



## ANDERSON GREENWOOD AMAL IRQ/IRQE/IRQS FLAME ARRESTERS

In-line deflagration flame arresters designed to prevent the propagation of subsonic flames.



### FEATURES

- Concentric and eccentric model variants available.
- Fabricated construction.
- Replaceable elements.
- Advanced crimped stainless steel element construction as standard. Other materials available.
- Mounted vertically or horizontally.
- Bi-directional.
- Can be used in combination with a pressure/vacuum valve.
- Independently tested and certified.
- Manufactured to ISO 9001:2015.

### GENERAL APPLICATION

The Types IRQ/IRQE/IRQS are used in applications with subsonic flames and mounted in process or vent lines. They can be located in the pipeline or at the end of the pipe vent.

### TECHNICAL DATA

Materials:	Carbon steel, stainless steel
Sizes:	DN 6 to 1000 (NPS 1/8 to 40)
Connections:	Threaded or flanged
Temperature range:	-20 to 280°C (-4 to 536°F)
Gas groups:	IIA, IIB1, IIB2, IIB3, IIB, IIC <sup>1)</sup>
Certification:	ATEX Directive 2014/34/EU; PED 2014/68/EU; ISO 16852

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

# ANDERSON GREENWOOD AMAL IRQ/IRQE/IRQS FLAME ARRESTERS

## MATERIALS AND CONNECTION OPTIONS

### Materials

Carbon steel and stainless steel.

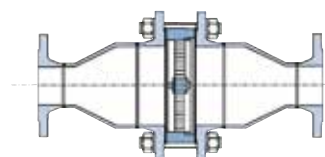
### Connection pipe size

Threaded DN 6 to 80 (1/8" to 3")  
 Flanged DN 6 to 1000 (1/8" to 40")

### Gas groups

- IIA
- IIB1
- IIB2
- IIB3
- IIB
- IIC<sup>(1)</sup>

TYPE IRQ<sup>(2)</sup> (DF VERSION)



## TEMPERATURE RANGE

Type	Gas group	Size range	Short burn	Max. temperature	Element
IRQ	IIB3	DN 200 (8")	No	-20/260°C (-4/500°F)	1 x 0.38 mm (0.039 x 0.015")
IRQ, IRQE, IRQS	IIA	DN 12 to 450	Yes	-20/60°C (-4/140°F)	1 x 0.8 mm (0.039 x 0.031")
IRQ, IRQE, IRQS	IIB1/IIB3	DN 12 to 450	Yes	-20/60°C (-4/140°F)	1 x 0.8/0.6 mm (0.039 x 0.031/0.024")
IRQ, IRQE, IRQS	IIA	DN 12 to 450	No	-20/165°C (-4/329°F)	1 x 0.6 mm (0.039 x 0.024")
IRQ, IRQE, IRQS	IIB1/IIB3	DN 12 to 450	No	-20/165°C (-4/329°F)	1 x 0.38 mm (0.039 x 0.015")
IRQ, IRQE, IRQS	IIB	DN 12 to 400	Yes	-20/60°C (-4/140°F)	1 x 0.45 mm (0.039 x 0.018")
IRQ, IRQE, IRQS	IIC	DN 12 to 150	Yes	-20/60°C (-4/140°F)	1 x 0.15 mm (0.039 x 0.006")
IRQ, IRQE, IRQS	IIB	DN 12 to 400	No	-20/165°C (-4/329°F)	1 x 0.3 mm (0.039 x 0.012")
IRQ, IRQE, IRQS	IIC	DN 12 to 500	No	-20/165°C (-4/329°F)	1 x 0.15 mm (0.039 x 0.006")

## SELECTION GUIDE

Example:	IRQ	50	DF	100	19	60	S3	S3
<b>Model</b>								
<b>IRQ</b>								
<b>IRQE</b>								
<b>IRQS</b>								
<b>Connection diameter</b>								
<b>Flanged</b>								
<b>Threaded</b>								
DN 6 to 1000 (1/8" to 40")								
DN 6 to 80 (1/8" to 3")								
<b>Element code</b>								
<b>DF</b>								
<b>Element diameter</b>								
DN 25 to 2000 (1" to 80")								
<b>Element width</b>								
<b>19</b>								
19 mm (0.75")								
<b>38</b>								
38 mm (1.5")								
<b>76</b>								
76 mm (3.0")								
<b>Cell height</b>								
<b>80</b>								
0.80 mm (0.032")								
<b>60</b>								
0.60 mm (0.024")								
<b>45</b>								
0.45 mm (0.018")								
<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								

### NOTES

- All sizing and selection must be conducted by the factory.  
 Standard elements are double the pipe size.  
 1. Only available up to and including DN 150 (6")  
 2. Eccentric variants are available

Accessories, special materials and connections are available on request.