FLAME CONTROL

GROTH CORPORATION®
a Continental Disc company

SAFETY PRODUCTS THAT PROTECT EQUIPMENT, LIVES & THE ENVIRONMENT

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ADDITIONAL GROTH PRODUCTS

Please see our other Groth Datasheets for additional product lines:

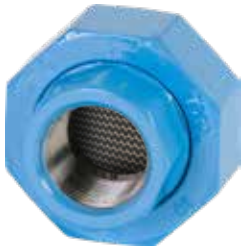
MODEL 7622B

TECHNICAL DETAILS

- Sizes 0.5" through 2"
- Housing standard material: carbon steel or stainless steel
- Flame element standard material: stainless steel
- Operational Temperature Range -4 to 140 °F (-20 to 60 °C)
- Good for IEC gas group IIB3 (MESG ≥ 0.65 mm)
- Pre-Ingition system pressure up to 23.2 psia (1.60 bara)
- Certified to ATEX Directive in compliance with EN ISO 16852:2010
  Certificate #: **IBExU14ATEX2076 X**

DEFLAGRATION FLAME ARRESTER / FLAME CHECK

Model 7622B is designed to prevent flashback in small lines carrying flammable gases. They are often used in small pilot lines and are intended for use where the gas flow can be shut off. The units are union type fittings with FNPT connections.



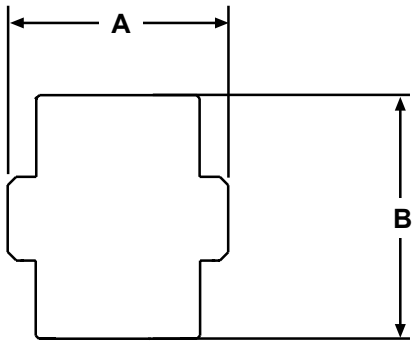
FEATURES & BENEFITS

- Flame element has sufficient openings to provide a minimum pressure drop and still prevent flashback in the line
- Flame element consists of mesh and chemically etched plates
- Modular design allows easy access for inspection and maintenance

OPTIONS

- Special options available
- FNPT threaded connections

Size (FNPT) (Metric)	A Width (Metric)	B Height (Metric)	Approx Ship. Wt. Lbs (Metric)
0.50"* (13 mm)	1.87" (48 mm)	2.77" (70 mm)	1 (0.5 kg)
0.75" (19 mm)	1.87" (48 mm)	1.84" (47 mm)	1 (0.5 kg)
1" (25 mm)	2.12" (54 mm)	2.34" (59 mm)	3 (1.4 kg)
1.50" (38 mm)	2.50" (64 mm)	2.59" (66 mm)	4 (1.8 kg)



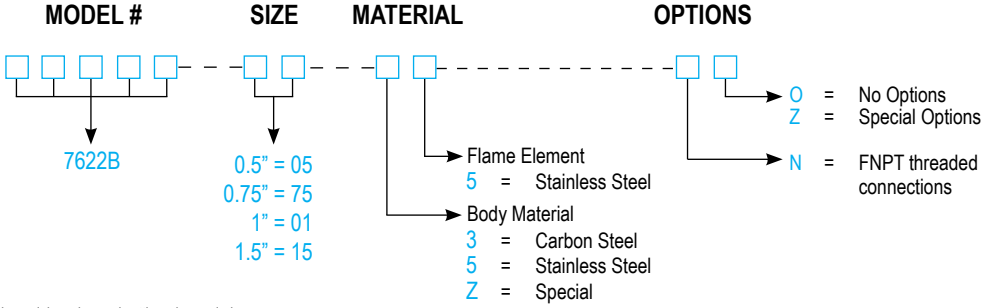
Specifications subject to change without notice. Certified dimensions available upon request.

*0.5" size utilizes a 0.75" flame check with 0.75" x 0.5" reducers.

Note: Maximum working pressure 25 psig

HOW TO ORDER

For easy ordering, select proper model numbers



NOTES

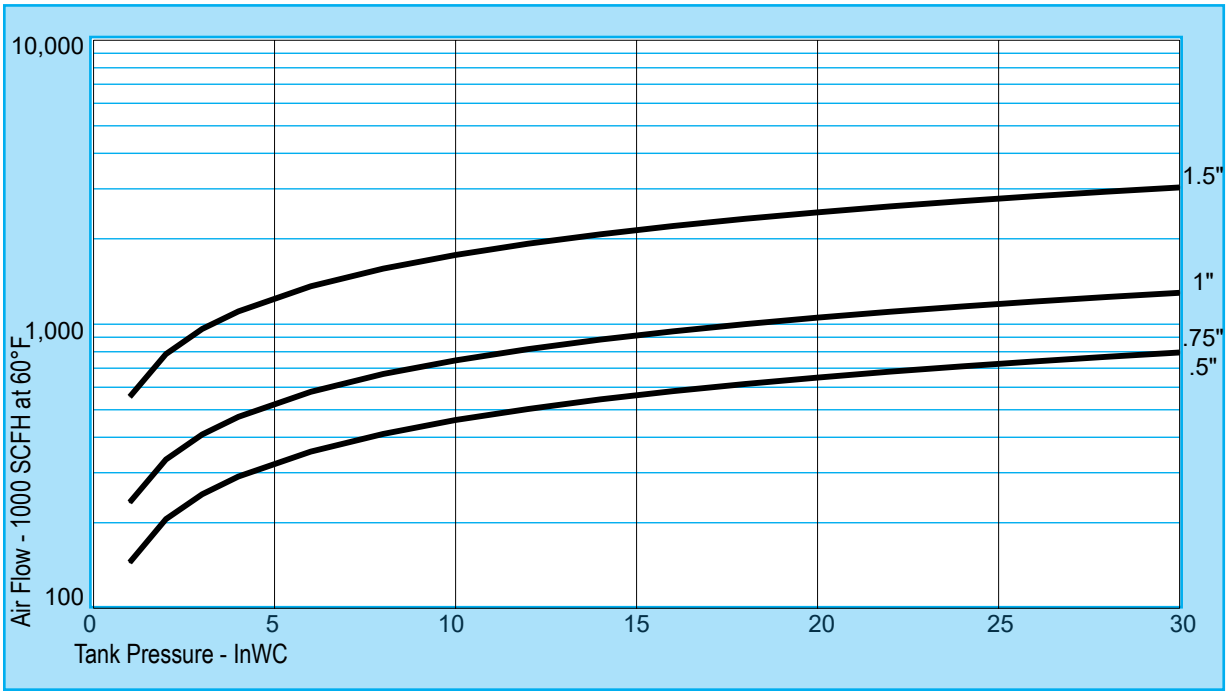
- Include model number and setting when ordering.
- For special options, consult factory.

EXAMPLE 7 6 2 2 B — 0 1 — 3 5 — N O

Indicates a 1" Model 7622B with Carbon Steel body, Stainless Steel Flame Element, FNPT connections, and no options.other options.

Air Flow - Standard Cubic Feet per Hour at 60°F				
Pressure Drop		Size		
InWC	oz/in²	0.5" & 0.75"	1"	1.5"
1	0.6	145	236	555
2	1.2	206	334	785
3	1.7	252	409	962
4	2.3	291	472	1110
6	3.5	356	578	1360
8	4.6	411	668	1570
10	5.8	460	746	1755
12	6.9	503	817	1922
14	8.1	544	883	2075
16	9.2	581	944	2218
18	10.4	616	1001	2353
20	11.6	649	1055	2479
22	12.7	681	1106	2600
24	13.9	711	1155	2715
26	15.0	740	1202	2825
28	16.2	768	1247	2932
30	17.3	795	1290	3034

1. Flow facility and equipment comply with API 2000.
2. Flow measurement accuracy verified by an independent research organization.
3. Flow capacity is based on actual tests and certified by Groth Corporation.
4. Flow data are for tank mounting or end of line and includes flame arrester entrance loss, exit loss and internal losses.



Air Flow - Normal Cubic Meters per Hour at 0°C				
Pressure Drop		Size		
mm H_2O	mb	0.5" & 0.75"	1"	1.5"
25.4	3.00	3.9	6.3	14.9
50.8	5.00	5.5	8.9	21.0
76.2	7.50	6.8	11.0	25.8
102	10.00	7.8	12.6	29.7
152	15.00	9.5	15.5	36.4
203	20.00	11.0	17.9	42.1
254	25.00	12.3	20.0	47.0
305	30.00	13.5	21.9	51.5
356	35.00	14.6	23.7	55.6
406	40.00	15.6	25.3	59.4
457	45.00	16.5	26.8	63.0
508	50.00	17.4	28.3	66.4
559	55.00	18.2	29.6	69.7
610	60.00	19.0	30.9	72.7
660	65.00	19.8	32.2	75.7
711	70.00	20.6	33.4	78.5
762	75.00	21.3	34.6	81.3

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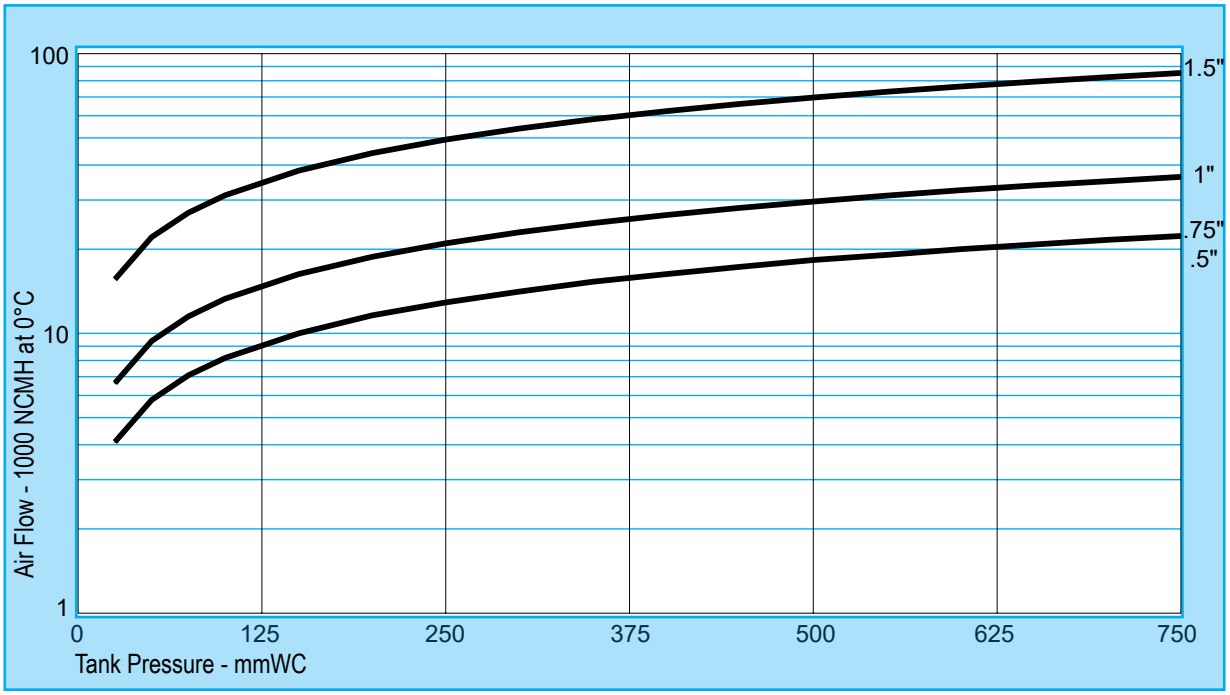


MODEL 7618

TECHNICAL DETAILS

- Flange sizes 2" through 12"
- Housing standard material: carbon steel, stainless steel, aluminum
- Designed for quick and easy maintenance
- Unique recessed seating for superior protection
- Proven spiral-wound, crimped-ribbon flame element (316SS or aluminum)
- Operating Temperature <= 140°F(60°C)
- Vertical installation only

MODEL 7618

DEFLAGRATION FLAME ARRESTERS

The 7618 model is 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. This provides increased fire protection and safety.

END-OF-LINE	END-OF-LINE	IN-LINE
Weather Hood Outlet	Flanged Outlet with or without Discharge Piping	
• Gas Group: NEC D, IEC IIA • Operating Temperature <= 140°F(60°C) • Pre-Ignition Pressure = Atmosphere	• Gas Group: NEC D, IEC IIA • Operating Temperature <= 140°F (60°C) • Pre-Ignition Pressure = Atmosphere • Discharge Piping Length <= 10 pipe diameters	• Gas Group: IEC IIA1, Methane (includes most Biogas applications) • Operating Temperature <= 140°F (60°C) • Pre-Ignition Pressure <= 1 psig • Run-up Length <= 50 pipe diameters (2") • Run-up Length <= 20 pipe diameters (3") • Run-up Length <= 10 pipe diameters (4" – 12")

FEATURES & BENEFITS

- Flame arrester element geometry maximizes flame quenching capability while minimizing pressure drop
- Proven spiral-wound, crimped-ribbon flame element provides reliable flame protection
- Modular design allows easy and cost-effective flame bank maintenance

OPTIONS

- Exterior painting or coating available
- Weatherhood (replaces flanged outlet)
- DIN or ASME/ANSI drilling available
- Tapped drain and instrumentation ports available

MODEL 7618 // SPECIFICATIONS

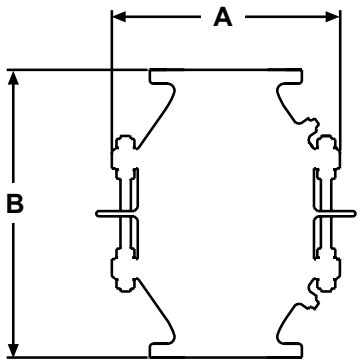
Specifications subject to change without notice. Certified dimensions available upon request.

Size* (Metric)	A Width (Metric)	B Height (Metric)	MAWP 7618◊ Aluminum (Metric)	MAWP 7618◊ Carbon or SS (Metric)	Approx Ship. Wt. Lbs. (Aluminum)
2" (50 mm)	8.75" (221 mm)	14" (356 mm)	50 psig (345 kPa)	100 psig (690 kPa)	18 (8 kg)
3" (80 mm)	9.50" (241 mm)	16" (406 mm)	50 psig (345 kPa)	100 psig (690 kPa)	25 (11 kg)
4" (100 mm)	12.25" (311 mm)	18.25" (464 mm)	50 psig (345 kPa)	100 psig (690 kPa)	40 (18 kg)
6" (150 mm)	16.50" (419 mm)	21" (533 mm)	50 psig (345 kPa)	100 psig (690 kPa)	70 (32 kg)
8" (200 mm)	21" (533 mm)	25" (635 mm)	50 psig (345 kPa)	100 psig (690 kPa)	135 (61 kg)
10" (250 mm)	24.75" (629 mm)	30" (762 mm)	50 psig (345 kPa)	100 psig (690 kPa)	235 (107 kg)
12" (300 mm)	28.62" (727 mm)	32.50" (826 mm)	50 psig (345 kPa)	100 psig (690 kPa)	345 (156 kg)

* Larger sizes available on special application.

†150# ANSI drilling compatibility, F.F. on aluminum and R.F. on carbon steel and stainless steel alloys.

◊Pneumatic tested to 15 psig as standard.



