



ISO Registered Company



## Model 6B00

### Inline Deflagration Flame Arrestor

#### **OBJECTIVE**

The Model 6B00 inline deflagration flame arrestor is a device that can be fitted to the opening of an enclosure or to the connecting pipe work of a system of enclosures. 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. The element inside the housing provides an extinguishing barrier to the ignited vapor mixture by absorbing heat from the flame. The Model 6B00 is used as an independent safety system to ensure explosion protection.

#### **TECHNIQUE**

6B00 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 breathe, 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. Standard element is suitable for explosion group IIA1 and IIA flammable gases and vapors. Elements for other gas groups are available upon request.

#### **SPECIAL FEATURES**

The Model 6B00 is designed, manufactured, and tested according to Directive 2014/34/EU (ATEX114) and ISO 16852.

The single element design is bidirectional and available for horizontal or vertical installations.

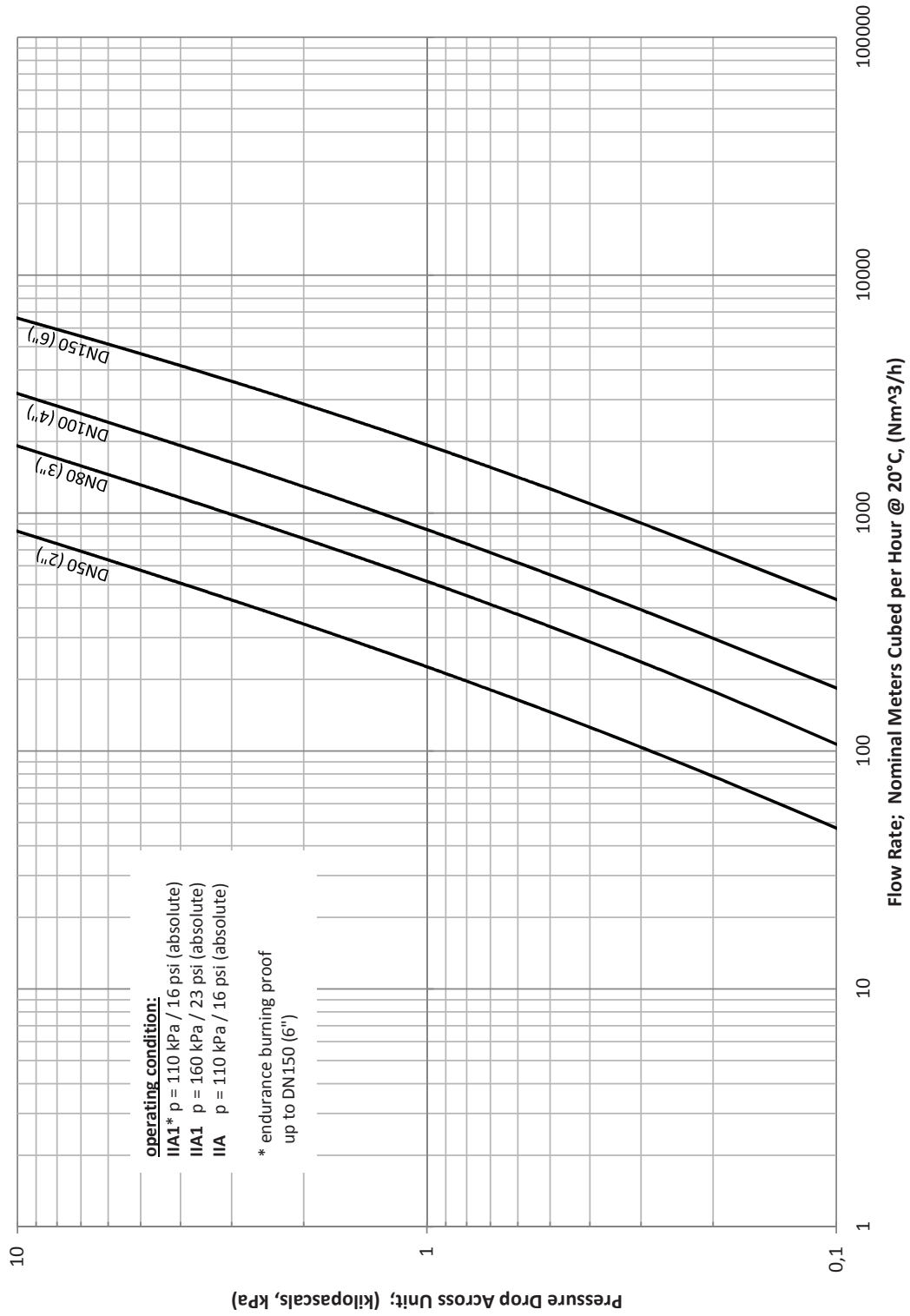
The maximum distance between flame arrestor and ignition source should not be more than 50 x the diameter of the connection size for most hydrocarbon gases.

