MODEL L76L-UF

TECHNICAL DETAILS

- Connection Sizes: 1" and 2" NPT
- Housing standard material: 1" carbon steel, aluminum
 2" carbon steel
- Flame element standard material: stainless steel
- Operational Temperature Range: -4 to 140 °F (-20 to 60 °C)
- Gas Group: NEC D; IEC IIA (MESG > 0.90 mm)
- Maximim Operational Pressure: (see charts)*
- Burn Time: tBT 20 minutes at Atmospheric Pressure
- Bi-directional with respect to flow and ignition source



MODEL L76L-UF

DEFLAGRATION FLAME ARRESTORS

The L76L-UF model is designed to inhibit flame propagation in gas piping systems and to protect low pressure tanks containing flammable liquids. Arrestors protect low flash point liquids from external sources of ignition. This provides increased fire protection and safety.

FEATURES & BENEFITS

- Flame arrestor element geometry maximizes flame quenching capability while minimizing pressure drop
- Spiral-wound, crimped-ribbon flame element

OPTIONS

• Exterior painting or coating available

MODEL L76L-UF // SPECIFICATIONS

Specifications subject to change without notice. Certified dimensions available upon request.

Size (Metric)	A Width (Metric)	B Height (Metric)	MAWP⁺ Carbon (Metric)	Approx Ship. Wt. Lbs. Carbon Steel	Approx Ship. Wt. Lbs. Aluminum
1"	5.56"	7.88"	100 psig	20.3	11.7
(25 mm)	(141 mm)	(200 mm)	(690 kPa)	(9.21 kg)	(5.31 kg)
2"	6.63"	8.50"	100 psig	29	-
(50 mm)	(168 mm)	(216 mm)	(690 kPa)	(13.2 kg)	-



Pneumatic tested to 15 psig as standard.

*MAWP does not reflect the maximum operational pressure of the flame arrestor. Please consult the specifications section for the correct maximum operational pressure of the arrestor.

HOW TO ORDER For easy ordering, select proper model numbers MODEL # DESCRIPTION L76L - UF - 0105 - 11 - 000 1" x 5" Aluminum Body, 316 SS Element L76L - UF - 0105 - 33 - 000 1" x 5" Carbon Steel Body, 316 SS Element L76L - UF - 0206 - 33 - 000 2" x 6" Carbon Steel Body, 316 SS Element

MODEL L76L-UF // SPECIFICATIONS

For an arrestor to be properly applied, all the requirements for one of the two following configuration scenarios must be met.

STRAIGHT PIPE, CLOSED END CONFIGURATION:								
Gas Group	End Condition	Maximum Pipe Length from Ignition Source to Flame Arrestor	Maximum Operational Pressure	Allowable Bend(s)*	Maximum Burn Time at Atmospheric Pressure	Operational Temperature Range °F (°C)		
D (IIA)	Closed End	50 pipe diameters	18.9 psia (1.3 bara)	None	20 minutes	-4 to 140 (-20 to 60)		

Model L76L-UF, Straight Pipe, Closed End Configuration, is designed and tested according to EN ISO 16852:2016, except for: 1. The short time burn test was conducted at atmospheric pressure, for a time period extending past 1 minute. *No additional bends or restrictions are allowed.

20FT WITH BEND, OPEN END CONFIGURATION:								
Gas Group	End Condition	Maximum Pipe Length from Ignition Source to Flame Arrestor**	Maximum Operational Pressure	Allowable Bend(s)*	Maximum Burn Time at Atmospheric Pressure	Operational Temperature Range °F (°C)		
D (IIA)	Open End	20 ft (ignition source - max of 15 ft - bend - max of 5 ft - arrestor)	15.9 psia (1.1 bara)	One 90 degree	20 minutes	-4 to 140 (-20 to 60)		

Model L76L-UF, 20 ft with Bend, Open End Configuration, is designed and tested according to EN ISO 16852:2016, except for: 1. The piping on the unprotected side, consisted of ignition source, 15 ft of straight pipe, one 90 degree bend, 5 ft of straight pipe, then the arrester.

2. The short time burn test was conducted at atmospheric pressure, for a time period extending past 1 minute.

3. Tested with a thin film on the end, to simulate an open-ended piping configuration.

*No additional bends or restrictions are allowed.

**See below 20 ft with bend diagram:



FIGURE 1: 20FT WITH BEND

MODEL L76L-UF // FLOW CAPACITY



- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance losses or exit losses.
- Flow values based on air at 60°F venting to atmospheric pressure of 14.6959 psia