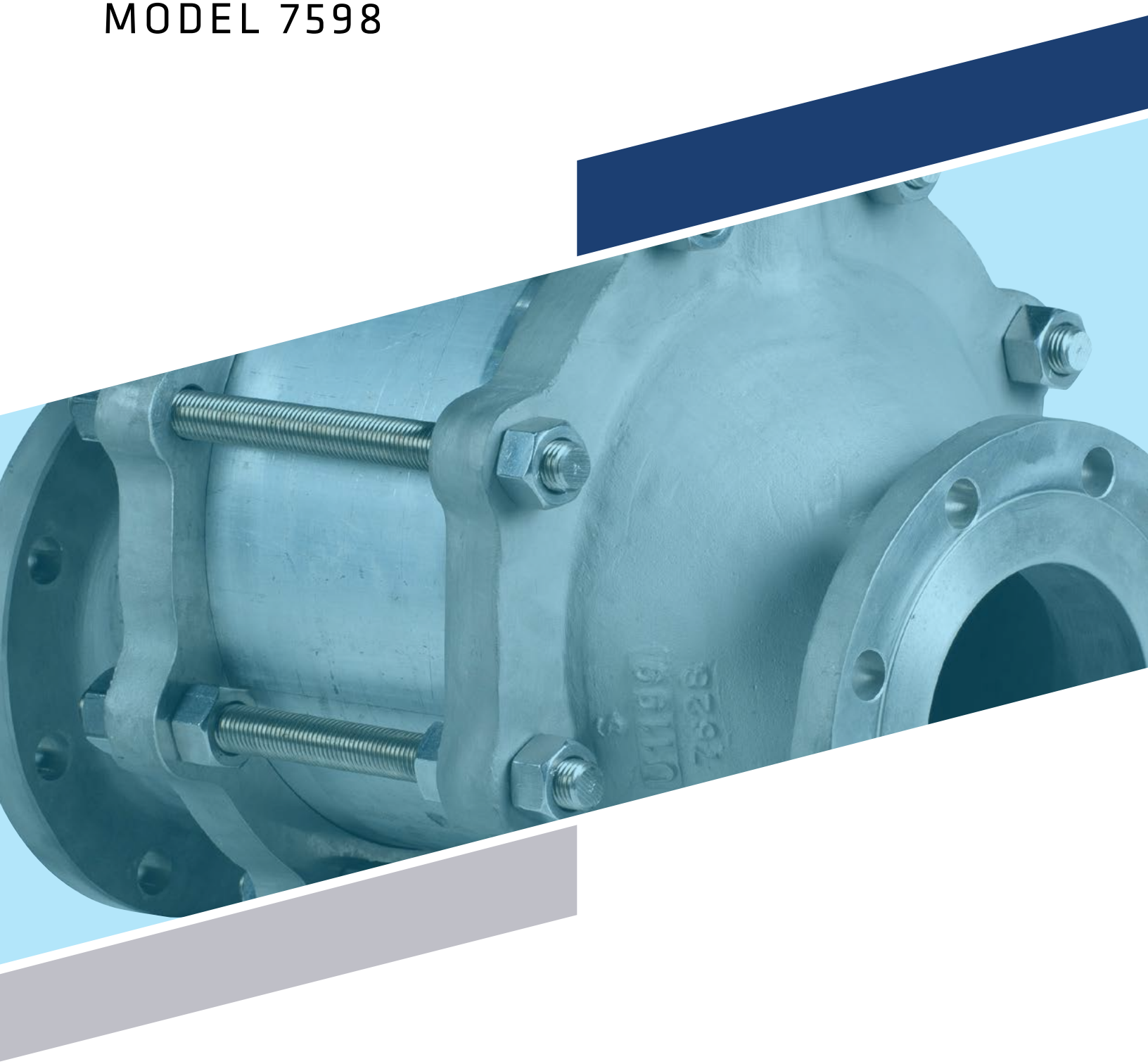
GROTH®
CORPORATION

# DEFLAGRATION FLAME ARRESTER

MODEL 7598



# MODEL 7598

The Groth Model 7598 is an In-Line Horizontal 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 to help provide increased fire protection and safety.

