#### **TECHNICAL BULLETIN**









# Model 6E00

**End-of-Line Deflagration Flame Arrestor** 

## **OBJECTIVE**

The Model 6E00 end-of-line deflagration flame arrestor is a device that can be fitted directly on a vessel, tank vent nozzle, or on the end of a vent line. Its primary function is to allow the flow of gases or vapor of flammable liquids through the enclosure, but prevent the transmission of a flame from the outside. The element inside the housing provides an extinguishing barrier to the ignited vapor mixture by absorbing heat from the flame. The Model 6E00 is used as an independent safety system to ensure explosion protection.

#### **TECHNIQUE**

6E00 flame arrestors are designed on the principle of "quenching gap". The crimped SST metal element allows vapor to pass through in order to allow a vessel to breath, yet prevents the propagation of a flame from the exposed side to the protected side.

# **CONSTRUCTION**

Housing Material: Carbon Steel, Stainless Steel.

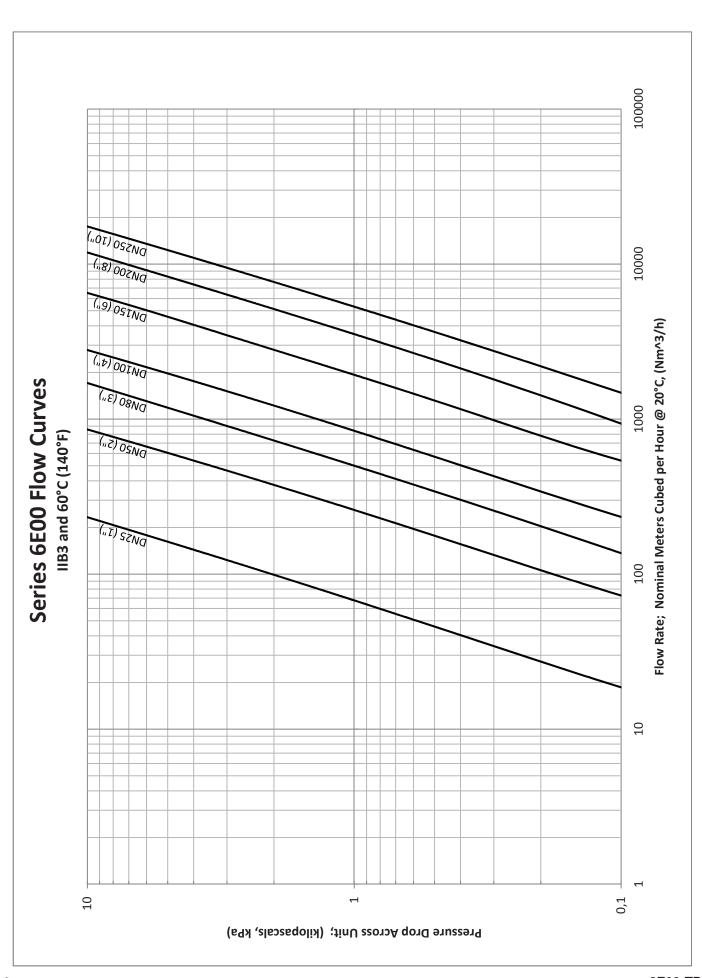
**Trim Material:** Stainless Steel (1.4571) element.

### **SPECIAL FEATURES**

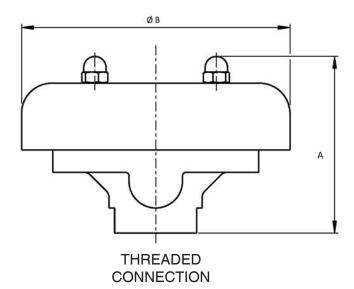
The Model 6E00 is designed, manufactured, and tested according to Directive 2014/34/EU (ATEX95) and ISO 16852.

**Easy Maintenance:** The Model 6E00 deflagration flame arrestor is a passive device with no moving parts. The flame cell element can be easily removed for inspection and cleaning in appropriate solvent solution.

**Sizes:** Units are available in DN20, 25, 32, 40, 50, 80, 100, 150, 200, 250, 300 (3/4", 1", 1-1/4", 1-1/2", 2", 3", 4", 6", 8", 10", 12") line sizes; thread connections according to ISO7/1, BS21 or ASME B1.20.1. Standard for flange connections to EN1092-1 PN10, ASME B16.5 150#RF or JIS B 2220 10K.