HOW TO ORDER

For easy ordering, select proper model numbers

MODEL # **SIZE** **MATERIAL** **OPTIONS**

7618 Vertical

02" Thru 12"

Flame element winding
1 = Aluminum
5 = Stainless Steel

Body Material
1 = Aluminum
3 = Carbon Steel
5 = Stainless Steel
Z = Special

O = No Options
Z = Special Options

O = No Options

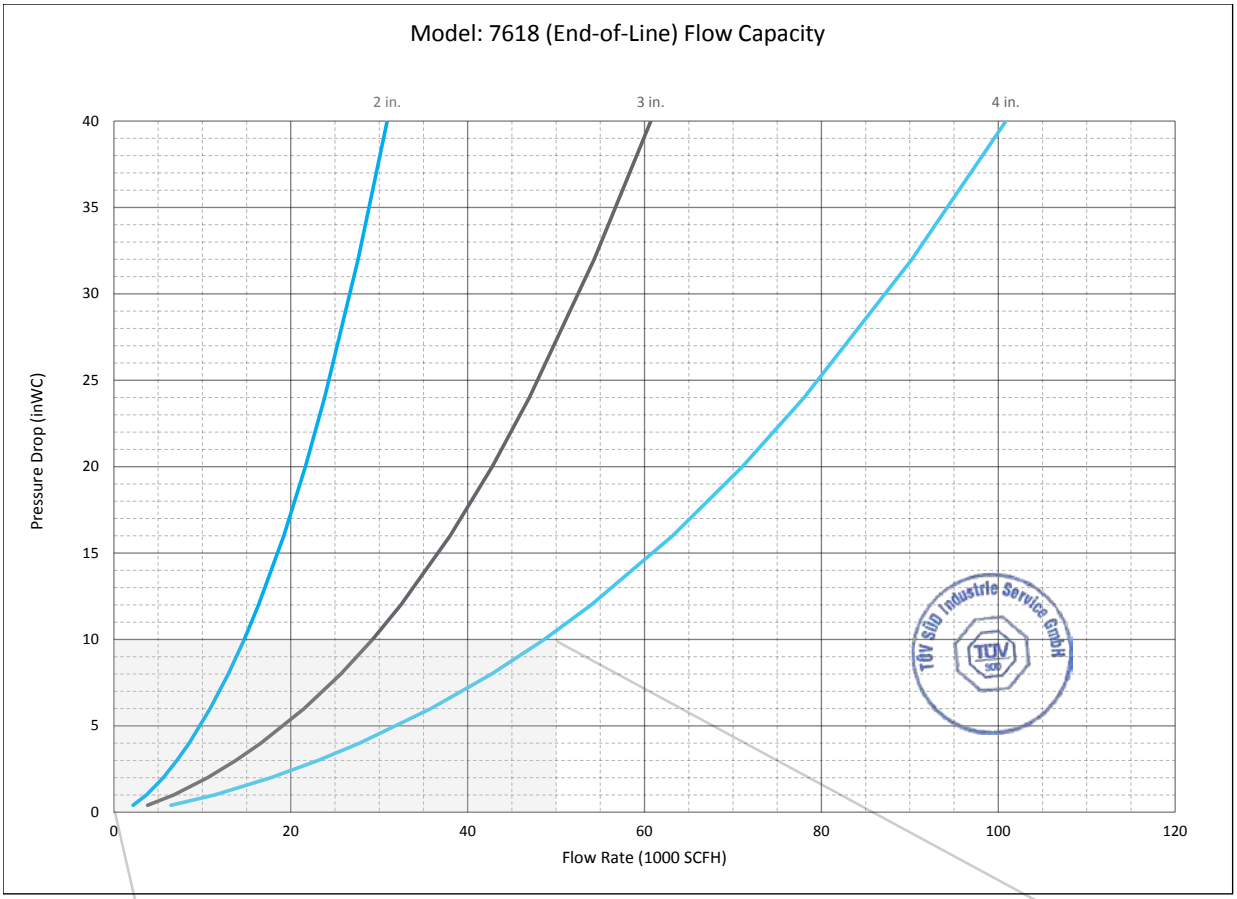
F = Flanged outlet (in-line design)
W = Weatherhood (replaces flanged outlet)

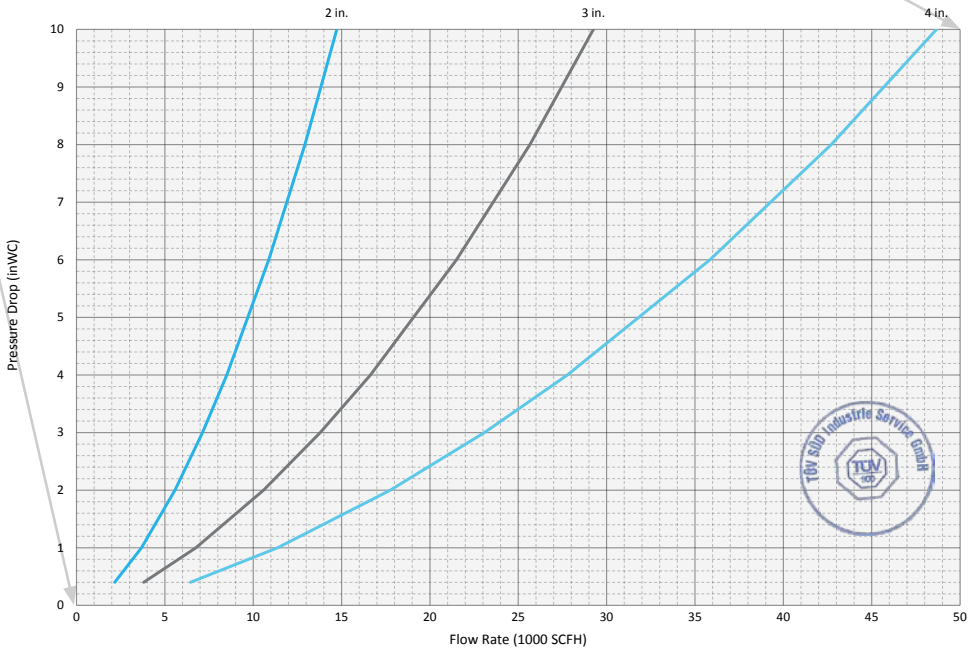
NOTES
- Include model number and setting when ordering.
- For special options, consult factory.

EXAMPLE 7618—04—11—FOO

Indicates a 4" Model 7618 with Aluminum Body, Aluminum Flame element winding, Flanged outlet, no Jacket and no other options.

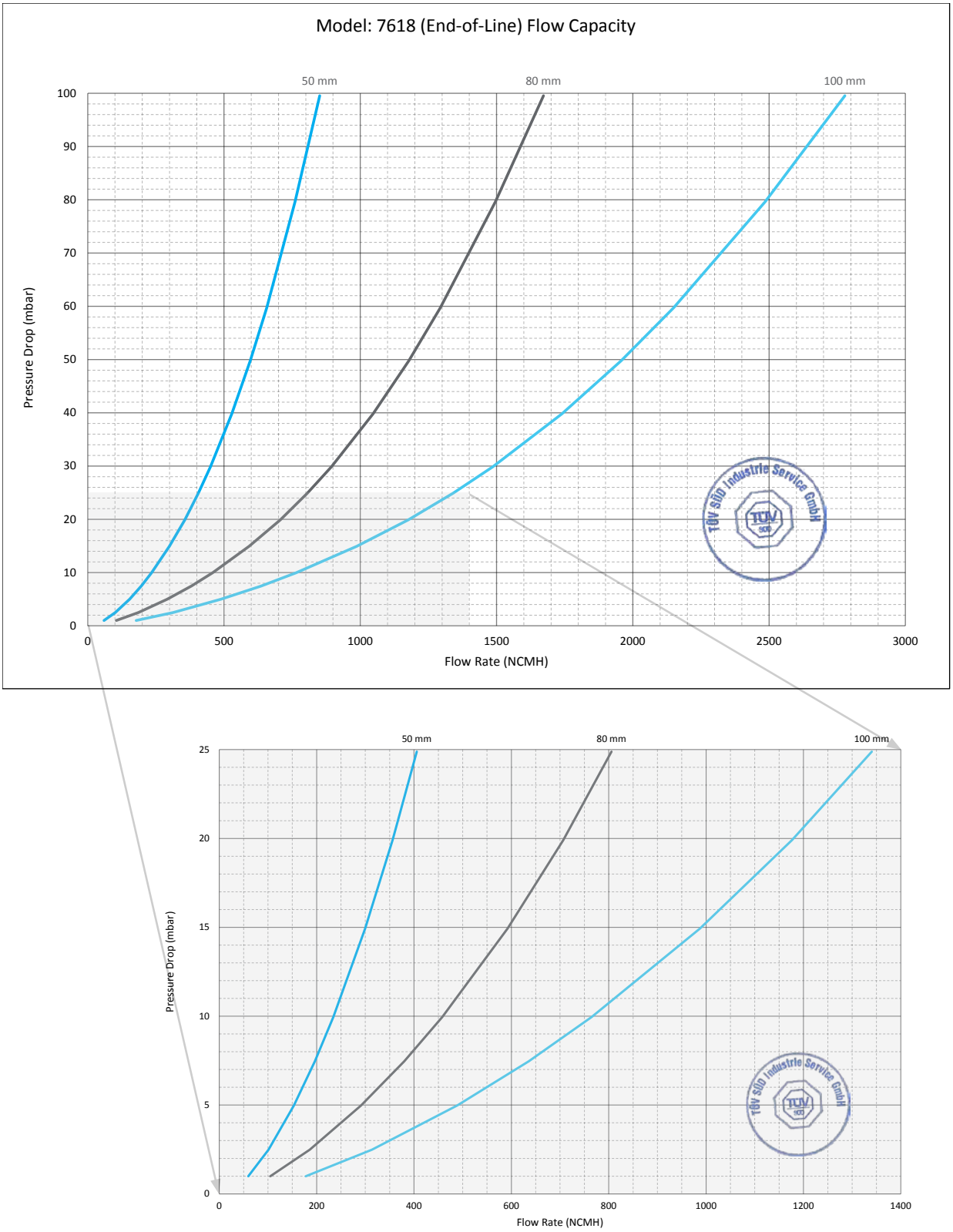
MODEL 7618 // FLOW CAPACITY (END OF LINE)





- 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 tank mounting or end of line and includes flame arrester entrance loss, exit loss and internal losses.
- Flow values based on air at 60°F venting to atmospheric pressure of 14.6959 psia

MODEL 7618 // FLOW CAPACITY (END OF LINE)



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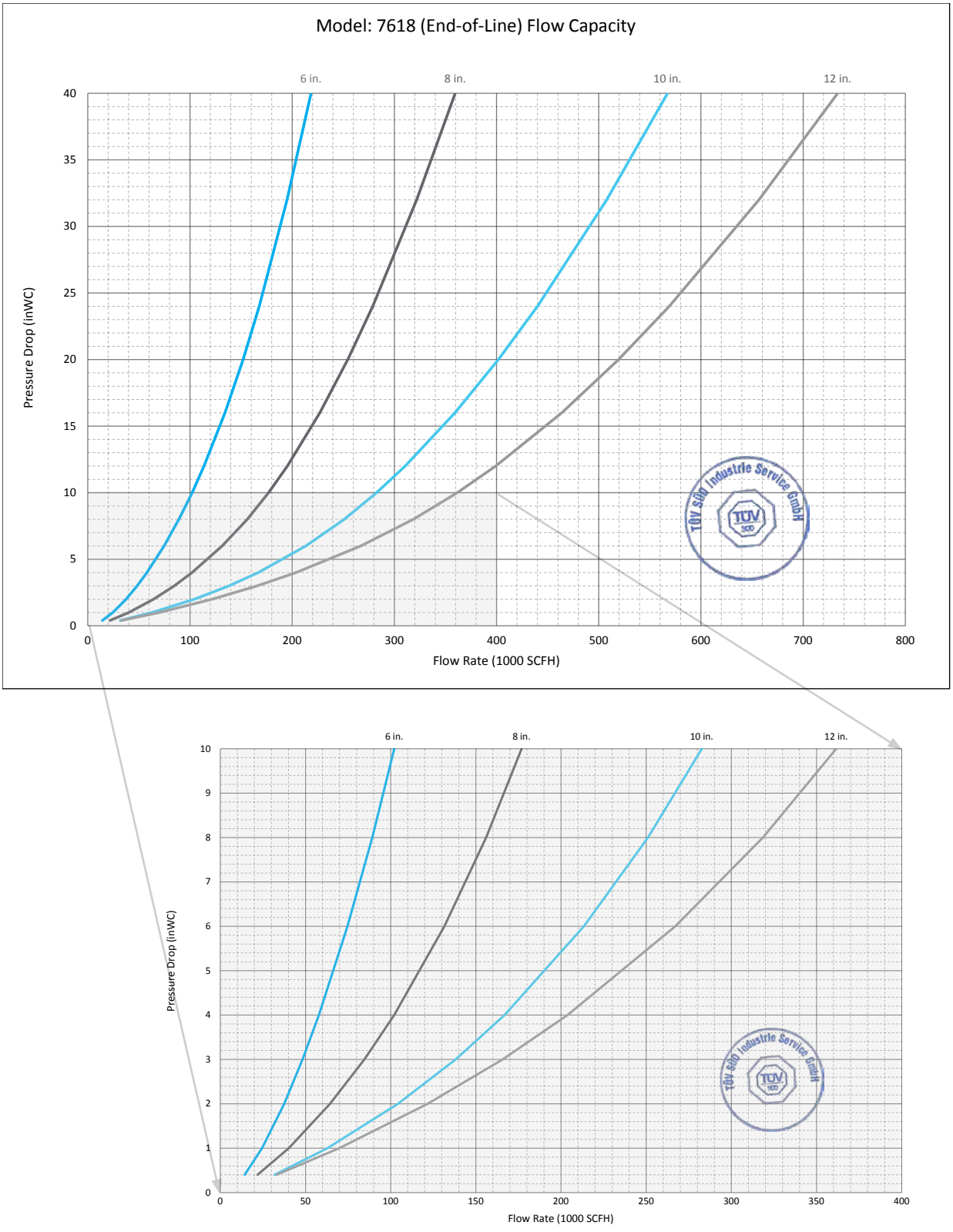
- Flow data are for tank mounting or end of line and includes flame arrester entrance loss, exit loss and internal losses.
- Flow values based on air at 0°C venting to atmospheric pressure of 1.01325 bara

MODEL 7618 // FLOW CAPACITY (END OF LINE)



