

SECTION 3.9 KFD

FLAME ARRESTER DETONATION PROOF IN-LINE

(1) INTRODUCTION

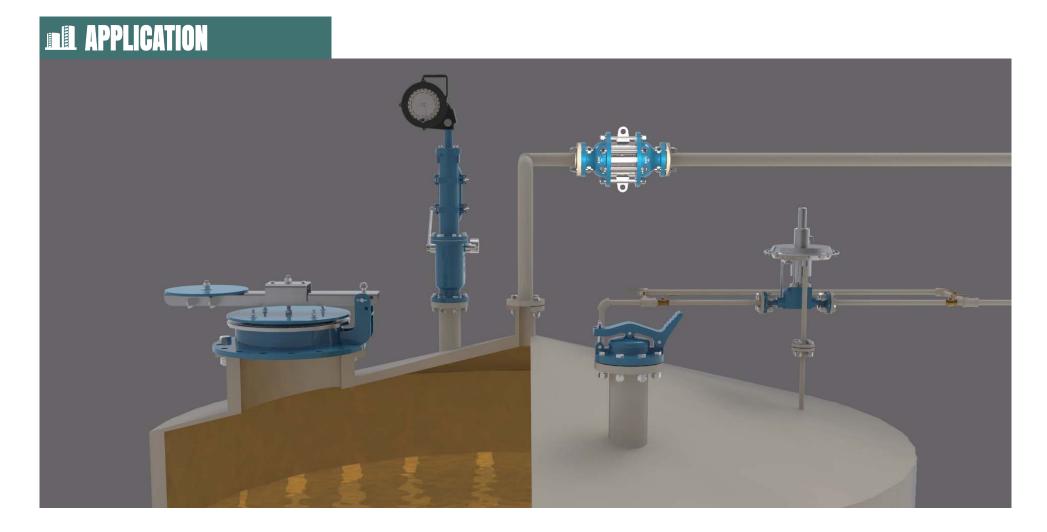
The model KFD inline detonation flame arrester is designed, manufactured and tested according to API 2000, ISO 16852, USCG and IMO MSC/Circ.677. KFD detonation flame arresters provide protection against flame propagation in piping systems that are manifolded or have long runs. The arresters are designed 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 25 ~ DN 300

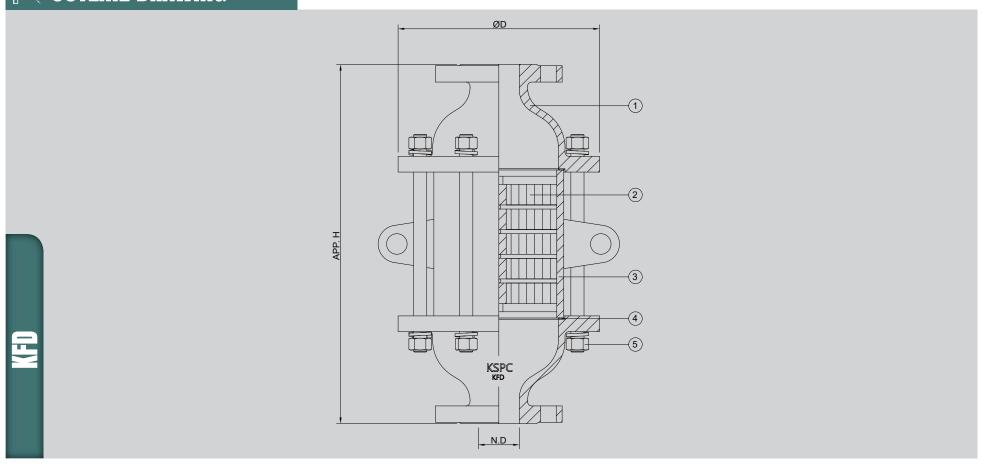
 $+60^{\circ}\text{C} (=140^{\circ}\text{F}) @ 0.11 \text{ Mpa}$

- Body Materials Nodular Iron, Cast Steel, SS304, SS316, SS316L with various trims (Different materials available on request)
- **Sizes range** DN 25 ~ DN 300 with ASME 150Lb flanges (Different connections available on request)
- Flame cell: NEC group D (=IIA), group C(=IIB3) and group B(=IIC), ETC.
- i Optimum / Optional Design & Arrangments Steam jacket type





COUTLINE DRAWING





III DIMENSION TABLE

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

SIZE	ן"	1½"	2"	3"	4"	6"	8"	10"	12"
N.D	25	40	50	80	100	150	200	250	300
ØD	200	250	250	280	330	440	570	670	790
*App. H	420	429	432	470	492	554	608	692	710

^{*}App. H is application of **KFD ELEMENT 5-STAGE 25MM.**

NOTE Other materials are available upon request.

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ITEM NO	COMPONENT	CARBON STEEL	STAINLESS STEEL			
1	BODY	CAST or WELDED CARBON STEEL	STAINLESS STEEL			
2	ELEMENT	SS316L				
3	ELEMENT HOUSING	SS304L	SS304L/SS316L			
4	GASKET	PT	PTFE			
5	STUD BOLT/NUT	A193-B7 / A194-2H or STAINLESS STEEL				
STAN	IDARD PAINTING	IN-OUT SIDE URETHANE 150 MICRON WITHOUT S.S & AL PART				

- 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.