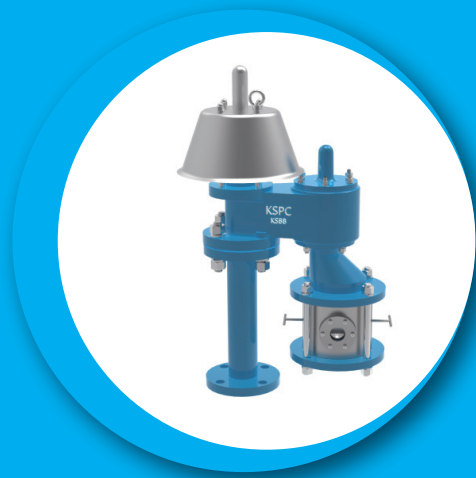




SECTION 1.1_KSBBFY/BSFY

PRESSURE VACUUM RELIEF VALVE VENT TO ATMOSPHERE

INTRODUCTION

 **The model KSBBFY and KSBSFY** pressure vacuum valves with a silica gel filter are an advanced design for vent to atmosphere applications.

Moisture in the air in the vapor space of tanks tends to spoil the qualities of tank contents. Hence, a silica gel filter option installed in the vents of tanks in retail outlets. Designed, manufactured and tested according to the API 2000 code, these valves utilize the latest technologies to provide protection against positive or vacuum over pressure and prevent air intake, evaporative losses of product and help to contain odorous and potentially explosive vapor.

Setting Pressure

KSBBFY Weight Loaded model	Min. +/- 20 mmW.C ~ Max. + 700/- 430 mmW.C
KSBSFY Spring Loaded model	Min. + 700/- 430 mmW.C ~ Max. +/- 9,000 mmW.C

 **Body Materials** Aluminium, Carbon Steel, SS304 and SS316 with various trims
(Different materials available on request)

