

TORCH END

Torch end flashback arrestors are safety devices fitted to the inlet of a torch handle or blowpipe. They incorporate a number of features designed to protect upstream equipment from damage in the event of a flashback.

PLUMBERS' – DISPLAY PACK (MODEL: SHT)

The SHT model flashback arrestor has been designed with all the functionality of other torch end flashback arrestors in the smallest possible body. These have been designed with the professional plumber in mind where safety is paramount, but where size and weight are important.

Specifications	
Packaging Type	Blister Pack
Weight	
Nett	0.090 kg
Gross	0.100 kg
Dimensions	
Product Only	(H) 52 mm (Ø) 21 mm
With Packaging	(H) 212 mm (W) 65 mm (D) 23 mm



Part No	Gas Service	Inlet Connection	Outlet Connection	Maximum Working Pressure*
FTPF	Fuel Gas	5/8-18 UNF-LH Male	5/8-18 UNF-LH Female	A 150 H 350 CMPY 500
FTPOD	Oxygen	5/8-18 UNF-RH Male	5/8-18 UNF-RH Female	OD 1500
FPD	Quad Pack – One each of the above (also includes Fuel Gas / Oxygen Torch End Flashback Arrestors)			
	Dimensions (mm)		Weight (kg)	
	Product Only	With Packaging	Nett	Gross
	(H) 112 (W) 46 (D) 23	(H) 212 (W) 90 (D) 24	0.400	0.430

* See flow chart page for gas type abbreviations

STANDARD FLOW – BOXED (MODEL: GG)

The GG model flashback arrestor is suitable for the majority of oxygen / fuel gas welding brazing and cutting processes.

Specifications	
Packaging Type	Cardboard Box
Weight	
Nett	0.080 kg
Gross	0.085 kg
Dimensions	
Product Only	(H) 55 mm (Ø) 20 mm
With Packaging	(H) 72 mm (W) 29 mm (D) 28 mm



Part No	Gas Service	Inlet Connection	Outlet Connection	Maximum Working Pressure*
FTSF	Fuel Gas	5/8-18 UNF-LH Male	5/8-18 UNF-LH Female	A 150 H 350 CMPY 500
FTSF3	Fuel Gas	G 3/8" LH Male	G 3/8" LH Female	A 150 H 350 CMPY 500
FTSFH	Fuel Gas	5/8-18 UNF-LH Male	9/16-18 UNF-LH Female	A 150 H 350 CMPY 500
FTSO	Oxygen	5/8-18 UNF-RH Male	5/8-18 UNF-RH Female	OD 1500
FTSO3	Oxygen	G 3/8" RH Male	G 3/8" RH Female	OD 1500
FTSO4	Oxygen	G 1/4" RH Male	G 1/4" RH Female	OD 1500
FTSOH	Oxygen	5/8-18 UNF-RH Male	9/16-18 UNF-RH Female	OD 1500

* See flow chart page for gas type abbreviations.

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STANDARD FLOW – DISPLAY PACK (MODEL: GG)

This range of flashback arrestor is identical to the boxed GG model products on the previous page, except that they are presented on a backing board with a clear shrink wrap for a high visibility store display.

Specifications	
Packaging Type	Blister Pack
Weight	
Nett	0.080 kg
Gross	0.090 kg
Dimensions	
Product Only	(H) 55 mm (Ø) 20 mm
With Packaging	(H) 212 mm (W) 65 mm (D) 22 mm



Part No	Gas Service	Inlet Connection	Outlet Connection	Maximum Working Pressure*
FTSFD	Fuel Gas	5/8-18 UNF-LH Male	5/8-18 UNF-LH Female	A 150 H 350 CMPY 500
FTSOD	Oxygen	5/8-18 UNF-RH Male	5/8-18 UNF-RH Female	OD 1500
FTD	Twin Pack – One each of above products			
	Dimensions (mm)		Weight (kg)	
	Product Only	With Packaging	Nett	Gross
	(H) 55 (W) 40 (D) 20	(H) 212 (W) 90 (D) 22	0.160	0.170

* See flow chart page for gas type abbreviations.

