LAMOT®

VALVE & ARRESTOR

FLAME ARRESTOR

MODEL L76T-UF

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The L76T-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.

Technical Details

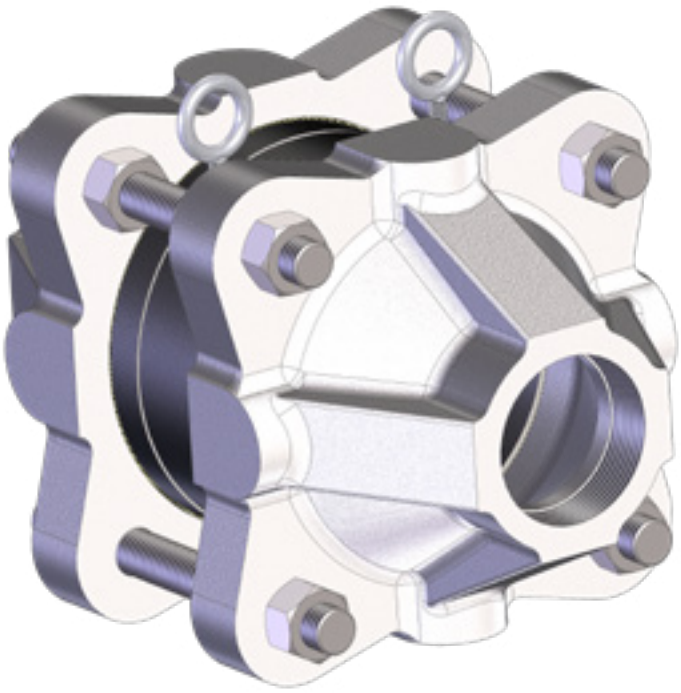
- Connection Sizes: 2", 3" and 4" NPT
- Housing standard material: carbon steel, 316SS
- Bases standard material: carbon steel
- Flame element standard material: stainless steel
- Operational Temperature Range: -4 to 140 °F (-20 to 60 °C)
- Gas Group: NEC D; IEC IIA (MESG > 0.90 mm)
- Maximum Operational Pressure: (see charts and IOM)
- Burn Time: t_{BT} 2.5 minutes or better at Atmospheric Pressure (see charts and IOM)
- Bi-directional with respect to flow and ignition source

Features & Benefits

- Flame arrestor element geometry maximized flame quenching capability while minimizing pressure drop
- Removable element housing for each of maintenance
- Spiral-wound, crimped ribbon flame element
- Flame elements made standard with premium 316SS material

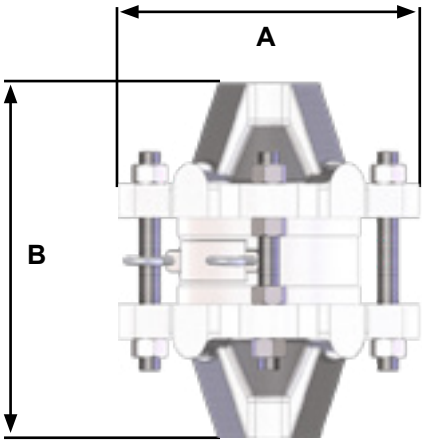
Options

- Exterior painting or coating available
- Drains and instrumentation ports available
- Factory installed thermocouples for flame sensing available



Specifications

Connection Size NPT	Housing Nominal Size	A Width	B Height	MAWP* Carbon Steel	Approx Ship. Wt. Lbs. Carbon Steel
2" FPT	5”	9.00"	10.50"	100 psig	36
3” FPT	6”	10.50”	12.25”	100 psig	52
4” FPT	8”	12.50"	13.13"	100 psig	89
4” FPT	10”	14.30”	13.13”	100 psig	106



Pneumatic leak 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.

MAWP, refers only to the maximum shell pressure allowed, it has no relation or influence on the flame arresting performance of the flame arrestor.