 **sizes range** DN 50 ~ DN 350 with ASME 150Lb flanges
(Different connections available on request)

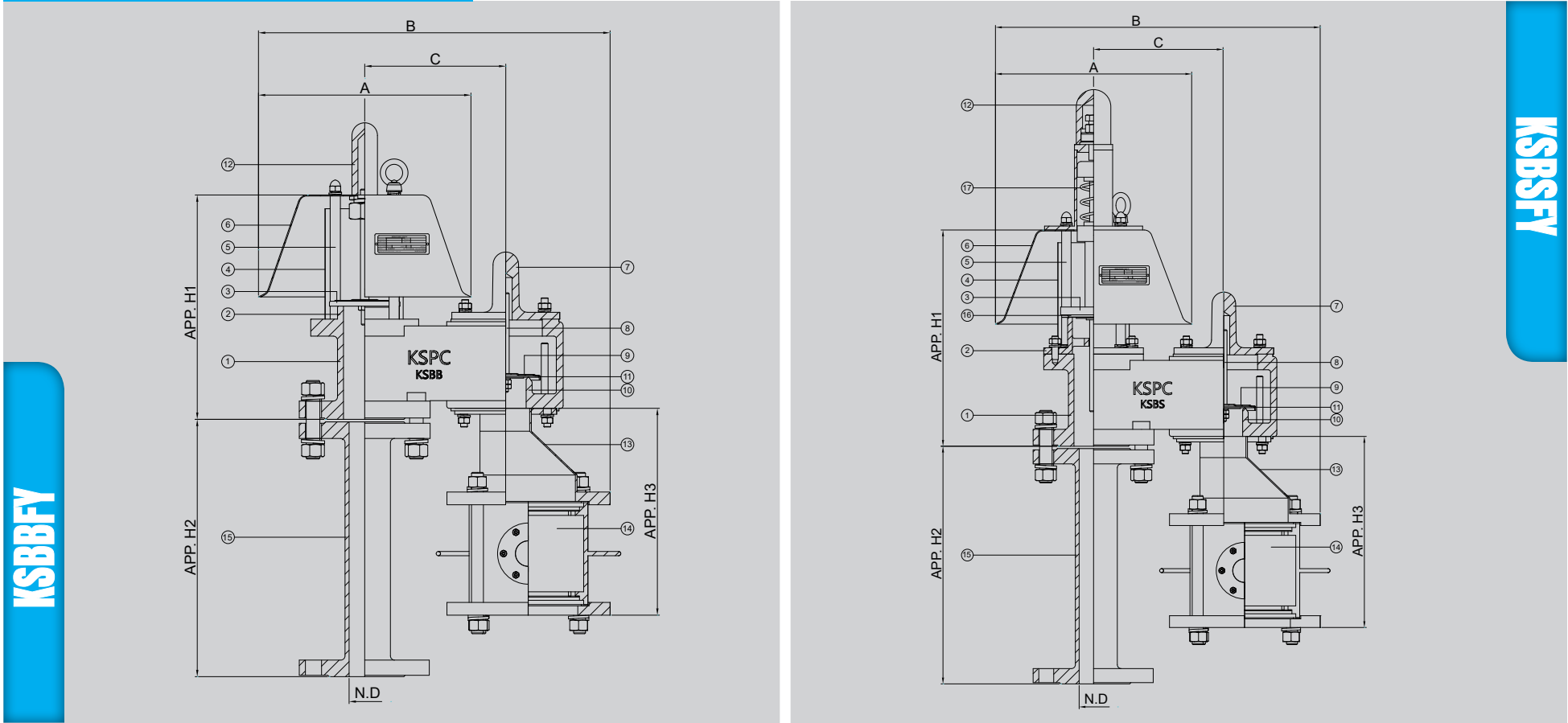
 **Rules & certifications** API 2000

 **Optimum / optional Design & Arrangements** Stem Jacket type, Steam Tracing type, Proximity type, Teflon Coating/Lining type

APPLICATION



 OUTLINE DRAWING



**Section 1.1**
KSBFBY/BSFY

 DIMENSION TABLE

SIZE	2"	3"	4"	6"	8"	10"	12"	14"
N.D	50	80	100	150	200	250	300	350
A	250	294	324	440	476	544	620	685
B	415	462	525	690	827	920	1069	1175
C	165	206	230	283	348	406	466	542
Approx. H1	361	378	422	484	545	604	653	662
Approx. H2	300	300	335	430	500	550	750	800
Approx. H3	245	245	312	355	390	415	572	597

NOTE Standard Connection(ASME 150Lb flange) and JIS or different types are available upon request.

 COMPONENT MATERIAL

ITEM NO	COMPONENT	BODY	ALUMINIUM	CARBON STEEL	SS304	SS316
		TRIM	SS304	SS304	SS304	SS316/316L
1	BODY		B26-319.F	A216-WCB	A351-CF8	A351-CF8M
2	PRESSURE SEAT		B26-319.F	A351-CF8	A351-CF8	A351-CF8M
3	PRESSURE DISC		SS304	SS304	SS304	SS316L
4	BIRD SCREEN		SS304	SS304	SS304	SS316
5	PRESS. GUIDE POST		SS304	SS304	SS304	SS316
6	WEATHER HOOD		SS304	SS304	SS304	SS316L
7	VACUUM COVER		B26-319.F	CARBON STEEL	SS304	SS316L
8	VACUUM STEM		SS304	SS304	SS304	SS316
9	VACUUM DISC		SS304	SS304	SS304	SS316L
10	VACUUM SEAT		B26-319.F	A351-CF8	A351-CF8	A351-CF8M
11	DIAPHRAGM		TEFLON			
12	STEM GUIDE		SS304	SS304	SS304	SS316
13	REDUCER		SS304	CARBON STEEL	SS304	SS316
14	SILICAGEL FILTER		SILICAGEL			
15	CONNECTOR		SS304	CARBON STEEL	SS304	SS316
16	ORING		VITON			
17	SPRING		SS304	SS304	SS304	SS316L



SECTION 3.1_KSFI

FLAME ARRESTER DEFLAGRATION PROOF IN-LINE

INTRODUCTION

 **The model KSFI** inline flame arrester is designed, manufactured, tested according to API 2000, British Standard Specification Code BS7244 and ISO 16852. The units are passive devices with no moving parts. They prevent the propagation of flame from the exposed side of the unit to the protected side by the use of a 316L stainless steel crimped metal ribbon type flame cell element. This construction produces a matrix of uniform opening that are carefully constructed to quench the flame by absorbing the heat.

