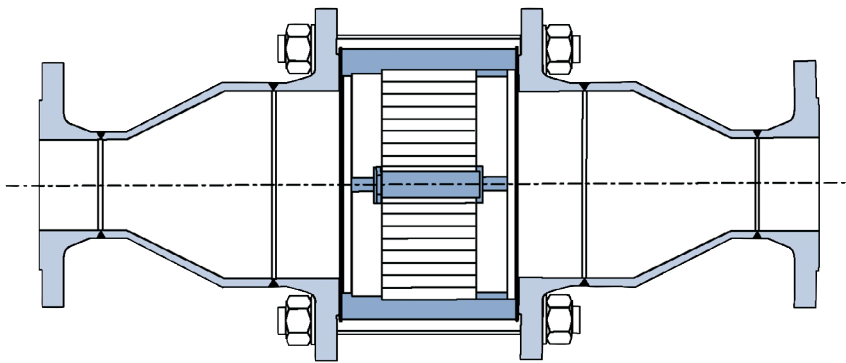


**ANDERSON GREENWOOD WHESSOE MODELS 600A/600AE FLAME ARRESTERS**

An in-line detonation flame arrester designed to prevent the propagation of supersonic flames.



**FEATURES**

- Concentric or eccentric model variants available.
- Fabricated construction.
- Replaceable elements.
- Advanced crimped stainless steel element construction as standard. Other materials available.
- Can be positioned anywhere within the pipeline.
- Bi-directional.
- Designed for unstable detonation.
- Independently tested and certified.
- Manufactured to ISO 9001:2015.

**GENERAL APPLICATION**

The Types 600A/600AE are used in applications with supersonic flames and mounted in process or vent lines. They are designed to handle both stable and unstable detonations.

**TECHNICAL DATA**

Materials:	Carbon steel, stainless steel
Sizes:	DN 15 to 600 (½" to 24")
Connections:	Threaded or flanged
Temperature range:	-20 to 165°C (-4 to 329°F)
Gas groups:	IIA, IIB1, IIB2, IIB3, IIB <sup>[1]</sup> , IIC <sup>[1]</sup>
Certification:	ATEX Directive 2014/34/EU; PED 2014/68/EU

1. Up to and including DN 150 (6")

# ANDERSON GREENWOOD WHESSOE MODELS 600A/600AE FLAME ARRESTERS

## STABLE AND UNSTABLE DETONATION

Detonations can be stable or unstable. A detonation is stable when it progresses through a confined system without significant variations of velocity and pressure characteristics. When a detonation is unstable, the velocity is not constant and the explosion pressure is significantly higher. This occurs in a limited zone during a combustion process from a deflagration into a stable detonation. The Types 600A/600AE are designed to handle both stable and unstable detonations.

## MATERIALS AND CONNECTION OPTIONS

### Materials

Carbon steel and stainless steel.

### Connection pipe size

Threaded DN 15 to 80 (½" to 3")

Flanged DN 15 to 600 (½" to 24")

## NOTE

Accessories, special materials and connections are available on request.

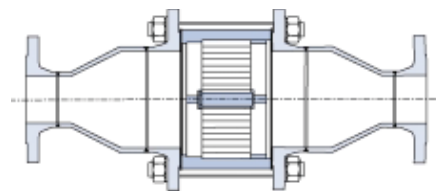
## Gas groups

- IIA<sup>[1]</sup>
- IIB1<sup>[1]</sup>
- IIB2<sup>[1]</sup>
- IIB3<sup>[1]</sup>
- IIB<sup>[2]</sup>
- IIC<sup>[2,3]</sup>

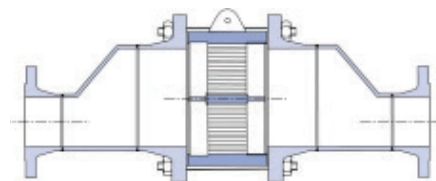
## NOTES

1. Multiple element design on sizes DN 250 (10") and above.
2. Only available up to and including DN 150 (6").
3. Multiple element design on DN 100 to 150 (4" to 6") sizes.

TYPE 600A (DT VERSION)



TYPE 600AE (DT VERSION)



## TEMPERATURE RANGE

Gas group	Size range	Short burn	Max. temperature	Element
IIA	DN 12 to 200	Yes	-20/60°C (-4/140°F)	1 x 0.6/0.45 mm (0.039 x 0.024/0.018")
IIA	DN 250 to 450 (10" to 18")	Yes	-20/60°C (-4/140°F)	2 x 0.45 mm (0.079 x 0.018")
IIA	DN 12 to 200	No	-20/165°C (-4/329°F)	1 x 0.45 mm (0.039 x 0.018")
IIA	DN 250 to 450 (10" to 18")	No	-20/165°C (-4/329°F)	2 x 0.45 mm (0.079 x 0.018")
IIB1/IIB3	DN 12 to 150	Yes	-20/60°C (-4/140°F)	1 x 0.45/0.38 mm (0.039 x 0.018/0.015")
IIB1/IIB3	DN 200 to 400 (8" to 16")	Yes	-20/60°C (-4/140°F)	2 x 0.45/3 x 0.38 mm (0.079 x 0.018/0.12 x 0.015")
IIB1/IIB3	DN 12 to 150	No	-20/165°C (-4/329°F)	1 x 0.38 mm (0.039 x 0.015")
IIB1/IIB3	DN 200 to 400 (8" to 16")	No	-20/165°C (-4/329°F)	3 x 0.38 mm (0.12 x 0.015")
IIB	DN 12 to 150	Yes	-20/60°C (-4/140°F)	1 x 0.3 mm (0.039 x 0.012")
IIB	DN 12 to 400	No	-20/165°C (-4/329°F)	1 x 0.3 mm (0.039 x 0.012")
IIC	DN 12 to 150	Yes	-20/60°C (-4/140°F)	1 x 0.15/2 x 0.15 mm (0.039 x 0.006/0.079 x 0.006")
IIC	DN 100 (4")	No	-20/165°C (-4/329°F)	2 x 0.15 mm (0.079 x 0.006")
IIC	DN 12 to 500	No	-20/165°C (-4/329°F)	1 x 0.15 mm (0.039 x 0.006")

## NOTES

All sizing and selection must be conducted by the factory. Standard elements are double the pipe size.

# ANDERSON GREENWOOD WHESSOE MODELS 600A/600AE FLAME ARRESTERS

## SELECTION GUIDE

Example:	600A	50	DT	100	76	45	S3	S3
<b>Model</b>								
<b>600A</b>								
<b>600AE</b>								
<b>Connection diameter</b>								
<b>Threaded</b>								
DN 15 to 80 (½" to 3")								
<b>Flanged</b>								
DN 15 to 600 (½" to 24")								
<b>Element code</b>								
<b>DT</b>								
<b>Element diameter</b>								
DN 25 to 2000 (1" to 80")								
<b>Element width</b>								
<b>76</b> 76 mm (3.0")								
<b>114</b> 114 mm (4.5")								
<b>152</b> 152 mm (6.0")								
<b>190</b> 190 mm (7.5")								
<b>Cell height</b>								
<b>60</b> 0.60 mm (0.024")								
<b>45</b> 0.45 mm (0.018")								
<b>38</b> 0.38 mm (0.015")								
<b>30</b> 0.30 mm (0.012")								
<b>15</b> 0.15 mm (0.006")								
<b>Element material</b>								
<b>S3</b> Stainless steel								
<b>C</b> Carbon steel								
<b>Body material</b>								
<b>S3</b> Stainless steel								
<b>C</b> Carbon steel								

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