

REGULATOR END

Regulator end flashback arrestors are safety devices fitted to the outlet of a regulator. They incorporate a number of features designed to protect upstream equipment from damage in the event of a flashback or sustained burn back. Of importance, all regulator end models incorporate a thermal cut-off valve as a failsafe, to shut off the flow of gas, eliminating the fire.

PLUMBERS' – DISPLAY PACK (MODEL: SRT)

The SRT model flashback arrestor has been designed with all the functionality of other regulator end flashback arrestors in the smallest possible body. They 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	0.110 kg
Gross	0.115 kg
Dimensions	
Product Only	(H) 60 mm (Ø) 23 mm
With Packaging	(H) 212 mm (W) 65 mm (D) 24 mm



Part No	Gas Service	Inlet Connection	Outlet Connection	Maximum Working Pressure*
FRPFD	Fuel Gas	5/8-18 UNF-LH Female	5/8-18 UNF-LH Male	A 150 H 350 CMPY 500
FRPOD	Oxygen	5/8-18 UNF-RH Female	5/8-18 UNF-RH Male	OD 1500
FPD	Quad Pack – One each of the above (also includes Fuel Gas / Oxygen Plumbers' 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: DGN)

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

Specifications	
Packaging Type	Cardboard Box
Weight	
Nett	0.160 kg
Gross	0.165 kg
Dimensions	
Product Only	(H) 87 mm (Ø) 23 mm
With Packaging	(H) 95 mm (W) 28 mm (D) 28 mm

Weight is on standard 5/8-18UNF product only



Part No	Gas Service	Inlet Connection	Outlet Connection	Maximum Working Pressure*
FRSF	Fuel Gas	5/8-18 UNF-LH Female	5/8-18 UNF-LH Male	A 150 H 350 CMPY 500
FRSF3	Fuel Gas	G 3/8" LH Female	G 3/8" LH Male	A 150 H 350 CMPY 500
FRSO	Oxygen	5/8-18 UNF-RH Female	5/8-18 UNF-RH Male	OD 2500
FRSO3	Oxygen	G 3/8" RH Female	G 3/8" RH Male	OD 2500
FRSO4	Oxygen	G 1/4" RH Female	G 1/4" RH Male	OD 2500

* See flow chart page for gas type abbreviations

REGULATOR END

STANDARD FLOW – DISPLAY PACK (MODEL: DGN)

This range of flashback arrestor is identical to the boxed product 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	0.160 kg
Gross	0.165 kg
Dimensions	
Product Only	(H) 87 mm (Ø) 23 mm
With Packaging	(H) 212 mm (W) 65 mm (D) 25 mm



Part No	Gas Service	Inlet Connection	Outlet Connection	Maximum Working Pressure*
FRSFD	Fuel Gas	5/8-18 UNF-LH Female	5/8-18 UNF-LH Male	A 150 H 350 CMPY 500
FRSOD	Oxygen	5/8-18 UNF-RH Female	5/8-18 UNF-RH Male	OD 2500
FRD	Twin Pack – One each of the above			
	Dimensions (mm)		Weight (kg)	
	Product Only	With Packaging	Nett	Gross
	(H) 87 (W) 46 (D) 23	(H) 212 (W) 90 (D) 24	0.320	0.330

* See flow chart page for gas type abbreviations

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

The DGNDK model flashback arrestor offers all of the functionality of the DGN standard flow model, with the addition of a quick action coupling and pin. The pin connects to the hose while the flashback arrestor remains on the regulator. The hose can then be connected to the flashback arrestor via the coupling pin. This allows for quick connection and disconnection of the hose 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	0.240 kg
Gross	0.250 kg
Dimensions	
Product Only	(H) 129 mm (Ø) 23 mm
With Packaging	(H) 140 mm (W) 28 mm (D) 28 mm



Part No	Gas Service	Inlet Connection	Outlet Connection	Maximum Working Pressure*
FRSFQD4	Fuel Gas	5/8-18 UNF-LH Female	5/8-18 UNF-LH Male (EN 561) Coupling Pin	A 150 H 350 CMPY 500
FRSOQD4	Oxygen	5/8-18 UNF-RH Female	5/8-18 UNF-RH Male (EN 561) Coupling Pin	OD 2500

* See flow chart page for gas type abbreviations

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

This range of flashback arrestor is identical to the boxed product 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	0.240 kg
Gross	0.250 kg
Dimensions	
Product Only	(H) 129 mm (Ø) 23 mm
With Packaging	(H) 212 mm (W) 65 mm (D) 25 mm