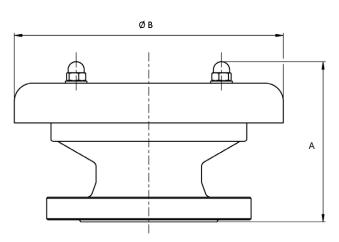


# **DIMENSIONS & WEIGHTS**



Metric Units			
SIZE	Δ	ØВ	Weight
Rp, BSP, NPTF	(mm)	(mm)	(kg)
3/4"	99	150	2.3
1"	99	150	2.3
1-1/4"	99	200	3.0
1-1/2"	102	250	4.8
2"	102	250	4.6

English Units			
SIZE	Α	ØВ	Weight
Rp, BSP, NPTF	(in)	(in)	(lbs)
3/4"	3.9	5.9	5.1
1"	3.9	5.9	5.1
1-1/4"	3.9	7.8	6.6
1-1/2"	4.0	9.8	10.6
2"	4.0	9.8	10.1
,			



**FLANGED** CONNECTION

Metric Units			
DIN, ASME (*)	A (mm) DIN/ASME	Ø B (mm)	Weight (kg) DIN/ASME
DN25	121	150	3.1
DN50	135	250	7.2
DN80	150	250	8.7
DN100	170	350	12.1/13.8
DN150	230	500	33.3/34.4
DN200	240	600	46.3/49.0
DN250	312/346	700	62.0/71.0
DN300	305/350	700	63.0/83.0
(*) DIN (PN10) Flange, ASME 150RF Flange			

English Units			
DIN, ASME (*)	A (in) DIN/ASME	Ø B (in)	Weight (lbs) DIN/ASME
1"	4.7	5.9	6.8
2"	5.3	9.8	15.9
3"	5.9	9.8	19.18
4"	6.7	13.8	26.7/30.4
6"	9.0	19.7	73.4/75.8
8"	9.4	23.6	102.1/108.0
10"	12.3/13.6	27.5	136.7/156.5
12"	12.0/13.8	27.5	138.9/183.0
(*) DIN (PN10) Flange, ASME 150RF Flange			

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# **6E00 Series PRODUCT CODER**

04/18/16



POS 3 & 4





**12** 

POS 9 POS POS 12

3

0

0

POS 16 0



POSITION 3 & 4 - SIZE/ EXPLOSION GROUP		
Size	IIB3 (C)	
metric (in)	CODE	
DN20 (3/4")	ES	
DN25 (1")	ET	
DN32	F0	
(1-1/4")		
DN40	F8	
(1-1/2")	. •	
DN50 (2")	F9	
DN80 (3")	FS	
DN100 (4")	G0	
DN150 (6")	G8	
DN200 (8")	GG	
DN250 (10")	GR	
DN300 (12")	GS	

POSITION 5 - OPERATING CONDITION Pmax Tmax.		
P-max. (abs.)	T-max. °C (°F)	CODE
110kPa (16 psi)	≤ 60 (140)	1

POSITION 7 & 8 - CASING / ELEMENT / RIM MATERIALS	
Material	CODE
Stainless Steel (1.4571)	02

POSITION 9 - HOOD MATERIALS		
Material	CODE	
Carbon Steel	1	
Stainless Steel	2	

POSITION 10 & 11 - HOUSING MATERIALS - CONNECTION			
(Threaded) Sizes	Rp	BSPP	NPT
DN20, 25, 32, 40, 50 (3/4", 1", 1-1/4", 1-1/2", 2")		CODE	
CS (zinc plated)			23
CS (1.0619 zinc plated)	41	42	
Stainless Steel (1.4571) Bar	81	82	83
Stainless Steel (1.4581) Cast	91	92	
(Flanged) Sizes	DIN (PN10)	ASME(150#RF)	JIS (10K)
DN25 - 300 (1" - 12")	CODE		
CS - Sizes DN250 & 300 (10" & 12")	17	19	1C
CS (zinc plated) Sizes DN25 - 40 (1" - 1-1/2")	27	29	2C
CS (1.0619) Sizes DN50 - 200 (2" - 8")	37	39	3C
Stainless Steel (1.4571) Sizes DN25 - 40 & DN250 & 300 (1" - 1-1/2" & 10" & 12")	87	89	8C
Stainless Steel (1.4581) Sizes DN50 - 200 (2" - 8" sizes)	97	99	9C

POSITION 12 - PORTS	
Number / Location	CODE
Without ports	1

POSITION 13 - BOLTING MATERIAL		
Material	CODE	
A4 Stainless Steel	3	
A4 Stairliess Steel	<u> </u>	

POSITION 16 - NAME PLATE	
Material / Language	CODE
Alum / German	7
Alum / English	8

POSITION 18 - PAINT	
Color	CODE
No Paint (CS-Zinc or SST)	0
Blue Epoxy	1