**Technical Details**

- Sizes: 2" (DN50) through 12" (DN300)
- Material: Aluminum, Carbon Steel, Stainless Steel
- Flame Element Material: 316L Stainless Steel
- Thermocouple is required for flame detection per the ATEX Code
- Maximum Operational pressure 15.7 psia (1.08 bara)
  (Testing parameters based on EN ISO 16852:2010)
- Burn Time tBT 5 minutes
- Good for NEC gas group D, IEC gas group IIA1 (MESG>= 1.14 mm)
- 2" - 12" sizes available with ATEX Certification in compliance with EN ISO 16852:2010 with bodies of carbon steel or Stainless Steel construction
- 2" - 4" sizes available with ATEX Certification in compliance with EN ISO 16852:2010 with bodies of aluminum construction

**Features**

- Horizontal installation
- Flame arrester element geometry maximizes flame quenching capability while minimizing pressure drop
- Modular design allows easy and cost-effective flame bank maintenance
- Proven spiral-wound, crimped-ribbon flame element provides reliable flame protection
- Eccentric design allows for horizontal installation to prevent liquid accumulation

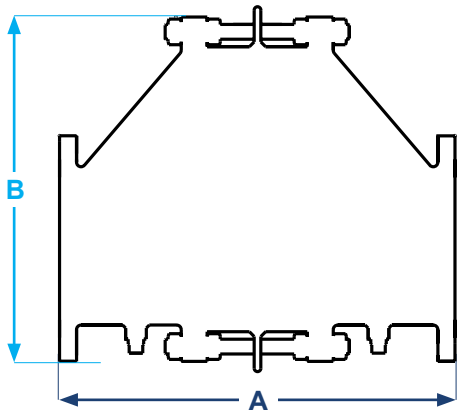
**Options**

- Exterior painting or coating
- DIN or ASME/ANSI drilling
- Tapped drain and instrumentation ports
- Factory installed thermocouple