STANDARD FLOW QUICK ACTION COUPLING – BOXED (MODEL: DKSG)

The DKSG model flashback arrestor offers all of the functionality of the GG standard flow model, with the addition of a quick action coupling and pin. The pin connects to the torch handle, while the flashback arrestor component is connected to the hose. The torch can then be connected to the flashback arrestor via the coupling pin. This allows for quick connection and disconnection of the torch without the need for spanners. The coupling and pin meet ISO 7289 and the double 'O' ring design ensures no leakage

Specifications	
Packaging Type	Cardboard Box
Weight	
Nett	0.180 kg
Gross	0.190 kg
Dimensions	
Product Only	(H) 96 mm (Ø) 22 mm
With Packaging	(H) 120 mm (W) 24 mm (D) 24 mm



Part No	Gas Service	Inlet Connection	Outlet Connection	Maximum Working Pressure*
FTSFQD1	Fuel Gas	5/8-18 UNF-LH Male	5/8-18 UNF-LH Female (EN 561) Coupling Pin	A 150 H 350 CMPY 500
FTSFQD1H	Fuel Gas	5/8-18 UNF-LH Male	9/16-18 UNF-LH Female (EN 561) Coupling Pin	A 150 H 350 CMPY 500
FTSQD1	Oxygen	5/8-18 UNF-RH Male	5/8-18 UNF-RH Female (EN 561) Coupling Pin	OD 1500
FTSQD1H	Oxygen	5/8-18 UNF-RH Male	9/16-18 UNF-RH Female (EN 561) Coupling Pin	OD 1500

* See flow chart page for gas type abbreviations.

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STANDARD FLOW QUICK ACTION COUPLING – DISPLAY PACK (MODEL: DKSG)

This range of flashback arrestor is identical to the boxed DKSG model products on the previous page, except that they are presented on a backing board with a clear shrink wrap for a high visibility store display.

Specifications	
Packaging Type	Blister Pack
Weight	
Nett	0.180 kg
Gross	0.190 kg
Dimensions	
Product Only	(H) 96 mm (Ø) 22 mm
With Packaging	(H) 212 mm (W) 65 mm (D) 24 mm



Part No	Gas Service	Inlet Connection	Outlet Connection	Maximum Working Pressure*
FTSFQD1D	Fuel Gas	5/8-18 UNF-LH Male	5/8-18 UNF-LH Female EN 561 Coupling Pin	A 150 H 350 CMPY 500
FTSFQD1HD	Fuel Gas	5/8-18 UNF-LH Male	9/16-18 UNF-LH Female EN 561 Coupling Pin	A 150 H 350 CMPY 500
FTSQD1D	Oxygen	5/8-18 UNF-RH Male	5/8-18 UNF-RH Female EN 561 Coupling Pin	OD 1500
FTSQD1HD	Oxygen	5/8-18 UNF-RH Male	9/16-18 UNF-RH Female EN 561 Coupling Pin	OD 1500
FTQD1D	Twin Pack One each of 5/8-18 UNF EN561 Coupling Pin Models Above			
	Dimensions (mm)		Weight (kg)	
	Product Only	With Packaging	Nett	Gross
	(H) 96 (W) 44 (D) 22	(H) 212 (W) 90 (D) 24	0.360	0.370



* See flow chart page for gas type abbreviations.

MEDIUM FLOW – BOXED (MODEL: DGU)

The DGU model flashback arrestor offers a solution where the flow rate required is more than the standard flow model arrestors can provide, but less than that of the high flow models. The major benefit being its compact size and reduced weight compared to the high flow models.

Specifications	
Packaging Type	Cardboard Box
Weight Nett Gross	0.16 kg 0.17 kg
Dimensions Product Only With Packaging	(H) 88 mm (Ø) 22 mm (H) 122 mm (W) 29 mm (D) 28 mm



Part No	Gas Service	Inlet Connection	Outlet Connection	Maximum Working Pressure*
FTMF	Fuel Gas	5/8-18 UNF-LH Male	5/8-18 UNF-LH Female	A 150 H 350 CMPY 500
FTMO	Oxygen	5/8-18 UNF-RH Male	5/8-18 UNF-RH Female	OD 2500

* See flow chart page for gas type abbreviations.