**Easy Maintenance:** The Model 6B00 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.

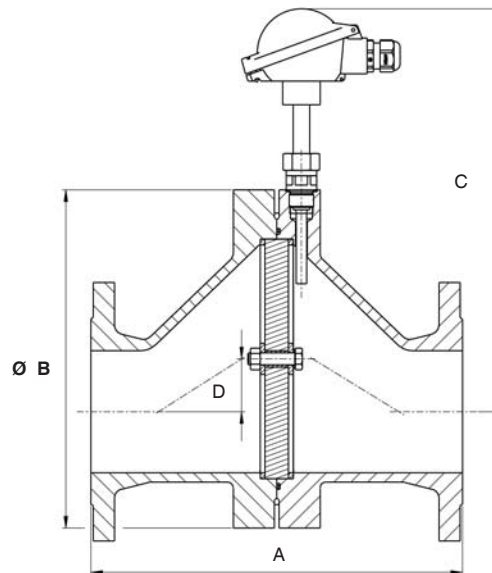
**Sizes:** Units are available in DN50, 65, 80, 100, 150, 200, 250, 300 (2", 2-1/2", 3", 4", 6", 8", 10", 12") line sizes. Standard for flange connections to EN1092-1 PN10 or ASME B16.5 150#RF.

# Series 6B00 Flow Curves

IIA1/IIA and 60°C (140°F)



## DIMENSIONS



Metric Units - mm					
SIZE	A		Ø B	C	D
	IIA1	IIA			
DN50	287		180	242	25.5
DN65 (**)	314		215	262	35
DN80	319		240	275	36.5
DN100	317		290	300	45
DN150	374		445	380	80
DN200	374		545	430	90
DN250	-		-	-	-
DN300	-		-	-	-

(\*) DIN (PN10) Flange, JIS 10K Flange, ASME 150RF Flange  
 (\*\*) NOT available with ASME 150RF Flange

English Units - in					
SIZE	A		Ø B	C	D
	IIA1	IIA			
2"	11.3		7.1	9.5	1
2-1/2"(**)	12.4		8.5	10.3	1.4
3"	12.6		9.4	10.8	1.4
4"	12.5		11.4	11.8	1.8
6"	14.7		17.5	15	3.1
8"	14.7		21.4	16.9	3.5
10"	-		-	-	-
12"	-		-	-	-

(\*) DIN (PN10) Flange, JIS 10K Flange, ASME 150RF Flange  
 (\*\*) NOT available with ASME 150RF Flange

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# 6B00 Series PRODUCT CODER

04/12/17

<b>6</b>	<b>B</b>	POS 3 & 4	POS 5	<b>B</b>	POS 7 & 8	POS 9	POS 10 & 11	POS 12	POS 13	POS 14 & 15	POS 16	<b>0</b>	POS 18
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POSITION 3 & 4 SIZE / EXPLOSION GROUP		
Size metric (in)	IIA1	IIA
CODE		
DN50 (2")	0V	4F
DN65 (2-1/2")	13	4P
DN80 (3")	1B	4Y
DN100 (4")	1K	56
DN150 (6")	1U	5E
DN200 (8")	22	5N
DN250 (10")	-	-
DN300 (12")	-	-

POSITION 5 OPERATING CONDITION				
Explosion Group	Size	P <sub>max</sub> absolute in kPa (psi)	T <sub>max</sub> in °C (°F)	CODE
IIA1 *	All Sizes	110 (16)	≤ 60 (140)	1
	All Sizes	160 (23)	≤ 60 (140)	6
IIA	All Sizes	110 (16)	≤ 60 (140)	1

\* Endurance burning proof available up to DN150 (6") size.  
Consult factory for additional operating conditions.

POSITION 7 & 8 CASING / ELEMENT / RIM MATERIALS	
Material	CODE
Stainless Steel (1.4571) Sizes up to DN200 (8")	02

POSITION 9 GASKET MATERIALS	
Material	CODE
NBR	1
FKM	2
EPDM	3
FKM/FEP seamless covered	4

POSITION 10 & 11 HOUSING MATERIALS / CONNECTION			
Sizes	DIN (PN10)	ASME(150#RF) *	JIS (10K)
DN25 - 300 (1" - 12")	CODE		
CS (1.0619) Sizes DN250 & 300 (10" & 12")*	17	19	1C
CS Sizes DN50 - 200 (2" - 8")	37	39	3C
Stainless Steel (1.4571) Sizes DN250 & 300 (10" & 12")	87	89	8C
Stainless Steel (1.4581) Sizes DN50 - 200 (2" - 8")	97	99	9C

POSITION 12 PORTS	
Number / Location	CODE
One port G1/2" on each side	2
One port G1/2" on one side Std for explosion groups IIA1 / IIA sizes DN50 - 200 (2" - 8")	3
Two ports G1/2" on each side	4

POSITION 13 MOUNTING KIT MAT'L FOR HOUSING	
Material	CODE
Standard 8.8 Zinc Plated	1
Standard A2 Stainless Steel	2
A4 Stainless Steel	3

POSITION 14 & 15 TEMPERATURE SENSOR (PT100)		
Quantity	Ex ib 3-wire	Ex ib 3-wire plus transmitter
	CODE	
None	00	00
One	01	02

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

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