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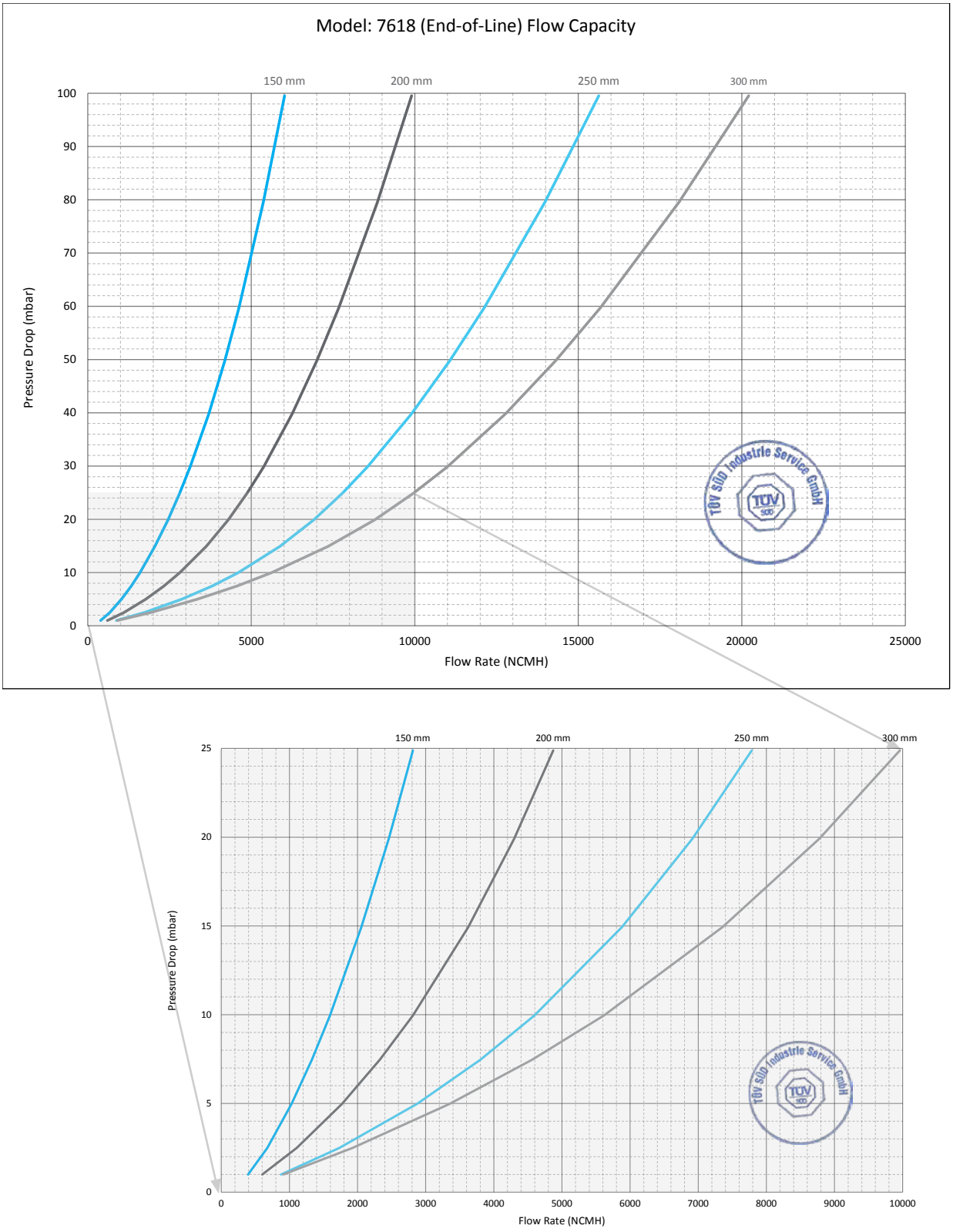
- Flow data are for tank mounting or end of line and includes flame arrester entrance loss, exit loss and internal losses.
- Flow values based on air at 60°F venting to atmospheric pressure of 14.6959 psia

MODEL 7618 // FLOW CAPACITY (END OF LINE)



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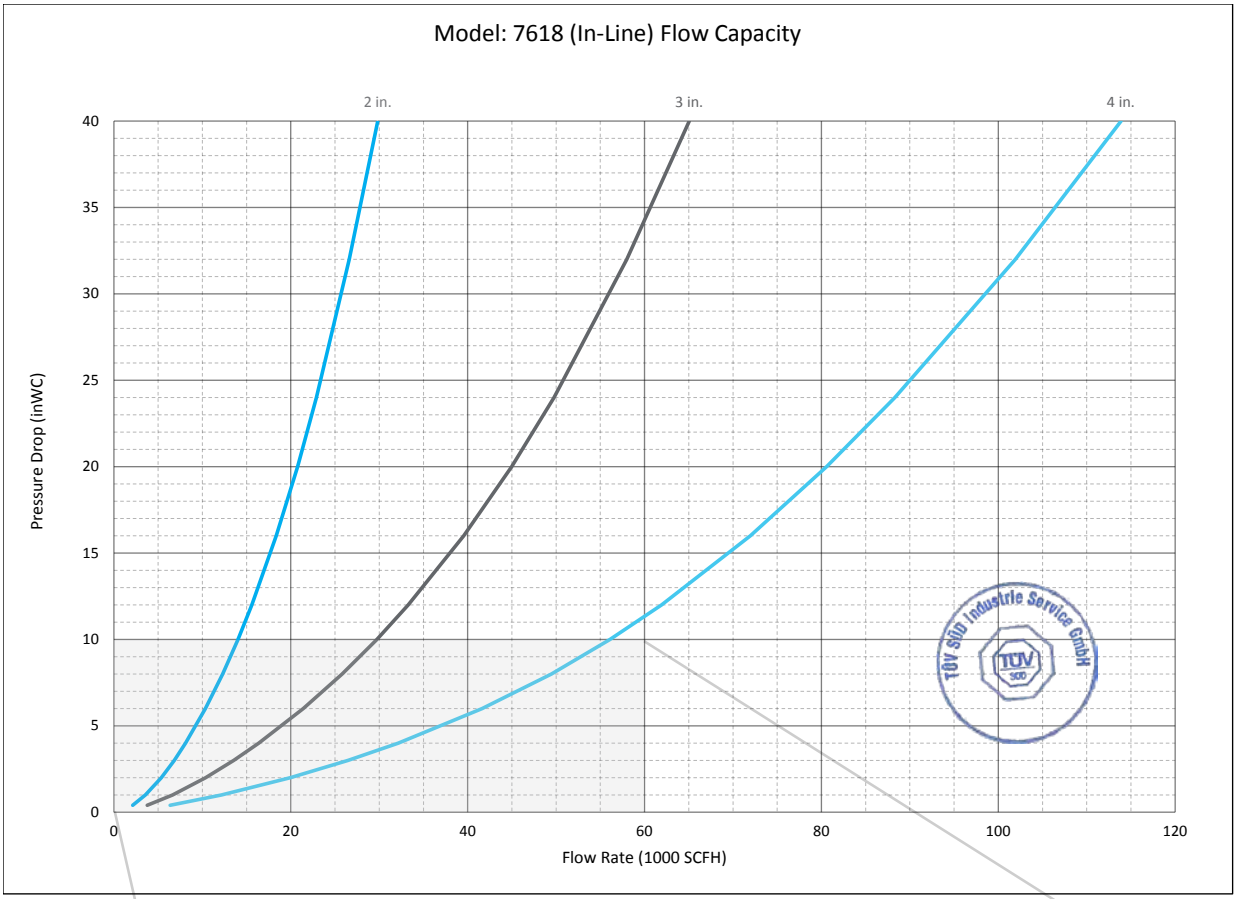
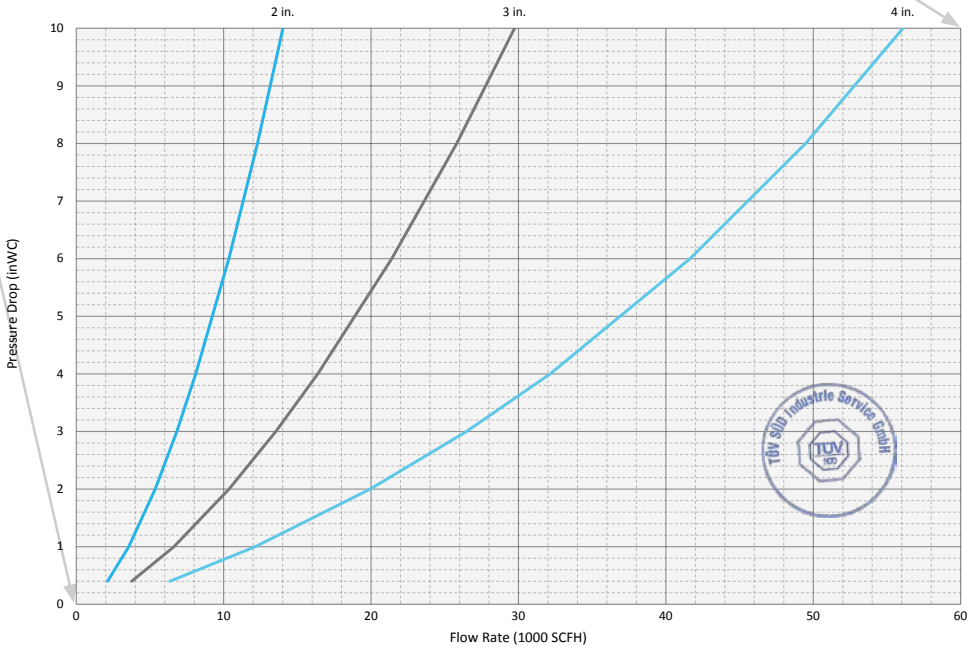
- Flow data are for tank mounting or end of line and includes flame arrester entrance loss, exit loss and internal losses.
- Flow values based on air at 0°C venting to atmospheric pressure of 1.01325 bara

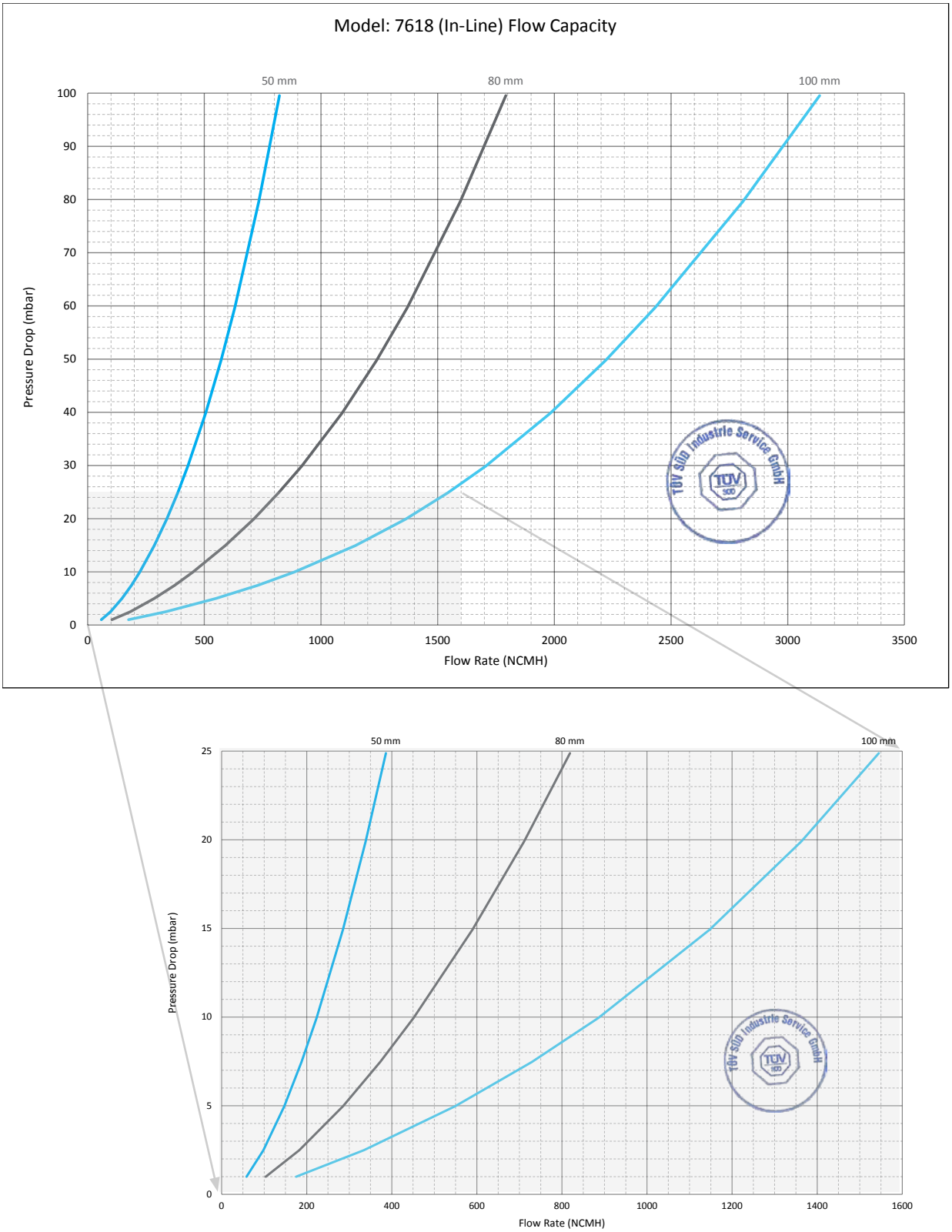
MODEL 7618 // FLOW CAPACITY (IN LINE)





- 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

MODEL 7618 // FLOW CAPACITY (IN LINE)



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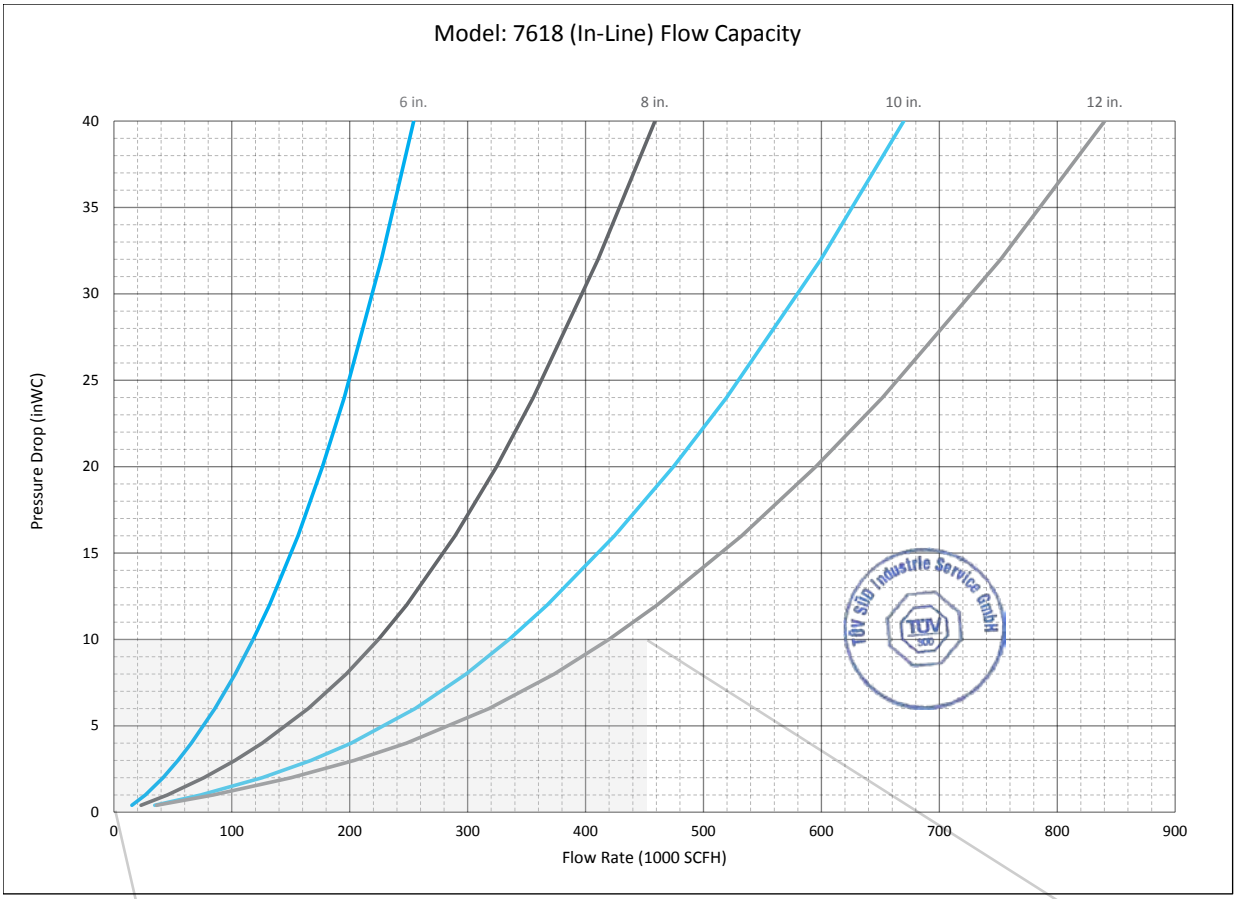
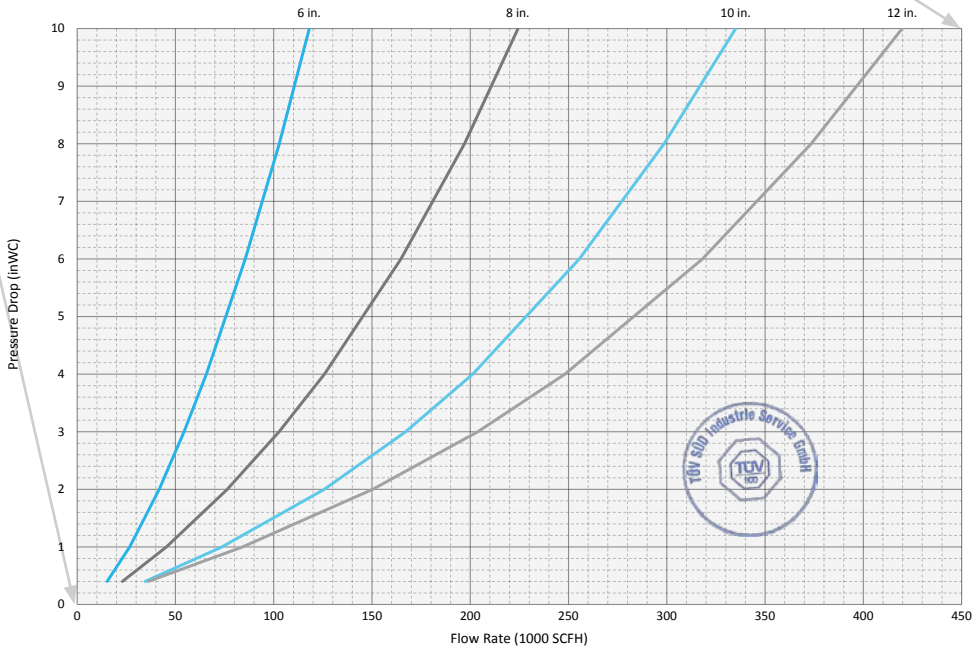
- Flow values based on air at 0°C venting to atmospheric pressure of 1.01325 bara