In contrast however, the maximum operational pressure of a flame arrestor, is the maximum pre-ignition pressure of vapors in the piping system in which the flame arrestor will successfully arrest the flame; per the correct application of gas group (IIA/D, MESG>0.90mm) and run-up-distance according to the IOM.

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

Specifications

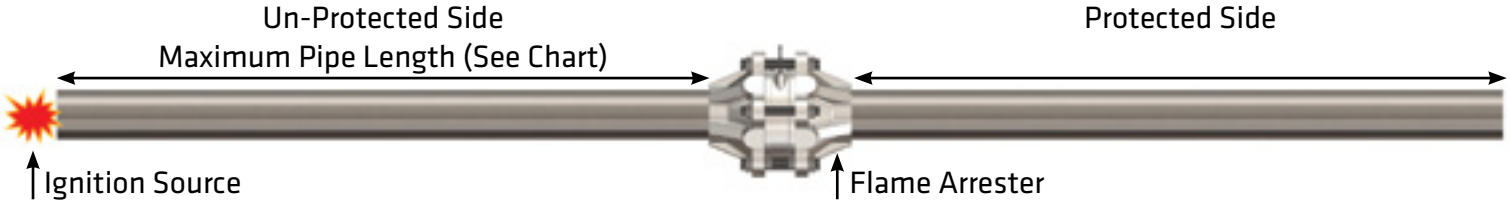
For an arrestor to be properly applied, all the requirements for one of the two following configuration scenarios must be met.

1) 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	18.8 psia (1.3 bara) or better, see IOM	None	2.5 minutes or better, see IOM	-4 to 140 (-20 to 60)

Model L76T-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.

