIS10K / ANSI150lbs
Ball	solid PTFE



DIMENSION TABLE

DM SIZE		L(mm)	D(mm)		Ød(mm)	Øg(mm)		H(mm)	Cv
JIS10K	ANSI150#		JIS10K	ANSI150#		JIS10K	ANSI150#		
20A	3/4"	152	100	98.5	20	55	49	120	11
25A	1"	152	125	108	25	65	51	130	14
40A	1 1/2"	178	140	127	40	79	70	155	42
50A	2"	203	155	152.5	50	95	95	180	110
65A	2 1/2"	228	175	178	65	115	115	203	205
80A	3"	241	185	190.5	80	125	125	225	260
100A	4"	292	210	228	100	147	147	293	515
150A	6"	356	250	280	150	210	210	350	1050

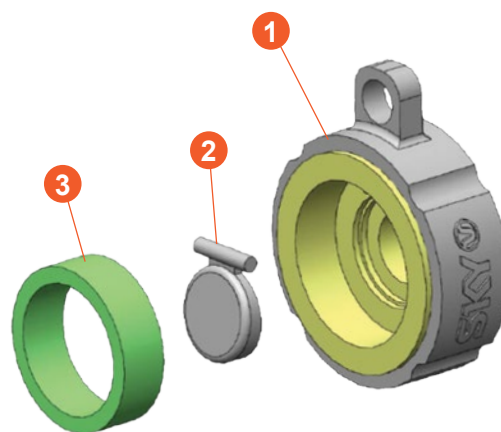
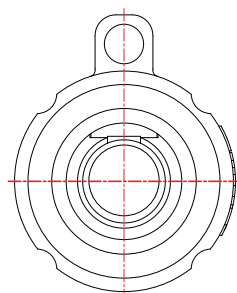
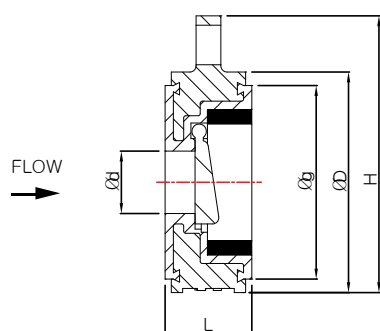
PFA LINED SWING CHECK VALVE

SIZE	Description	Material
①	BODY	SCS13A, CF8, SCPH2, WCB + PFA
②	DISC	PFA(SCS13A + PFA)
③	PTFE SEAL	PTFE



Testing / Marking

- Pressure – and tightness testing acc. to EN 12266–1, leakage rate A, resp. API 598.
- Marking of vales on body and name plate acc. to EN 19.
- Material – resp. test certificates acc. to EN 10204 – 3.1/2.2/2.1



SIZE		L	ØD	Øg	Ød	H
40A	1 1/2"	33	87	77	23	111
50A	2"	43	106	93	30	133
65A	2 1/2"	46	130	116	45	156
80A	3"	46	140	127	55	166
100A	4"	52	170	148	72	205
125A	5"	56	200	180	105	228
150A	6"	56	235	204	119	263
200A	8"	60	284	260	155	320
250A	10"	68	338	316	190	392
300A	12"	78	416	366	240	456

PFA Lined Bottom Ball Valve

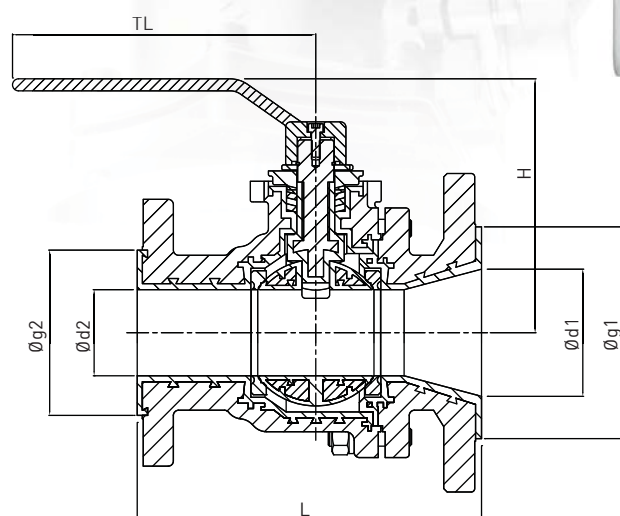


MATERIALS OF CONSTRUCTION

No.	Description	Materials	
		Stainless steel	Carbon steel
1	Body/Cap	SCS13A PFA Lined	A216 WCB PFA Lined
2	Ball	SCS13A PFA Lined	A216 WCB PFA Lined
3	Stem	SCS13A PFA Lined	A216 WCB PFA Lined