MODEL 7618 // FLOW CAPACITY (IN LINE)





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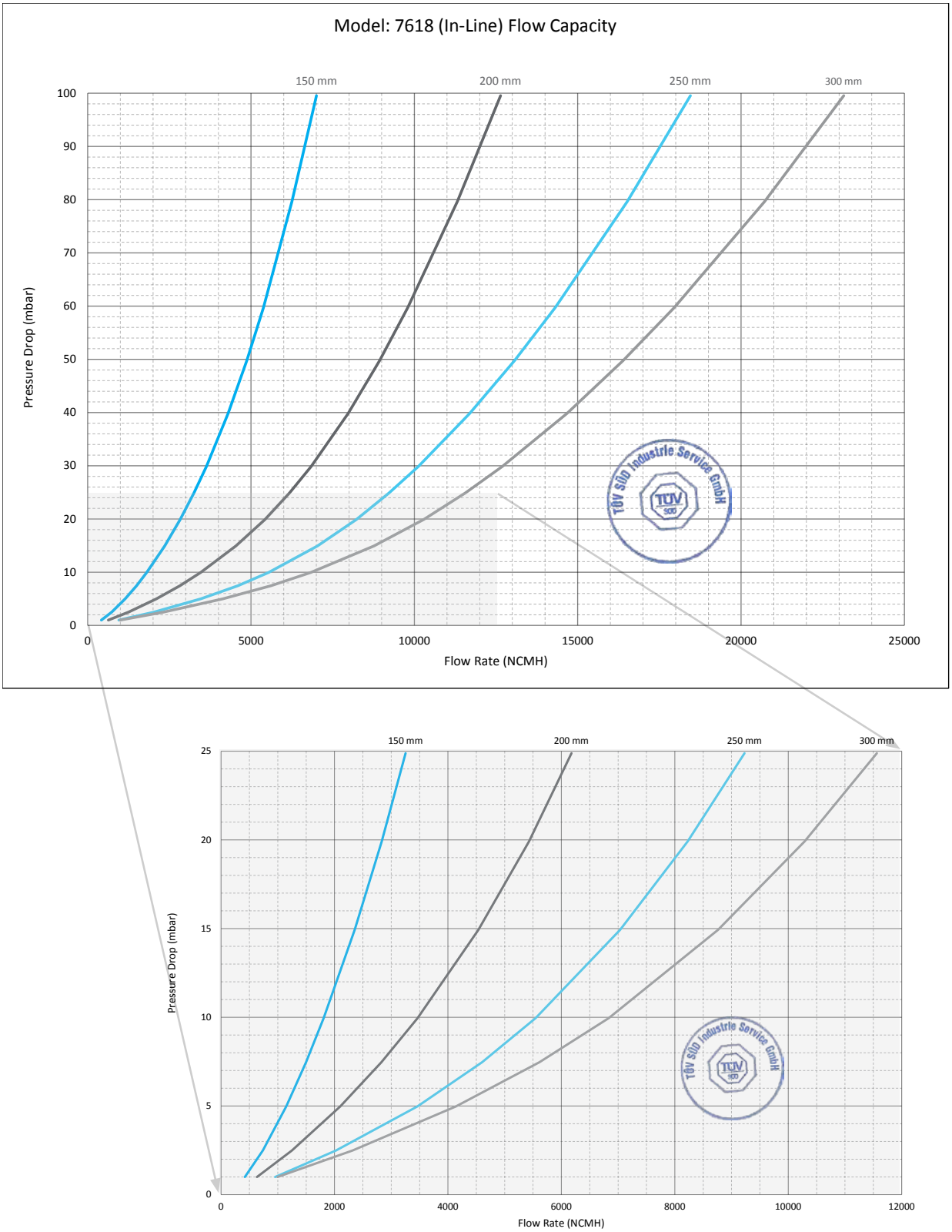
- Flow data are for in-line mounting and does not include entrance losses or exit losses.
- Flow values based on air at 60°F venting to atmospheric pressure of 14.6959 psia

MODEL 7618 // FLOW CAPACITY (IN LINE)



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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

MODEL 7628

TECHNICAL DETAILS

- Flange sizes 2" through 12"
- Housing standard material: carbon steel, stainless steel, aluminum
- Designed for quick and easy maintenance
- Unique recessed seating for superior protection
- Proven spiral-wound, crimped-ribbon flame element (316SS or aluminum)
- Operating Temperature <= 140°F(60°C)
- Horizontal installation only

MODEL 7628

DEFLAGRATION FLAME ARRESTERS

The 7628 model is 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. This provides increased fire protection and safety.

END-OF-LINE	IN-LINE
Flanged Outlet with or without Discharge Piping	
• Gas Group: NEC D, IEC IIA • Operating Temperature <= 140°F (60°C) • Pre-Ignition Pressure = Atmosphere • Discharge Piping Length <= 10 pipe diameters	• Gas Group: IEC IIA1, Methane (includes most Biogas applications) • Operating Temperature <= 140°F (60°C) • Pre-Ignition Pressure <= 1 psig • Run-up Length <= 50 pipe diameters (2") • Run-up Length <= 20 pipe diameters (3") • Run-up Length <= 10 pipe diameters (4" – 12")

FEATURES & BENEFITS

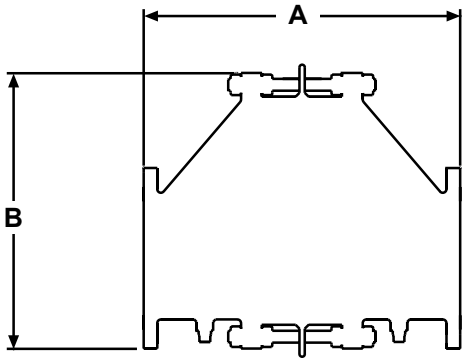
- Flame arrester element geometry maximizes flame quenching capability while minimizing pressure drop
- Proven spiral-wound, crimped-ribbon flame element provides reliable flame protection
- Modular design allows easy and cost-effective flame bank maintenance

OPTIONS

- Exterior painting or coating available
- DIN or ASME/ANSI drilling available
- Tapped drain and instrumentation ports available

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

Size* (Metric)	A Length (Metric)	B Height (Metric)	MAWP 7628◊ Aluminum (Metric)	MAWP 7628◊ Carbon or SS (Metric)	Approx Ship. Wt. Lbs. (Aluminum)
2" (50 mm)	15" (381 mm)	9.50" (241 mm)	150 psig (1035 kPa)	350 psig (2415 kPa)	18 (8 kg)
3" (80 mm)	17" (431 mm)	11" (279 mm)	140 psig (966 kPa)	325 psig (2242 kPa)	25 (11 kg)
4" (100 mm)	18.75" (476 mm)	12.50" (318 mm)	140 psig (966 kPa)	325 psig (2242 kPa)	40 (18 kg)
6" (150 mm)	21" (533 mm)	16.50" (419 mm)	140 psig (966 kPa)	325 psig (2242 kPa)	70 (32 kg)
8" (200 mm)	26" (660 mm)	20.50" (521 mm)	90 psig (621 kPa)	200 psig (1380 kPa)	135 (61 kg)
10" (250 mm)	30" (762 mm)	24.50" (622 mm)	75 psig (517 kPa)	150 psig (1035 kPa)	235 (107 kg)
12" (300 mm)	32.50" (826 mm)	28.50" (724 mm)	75 psig (517 kPa)	150 psig (1035 kPa)	345 (156 kg)



* Larger sizes available on special application.

†150# ANSI drilling compatibility, F.F. on aluminum and R.F. on carbon steel and stainless steel alloys.

◊Pneumatic tested to 15 psig as standard.

HOW TO ORDER

For easy ordering, select proper model numbers

MODEL # **SIZE** **MATERIAL** **OPTIONS**

□□□□ – – □□ – – □ □ – – – – – – – – – – □ □ □

- 7628 Horizontal
- Size: 02" Thru 12"
- Flame element winding: 1 = Aluminum; 5 = Stainless Steel
- Body Material: 1 = Aluminum; 3 = Carbon Steel; 5 = Stainless Steel; Z = Special
- Options: O = No Options; Z = Special Options
- Options: O = No Options
- Options: F = Flanged outlet (in-line design)

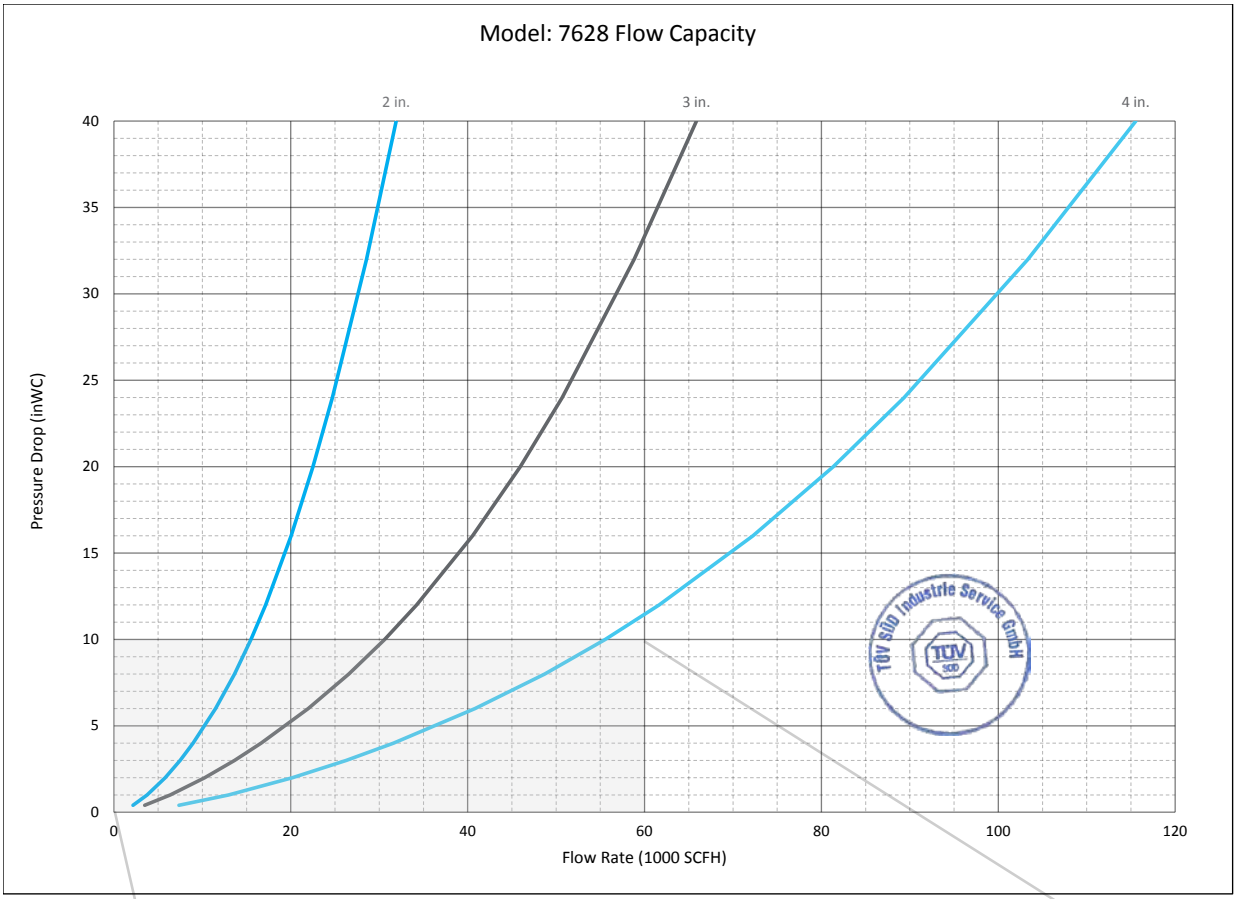
NOTES

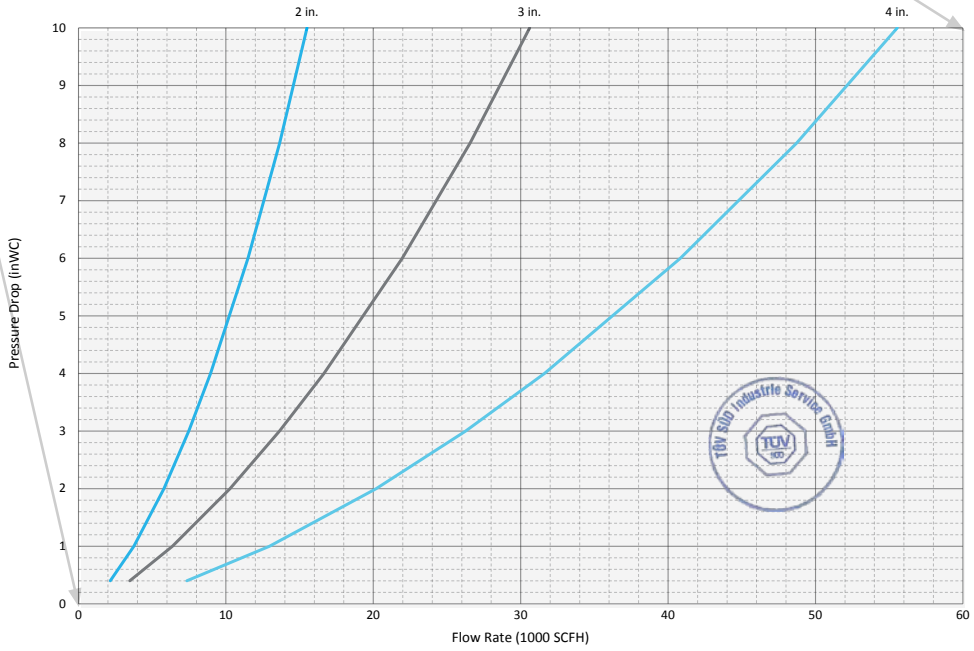
- Include model number and setting when ordering.
- For special options, consult factory.

