

# FLAME ARRESTER MODEL 7688

### **MODEL 7688**

The Groth Model 7688 is an In-Line Vertical Deflagration Flame Arrester designed to inhibit flame propagation in gas piping systems and to protect low pressure tanks containing flammable liquids. Arresters protect low flash point liquids from external sources of ignition providing increased fire protection and safety.

#### **Technical Details**

- Flange Sizes: 2" (DN50) through 12" (DN300)
- Housing standard material: Aluminum, Carbon Steel, Stainless Steel
- Bases standard material: Aluminum, Carbon Steel, Stainless Steel
- Flame element standard material: 316L Stainless Steel
- Maximum Run Up (L/D) 50 (testing parameters based on EN ISO 16852:2010)
- Operational Temperature Range: -4 to 140 °F (-20 to 60 °C)
- Burn Time tBT 2 minutes (Size 8", 10", 12")
- Burn Time tBT 10 minutes (Sizes 2", 3", 4", 6")
- NEC gas group D, IEC gas group IIA (MESG>= 0.90mm)
- 2-4" sizes available with ATEX Certification in compliance with EN ISO 16852:2010

#### Features

- Unique recessed seating for superior protection
- Quick and easy maintenance
- Modular design allows easy and cost-effective flame-bank maintenance
- Flame arrestor element geometry maximizes flame-quenching capability while minimizing pressure drop
- Proven spiral-wound, crimped-ribbon flame element provides reliable protection

#### Options

- Exterior painting or coating
- DIN or ASME/ANSI drilling
- Tapped and instrumentation ports
- Factory installed thermocouples for flame sensing, required for flame detection per ATEX code

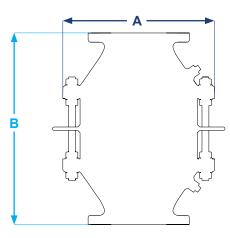


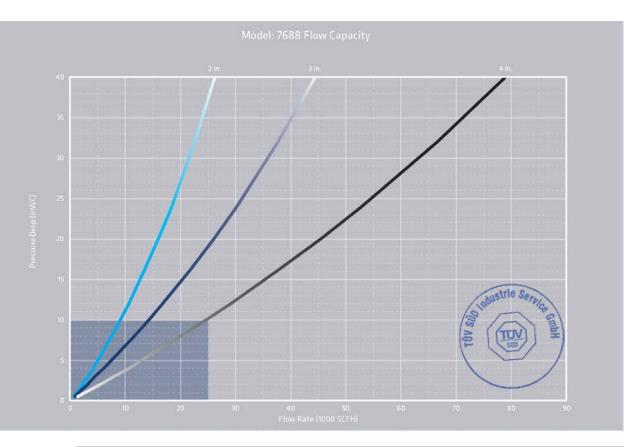
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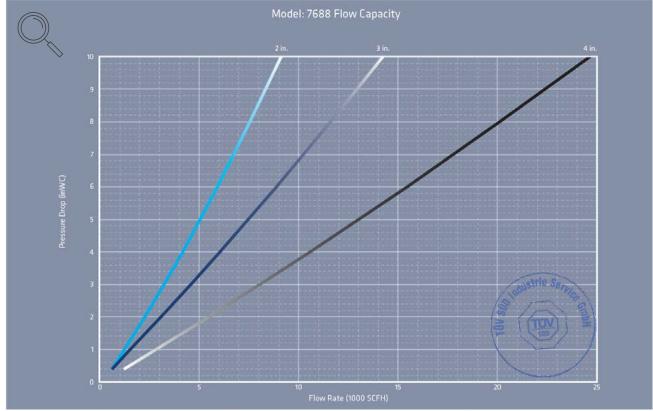
### **SPECIFICATIONS**