Figure 1: Straight Pipe, Allowable Installation Configuration



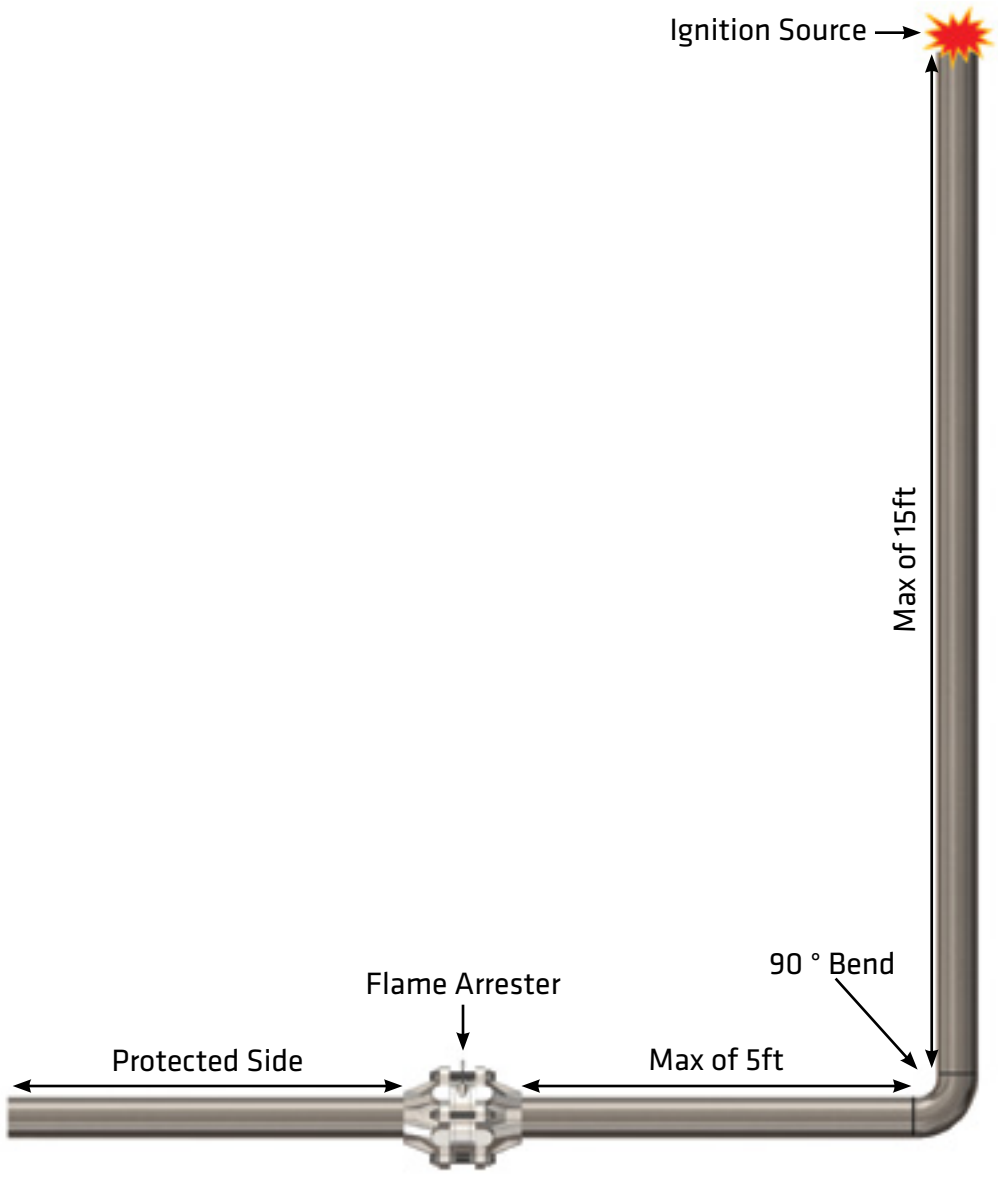
Specifications

2) 20Ft Pipe with Bend, Open End Configuration:

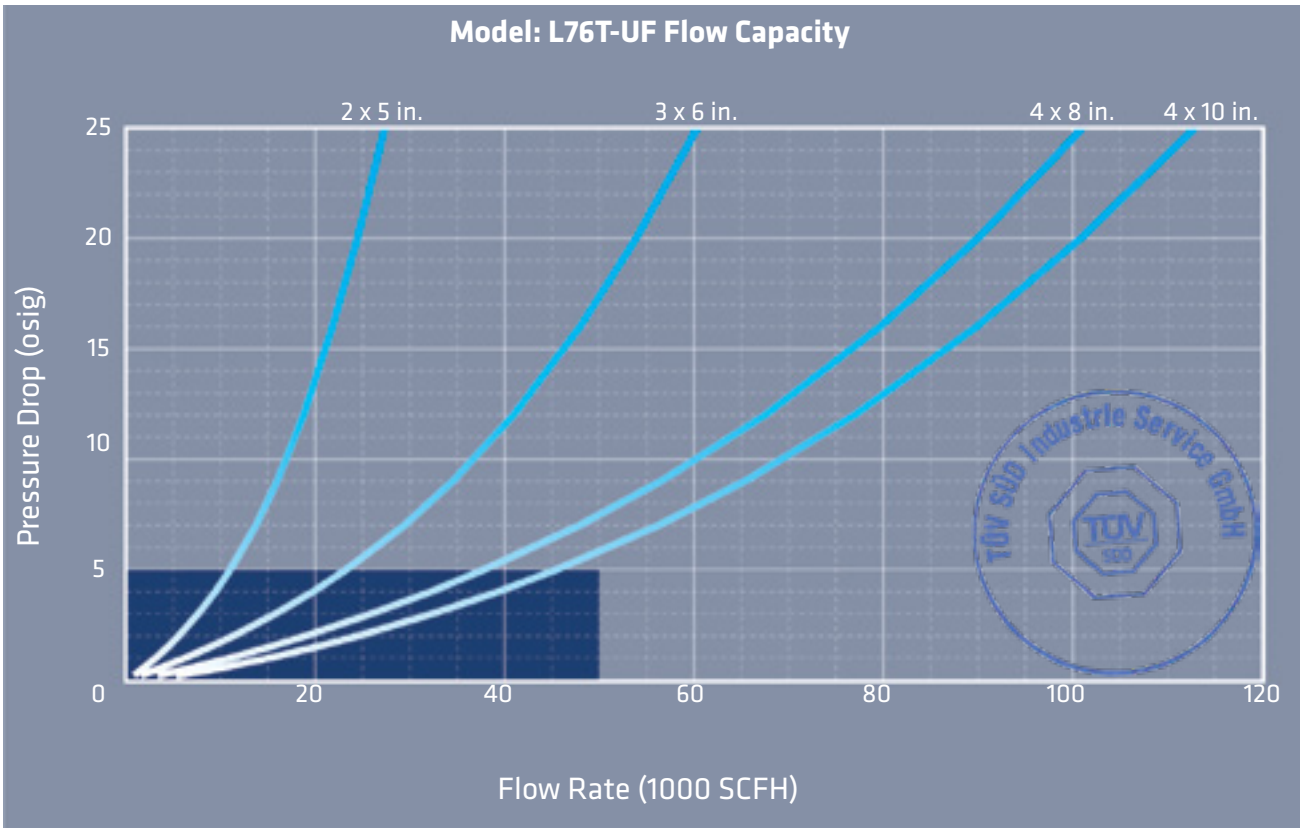
Gas Group	End Condition	Maximum Pipe Length from Ignition Source to Flame Arrestor	Maximum Operational Pressure	Allowable Bend(s)*	Maximum Burn Time at Atmospheric Pressure	Operational Temperature Range °F (°C)
D (IIA)	Open End	20 ft (ignition source - max of 15 ft - bend - max of 5 ft - arrestor)	15.5 psia (1.07 bara) or better, see IOM	One 90 Degree	2.5 minutes or better, see IOM	-4 to 140 (-20 to 60)