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MEDIUM FLOW QUICK ACTION COUPLING – DISPLAY PACK (MODEL: DGUDK)

The DGUDK model flashback arrestor offers all of the functionality of the DGU medium flow model, with the additional feature of a quick action coupling and pin. The pin connects to the torch handle, while the flashback arrestor component is connected to the hose. The torch can then be connected to the flashback arrestor via the coupling pin. This allows for quick connection and disconnection of the torch without the need for spanners. The coupling and pin meet ISO 7289 and the double ‘O’ ring design ensures no leakage.

Specifications	
Packaging Type	Blister Pack
Weight	
Nett	0.245 kg
Gross	0.255 kg
Dimensions	
Product Only	(H) 127 mm (Ø) 22 mm
With Packaging	(H) 212 mm (W) 65 mm (D) 24 mm



Part No	Gas Service	Inlet Connection	Outlet Connection	Maximum Working Pressure*
FTMFQD1D	Fuel Gas	5/8-18 UNF-LH Male	5/8-18 UNF-LH Female EN561 Coupling Pin	A 150 H 350 CMPY 500
FTMOQD1D	Oxygen	5/8-18 UNF-RH Male	5/8-18 UNF-RH Female EN561 Coupling Pin	OD 2500

* See flow chart page for gas type abbreviations.

HIGH FLOW – BOXED (MODEL: DG91UA)

The DG91UA model flashback arrestor is suitable for applications where a higher flow rate is required for the process being performed: for example, when using larger cutting, heating and gouging nozzles.

Specifications	
Packaging Type	Cardboard Box
Weight Nett Gross	0.435 kg 0.445 kg
Dimensions Product Only With Packaging	(H) 126 mm (Ø) 33 mm (H) 130 mm (W) 35 mm (D) 35 mm



Part No	Gas Service	Inlet Connection	Outlet Connection	Maximum Working Pressure*
FTHF	Fuel Gas	5/8-18 UNF-LH Male	5/8-18 UNF-LH Female Offset	A 150 H 400 CMPY 500
FTHF3	Fuel Gas	G 3/8" LH Male	G 3/8" LH Female Offset	A 150 H 400 CMPY 500
FTHFH	Fuel Gas	5/8-18 UNF-LH Male	9/16-18 UNF-LH Female Offset	A 150 H 400 CMPY 500
FTHO	Oxygen	5/8-18 UNF-RH Male	5/8-18 UNF-RH Female Offset	OD 2500
FTHO2	Oxygen	G 1/2" RH Male	G 1/2" RH Female Offset	OD 2500
FTHO3	Oxygen	G 3/8" RH Male	G 3/8" RH Female Offset	OD 2500
FTHO5	Oxygen	G 5/8" RH Male	G 5/8" RH Female Offset	OD 2500
FTHO58	Oxygen	G 5/8" RH Male	5/8-18 UNF-RH Female Offset	OD 2500
FTHOH	Oxygen	5/8-18 UNF-RH Male	9/16-18 UNF-RH Female Offset	OD 2500

* See flow chart page for gas type abbreviations.

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HIGH FLOW – DISPLAY PACK (MODEL: DG91UA)

This range of flashback arrestor is identical to the boxed DG91UA model products on the previous page, except that they are presented on a backing board with a clear shrink wrap for a high visibility store display.

Specifications	
Packaging Type	Blister Pack
Weight	
Nett	0.435 kg
Gross	0.445 kg
Dimensions	
Product Only	(H) 126 mm (Ø) 33 mm
With Packaging	(H) 212 mm (W) 90 mm (D) 35 mm

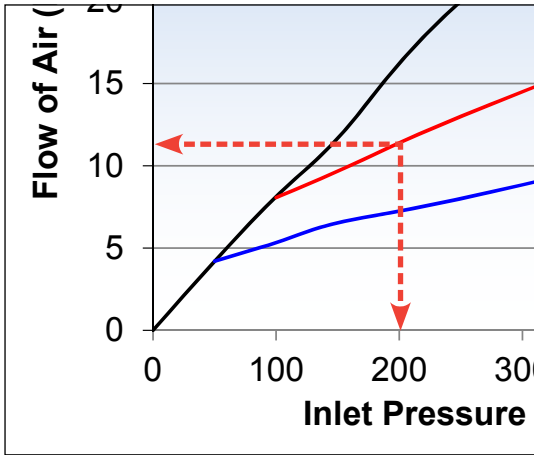


Part No	Gas Service	Inlet Connection	Outlet Connection	Maximum Working Pressure*
FTHFD	Fuel Gas	5/8-18 UNF-LH Male	5/8-18 UNF-LH Female Offset	A 150 H 400 CMPY 500
FTHOD	Oxygen	5/8-18 UNF-RH Male	5/8-18 UNF-RH Female Offset	OD 2500

* See flow chart page for gas type abbreviations.

