

REGULATOR & TORCH SAFETY ACCESSORIES

FLAME TECH® Regulator & Torch Flashback Arrestors:

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



Torch Flash Arrestor
(DG91UA)

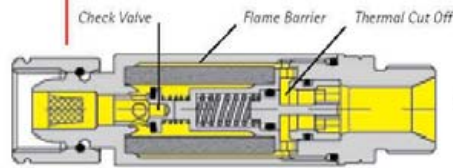


Regulator Flash Arrestor
(DGN)



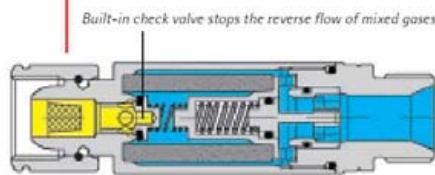
High Volume In Line
Flash Arrestor for in
line & point of supply
(SIMAX 3 & 5)

How Flashback Arrestors Work



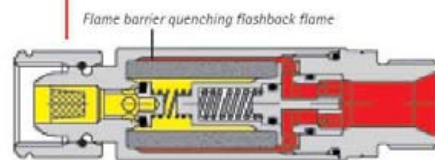
Normal gas flow shown in yellow flowing through the flashback arrestor to torch, hose, or pipeline.

Normal Gas Flow →



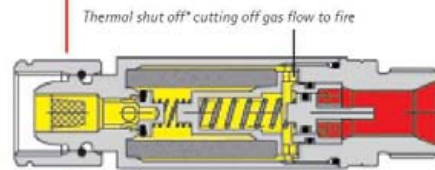
Here the reverse flow of an explosive mixture of gases depicted in blue is stopped by the flashback arrestor's built in check valve. Reverse flow of gases is often caused by operator error, improper gas pressures, faulty or defective equipment, and / or obstruction at or after the point where gases mixed.

Reverse Gas Flow ←



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.

Flashback ←



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

Hose Burn Back ←

REGULATOR & TORCH SAFETY ACCESSORIES

FLAME TECH® Regulator & Torch Flashback Arrestors:

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

FEATURES:

High Capacity – adequate for cutting 12” steel and operating the larger heating torches

- Quality Manufactured – internal valve and spring made from stainless steel for longer life
- 100% tested
- Conforms to OSHA Regulations
- U. L. Listed

TORCH & REGULATOR TYPE



DG91UA
Individual High Flow
Flashback Arrestor for
Torches, 9/16" L & RH,
CGA Class B, Model GG



**Regulator
(DG91N)**
High Gas Flow Flash Arrestor
available in CGA "B"-9/16, 3/8" &
CGA "C" 1/2"

REGULATOR & TORCH SAFETY ACCESSORIES

In Line and Point of Supply Flashback Arrestors

The DEMAX Flame Tech Flash Arrestor 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.

DEMAX

High Flow in line Flash Arrestor Inlet is 1" NPT female and outlet . A wide variety of connections can be factory installed including CGA "C" size (7/8" – 14 LH or RH) 3.5 lbs.

Approval & Specifications

Meets ANSI Z49.1 1999 safety guide lines, OSHA, NFPA guide lines. UL Listed 23Y5.

SAFETY ELEMENTS

Inlet filter (100 micron).....YES (1)
Reverse Flow Check Valve....YES
Flame Barrier.....YES
Thermal Cut Off Valve.....YES (1)

MATERIALS

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



DEMAX AIR FLOW TABLE

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

WORKING PRESSURE

GAS	PSIG
ACETYLENE	15
HYDROGEN	50
PLG	50
OXYGEN	143

PART #	DESCRIPTION
0901-7000	Fuel Gas, 1" NPT, DEMAX Style
0901-7001	Oxygen, 1" NPT, DEMAX Style

REGULATOR & TORCH SAFETY ACCESSORIES

In Line and Point of Supply

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-3

(Part# 0901-3010)

High Flow in line Flash Arrestor with 75 psig relief valve. Inlet is 1" NPT and outlet is (right angle) 1/2" NPT The relief valve is threaded for 1/2" NPT (pipe away relief). Position of the relief valve and outlet can be reversed. Wt. 7.5 lbs

Approval & Specifications

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

SAFETY ELEMENTS

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

MATERIALS

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

Flash Arrestor Fuel Gas



Flash Arrestor Oxygen

SIMAX-5
(Part # 0901-5000)



Relief Valve # 0901-3007
Required by NFPA 51

HIGH VOLUME IN LINE FLASH ARRESTORS & RELIEF VALVES

PART #	DESCRIPTION
0901-3000	Fuel Gas, 1" NPT, SIMAX 3 Style
0901-3001	Oxygen, 1" NPT, SIMAX 3 Style
0901-3007	Propylene, Pipe-away "T" Relief Valve (75psi), SIMAX 3 Style
0901-3010	Fuel Gas, Flash Arrestor with attached Relief Valve, 1" NPT, SIMAX 3 Style
0901-3011	Oxygen, Flash Arrestor with attached Relief Valve, 1" NPT, SIMAX 3 Style
0901-5010	Fuel Gas, Flash Arrestor with Relief Valve, 1" NPT, SIMEX 5 Style
0901-5011	Oxygen, Flash Arrestor with Relief Valve, 1" NPT, SIMAX 5 Style

AIR FLOW TABLE (FT³ /h)

PSIG	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

GAS TYPE CONVERSION FACTOR

ACETYLENE	1.05
BUTANE	0.7
HYDROGEN	3.79
MAPP / PROPYLENE	0.82
METHANE/NATURAL GAS	1.34
OXYGEN	0.95
PROPANE	0.8

REGULATOR & TORCH SAFETY ACCESSORIES

FLAME TECH QUICK CONNECTORS:

FEATURES:

- Long lasting stainless steel pin connection
- Automatic gas cut off feature to positively shut off the gas supply when disconnected
- Durable brass and stainless steel construction

NEW

DKD "C" Size Fuel Gas & Oxygen
7/8" With Auto Gas Shut-Off
For Caster Torches
Quick Disconnect System

All brass construction with
durable stainless steel
coupling pins reduces breakage
and wear plus they meet ISO 7289,
EN561 standards.

TORCH TYPE QUICK CONNECTORS (DKG/D-1)



Oxygen PART # 0901-8101
Fuel Gas PART # 0901-8101
OR PAIR PART # 0901-0092



PINS

(For Torches use D1 Pin)
For Regulators use D4 Pin
(See Price Sheet)



D1 Oxygen PART # 0901-0008
D1 Fuel Gas PART # 0901-0003