Flange Size Inches (mm)	A Width Inches (mm)	B Height Inches (mm)	Maximum Operational Pressure* psia (bara)	Burn Time tBT * minutes	Approx Ship. Weight Aluminum Lbs (kg)	Approx Ship. Weight Carbon or SS Lbs (kg)
2" (51)	8.75 (221)	14.00 (356)	23.2 (1.60)	10	19 (9)	41 (18)
3" (76)	9.50 (241)	16.00 (406)	23.2 (1.60)	10	28 (13)	61 (28)
4" (102)	11.50 (292)	18.25 (464)	17.4 (1.20)	10	44 (20)	93 (42)
6" (152)	16.50 (419)	21.00 (533)	17.4 (1.20)	10	98 (44)	189 (86)
8" (203)	21.00 (533)	25.00 (635)	17.4 (1.20)	2	155 (70)	317 (144)
10" (254)	24.75 (629)	30.00 (762)	17.4 (1.20)	2	250 (113)	512 (232)
12" (305)	28.62 (727)	32.50 (826)	v	2	324 (147)	712 (323)

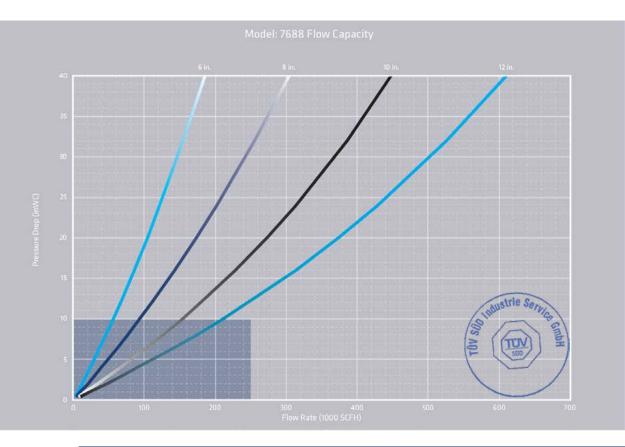
Specifications subject to change without notice. Certified dimensions available upon request \*Testing parameters based on EN ISO 16852:2010

