



Carlisle Machine Works, Inc.

Instructions for the use of the Flashback Arrestor

Norms and Standards: ISO 5175; EN 730-1; EN 730-2; O NORM EN 730; BS 6158; EN 561; ISO 7289; UL; CGA: AS 4603; SABS
Follow local national Safety Regulations.

Information: -For any questions, please call Carlisle Machine Works, Inc. 800-922-1167

Function: -Protection against creeping and sudden reverse flow Gas;
-Flashbacks;

Correct Usages: -Safety at the supply tapping points, cylinder regulators and torches
-Use only in connection with given data on the product body

Working pressure : -See data on product body
-Cracking pressure is less than 1 PSI (6oz.—8oz.)

Incorrect Usage: -Application of other gases and/or pressures than those indicated on the product body
-Couplings are not cut-off valves, in the event of longer breaks or at the end of the working day the gas source should be closed

Assembly Instructions:

- Before commencing, check visually that all connections are clean and undamaged.
- When assembled, check for possible leaks by going up to the maximum working pressure.
- When using oxygen, all connections and the complete unit must be free from oil and grease
- Fit with open-ended spanners for each connection (use wrenches not pliers).

Maintenance:

- The flashback arrestor and coupling must be tested at regular intervals by a trained and authorized person according to your local safety regulations.
- This means testing at least once per year (with couplings coupled and uncoupled being tested every six months) for gas leaks and gas reverse flow.
- Where Acetylene generators are used, a gas purifier must be installed directly before the arrestor.
- Where there is the possibility of condensed water in the feed delivery pipes/hose, an adequate water filter should be installed before the arrestor.
- Repairs of all sorts may only be carried out by the manufacturer or manufacturer's representative.
- The dust filter at the inlet of the arrestor may be changed and/or cleaned by the user.

Instructions in case of break-downs:

- No gas flow: check flow direction, operating pressure, gas cut-off valves, gas source, thermal and pressure cut-off valves.
- Couplings and coupling pins can leak if they are damaged or dirty; therefore they should be checked regularly
- gas return flow: replace device
- external leakage: replace device

Designation examples:

- Line 1: Year; type; standards: B02 EN730-1
- Line 2: serial number: 001234
- Line 3: Gas type and Working Pressure; Flow Direction: A1,5H3,5PMY5bar

Key to Gas Types: Acetylene (A); Propane (P); Methane, Natural Gas (M); Hydrogen (H); town gas (C); Gas Mixture (Y); Oxygen (O); Compressed Air (D).

WARNING:

- *Use only in the prescribed gas direction and do not exceed the maximum working pressure.
- *Use only the prescribed gas.
- *Do not connect the flashback arrestor to any other pressure recipients (e.g. directly to pressure gas cylinders 200 bar, 20,000 kPa, 2856 PSI)

DANGER TO LIFE!

- * Compressed Air controlled valves are no longer allowed to be used in oxygen systems.
- * CAUTION—Do NOT attempt to repair flashback arrestors. There are no user repairable parts.
- * Only one operating unit may be installed in conjunction with a flashback arrestor.
- * Additional marking, stamping or engraving in the arrestor by the user is strictly forbidden, as this can cause damage.

The control knob is up and the green area is viewable

After a flashback or reverse flow over .5 bar the control knob snaps forward, pull up to reset



Carlisle Machine Works, Inc.,
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FLOW RATE CHART

Model	Safety Element	DGN;SRT;DGNK;DGNDK;DG91N;DG91NH;SIMAX;DEMAX;RV90;V90	GT;GG;TT;NKSG;DKST;DKSG;DG;DG91;DG91UA;SR;DG91;DG91UA;SR;SRH;SRHH;SHT;SHH;SHDK;STDK	DS2000	GRS91;GRS91UA	FV90
Safety Element						
Dust Filter		X	X	X	X	X
Gas non-return Valve	NV	X	X	X	X	X
Flame Filter					X	
Flame Block	FA	X	X	X		
Thermal Cut-off Valve	TV	X		X		
Pressure cut-off Valve	PV			X		

CONVERSION FACTORS

Model	GT GG TT SR SRT SRHH SRH SHT SHH	NKST NKSG DKST STDK SHDK	DGN DG	DGNK DGND	DG91 DG91N DG91UA DS2000	DG91NH		SIMAX			DEMAX	GRS91 GRS91UA
Inlet Pressure						0,5	1,0	-3	-5	-8		
0,1 bar	%	%	%	%	%	%	%	%	%	%	4,0	%
0,9 bar	4,5	4,0	6,8	5,2	12,6	3,9	4,8	35	60	85	%	26,3
85	7,3	6,2	10,5	7,3	20,5	6,9	8,9	57	96	150	%	45,3
5,0 bar	26,0	19,5	34,5	21,0	50,5	24,0	32,0	160	260	420	%	115,5
10,0 bar	47,0	36,0	61,0	39,5	80,0	50,0	74,0	310	510	800	%	235,0

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