Part No	Gas Service	Inlet Connection	Outlet Connection	Maximum Working Pressure*
FRSFQD4D	Fuel Gas	5/8-18 UNF-LH Female	5/8-18 UNF-LH Male (EN 561) Coupling Pin	A 150 H 350 CMPY 500
FRSQD4D	Oxygen	5/8-18 UNF-RH Female	5/8-18 UNF-RH Male (EN 561) Coupling Pin	OD 2500
FRQD4D	Twin Pack – One each of the above			
	Dimensions (mm)		Weight (kg)	
	Product Only	With Packaging	Nett	Gross
	(H)129 (W) 46 (D) 23	(H) 212 (W) 90 (D) 24	0.480	0.490

* See flow chart page for gas type abbreviations

HIGH FLOW – BOXED (MODEL: DG91N)

The DG91N 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	0.380 kg 0.385 kg
Dimensions Product Only With Packaging	(H) 108 mm (Ø) 33 mm (H) 120 mm (W) 35 mm (D) 35 mm



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

* See flow chart page for gas type abbreviations

HIGH PRESSURE – BOXED (MODEL: DG91NH)

The DG91NH model flashback arrestor has been designed for use where a higher fuel gas pressure than is available through the standard range of flashback arrestor is required.

Specifications	
Packaging Type	Cardboard Box
Weight Nett Gross	0.380 kg 0.385 kg
Dimensions Product Only With Packaging	(H) 108 mm (Ø) 32 mm (H) 120 mm (W) 35 mm (D) 35 mm



Part No	Gas Service	Inlet Connection	Outlet Connection	Maximum Working Pressure*
FRHH	Fuel Gas	5/8-18 UNF-LH Female	5/8-18 UNF-LH Male	A 250 H 1000 CMPY 1200

* See flow chart page for gas type abbreviations

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HIGH FLOW – DISPLAY PACK (MODEL: DG91N)

This range of flashback arrestor is identical to the boxed DG91N model product 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	0.380 kg
Gross	0.385 kg
Dimensions	
Product Only	(H) 108 mm (Ø) 33 mm
With Packaging	(H) 212 mm (W) 90 mm (D) 34 mm



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

* See flow chart page for gas type abbreviations

STANDARD FLOW RESETTABLE – BOXED (MODEL: DS1000)

The DS1000 model flashback arrestor offers all of the functionality of the DGN standard flow model, with the additional resettable pressure sensitive cut-off valve feature. When the flashback arrestor is subjected to a pressure wave preceding a flashback, the cut-off valve is activated and stops the flow of gas. Once the equipment has been checked for faults, the device can be reset and normal operation resumed. Suitable for brazing welding and cutting only.

Specifications	
Packaging Type	Cardboard Box
Weight	
Nett	0.250 kg
Gross	0.260 kg
Dimensions	
Product Only	(H) 106 mm (Ø) 35 mm
With Packaging	(H) 114 mm (W) 36 mm (D) 36 mm



Part No	Gas Service	Inlet Connection	Outlet Connection	Maximum Working Pressure*
FRSFR	Fuel Gas	5/8-18 UNF-LH Female	5/8-18 UNF-LH Male	A 150 H 350 CMPY 500
FRSOR	Oxygen	5/8-18 UNF-RH Female	5/8-18 UNF-RH Male	OD 2000

* See flow chart page for gas type abbreviations

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HIGH FLOW RESETTABLE – BOXED (MODEL: DS2000)

The DS2000 model flashback arrestor offers all of the functionality of the DG91N high flow model, with the additional resettable pressure sensitive cut-off valve feature. When the flashback arrestor is subjected to a pressure wave preceding a flashback, the cut-off valve is activated and stops the flow of gas. Once the equipment has been checked for faults, the device can be reset and normal operation resumed. Suitable for heating, gouging where high flowrates are required

Specifications	
Packaging Type	Plastic Container
Weight	
Nett	0.490 kg
Gross	0.535 kg
Dimensions	
Product Only	(H) 121 mm (Ø) 45 mm
With Packaging	(H) 130 mm (W) 50 mm (D) 50 mm