EXAMPLE 7 6 2 8 — 0 4 — 1 1 — F O O

Indicates a 4" Model 7628 with Aluminum Body, Aluminum Flame element winding, Flanged outlet, no Jacket and no other options.

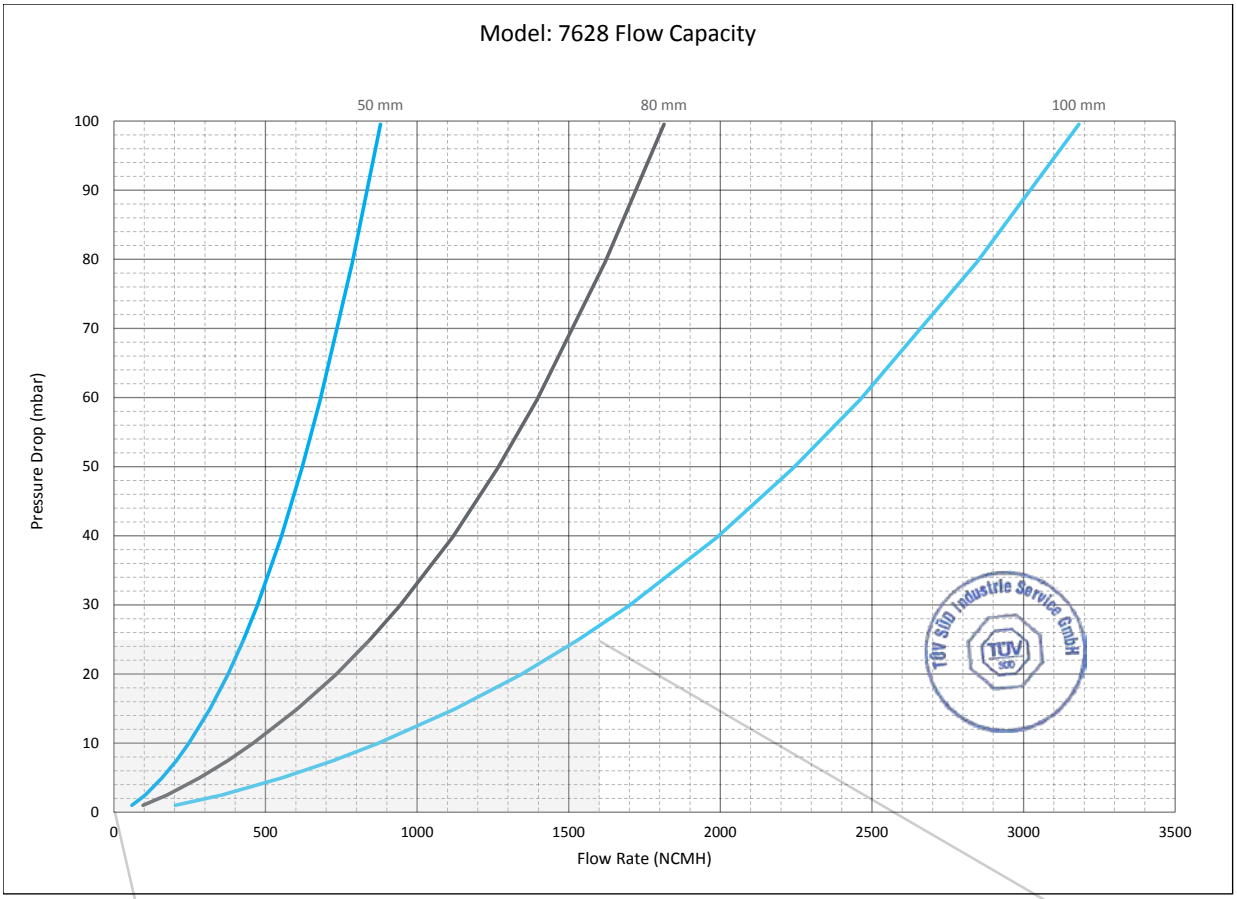
MODEL 7628 // FLOW CAPACITY (IN-LINE)

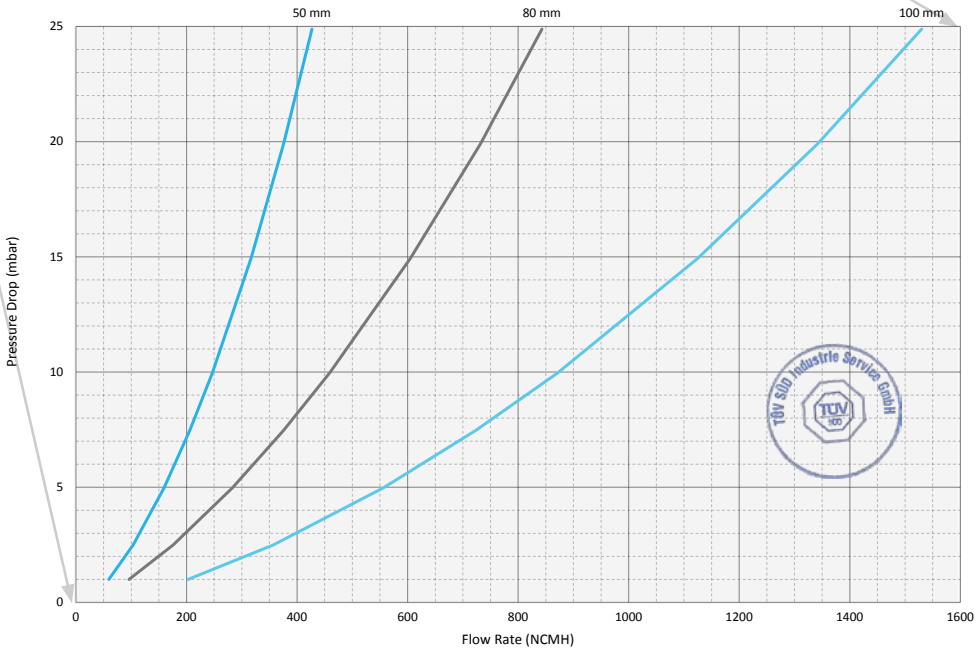




- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

MODEL 7628 // FLOW CAPACITY (IN LINE)





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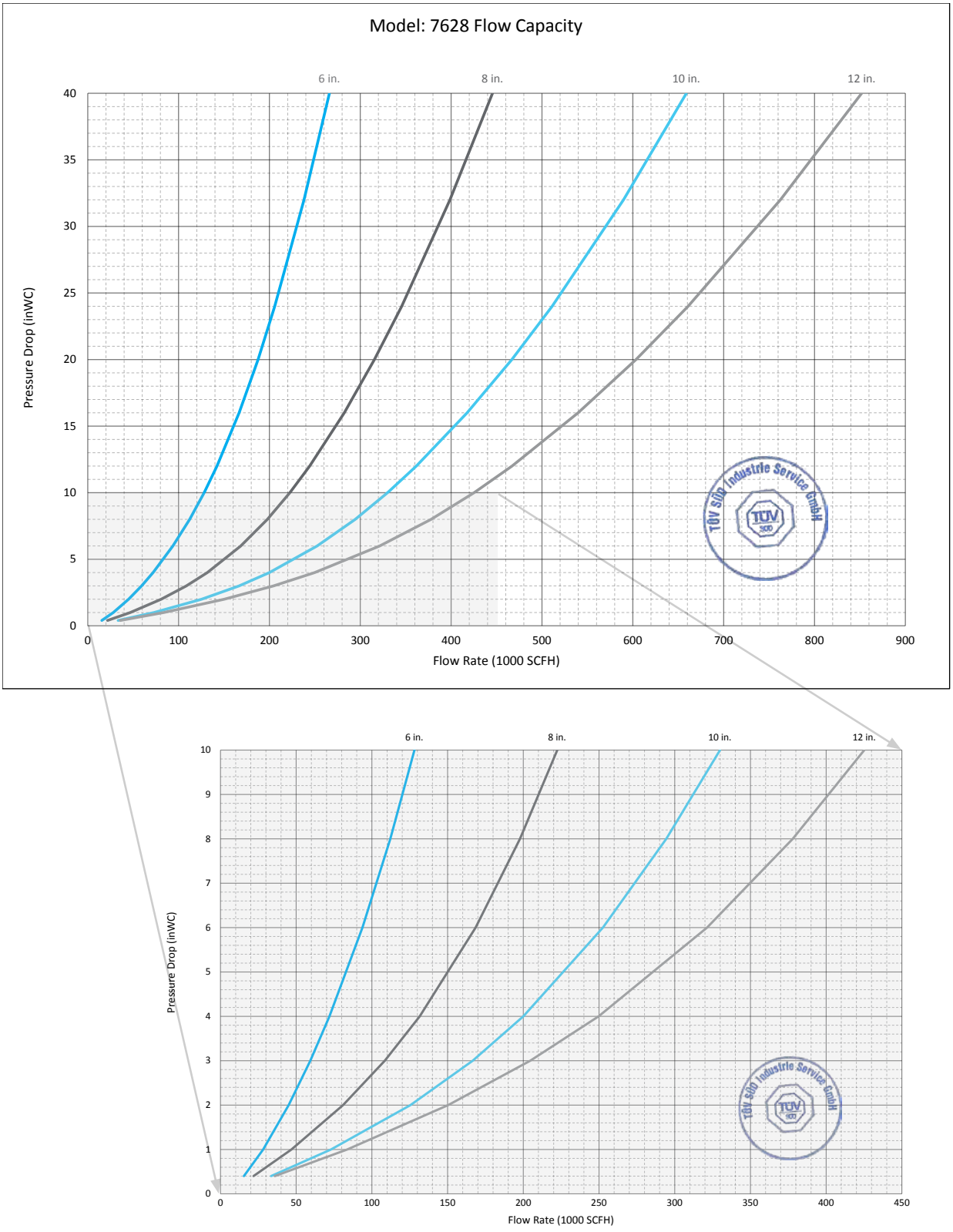
- Flow data are for in-line mounting and does not include entrance losses or exit losses.
- Flow values based on air at 0°C venting to atmospheric pressure of 1.01325 bara

MODEL 7628 // FLOW CAPACITY (IN-LINE)



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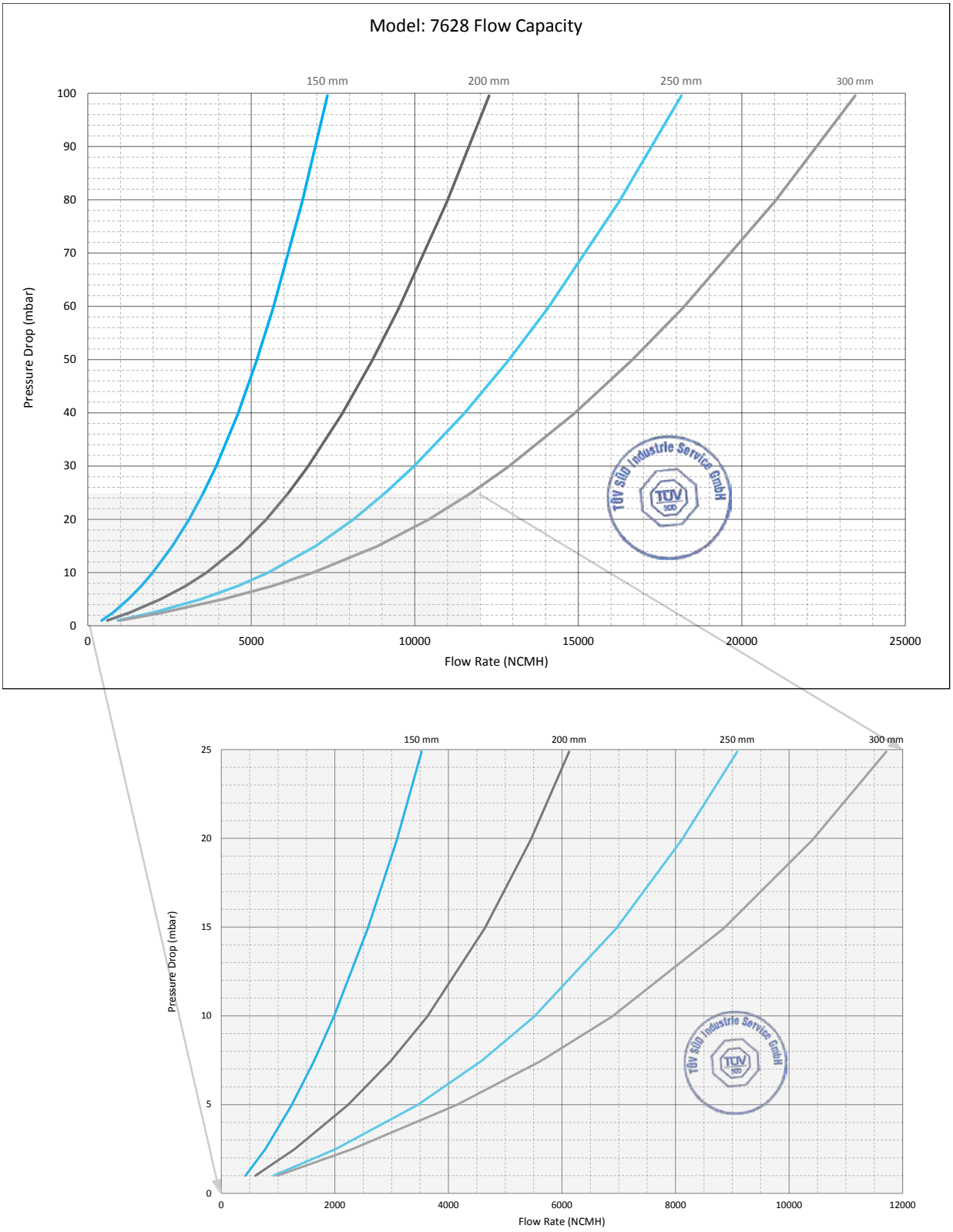
- Flow data are for in-line mounting and does not include entrance losses or exit losses.
- Flow values based on air at 60°F venting to atmospheric pressure of 14.6959 psia

MODEL 7628 // FLOW CAPACITY (IN LINE)



- 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

MODEL 7588 // IEC IIA1

TECHNICAL DETAILS

- Sizes 2" through 12"
- Housing standard material: carbon steel, stainless steel, aluminum
- Flame element standard material: 316L stainless steel
- Other materials available upon request
- Maximim Operational pressure 15.7 psia (1.08 bara)*
- Operational Temperature Range -4 to 140 °F (-20 to 60 °C)
- Burn Time t_{BT} 5 minutes*
- IEC gas group IIA1 (MESG ≥ 1.14 mm)
- Certified to ATEX Directive in compliance with EN ISO 16852:2010
  Certificate #: **IBExU12ATEX2018 X**
- Thermocouple is required for flame detection per the ATEX code

DEFLAGRATION FLAME ARRESTERS

The 7588 model is a 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. This provides increased fire protection and safety.