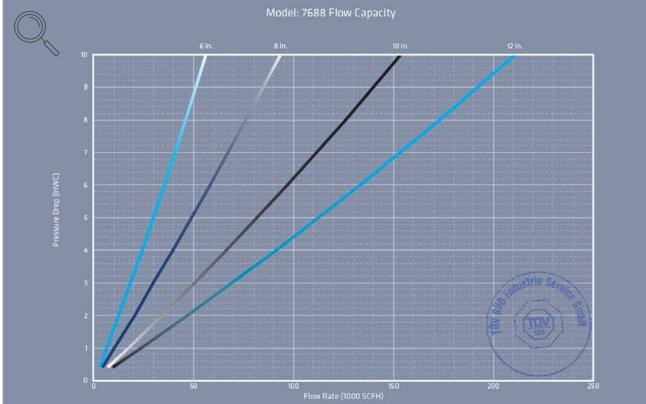




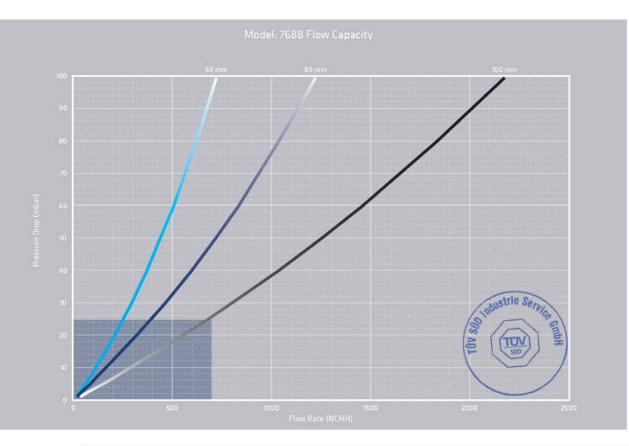


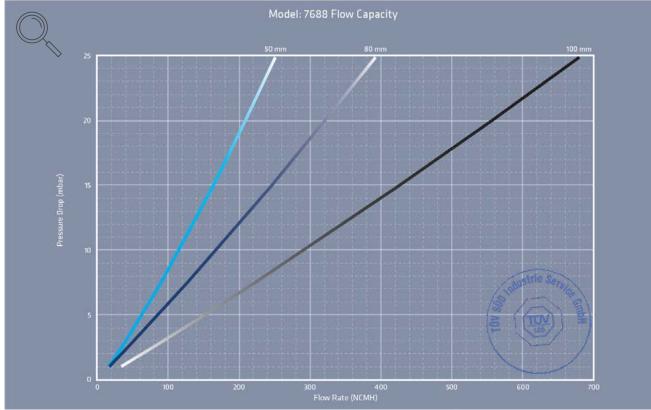
- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
  Flow data are for in-line mounting and does not include entrance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





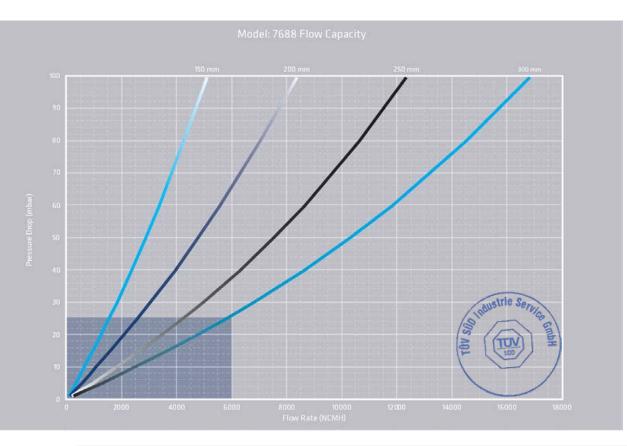
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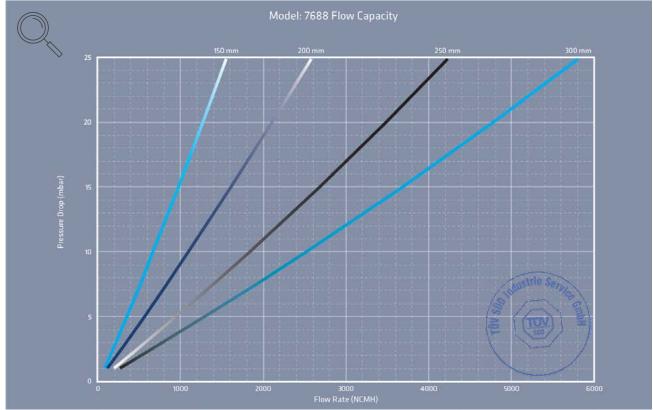




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  Flow data are for in-line mounting and does not include entrance losses or exit losses.
  Flow values based on air at 0°C venting to atmospheric pressure of 1.01325 bara

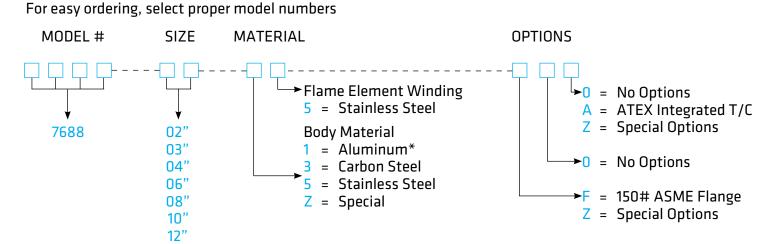






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## HOW TO ORDER



#### Notes

- Include model number and setting when ordering
- For special options, consult factory
- \*For aluminum construction, only 2", 3" and 4" sizes available with ATEX. Aluminum construction sizes 6" and above are not available with ATEX

Example	7	6	8	8	-	0	2	_	3	5	-	F	0	Α	
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Indicates a 2" Model 7588 with Carbon Steel body, Stainless Steel flame element, 150# ASME Flanged Outlet, and ATEX Integrated thermocouple



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