USING THE FLOW CHARTS

The flow charts below show the flow of air through different models of flashback arrestors, at various inlet pressures and with increasing line restrictions. To determine the gas flow, multiply the flow derived from the charts below by the conversion factor from the table to the right appropriate to the gas medium being used.



Example:
 QG = Flow (Gas Type)
 QD = Flow of Air
 F = Conversion Factor

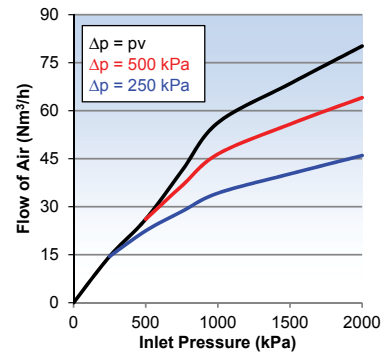
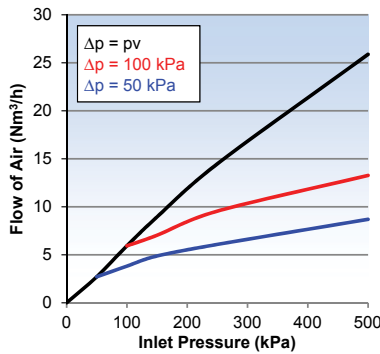
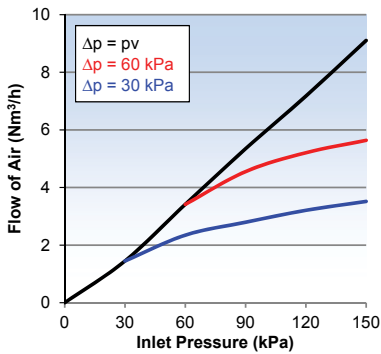
$QG = QD \times F$
 $= 11 \times 2.5$
 $= 27.5 \text{ m}^3/\text{h} \text{ (Hydrogen)}$

Definitions:
 pv = Primary pressure
 ph = Secondary pressure
 $\Delta p = p_v - p_h$

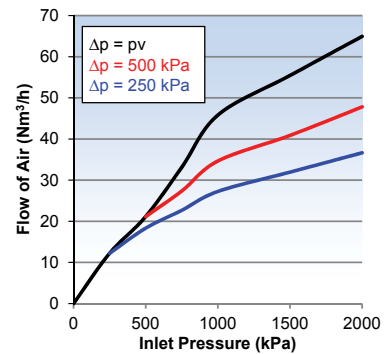
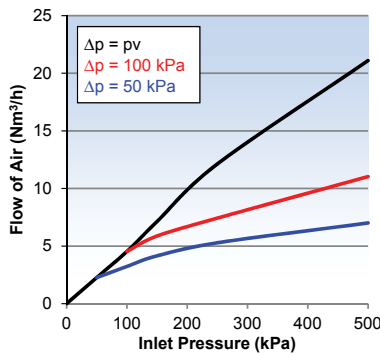
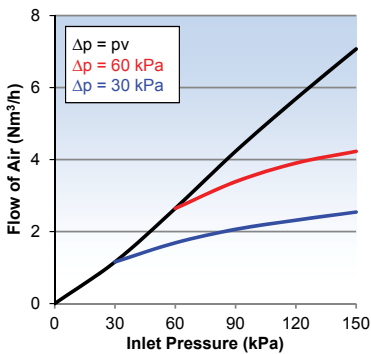
Conversion Factors:

Gas Type (Abbreviation)	Conversion Factor (F)
Acetylene (A)	1.2
Hydrogen (H)	2.5
Town Gas (C)	0.9
Methane (M)	1.25
Propane (P)	0.9
Mixed Gas (Y)	-
Oxygen (O)	0.95
Air (D)	1.0