Operating Temperature @ Pressure

KSFI / DN 15 ~ DN 600

+ 60 °C (=140°F) @ 0.11 Mpa

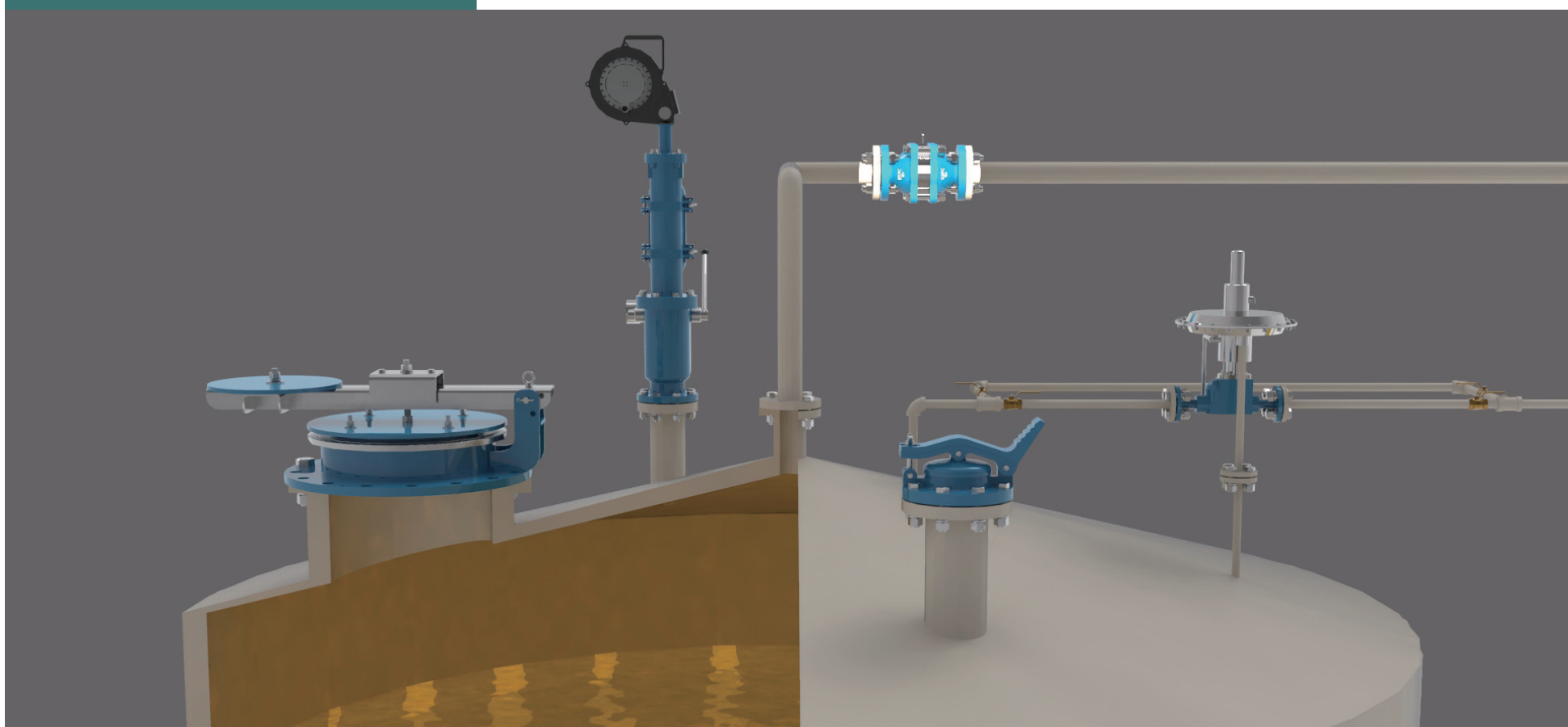
 **Body Materials** Aluminium, Nodular Iron, Cast Steel, SS304, SS316, SS316L with various trims
(Different materials available on request)