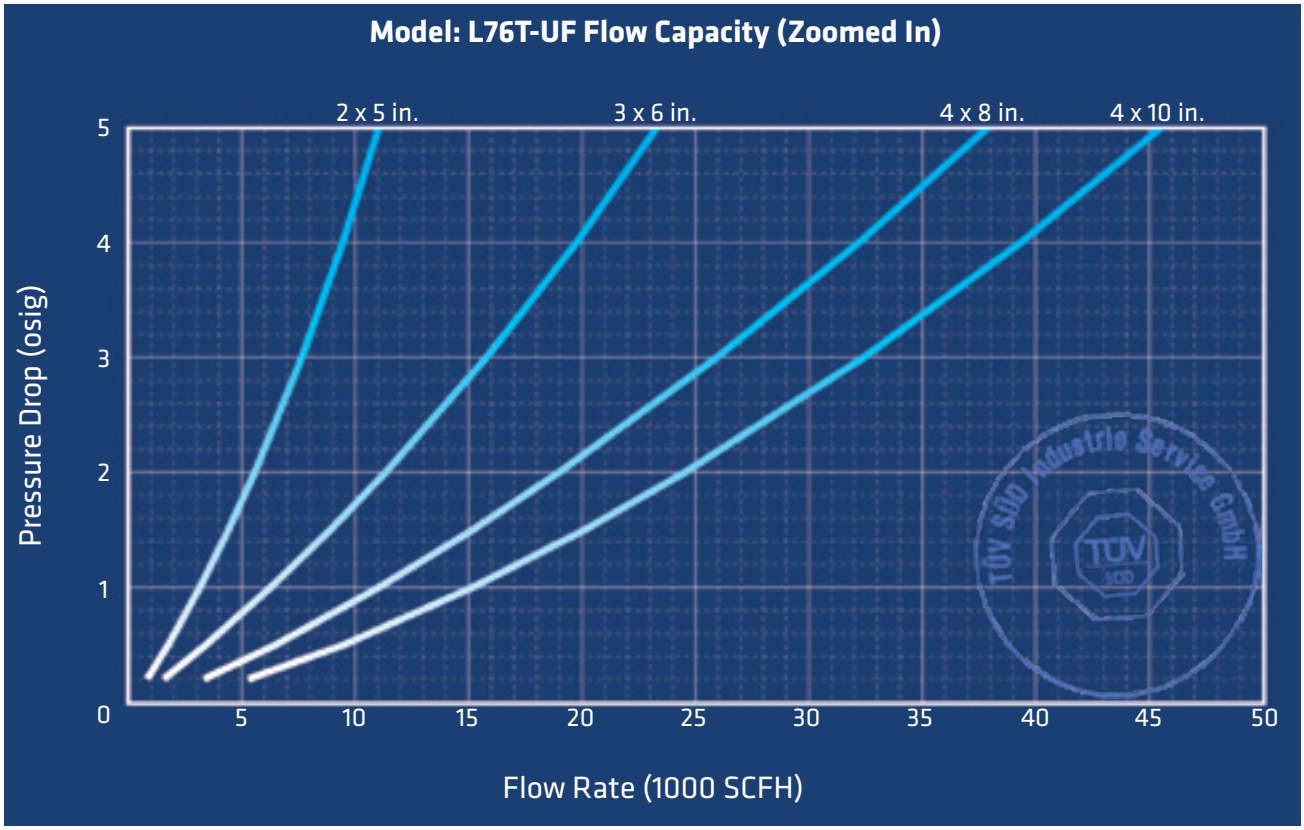
Model L76T-UF, 20 ft with Bend, Open End Configuration, is designed and tested according to EN ISO 16852:2016, except for:
1. The piping on the unprotected side, consisted of ignition source, 15 ft of straight pipe, one 90 degree bend, 5 ft of straight pipe, then the arrester.
2. The short time burn test was conducted at atmospheric pressure, for a time period extending past 1 minute.
*No additional bends or restrictions are allowed.
**See below 20 ft with bend diagram