FEATURES & BENEFITS

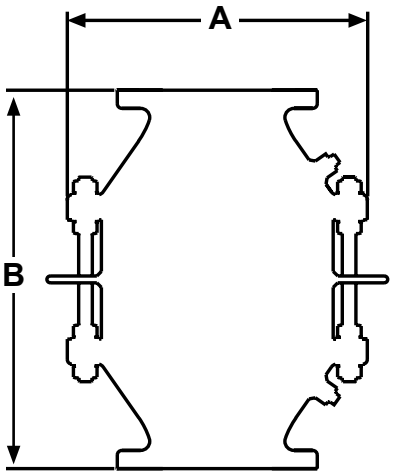
- Flame arrester element geometry maximizes flame quenching capability while minimizing pressure drop
- Proven spiral-wound, crimped-ribbon flame element provides reliable flame protection
- Modular design allows easy and cost-effective flame bank maintenance

OPTIONS

- Exterior painting or coating available
- DIN or ASME/ANSI drilling available
- Drains and instrument ports available
- Factory installed thermocouples for flame sensing

*Testing parameters based on EN ISO 16852:2010

MODEL 7588 // SPECIFICATIONS

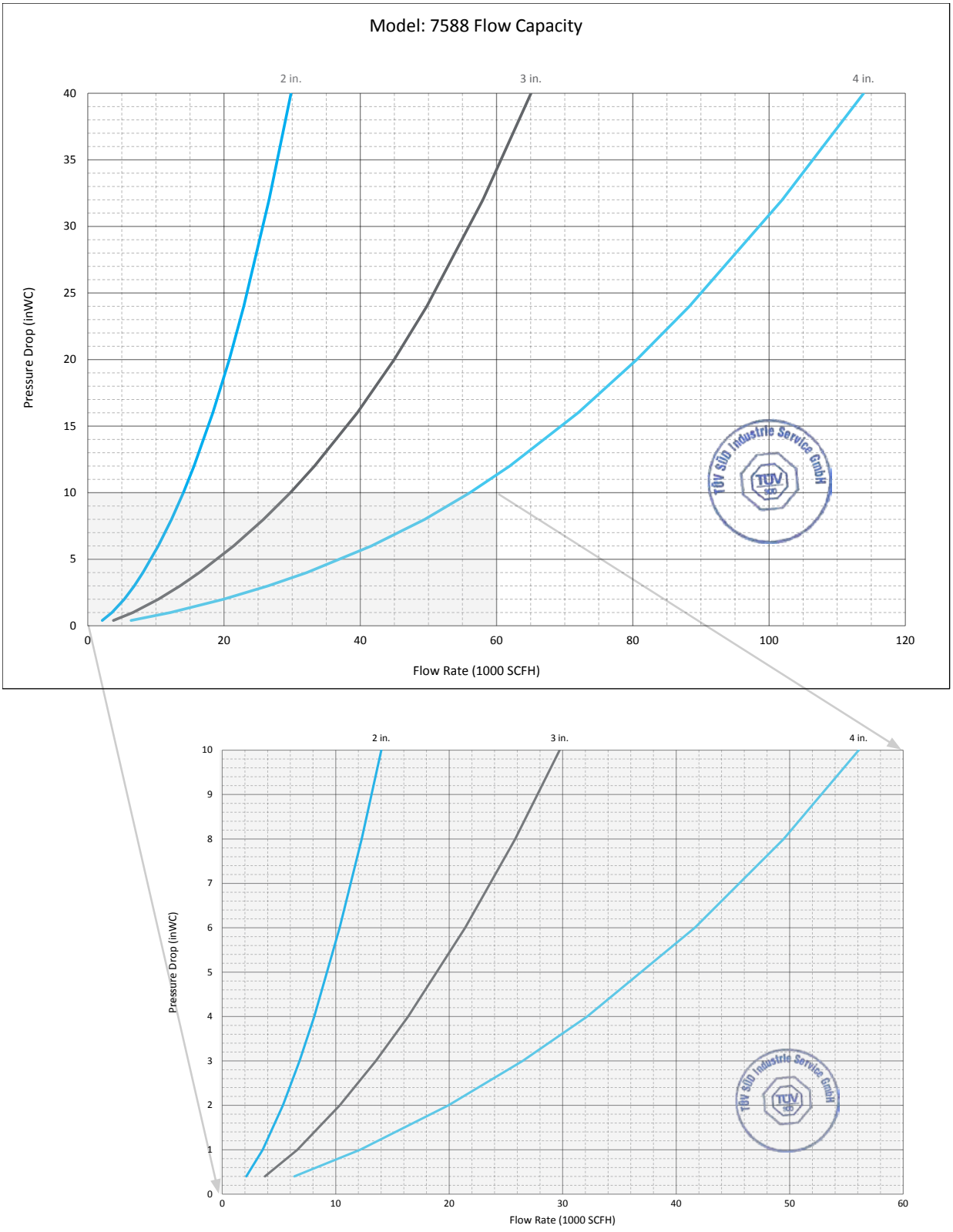


Specifications subject to change without notice. Certified dimensions available upon request.

Size* (Metric)	A Width (Metric)	B Height (Metric)	Maximum Run Up (L/D)*	Approx Ship. Wt. Lbs. (Aluminum)	Approx Ship. Wt. Lbs. (Carbon or SS Body)
2" (50 mm)	8.75" (221 mm)	14" (356 mm)	50	18 (8 kg)	40 (18 kg)
3" (80 mm)	9.50" (241 mm)	16" (406 mm)	20	27 (12 kg)	60 (27 kg)
4" (100 mm)	11.50" (292 mm)	18.25" (464 mm)	10	42 (19 kg)	91 (41 kg)
6" (150 mm)	16.50" (419 mm)	21" (533 mm)	10	92 (42 kg)	184 (83 kg)
8" (200 mm)	21" (533 mm)	25" (635 mm)	10	146 (66 kg)	309 (140 kg)
10" (250 mm)	24.75" (629 mm)	30" (762 mm)	10	237 (108 kg)	498 (226 kg)
12" (300 mm)	28.62" (727 mm)	32.50" (826 mm)	10	306 (139 kg)	694 (314 kg)

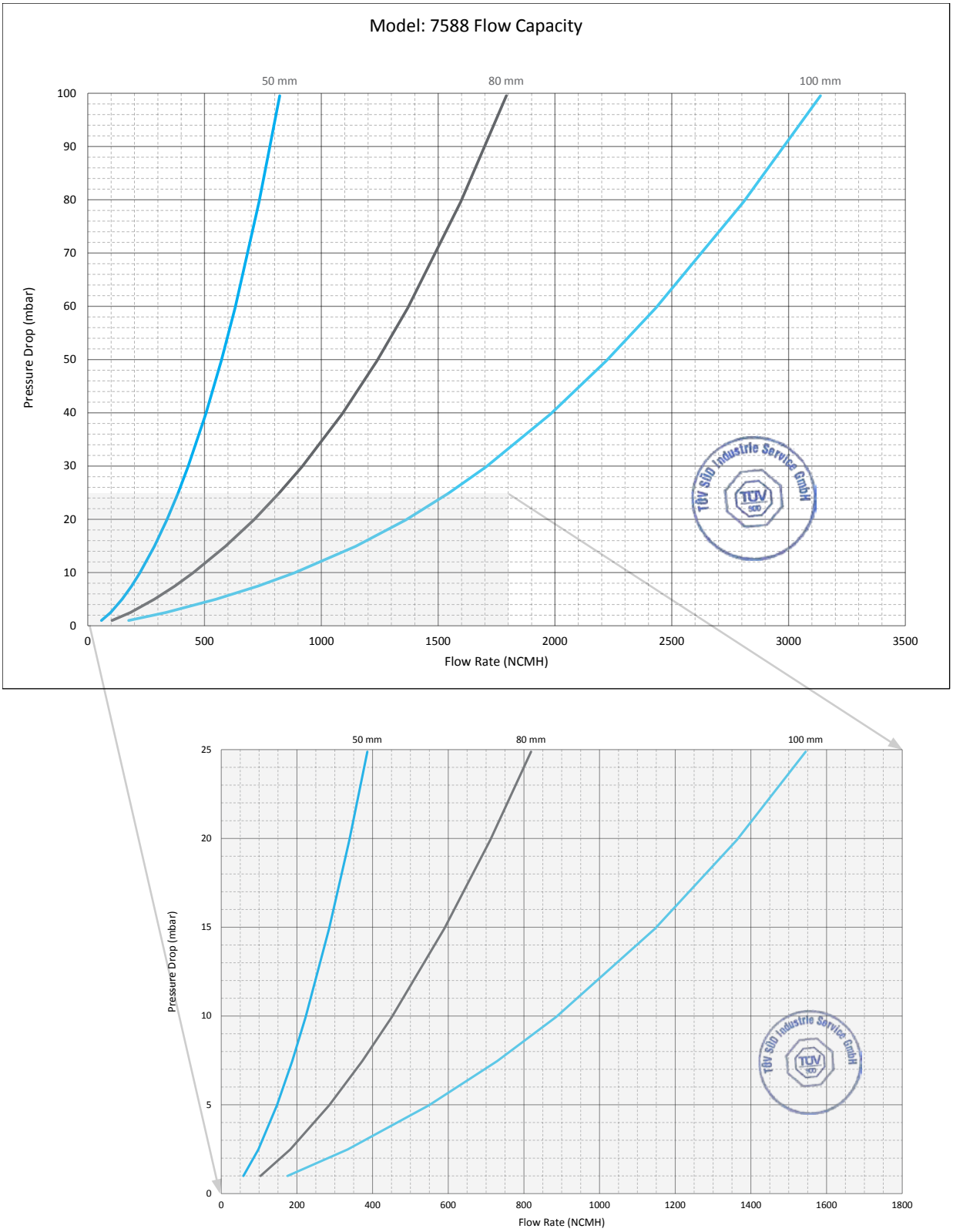
*Testing parameters based on EN ISO 16852:2010

MODEL 7588 // FLOW CAPACITY (IN-LINE)



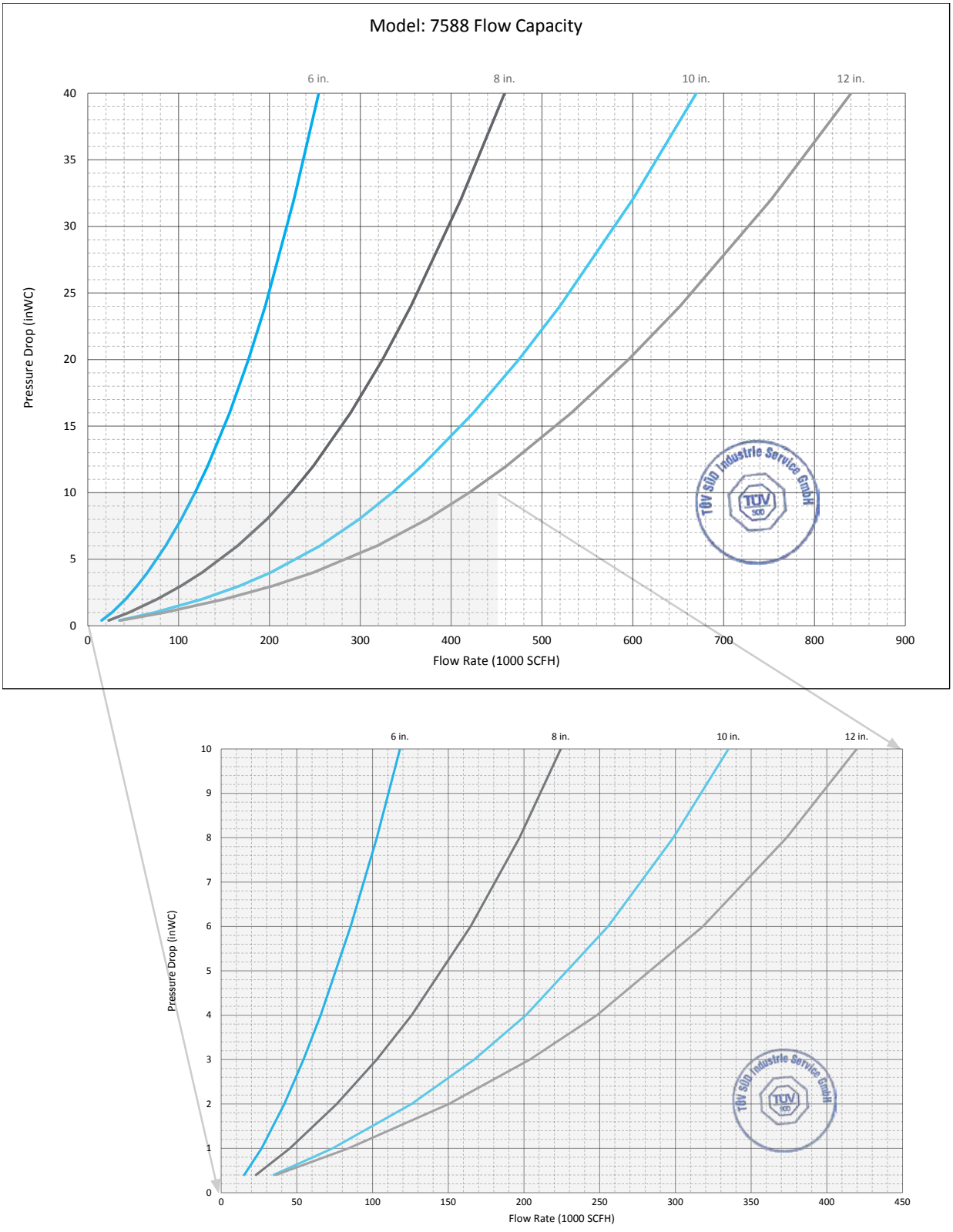
- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

MODEL 7588 // FLOW CAPACITY (IN LINE)



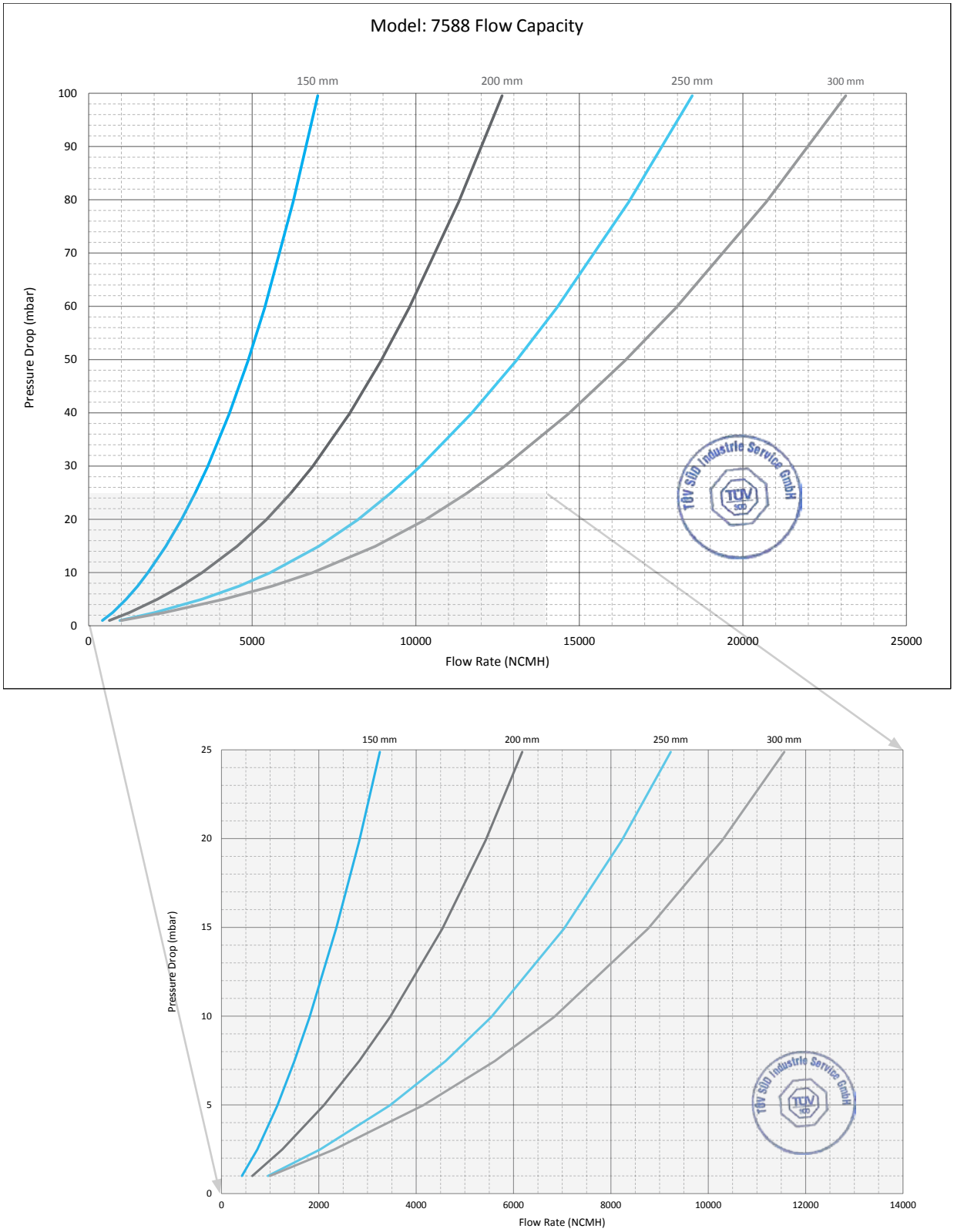
- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

MODEL 7588 // FLOW CAPACITY (IN-LINE)



- 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

MODEL 7588 // FLOW CAPACITY (IN LINE)



- 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

MODEL 7598 // IEC IIA1

TECHNICAL DETAILS

- Sizes 2" through 12"
- Housing standard material: carbon steel, stainless steel, aluminum
- Flame element standard material: 316L stainless steel
- Other materials available upon request
- Maximim Operational pressure 15.7 psia (1.08 bara)*
- Operational Temperature Range -4 to 140 °F (-20 to 60 °C)
- Burn Time t_{BT} 5 minutes*
- Good for IEC gas group IIA1 (MESG ≥ 1.14 mm)
- Certified to ATEX Directive in compliance with EN ISO 16852:2010 Certificate #: **IBExU12ATEX2017 X**
- Thermocouple is required for flame detection per the ATEX code

DEFLAGRATION FLAME ARRESTERS

The 7598 model is a 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. This provides increased fire protection and safety.