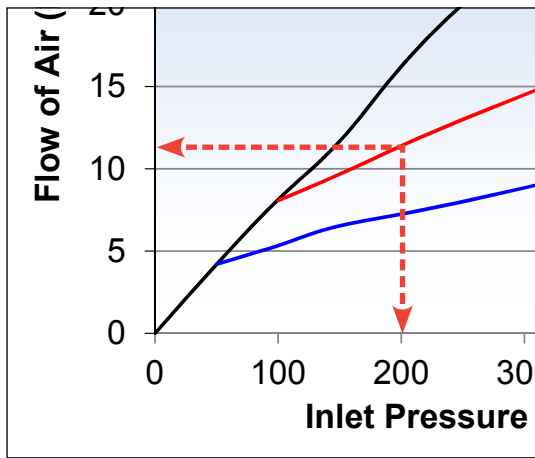


Part No	Gas Service	Inlet Connection	Outlet Connection	Maximum Working Pressure*
FRHFR	Fuel Gas	5/8-18 UNF-LH Female	5/8-18 UNF-LH Male	A 150 H 500 CMPY 500
FRHOR	Oxygen	5/8-18 UNF-RH Female	5/8-18 UNF-RH Male	OD 1500

* 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

$$QG = QD \times F$$

$$= 11 \times 2.5$$

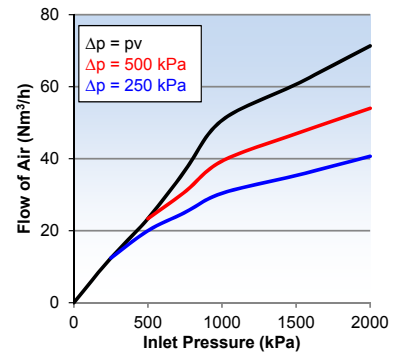
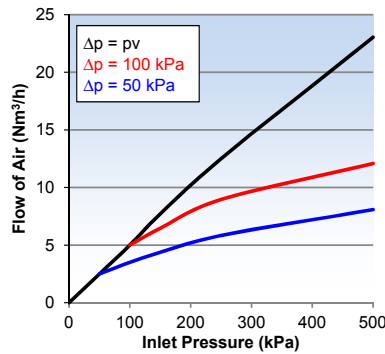
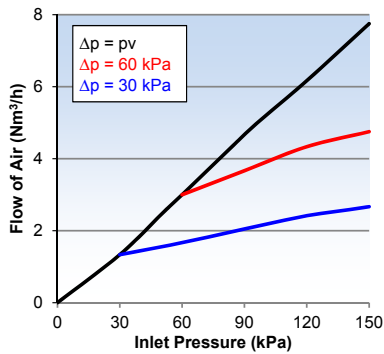
$$= 27.5 \text{ m}^3/\text{h (Hydrogen)}$$

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

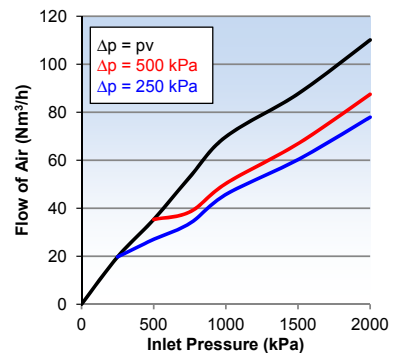
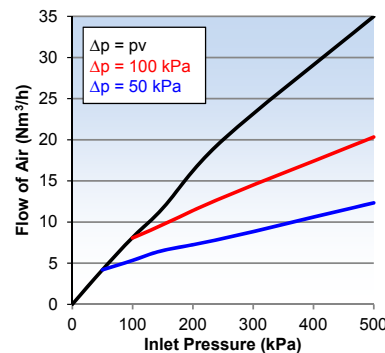
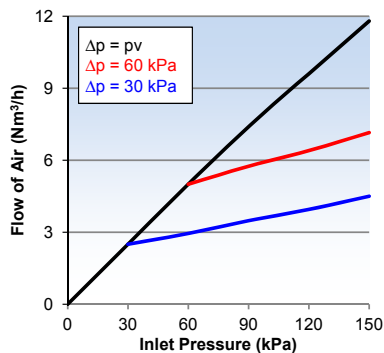
Conversion Factors:

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: SRT

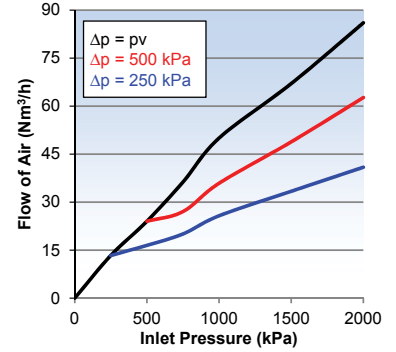
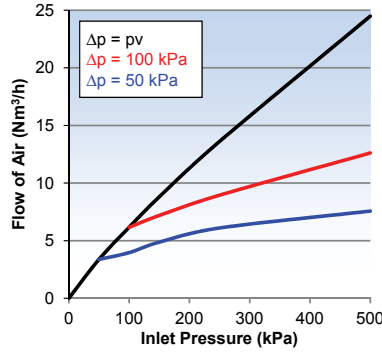
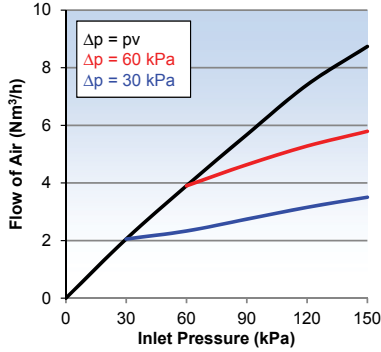


FLOW CHARTS – MODEL: DGN

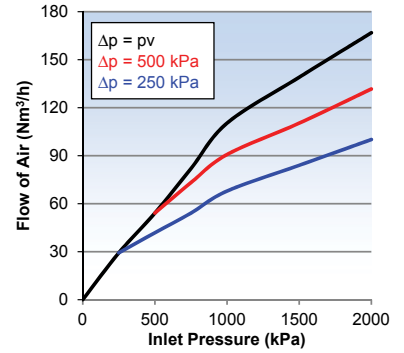
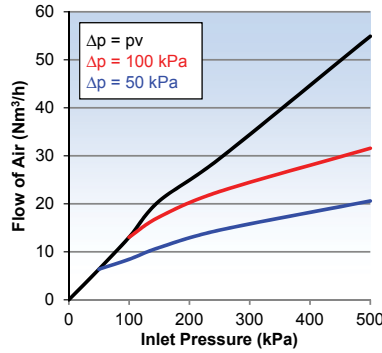
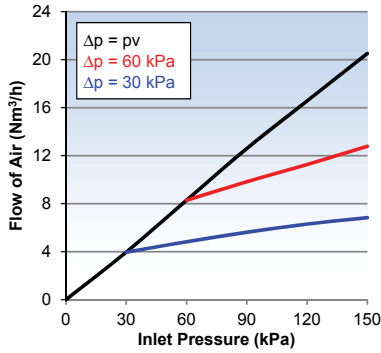


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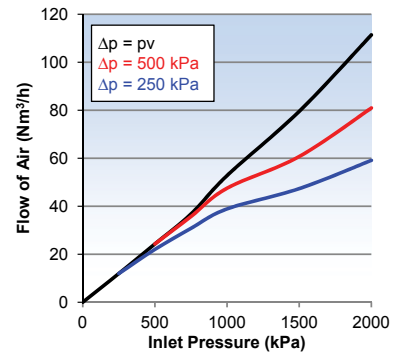
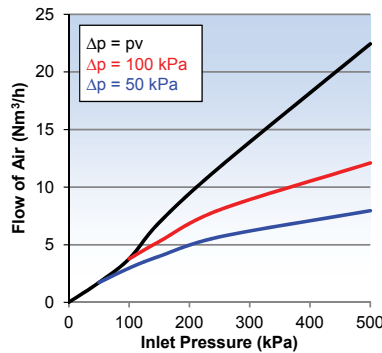
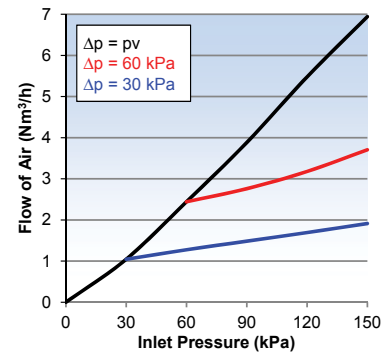
FLOW CHARTS – MODEL: DGNDK