Figure 2: 20FT with bend, Allowable Installation Configuration



Flow Capacity

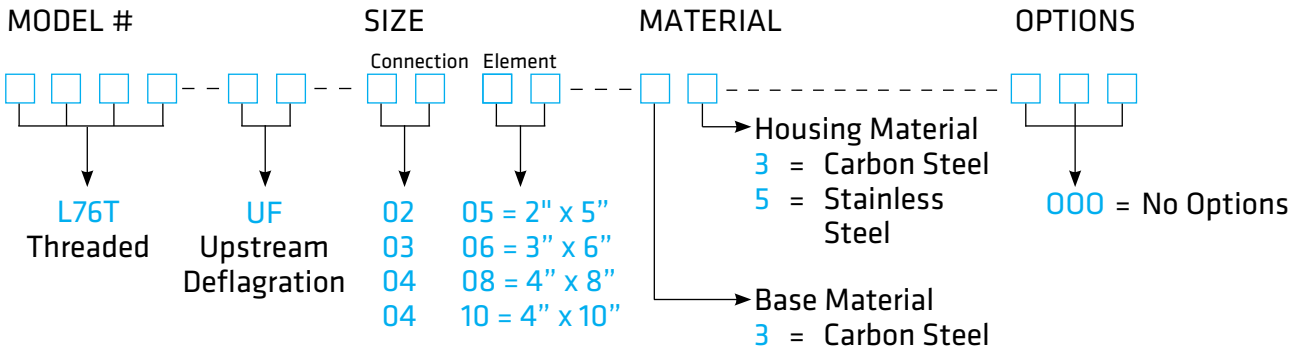




- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

How To Order

For easy ordering, select proper model numbers



Notes

- Include model number and setting when ordering
- For special options, consult factory

Example

L	7	6	T	–	U	F	–	0	2	0	5	–	3	3	–	0	0	0

Indicates a 2" x 5" Model L76T with carbon steel base, carbon steel housing, threaded inlet/outlet, and no other options.

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