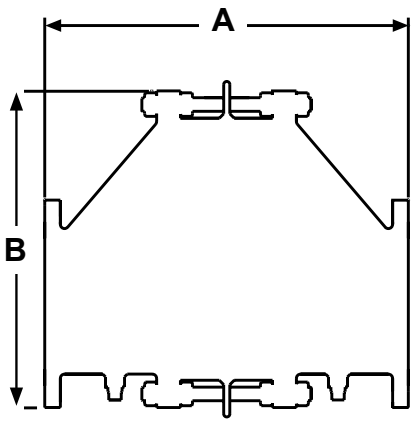
FEATURES & BENEFITS

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

OPTIONS

- Exterior painting or coating available
- DIN or ASME/ANSI drilling available
- Drains and instrument ports available
- Factory installed thermocouples for flame sensing

*Testing parameters based on EN ISO 16852:2010

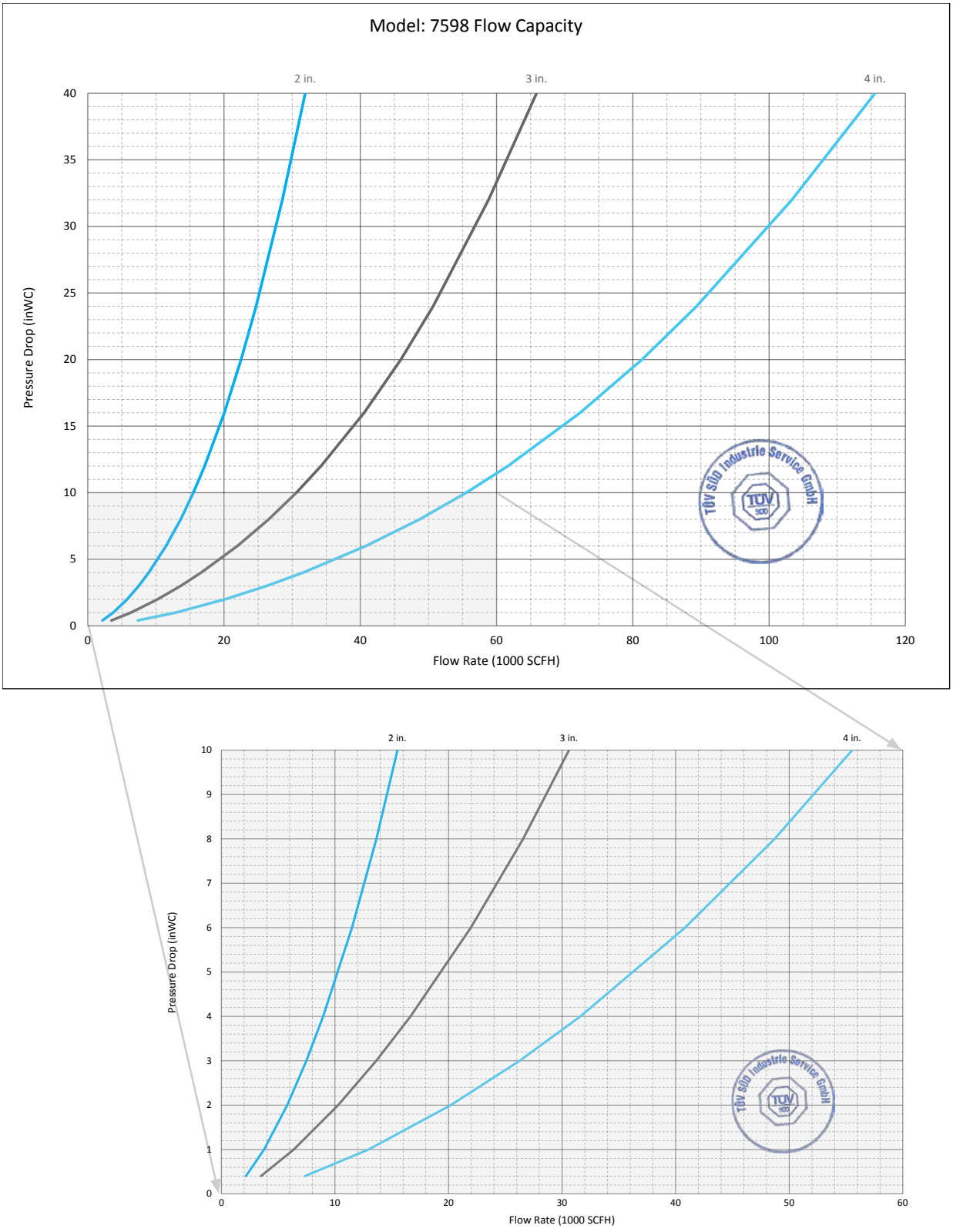


Specifications subject to change without notice. Certified dimensions available upon request.

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

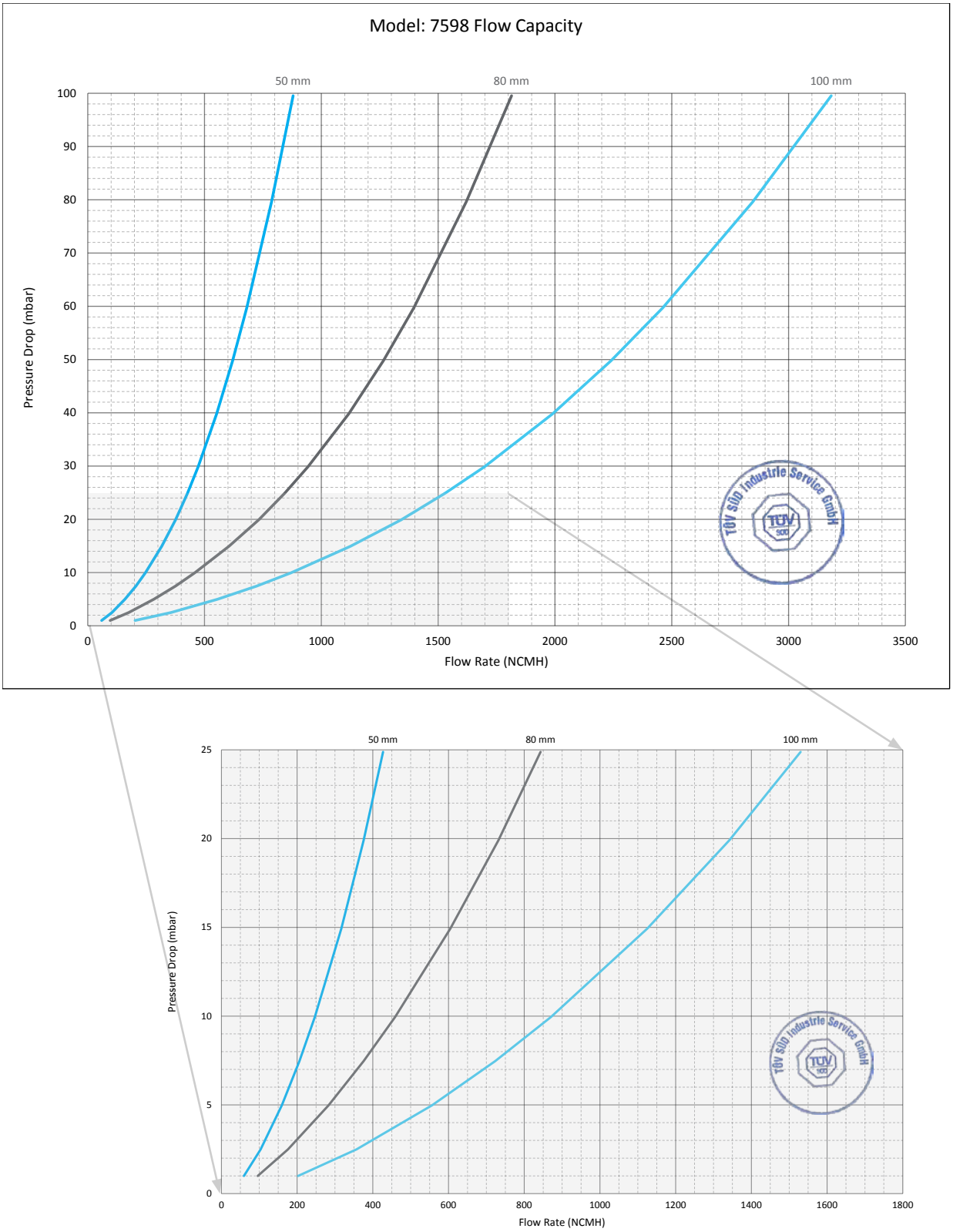
*Testing parameters based on EN ISO 16852:2010

MODEL 7598 // FLOW CAPACITY (IN-LINE)



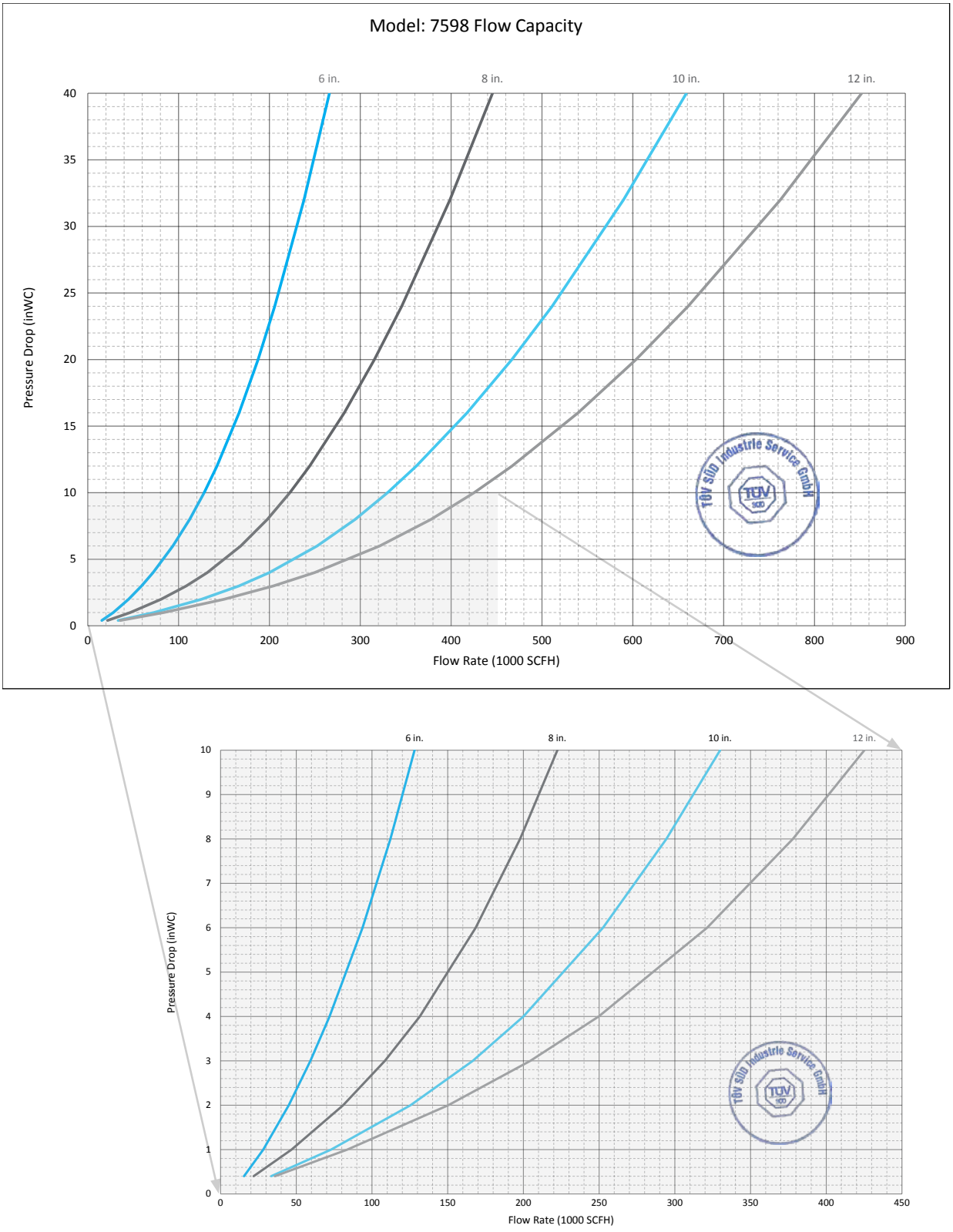
- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

MODEL 7598 // FLOW CAPACITY (IN LINE)



