SECTION 3.7_KFD

FLAME ARRESTER
DETONATION PROOF IN-LINE

INTRODUCTION

The model KFD inline detonation flame arrester is designed, manufactured and tested according to API 2000, British Standard Specification Code BS7244, ISO 16852 & USCG, IMO MSC/Circ.677. **KFD** 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

KFD / DN 15 ~ DN 300	+ 60℃ (=140°F) @ 0.11 Mpa

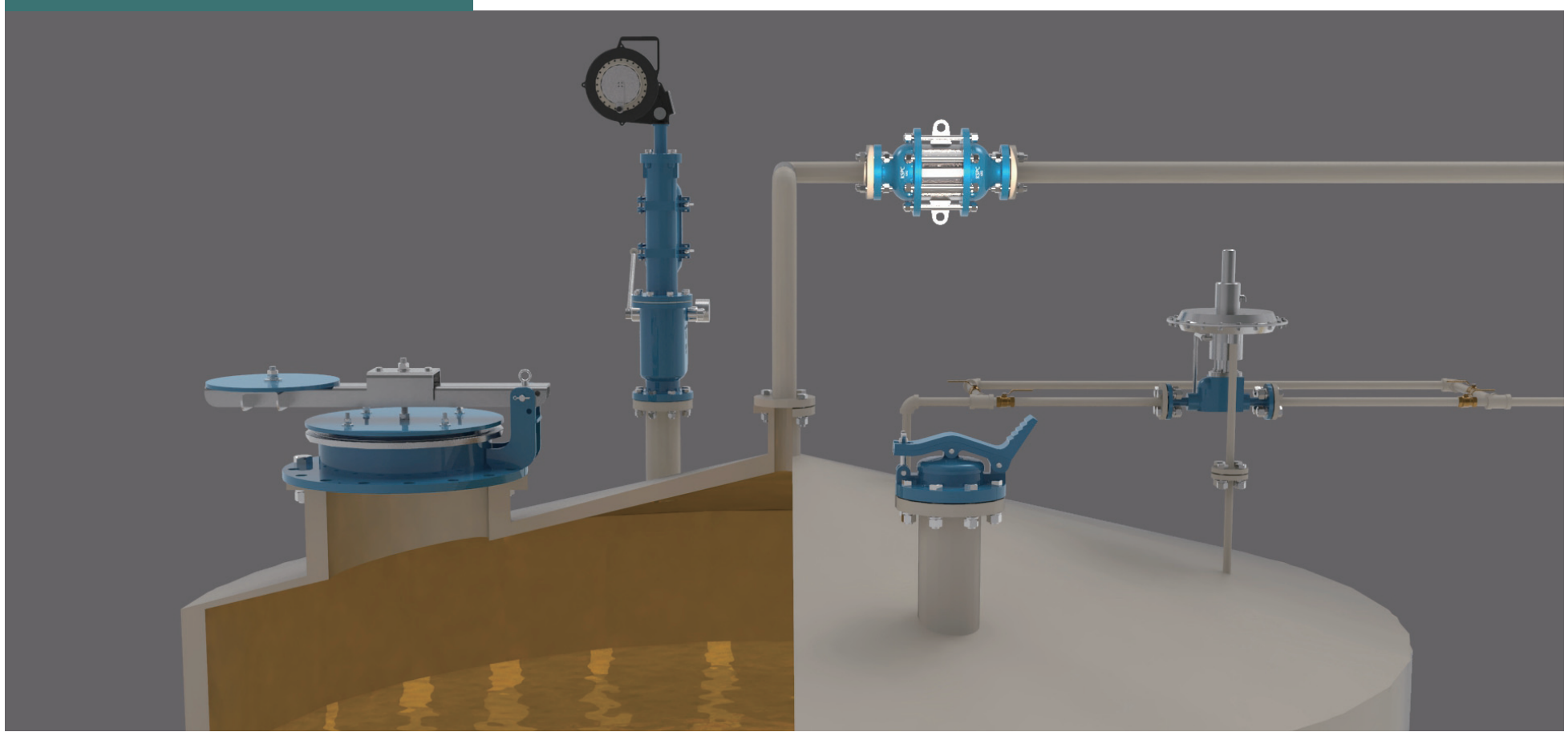
Body Materials
Nodular Iron, Cast Steel, SS304, SS316, SS316L with various trims
(Different materials available on request)

Sizes range
DN 15 ~ DN 300 with ASME 150Lb flanges
(Different connections available on request)

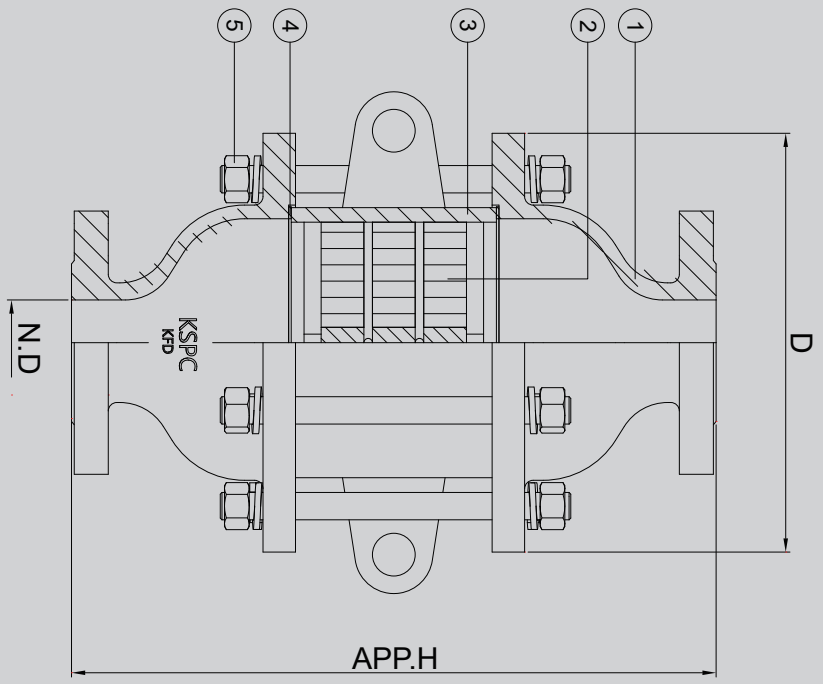
Rules & Certifications
API 2000, BS7244, ISO 16852 / USCG, IMO MSC/Circ.677
Flame cell : NEC group D (=IIA), group C(=IIB3) and group B(=IIC), ETC.

Optimum / Optional Design & Arrangments
Stem Jacket type, Steam Tracing type

APPLICATION



OUTLINE DRAWING



DIMENSION TABLE

SIZE	½"	1"	1 ½"	2"	3"	4"	6"	8"	10"	12"
N.D	15	25	40	50	80	100	150	200	250	300
D	180	200	250	250	280	330	440	570	670	790
Approx. H	360	364	373	373	445	502	577	657	786	840

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

COMPONENT MATERIAL

ITEM NO	COMPONENT	CARBON STEEL	STAINLESS STEEL
1	BODY	CAST or WELDED CARBON STEEL	STAINLESS STEEL
2	ELEMENT	SS316L	
3	ELEMENT HOUSING	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 ban 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.