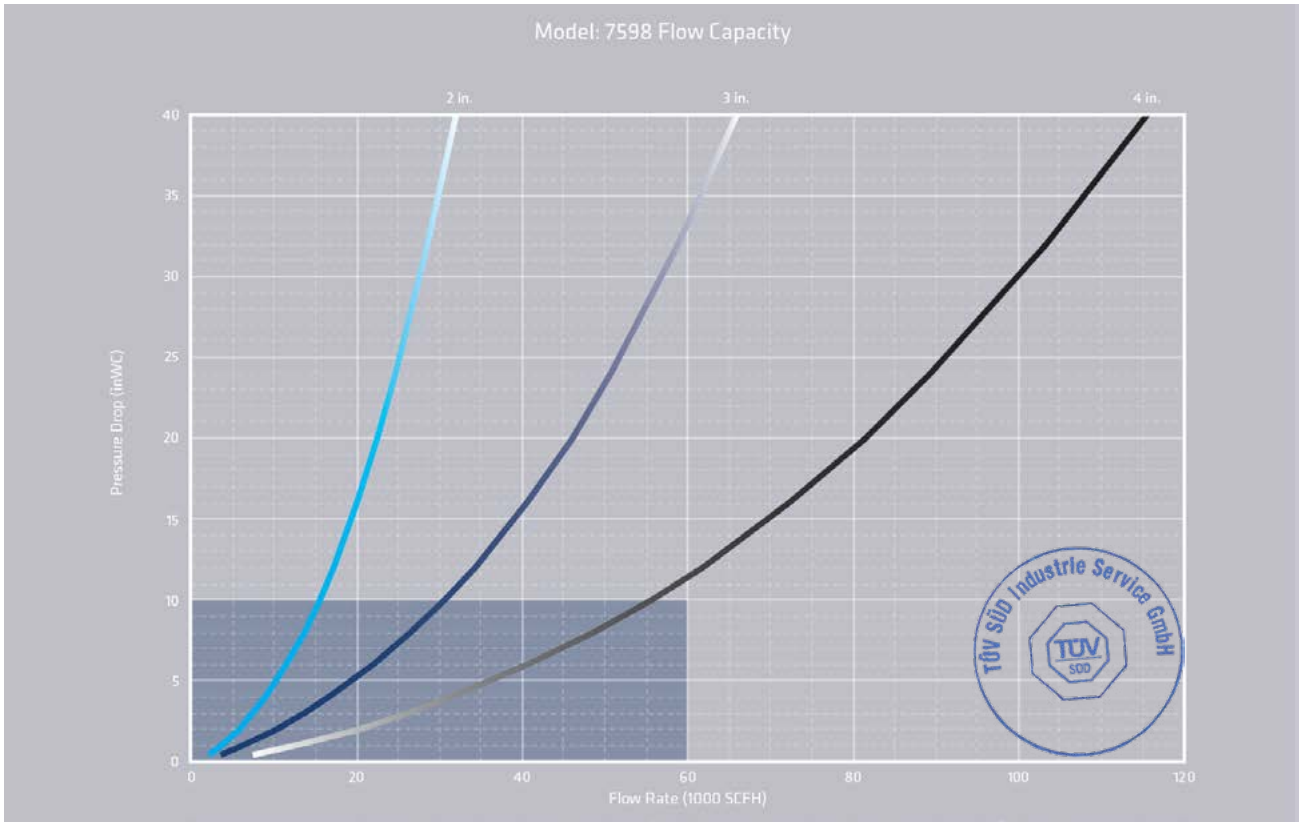
# SPECIFICATIONS

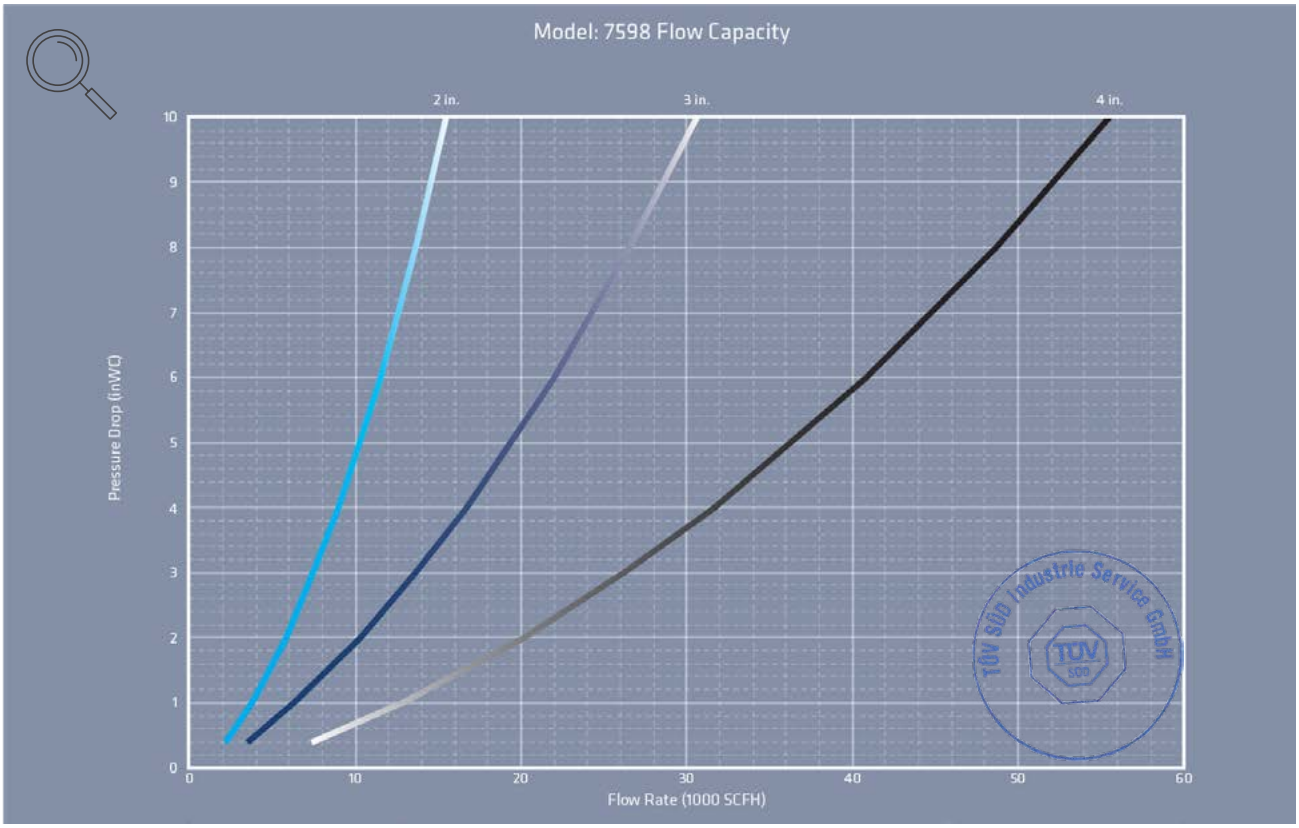
| Size*<br>In (mm) | A<br>Length<br>In (mm) | B<br>Height<br>In (mm) | Maximum Run<br>Up (L/D)* | Approx<br>Ship Weight<br>Aluminum<br>Lbs (kg) | Approx<br>Ship Weight<br>Carbon or SS Body<br>Lbs (kg) |
|---|---|---|---|---|---|
| 2 (50) | 13.75 (349) | 9.50 (241) | 50 | 31 (14) | 69 (31) |
| 3 (80) | 15.75 (400) | 11 (279) | 20 | 40 (18) | 85 (38) |
| 4 (100) | 18 (457) | 12.50 (318) | 10 | 53 (24) | 112 (51) |
| 6 (150) | 21 (533) | 16.50 (419) | 10 | 111 (50) | 216 (98) |
| 8 (200) | 25 (635) | 20.50 (521) | 10 | 213 (97) | 413 (187) |
| 10 (250) | 30 (762) | 24.50 (622) | 10 | 306 (139) | 622 (282) |
| 12 (300) | 32.50 (826) | 28.50 (724) | 10 | 378 (171) | 693 (314) |

