




SECTION 3.9_KSFD


FLAME ARRESTER DETONATION PROOF IN-LINE

INTRODUCTION


 **The model KSFD** inline detonation flame arrester is designed, manufactured and tested according to API 2000, British Standard Specification Code BS7244 and ISO 16852. **KSFD** detonation flame arresters provide protection against flame propagation in piping systems that are manifolded or have long runs. The arresters are designed to stop an ignited flammable vapor mixture traveling at subsonic or supersonic vapor velocities. They are also designed to protect against continuous burning against the SS316L flame cell for a specific period.

Operating Temperature @ Pressure

KSFD / DN 25 ~ DN 150	+ 60°C (=140°F) @ 0.11 Mpa
KSFD / DN 200 ~ DN 400	+ 60°C (=140°F) @ 0.11 Mpa

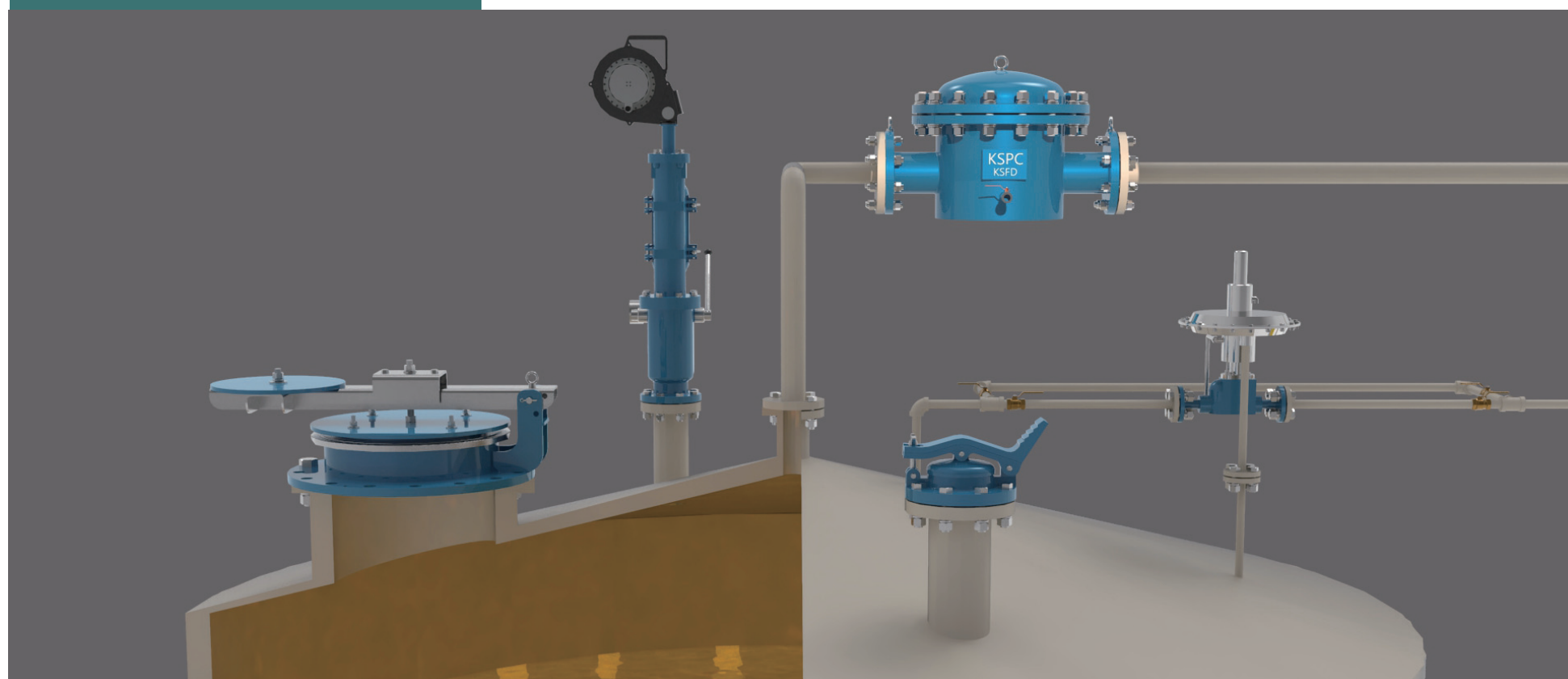
 **Body Materials** Cast Steel, SS304, SS316, SS316L with various trims
(Different materials available on request)

 **Sizes range** DN 25 ~ DN 400 with ASME 150Lb flanges
(Different connections available on request)

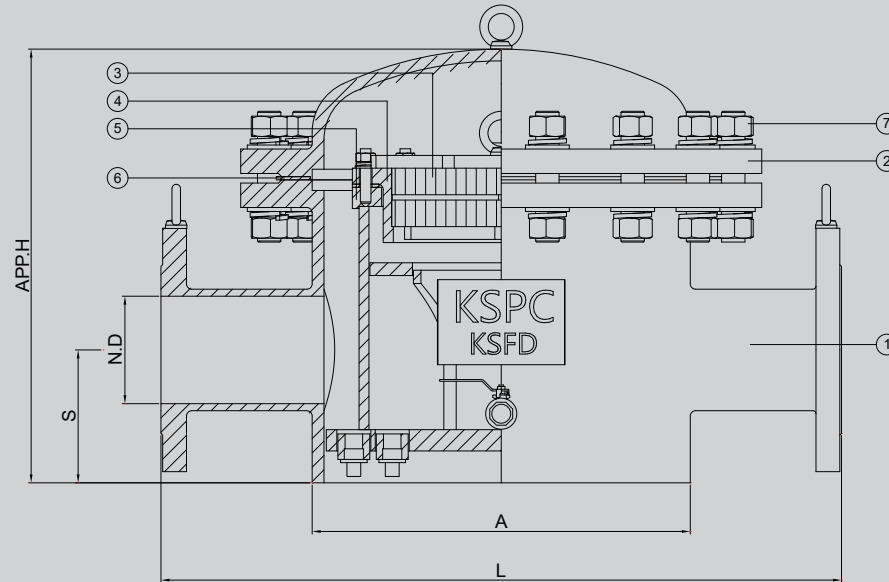
 **Rules & Certifications** API 2000, BS7244 / ISO 16852
Flame cell : NEC group D (=IIA), group C(=IIB3) and group B(=IIC), ETC.

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

APPLICATION



OUTLINE DRAWING



KSFD

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DIMENSION TABLE

SIZE	1"	1 1/2"	2"	3"	4"	6"	8"	10"	12"	14"	16"
N.D	25	40	50	80	100	150	200	250	300	350	400
A	216	216	216	267	356	406	508	610	711	812	914
L	450	450	450	530	640	720	830	960	1080	1200	1320
S	95	95	95	110	125	170	190	220	260	275	305
Approx.H	325	325	325	340	405	495	560	663	760	845	970

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

COMPONENT MATERIAL

ITEM NO	COMPONENT	CARBON STEEL	SS304	SS316
1	BODY	WELDED CARBON STEEL	WELDED SS304	WELDED SS316
2	COVER	CARBON STEEL	SS304	SS316
3	ELEMENT	SS316L		
4	ELEMENT HOUSING	A351-CF8/SS304	A351-CF8/SS304	A351-CF8M/SS316
5	MOUNTING FLANGE	A105	A182-F304	A182-F316
6	GASKET	NON ASBESTOS or SPIRAL WOUND		
7	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.