SECTION 3.5_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, EN 12874 / 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) @ 1.1 bar abs

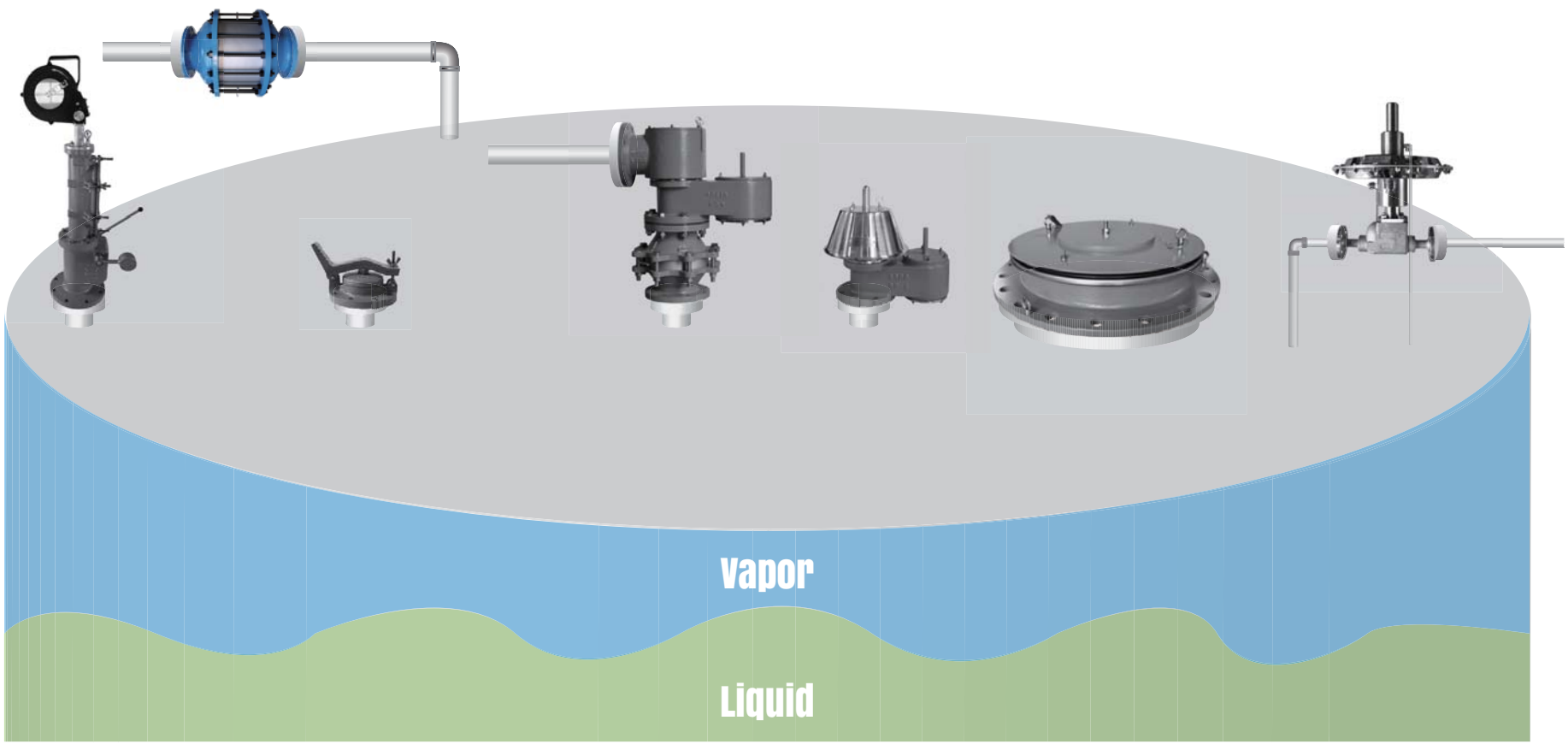
Body Materials Nodular Iron, Cast Steel, SS304, SS316, SS316L with various trims
(Different materials available on request)

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

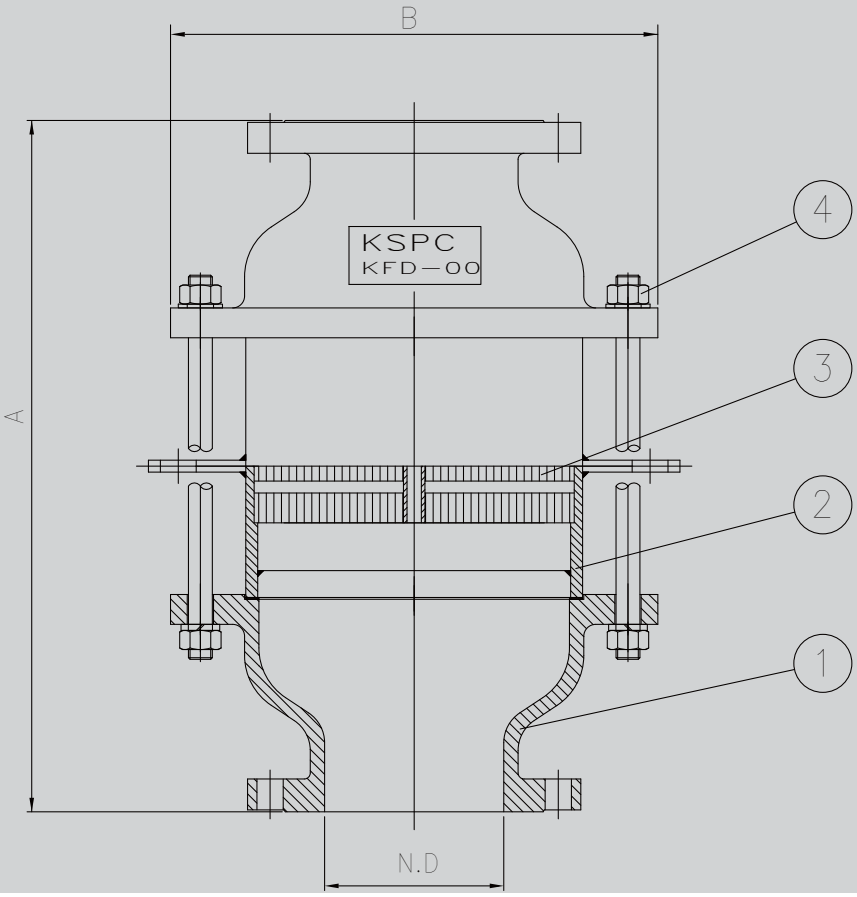
Rules & Certifications API 2000, BS7244, EN 12874/ISO 16852, and USCG, IMO MSC/Circ.677
Flame cell : NEC group D or IEC IIA Gases(Other gas groups all available as extras)

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

APPLICATION



OUTLINE DRAWING



KFD

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
A	360	364	373	375	435	502	577	657	765	818
B	180	200	245	245	270	324	408	570	670	740

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

COMPONENT MATERIAL

ITEM NO	COMPONENT	C.S	S.S
1	BODY	CAST or WELDED C.S	S.S
2	ELEMENT RING	SS304	SS304 OR SS316L
3	ELEMENT	SS316L	
4	STUD BOLT/NUT	A193-B7 / A194-2H OR S.S	
STANDARD PAINTING		IN-OUT SIDE EPOXY 150 MICRON WITHOUT S.S & AL PART.	

NOTE C.S – Carbon Steel, S.S – Stainless Steel

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.