

ANDERSON GREENWOOD WHESSOE MODEL 500B FLAME ARRESTERS

An end-of-line long burn flame arrester designed to prevent the propagation of a flame



FEATURES

- Fabricated construction.
- Replaceable element.
- Sprung weather cover.
- Advanced crimped stainless steel element construction as standard. Other materials available.
- Suitable for endurance burning.
- Independently tested and certified.
- Manufactured to ISO 9001:2008.

GENERAL APPLICATION

The 500B is mounted on tanks or on the end of discharge pipes to stop flames entering the process. It allows for stabilized burning for an unspecified time.

TECHNICAL DATA

Materials:	Carbon steel, stainless steel
Sizes:	DN 15 to 350 (½" x 14")
Connections:	Threaded or flanged
Temperature range:	-20° to +60°C (-4° to +140°F)
Gas groups*:	IIA, IIB, IIB2, IIB3, IIC
Certification:	ATEX Directive 94/9/EC; PED 97/23/EC

* Only available for hydrocarbon gas

ANDERSON GREENWOOD WHESSOE MODEL 500B FLAME ARRESTERS

STABILIZED BURNING

Stabilized burning is the steady burning of a flame stabilized at or close to the flame arrester element. The 500B allows for stabilized burning for an unspecified time. A fusible link holds the weather cover in the normal position. During an endurance burn, extreme temperatures are generated which cause the fusible link to melt, eventually releasing the cover and allowing the heat to escape.

MATERIALS AND CONNECTION OPTIONS

Materials

Carbon steel and stainless steel.

Connection pipe size

Threaded DN 15 to 50 (½" to 2")

Flanged DN 15 to 350 (½" to 14")

NOTE

Accessories, special materials and connections are available on request.

Gas groups

- IIA
- IIB1

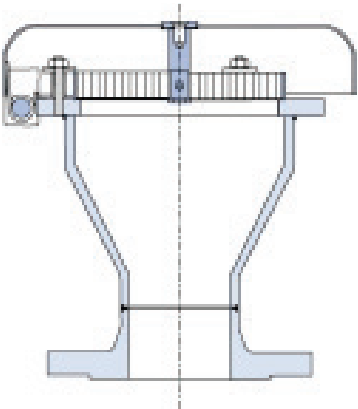
Only available for hydrocarbon gas.

NOTES

Some sizes of 500B are supplied with multiple elements, which fit onto pipe arms extending from a central inlet pipe. These are suitable for endurance burning applications.

The largest diameter element used with the 500B is DN 200 (8"), inlet diameters DN 100 (4") and above all use this element and sizes DN 100 - 150 (4" - 6") have single elements whilst sizes above DN 150 (6") have multiple elements. Standard elements are double the pipe size.

500B ENDURANCE BURN (EC VERSION)



HIGH TEMPERATURE (+200°C (+392°F)) APPLICATIONS

Explosion group	Gap width	Inlet size
IIB1 (IIA)	0.8 mm (0.032")	DN 15 - 350 (½" - 14")

ANDERSON GREENWOOD WHESSOE MODEL 500B FLAME ARRESTERS

SELECTION GUIDE

Example:	500B	50	EC	100	19	80	S3	S3
Model								
500B								
Connection diameter, mm (in)								
Threaded								
DN 15 to DN50 (½" to 2")								
Flanged								
DN 15 to DN 150 (½" to 6") – element sizes to DN 200 (8")								
DN 200 to DN 350 (8" to 14") – element sizes > DN 200 (8")								
Element code								
EC								
Element diameter, mm (in)								
DN 50 to DN 100 (2" to 4") – screwed connection								
DN 50 to DN 200 (1" to 8") – flanged connection								
DN 200 (8") multiples – flanged connection > DN 200 (8")								
Element width, mm (in)								
19 19 mm (0.75")								
Cell height, mm (in)								
80 0.80 mm (0.032")								
Element material								
S3 Stainless steel								
C Carbon steel								
Body material								
S3 Stainless steel								
C Carbon steel								

NOTES

All sizing and selection must be conducted by the factory.

Neither Emerson, Emerson Automation Solutions, nor any of their affiliated entities assumes responsibility for the selection, use or maintenance of any product. Responsibility for proper selection, use, and maintenance of any product remains solely with the purchaser and end user.

Anderson Greenwood is a mark owned by one of the companies in the Emerson Automation Solutions business unit of Emerson Electric Co. Emerson Automation Solutions, Emerson and the Emerson logo are trademarks and service marks of Emerson Electric Co. All other marks are the property of their respective owners.

The contents of this publication are presented for informational purposes only, and while every effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available upon request. We reserve the right to modify or improve the designs or specifications of such products at any time without notice.

Emerson.com/FinalControl