TECHNICAL DATA

Size(mm) (inch)	50AX25A, 50AX40A, 80AX50A, 100AX80A, 150AX100A 2"X1", 2"X1 1/2", 3"X2", 4"X3", 6"X4"
Temperature	-30°C ~ 150°C
Flange	JIS10K, ANSI150lbs, DIN PN16



DIMENSION TABLE

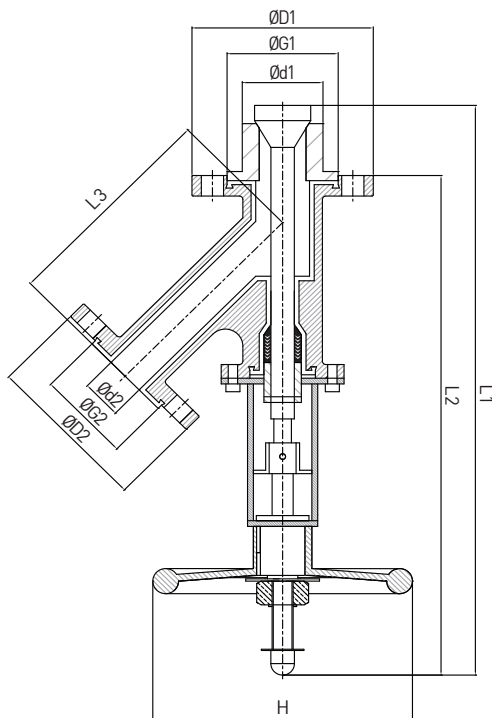
DN SIZE			L(mm)			H (mm)	TL (mm)	Ød(mm)		Øg(mm)		Weight (kg)
JIS10K	ANSI150#	DINPN16	JIS10K	ANSI150#	DINPN16			Ød1	Ød2	Øg1	Øg2	
50AX25A	2"X1"	DN50XDN25	150	125	150	110	170	50	25	95	60	5.5
50AX40A	2"X1 1/2"	DN50XDN40	168	157	168	124	200	50	36	95	73	8
80AX50A	3"X2"	DN80XDN50	203	178	203	142	250	75	50	123	95	13
100AX80A	4"X3"	DN100XDN80	225	203	225	170	280	100	75	147	123	21
150AX100A	6"X4"	DN150XDN100	245	220	245	200	280	141	94	210	147	34



PFA Lined Bottom Flush Valve

Materials of construction

No.	Description	Materials
1	Body	SCS13A PFA LINED
2	STEM & DISC (one piece)	SCS13A PFA LINED
3	FRAME	SUS304
4	BUSH	COOPER
5	GLAND	SUS304
6	V-Packing	PTFE
7	Hand wheel	Aluminum
8	Bolt & Nut	SUS304



Technical Data

Size(mm) (inch)	80AX65A, 80AX50A, 50AX40A, 50AX25A 3"X2 1/2", 3"X2", 2"X1 1/2", 2"X1"
Temperature	-30°C ~ 120°C
Flange	JIS10K / ANSI150lbs

DIMENSION TABLE

DN SIZE	L1(mm)	L2(mm)	L3(mm)	ØD1(mm)	ØD2(mm)	ØG1(mm)	ØG2(mm)	Ød1(mm)	Ød2(mm)	H(mm)
50A X 25A	500	438	190.5	155	125	95	65	69	34	222
50A X 40A	500	438	190.5	155	140	95	80	69	34	222
80A X 50A	600	528	269.5	185	155	120	95	90	48	247
80A X 65A	600	528	269.5	185	175	120	112	90	48	247