FLOW CHARTS – MODEL: SHT

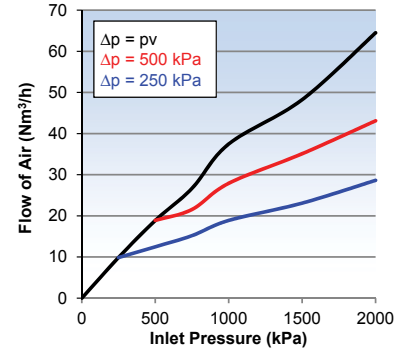
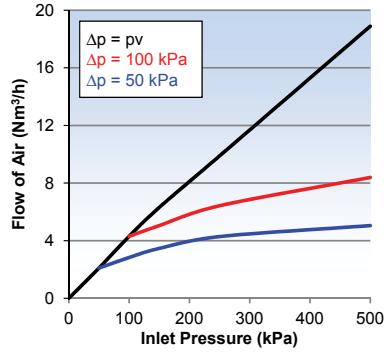
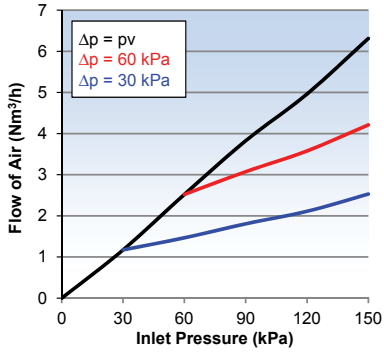


FLOW CHARTS – MODEL: GG

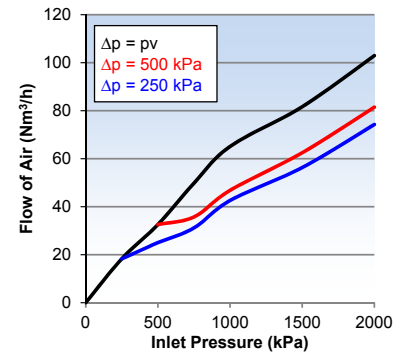
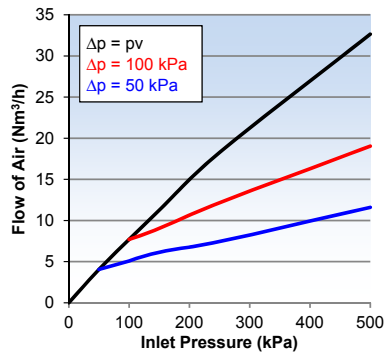
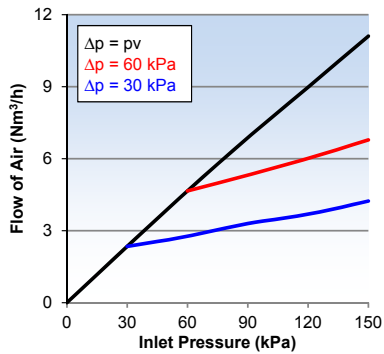


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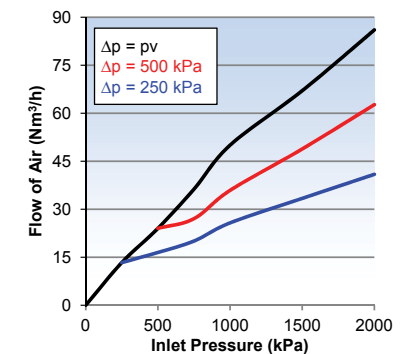
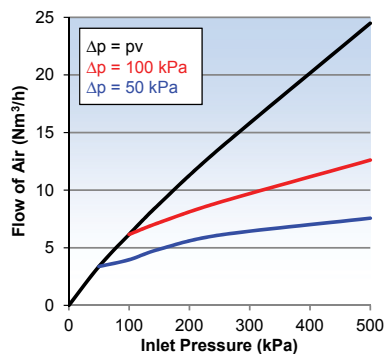
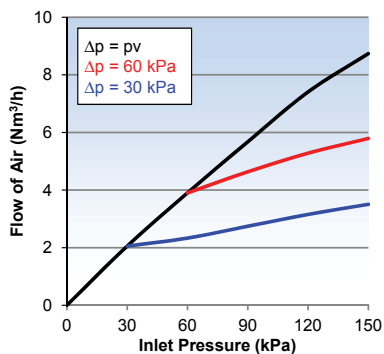
FLOW CHARTS – MODEL: DKSG