 **Sizes range** DN 15 ~ DN 600 with ASME 150Lb flanges
(Different connections available on request)

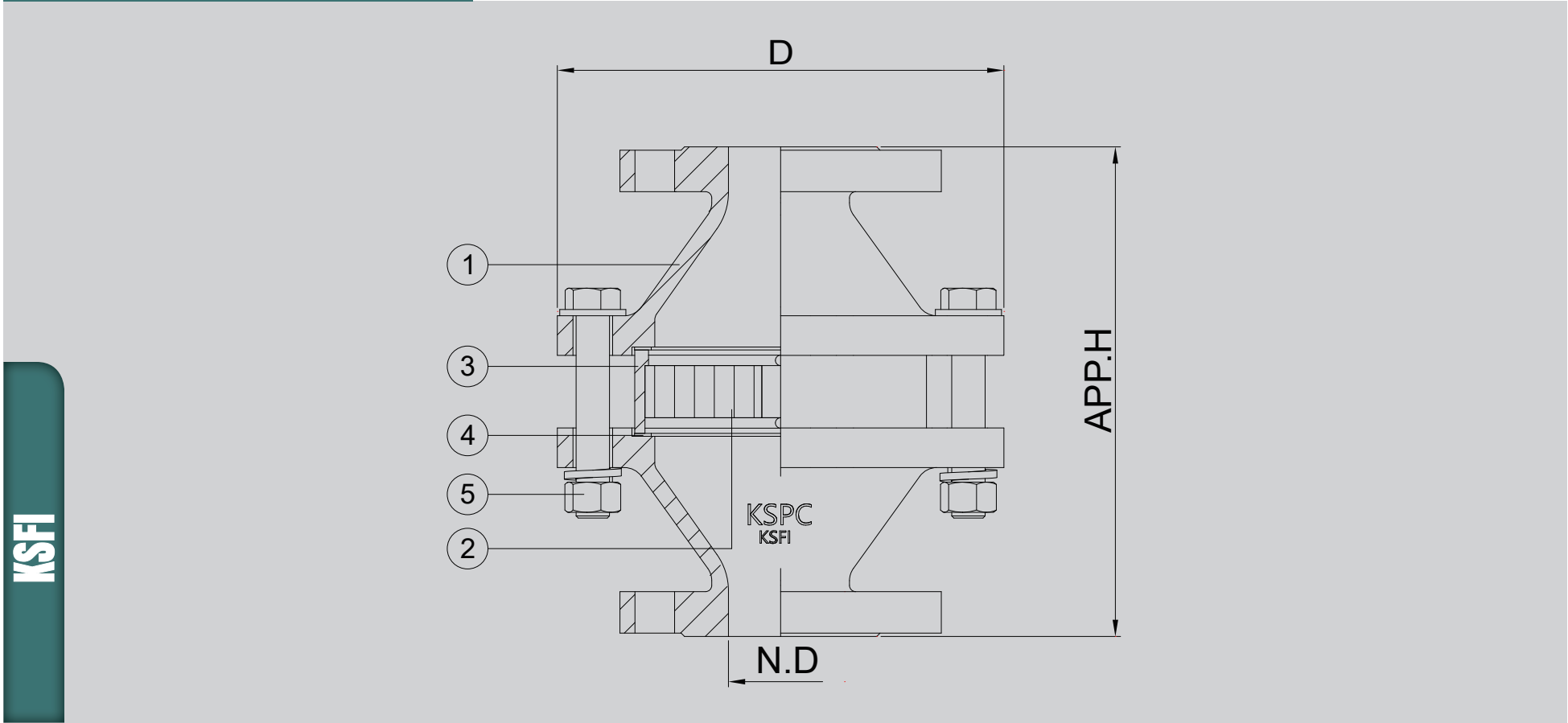
 **Rules & Certifications** API 2000, BS7244 / ISO 16852 & KFI
Flame cell : NEC group D (=IIA), group C(=IIB3) and group B(=IIC), ETC.

 **Optimum / optional Design & Arrangements** Steam Jacket type, Steam Tracing type

APPLICATION



OUTLINE DRAWING



DIMENSION TABLE

SIZE	½"	¾"	1"	1 ½"	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
N.D	15	20	25	40	50	80	100	150	200	250	300	350	400	450	500	600
D	155	155	155	214	225	251	300	389	450	600	680	745	850	930	1000	1240
H	221	226	229	231	234	253	262	326	342	364	454	486	511	529	541	760

NOTE Standard Connection(ASME 150Lb flange) and JIS or different types are available upon request.

COMPONENT MATERIAL

ITEM NO	COMPONENT	ALUMINIUM	CARBON STEEL	STAINLESS STEEL
1	BODY	CAST ALUMINIUM	CAST or WELDED C.S	CAST or WELDED S.S
2	ELEMENT	SS316L		
3	ELEMENT HOUSING	SS304	SS304	SS304/SS316
4	GASKET	PTFE		
5	STUD BOLT/NUT	A193-B7 / A194-2H or STAINLESS STEEL		
STANDARD PAINTING		IN-OUT SIDE EPOXY 150 MICRON WITHOUT STAINLESS STEEL & ALUMINIUM PART		

MAINTENANCE

- 
Periodic inspection and maintenance is required. The cell assembly can be removed for cleaning purposes.
- 
Cleaning can be accomplished by dipping the entire cell assembly into an appropriate solvent.
- 
Care should be taken not to damage the cell openings as such deformations hamper the flow through the cell.
- 
The gaskets should be inspected and replaced if necessary.