

Safety Accessories

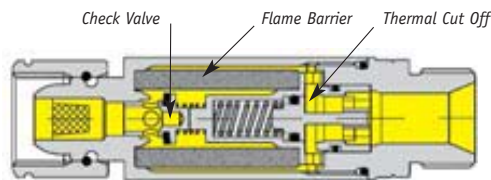
WHAT ARE FLASHBACK ARRESTORS

Flashback Arrestors prevent reverse flow of gases with built-in check valves and extinguishes flashback fire with a stainless steel sintered element.

HOW FLASHBACK ARRESTORS WORK



Torch Type (GG)

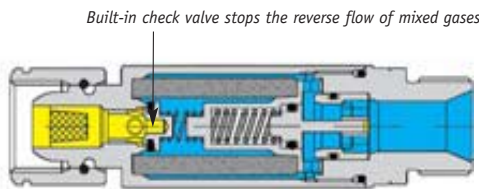


Normal Gas Flow →

Normal gas flow shown in yellow flowing through the flashback arrestor to torch, hose, or pipeline.

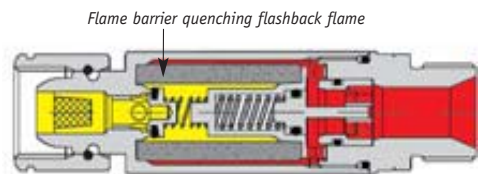


Regulator Type (DGN)



Reverse Gas Flow ←

Here the reverse flow of an explosive mixture of gases depicted in blue is stopped by the flashback arrestor's built in check valve. Reverse flow of gases is often caused by operator error, improper gas pressures, faulty or defective equipment, and/or obstruction at or after the point where gases mixed.

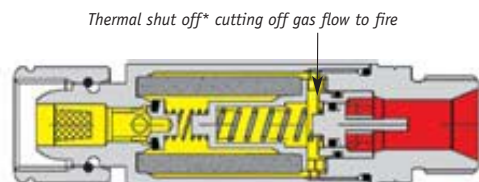


Flashback ←

The next step is the ignition of the mixed gases called a flashback shown here in red. The flashback causes a rapid flame propagation upstream to the equipment and gas supply. Here it is stopped by the flame barrier. Flashback can cause serious personal injury and/or equipment damage.



High Volume Type for In-Line and Point of Supply (SIMAX 3 & 5)



Hose Burn Back ←

Hose burn back shown here in red is an oxygen enriched fire or fuel gas decomposition in the hose or pipeline which flows back to the equipment and gas supply. In the illustration the hose burn back is stopped by the thermal cut off.

* Regulator and Point of Supply (in line) arrestors only



TORCH & REGULATOR FLASHBACK ARRESTORS

Prevent reverse flow of gases with built-in check valves. Extinguishes flashback fire with stainless steel sintered element.

FEATURES

- GG/DGN Series: For use up to size 6 cutting tip.
- DG91UA/DG91N Series: For use up to size 12 cutting tip.
- Quality Manufactured – internal valve and spring made from stainless steel for longer life.
- 100% tested
- Conforms to OSHA Regulations

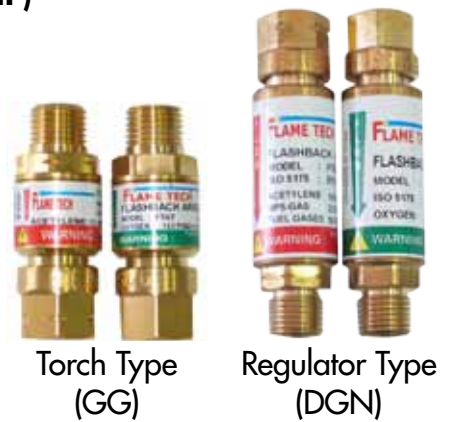
STANDARD FLOW (UP TO SIZE 6 TIP)

GG AIRFLOW

INLET PRESSURE (PSI)	AIRFLOW (CFH)
7.3	100.0
14.5	197.0
21.8	309.0
36.3	521.0
72.7	929.0

DGN AIRFLOW

INLET PRESSURE (PSI)	AIRFLOW (CFH)
7.3	141.0
14.5	268.0
21.8	390.0
36.3	651.0
72.7	1153.0



Torch Type (GG)

Regulator Type (DGN)

HIGH FLOW (UP TO SIZE 12 TIP)

DG91N & DG91UA AIRFLOW

INLET PRESSURE (PSI)	AIRFLOW (CFH)
7.3	231.0
14.5	465.0
21.8	725.0
36.3	1041.0
72.7	1933.0



Torch Type (DG91UA)



Regulator Type (DG91N)



IN LINE AND POINT OF SUPPLY—DEMAX SERIES

The DEMAX Flame Tech Flash Arrestors are ideal for high volume gas flow applications in pipelines, manifolds and regulators. The DEMAX includes an inlet filter, reverse flow check valve, flame barrier, and thermal cut off in one compact brass body.