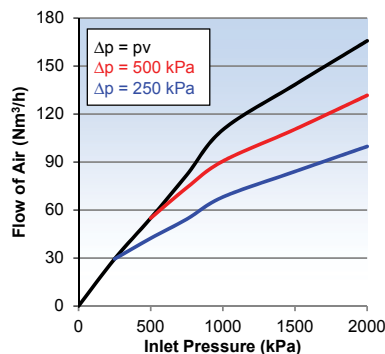
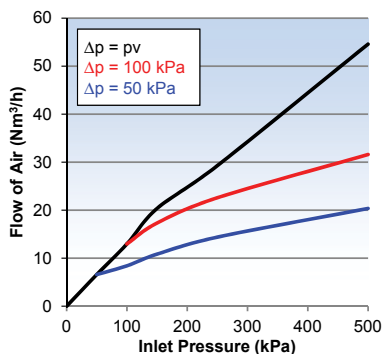
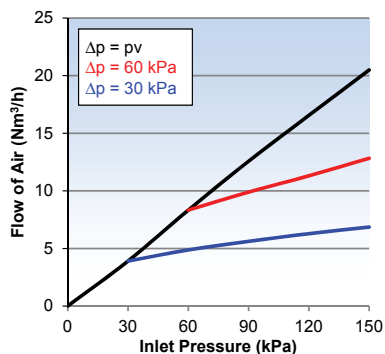
FLOW CHARTS – MODEL: DGU



FLOW CHARTS – MODEL: DGUDK



FLOW CHARTS – MODEL: DG91UA



TORCH END FLASHBACK ARRESTOR APPLICATION CHART

Model	Suitable For	Welding 0.5 – 30 mm	Heating 0.5 – 30 mm	Heating 30 – 100 mm	Heating > 100 mm	Flame Cutting 3 – 200 mm	Flame Cutting 50 – 700 mm	Flame Cutting > 700 mm	Flame Scarfing 50 – 200 mm	Flame Scarfing 200 – 500 mm	5-Flame Scarfing	Brazing 4 m³/h	Brazing 12 m³/h	Brazing > 12 m³/h	Flame Spraying
SHT		•	•			•									
GG		•	•			•									
DKSG		•	•			•									
DGU		•	•	•	•	•	•					•			
DGUDK		•	•	•	•	•	•					•			
DG91UA		•	•	•	•	•	•		•	•	•	•	•		•
DEMAX 5 *		•	•	•	•	•	•	•	•	•	•	•	•	•	•
SIMAX 3 *		•	•	•	•	•	•	•	•	•	•	•	•	•	•
SIMAX 5 *		•	•	•	•	•	•	•	•	•	•	•	•	•	•
SIMAX 8 *		•	•	•	•	•	•	•	•	•	•	•	•	•	•

* See data sheet GSE_FBA_MA_V01 for more information on these flashback arrestors.

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TORCH END FLASHBACK ARRESTORS

The following specification table is common to the group of torch end flashback arrestors detailed in this section of the catalogue.

Specifications	
Materials of Construction	
Body	Brass
Flame Arrestor	Stainless Steel Sintered Filter
Non Return Valve Seat	NBR70 (Nitrile butadiene rubber)
Inclusions	
Non Return Valve	All Models
Flame Arrestor	All Models
Inlet Filter	All Models
EN561 Quick Action Coupling	DKSG and DGUDK Models Only
Standard	BAM ¹ Certified to AS 4603
Identification	
Colour Coding	
Fuel Gas	Red
Oxygen	Blue
Label Information	
	Logo of Manufacturer Year of Construction Country of Origin Direction of Flow Australian Standard Certification Product Description Model Number Gas Service Maximum Working Pressures
Body Stamping	
	Manufacturer's Identification Year of Construction Product Type Australian Standard Serial Number Gas Service Maximum Working Pressures Direction of Flow
Warranty	1 Year – Covering Manufacturer's Defect
Maximum Operating Temperature	100 °C
Country of Origin	Germany



¹ BAM is the Federal Institute for Materials Research and Testing in Berlin, Germany. They are the largest independent testing facility in the world. Through extensive testing, BAM have certified the IBEDA range of flashback arrestors to AS 4603, making them the first AS 4603 certified product available in the Australian market.