*Testing parameters based on EN ISO 16852:2010



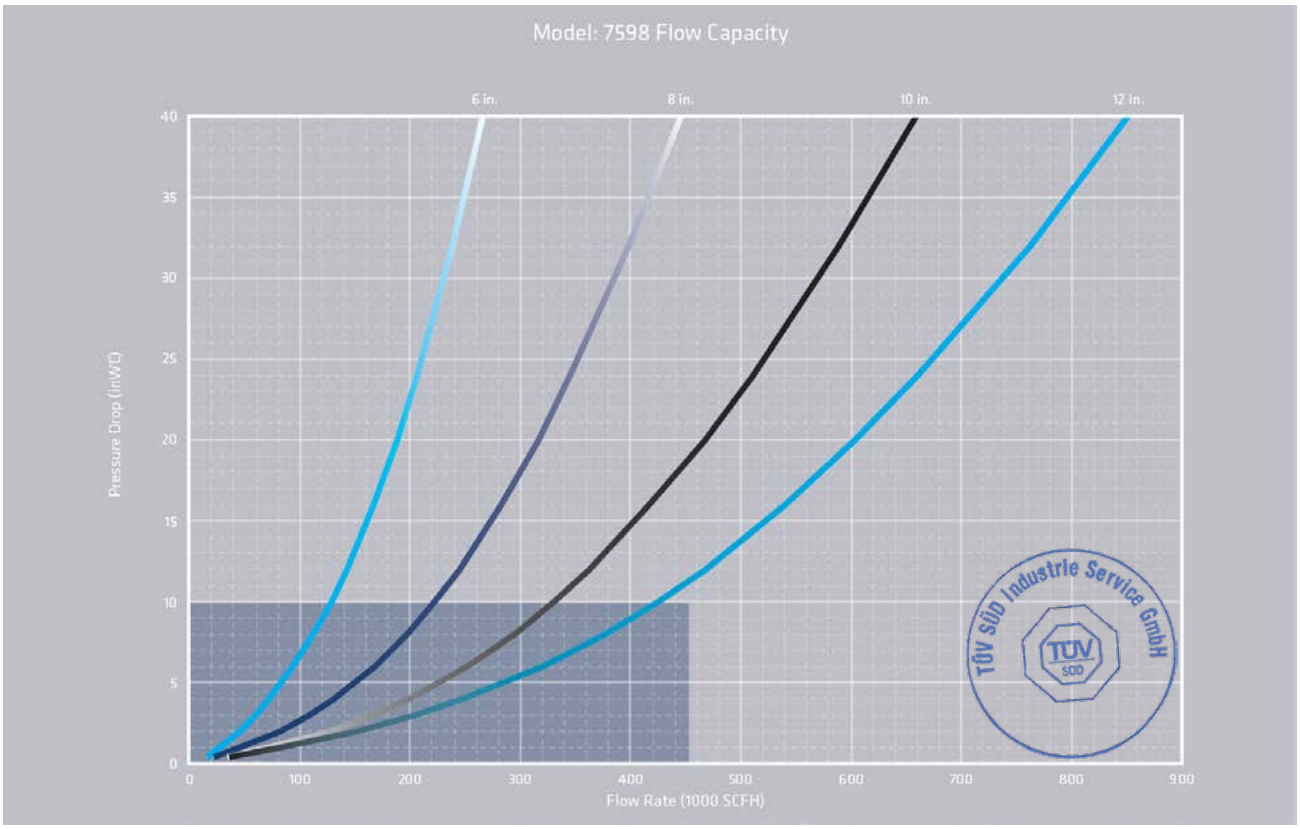
# FLOW CAPACITY

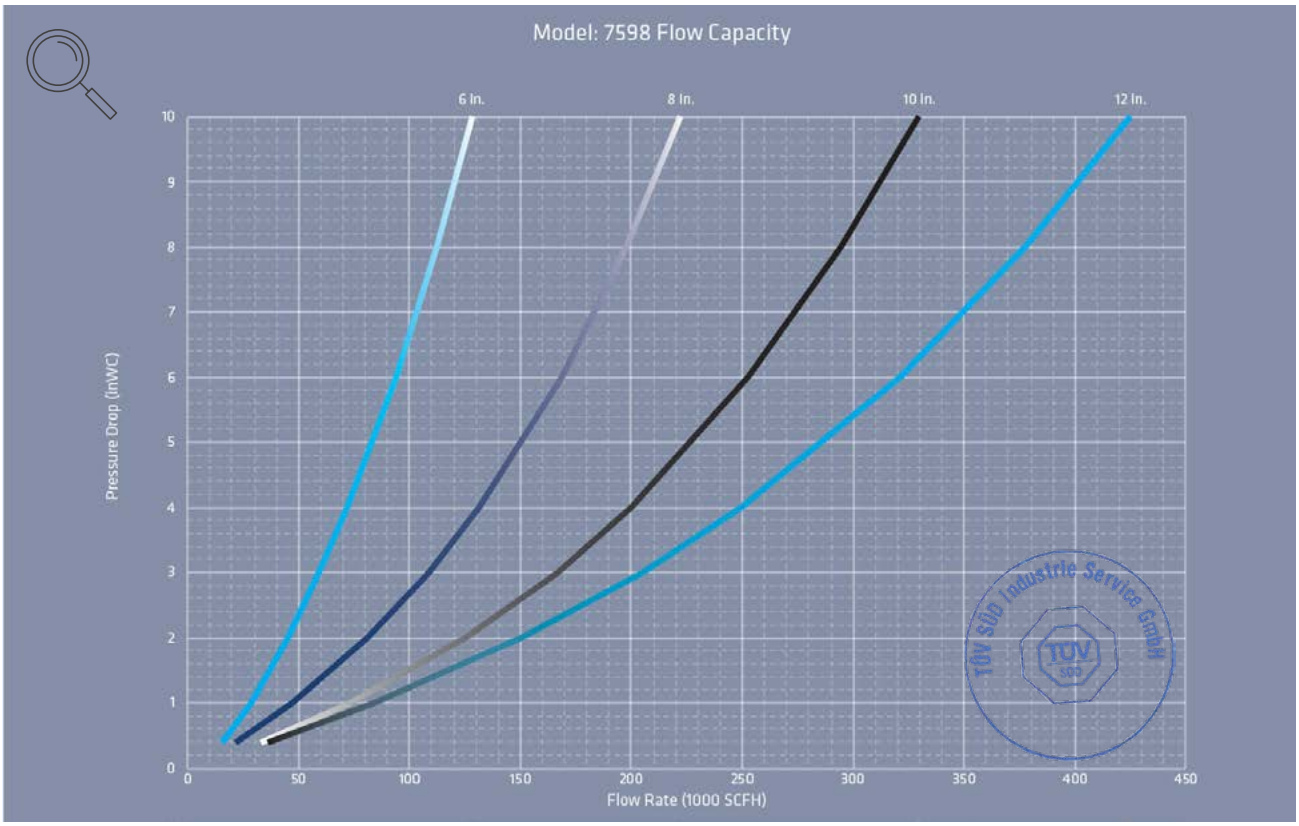



- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

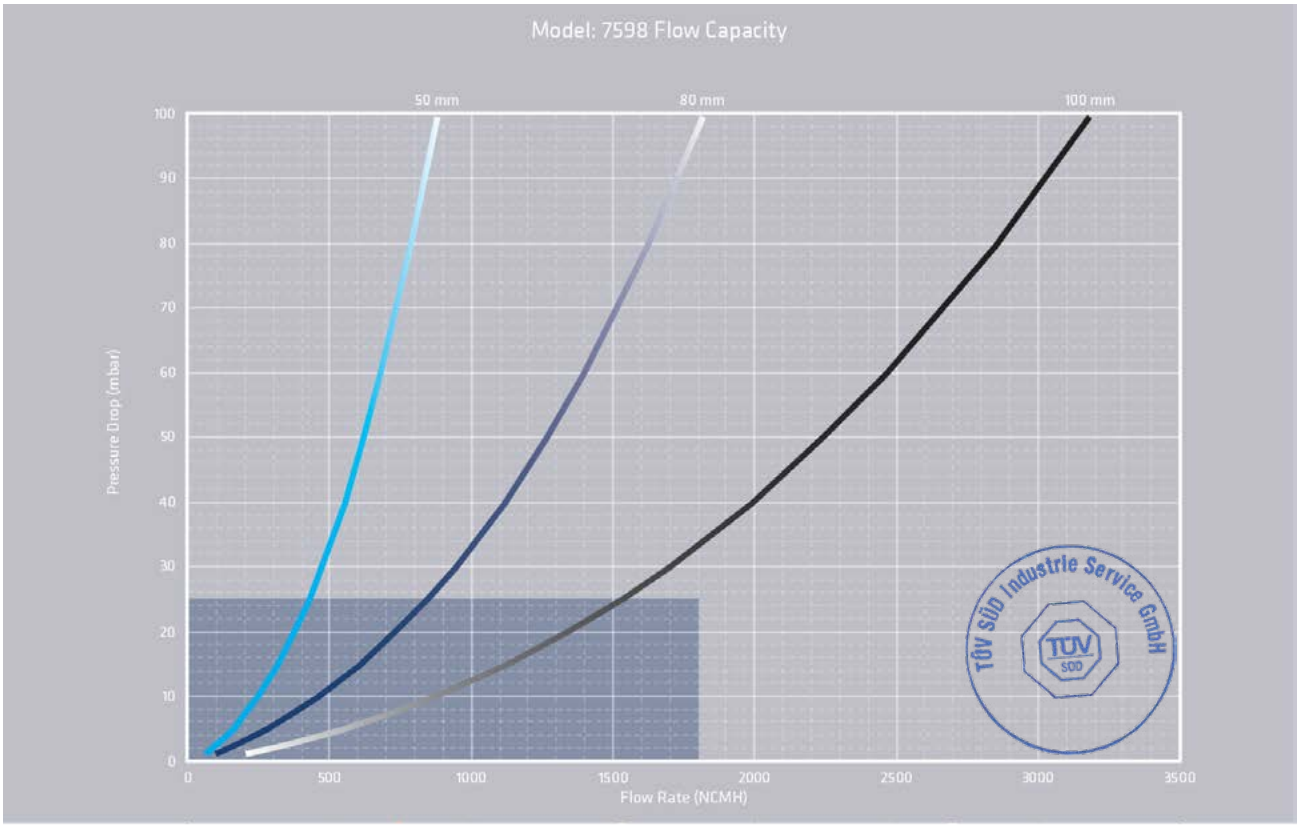