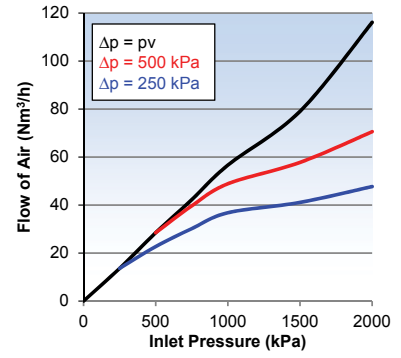
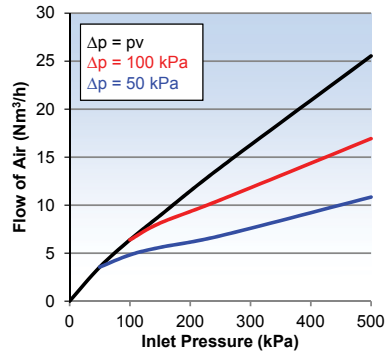
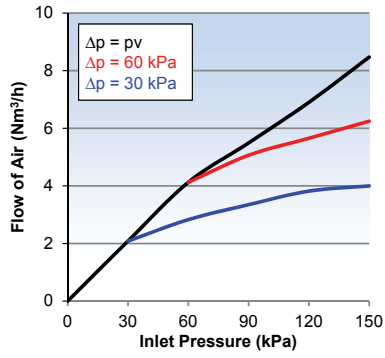
FLOW CHARTS – MODEL: DG91N



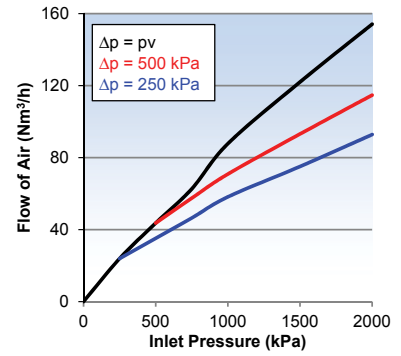
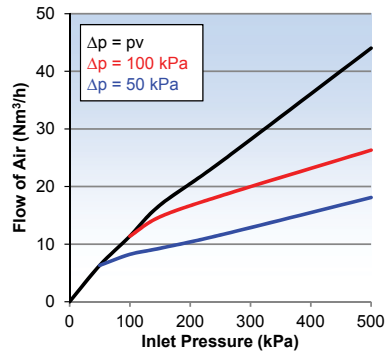
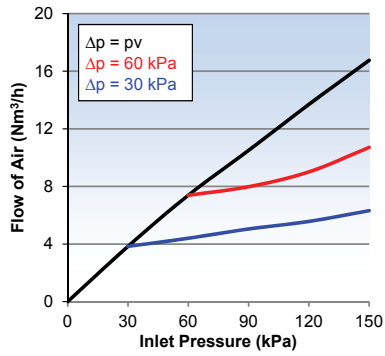
FLOW CHARTS – MODEL: DG91NH



FLOW CHARTS – MODEL: DS1000



FLOW CHARTS – MODEL: DS2000



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REGULATOR 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 m ³ /h	Brazing 12 m ³ /h	Brazing > 12 m ³ /h	Flame Spraying
SRT		•	•			•									
DGN		•	•	•		•			•			•			
DGNDK		•	•	•		•			•			•			
DG91N		•	•	•	•	•	•		•	•	•	•	•		•
DG91NH		•	•	•	•	•	•				•	•			•
DS1000		•	•	•	•	•			•			•			
DS2000		•	•	•	•	•	•		•	•	•	•	•		•
DEMAX 5 *		•	•	•	•	•	•	•	•	•	•	•	•	•	•
SIMAX 3 *		•	•	•	•	•	•	•	•	•	•	•	•	•	•
SIMAX 5 *		•	•	•	•	•	•	•	•	•	•	•	•	•	•
SIMAX 8 *		•	•	•	•	•	•	•	•	•	•	•	•	•	•

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

REGULATOR END FLASHBACK ARRESTORS

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

Specifications	
Materials of Construction Body Flame Arrestor Non Return Valve Seat	Brass Stainless Steel Sintered Filter NBR70 (Nitrile butadiene rubber)
Inclusions Non Return Valve Flame Arrestor Thermal Cut-off Valve Inlet Filter Pressure Sensitive Cut-off Valve EN561 Quick Action Coupling	All Models All Models All Models All Models DS1000 and DS2000 Models Only DGNDK Model Only
Standard	BAM ¹ Certified to AS 4603
Identification Colour Coding Fuel Gas Oxygen Label Information Body Stamping	Red Blue Logo of Manufacturer Year and Month of Construction Country of Origin Direction of Flow Australian Standard Certification Product Description Model Number Gas Service Maximum Working Pressures 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.