APPROVAL & SPECIFICATIONS

- Meets ANSI Z49.1 1999 Safety Guide Lines, OSHA, NFPA Guide Lines.
- UL Listed 23Y5.

SAFETY ELEMENTS

- One Inlet Filter Included (100 micron)
- Reverse Flow Check Valve
- Flame Barrier
- Thermal Cut Off

MATERIALS

- BODY: Brass, Alloy 360
- INTERNALS: Brass
- FLAME BARRIER: Stainless Steel
- ELASTOMERS: Neoprene (NPR)



DEMAX AIR FLOW

INLET PRESSURE (PSI)	AIRFLOW (CFH)
4.6	265
14.6	920
21.9	1593
36	2100
72	4000
109	6125
145	8200
290	13,000

PART NUMBERS

- 0901-7000 Fuel Gas, 1" Female NPT Inlet/Outlet, DEMAX Style
- 0901-7001 Oxygen, 1" Female NPT Inlet/Outlet, DEMAX Style

WORKING PRESSURE

GAS	PSI
ACETYLENE	15
HYDROGEN	50
LPG	50
OXYGEN	143



IN LINE AND POINT OF SUPPLY—SIMAX SERIES

The (SIMAX) Flame Tech Flash Arrestor series provide a full range of dry type (no water or fluid to check or replenish) flashback, gas reverse flow, and hose burn back protection in a compact economical package. SIMAX series flashback arrestors are approved safety devices under ANSI Z49.1999 safety guidelines and help meet OSHA, NFPA, and other strict industry Safety standards (see listings of approvals and specifications below). They are ideal for high volume gas flow applications in pipelines and manifolds. SIMAX units available in sizes 3, 5 & 8 with optional pipe away relief valve assemblies.

APPROVAL & SPECIFICATIONS

- UL Listed 23Y5, ISO 5175, BS 6158, EN 730 (BAM / DIN), AS 4603

SAFETY ELEMENTS

- Inlet filter (100 micron)
- Reverse Flow Check Valve
- Flame Barrier
- Thermal Cut Off Valve

MATERIALS

- BODY: Brass, Alloy 360
- INTERNALS: Brass
- FLAME BARRIER: Stainless Steel
- ELASTOMERS: Neoprene (NPR)



Relief Valve
0901-3007
Required by NFPA 51

Fuel Gas
(SIMAX-3 Style)

Oxygen
(SIMAX-5 Style)

GAS TYPE CONVERSION FACTORS

GAS TYPE	FACTOR
ACETYLENE	1.05
BUTANE	0.70
HYDROGEN	3.79
PROPYLENE	0.82
METHANE/NATURAL GAS	1.34
OXYGEN	0.95
PROPANE	0.80

AIR FLOW (CFH)

PSI	21.9	36.5	73	145.9	286
BAR	1.5	2.5	5	10	20
SIMAX-3	1904	2618	5202	9860	20400
SIMAX-5	3060	4352	8670	16150	33150
SIMAX-8	5168	5670	13872	26180	53040

QUICK CONNECTORS

FEATURES

- Long lasting stainless steel pin connection
- Automatic gas cut off feature to positively shut off the gas supply when disconnecting
- All brass construction with durable stainless steel coupling pins reduces breakage and wear plus they meet ISO 7289, EN561 standards
- Double O-ring seal
- Color coded for gas service
- Quick connectors available with built-in flashback arrestors

DKD Size "C" Fuel Gas & Oxy
7/8" with Auto Gas Shut-Off
Quick Disconnect System

TORCH TYPE QUICK CONNECTORS (DKG/D1)



Oxygen	P/N: 0901-8101
Fuel Gas	P/N: 0901-8100
Oxy-Fuel Set	P/N: 0901-0092



PINS FOR TORCHES USE D1 PIN FOR REGULATORS USE D4 PIN



D1 Oxygen	P/N: 0901-0008
D1 Fuel Gas	P/N: 0901-0003