# FLOW CAPACITY

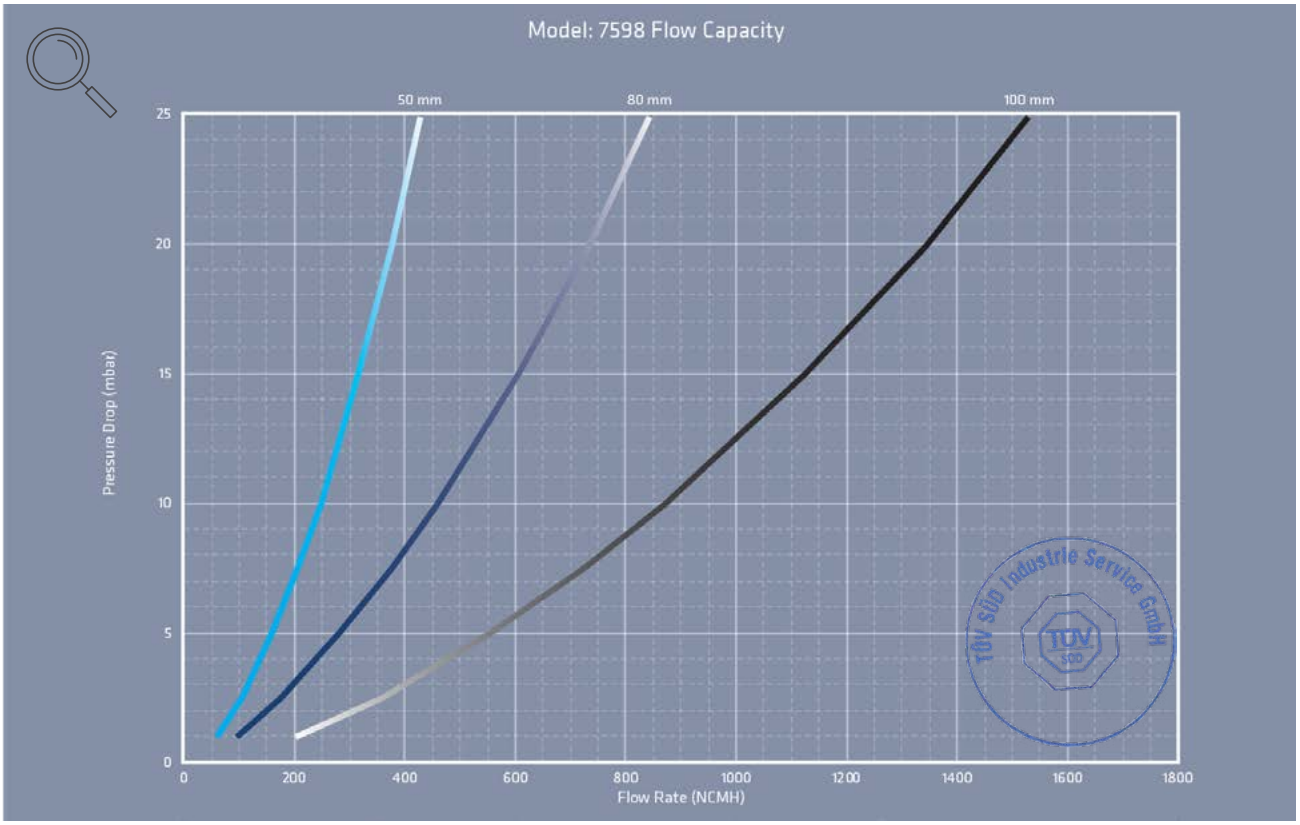



- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

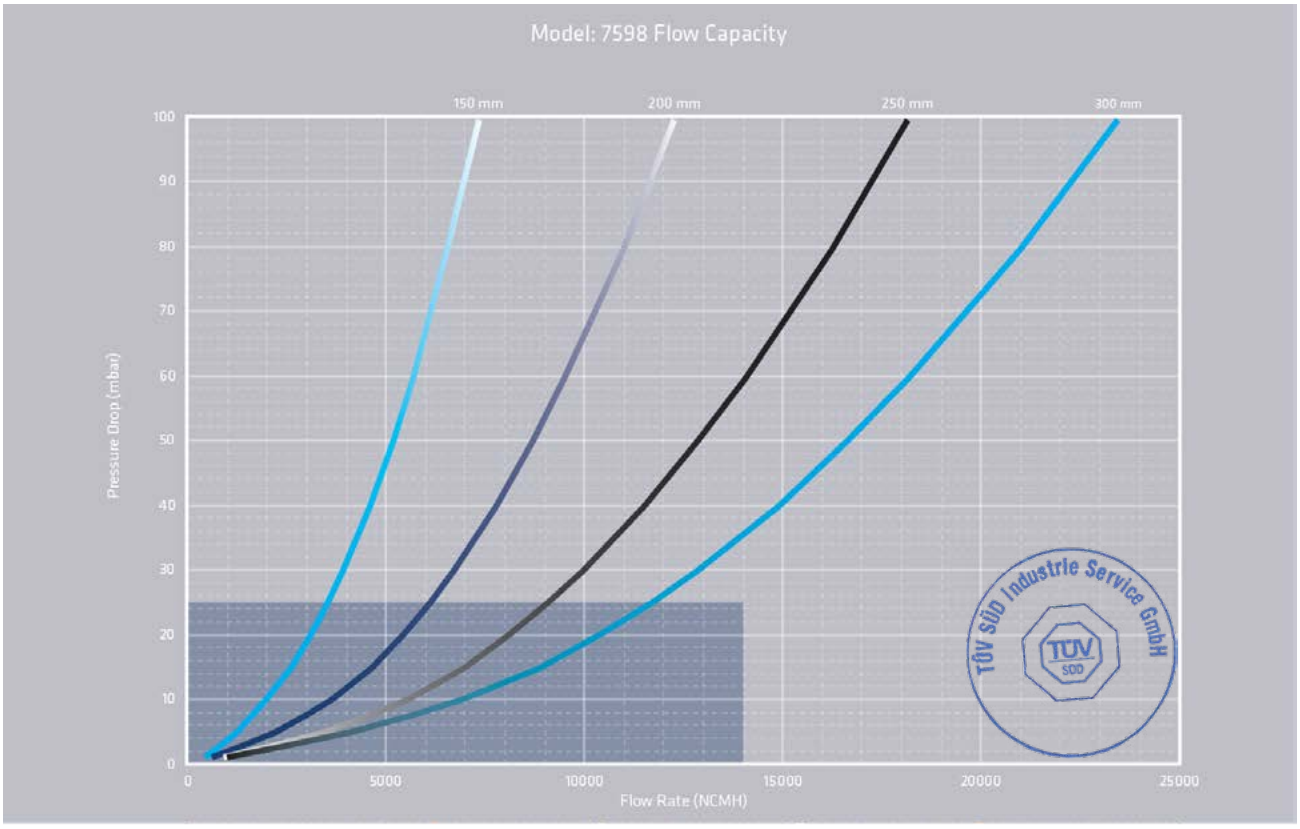
# FLOW CAPACITY

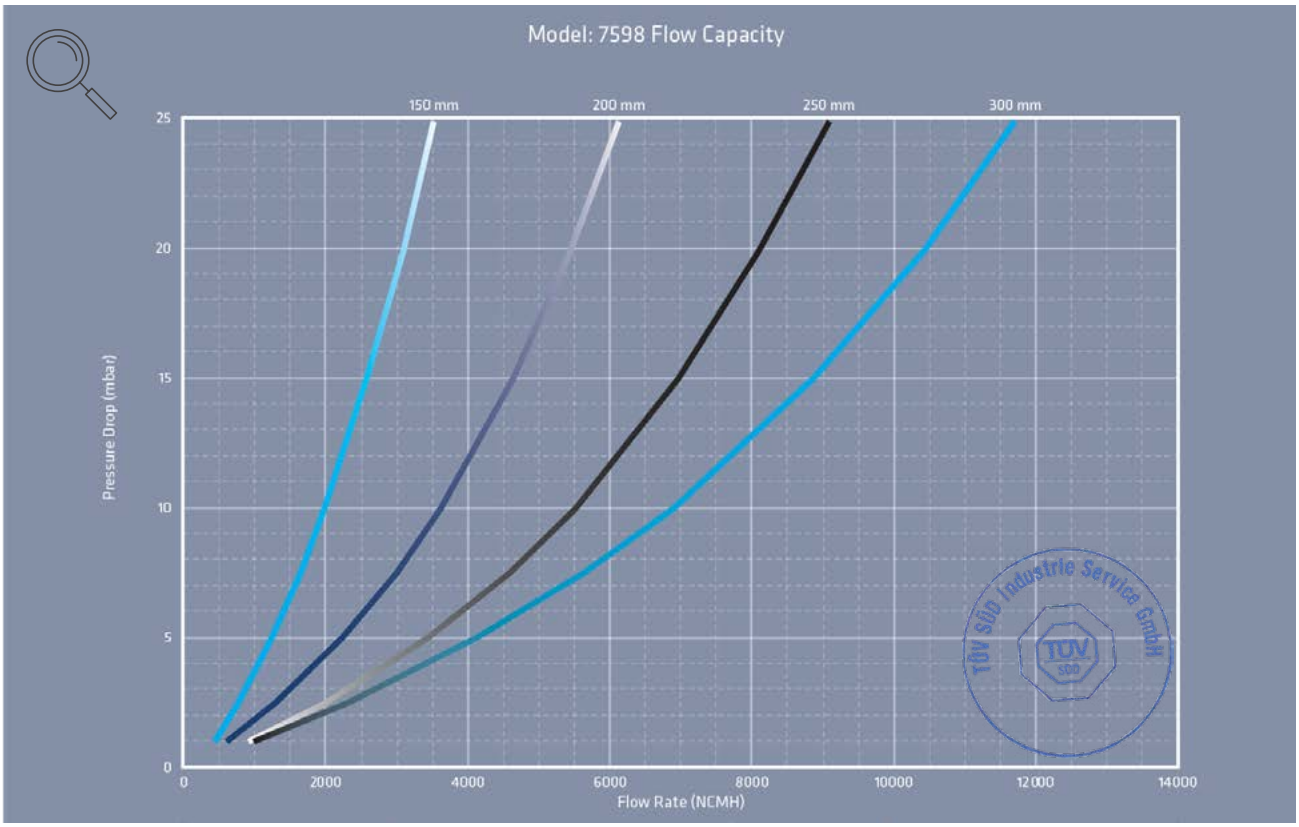



- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance losses or exit losses.
- Flow values based on air at 0°C venting to atmospheric pressure of 1.01325 bara

# FLOW CAPACITY

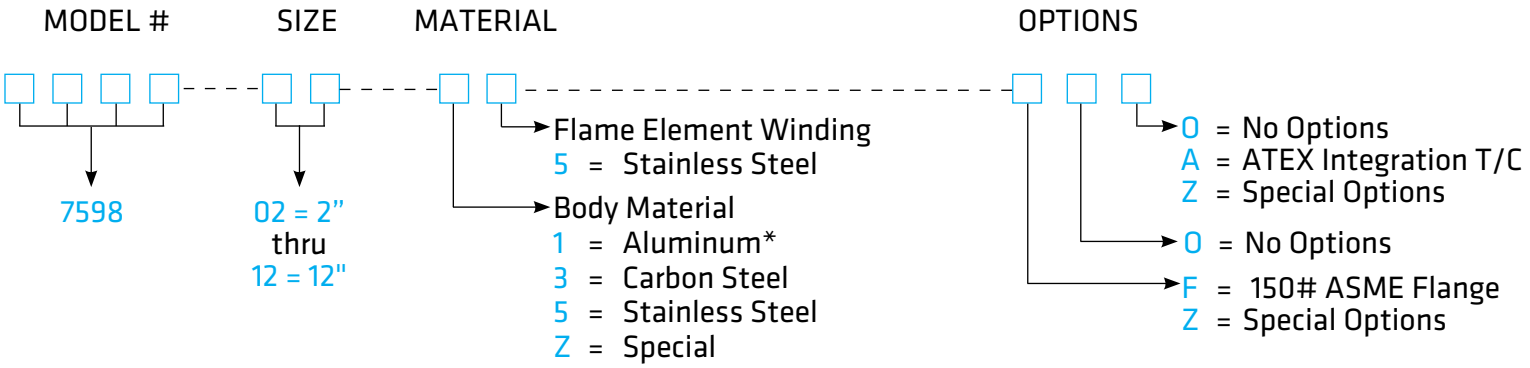



- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance losses or exit losses.
- Flow values based on air at 0°C venting to atmospheric pressure of 1.01325 bara

# HOW TO ORDER

For easy ordering, select proper model numbers




**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 | 5 | 9 | 8 | – | 0 | 2 | – | 3 | 5 | – | F | 0 | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Indicates a 2" Model 7598 with Carbon Steel Body, 316 SS Flame element winding, 150# ASME Flanged outlet, and ATEX Integrated thermocouple.

GROTH CORPORATION®

**GROTHCORP.COM**