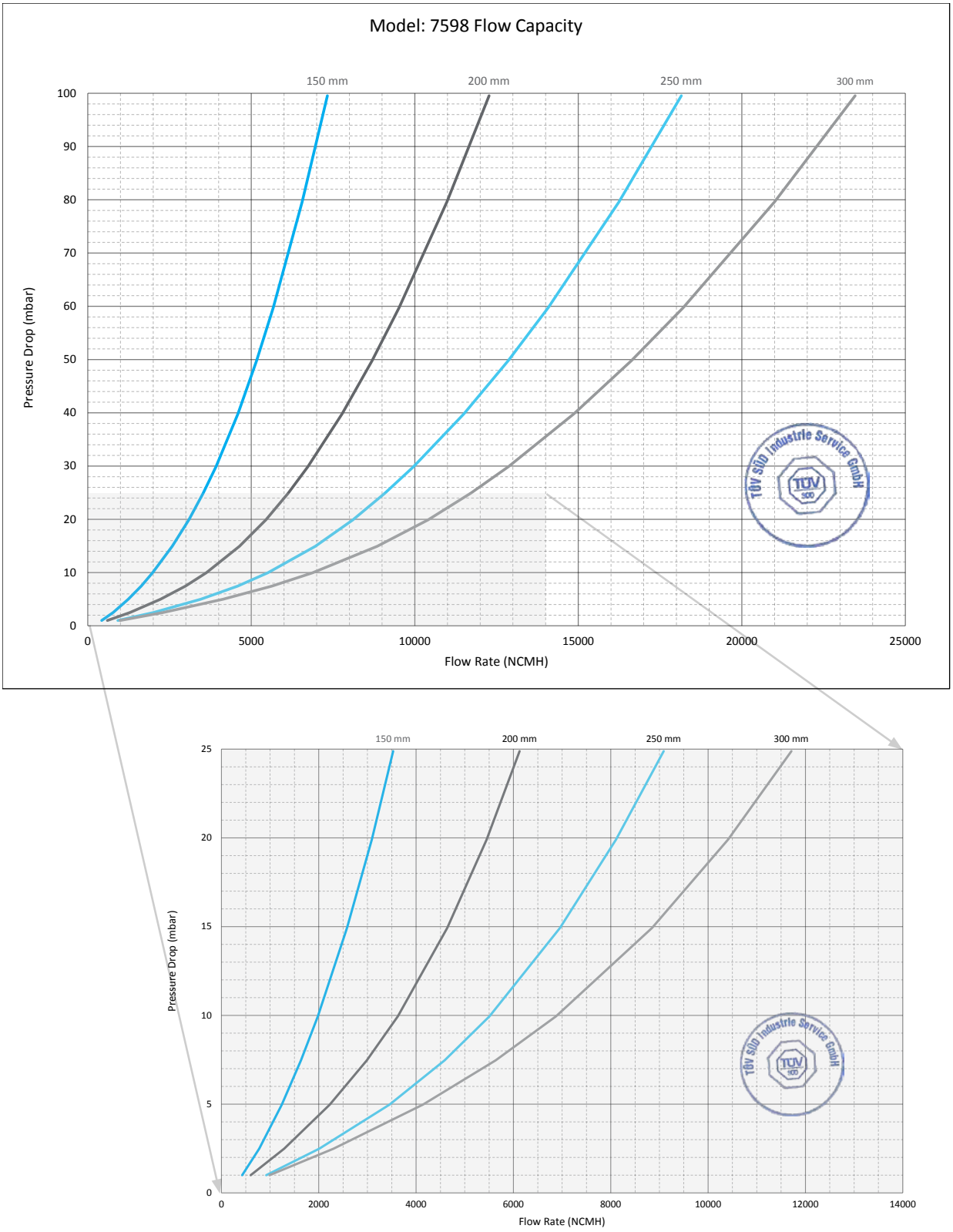
- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

MODEL 7598 // FLOW CAPACITY (IN-LINE)



- 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

MODEL 7598 // FLOW CAPACITY (IN LINE)



- 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

MODEL 7688 // IEC IIA

TECHNICAL DETAILS

- Sizes 2" through 12"
- Housing standard material: carbon steel, stainless steel, aluminum
- Flame element standard material: 316L stainless steel
- Other materials available upon request
- Maximim Run Up (L/D) 50*
- Operational Temperature Range -4 to 140 °F (-20 to 60 °C)
- Burn Time t_{BT} 2 minutes (sizes 8", 10" and 12")*
- Burn Time t_{BT} 10 minutes (sizes 2", 3", 4" and 6")*
- IEC gas group IIA (MESG ≥ 0.90 mm)
- Certified to ATEX Directive in compliance with EN ISO 16852:2010 Certificate #: **IBExU12ATEX2016 X**
- Thermocouple is required for flame detection per the ATEX code

DEFLAGRATION FLAME ARRESTERS

The 7688 model is a 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. This provides increased fire protection and safety.

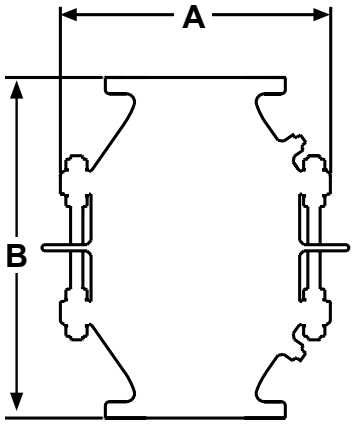
FEATURES & BENEFITS

- Flame arrester element geometry maximizes flame quenching capability while minimizing pressure drop
- Proven spiral-wound, crimped-ribbon flame element provides reliable flame protection
- Modular design allows easy and cost-effective flame bank maintenance

OPTIONS

- Exterior painting or coating available
- DIN or ASME/ANSI drilling available
- Drains and instrument ports available
- Factory installed thermocouples for flame sensing

*Testing parameters based on EN ISO 16852:2010

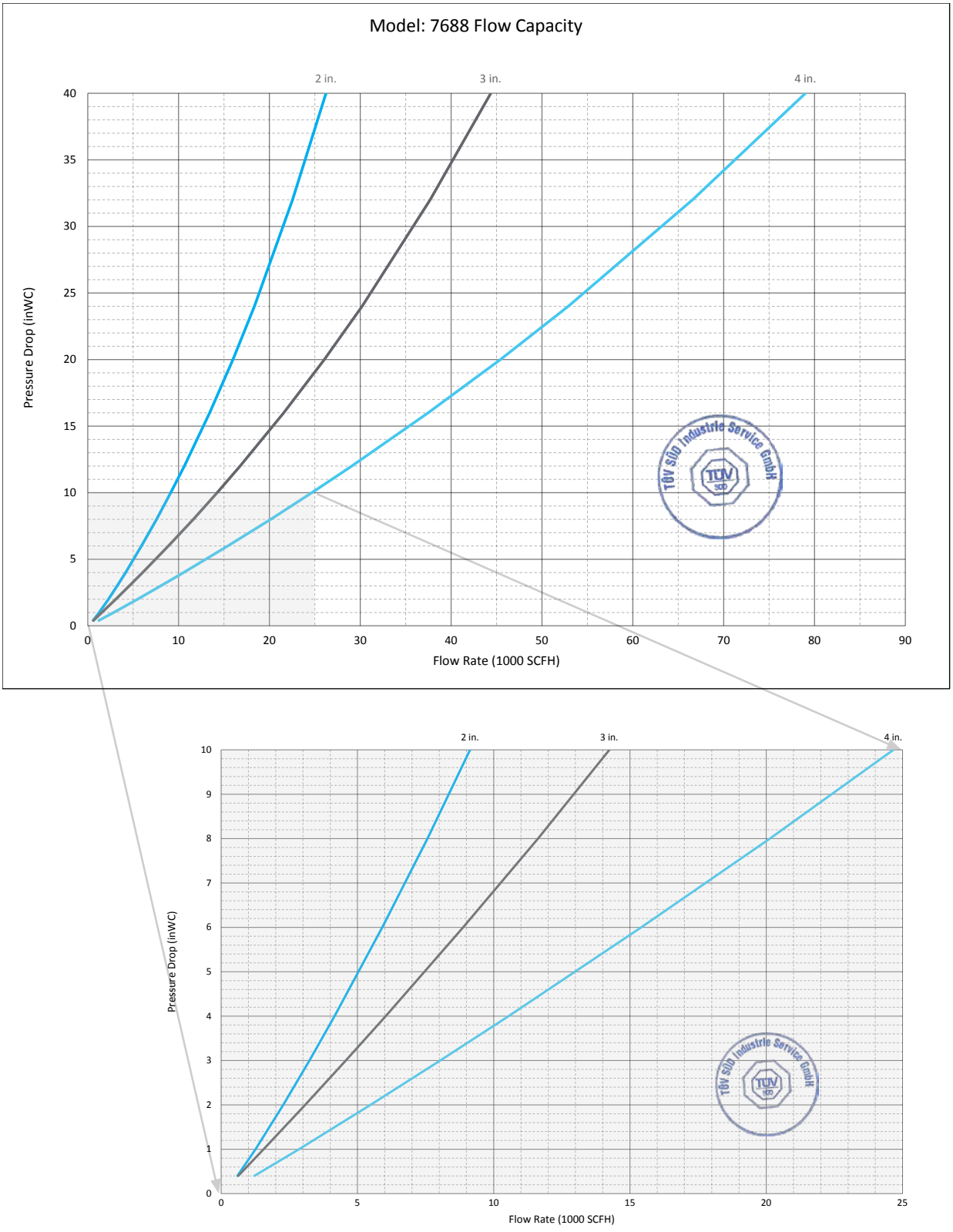


Specifications subject to change without notice. Certified dimensions available upon request.

Size* (Metric)	A Width (Metric)	B Height (Metric)	Maximum Operational Pressure* psia (bara)	Burn Time t_{BT}* minutes	Approx Ship. Wt. Lbs. (Aluminum)	Approx Ship. Wt. Lbs. (Carbon or SS Body)
2" (50 mm)	8.75" (221 mm)	14" (356 mm)	23.2 (1.60)	10	19 (9 kg)	41 (18 kg)
3" (80 mm)	9.50" (241 mm)	16" (406 mm)	23.2 (1.60)	10	28 (13 kg)	61 (28 kg)
4" (100 mm)	11.50" (292 mm)	18.25" (464 mm)	17.4 (1.20)	10	44 (20 kg)	93 (42 kg)
6" (150 mm)	16.50" (419 mm)	21" (533 mm)	17.4 (1.20)	10	98 (44 kg)	189 (86 kg)
8" (200 mm)	21" (533 mm)	25" (635 mm)	17.4 (1.20)	2	155 (70 kg)	317 (144 kg)
10" (250 mm)	24.75" (629 mm)	30" (762 mm)	17.4 (1.20)	2	250 (113 kg)	512 (232 kg)
12" (300 mm)	28.62" (727 mm)	32.50" (826 mm)	17.4 (1.20)	2	324 (147 kg)	712 (323 kg)

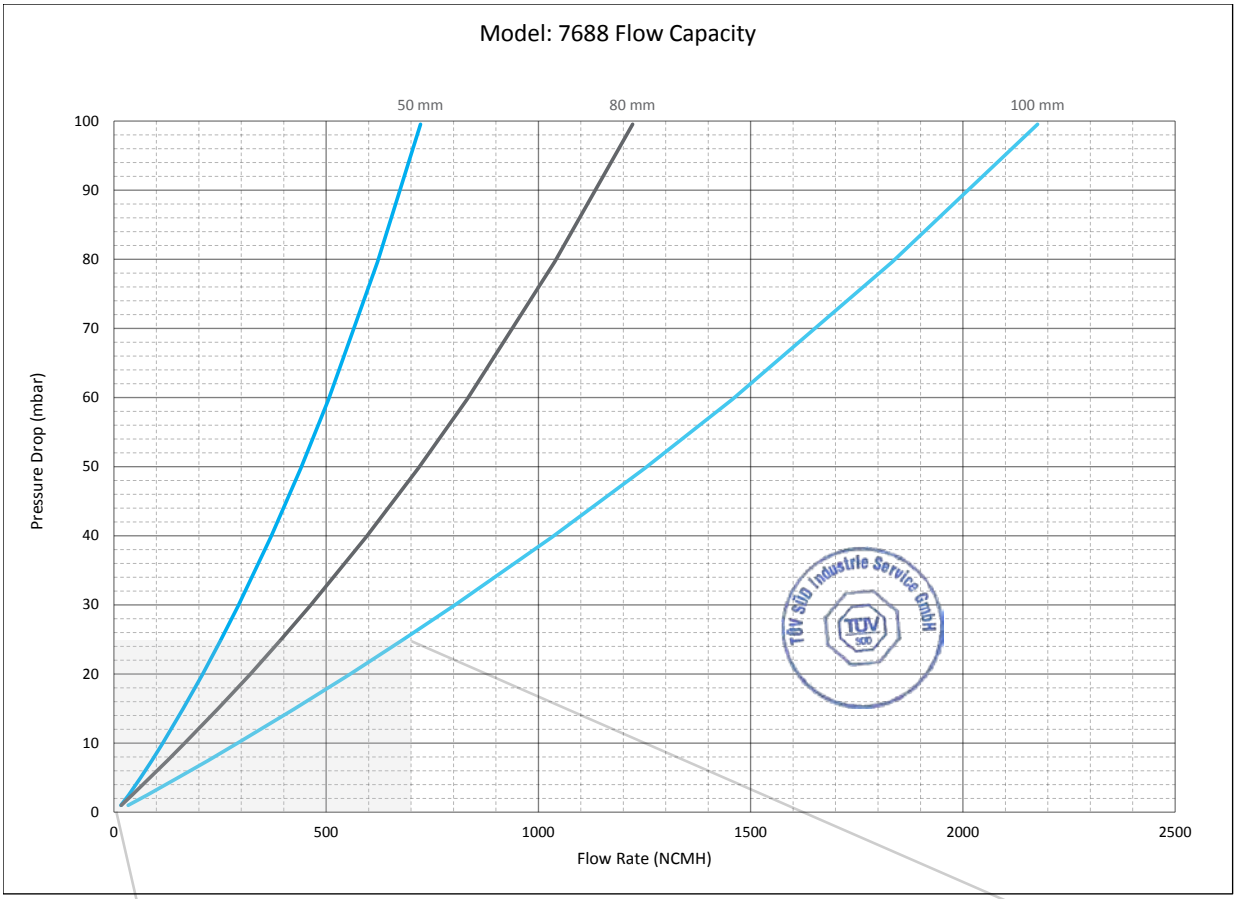
*Testing parameters based on EN ISO 16852:2010

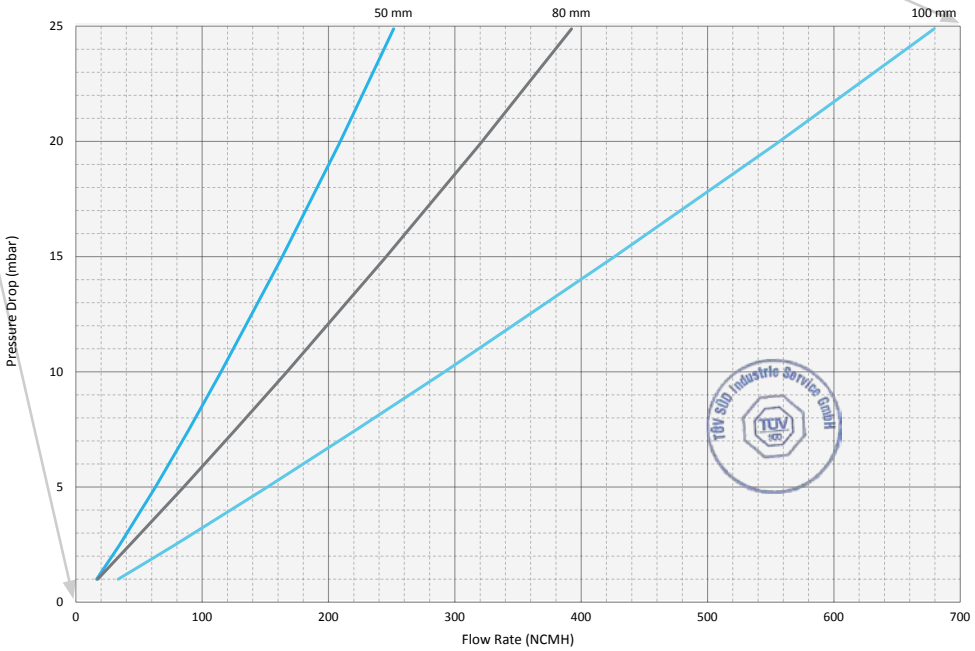
MODEL 7688 // FLOW CAPACITY (IN-LINE)



- 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

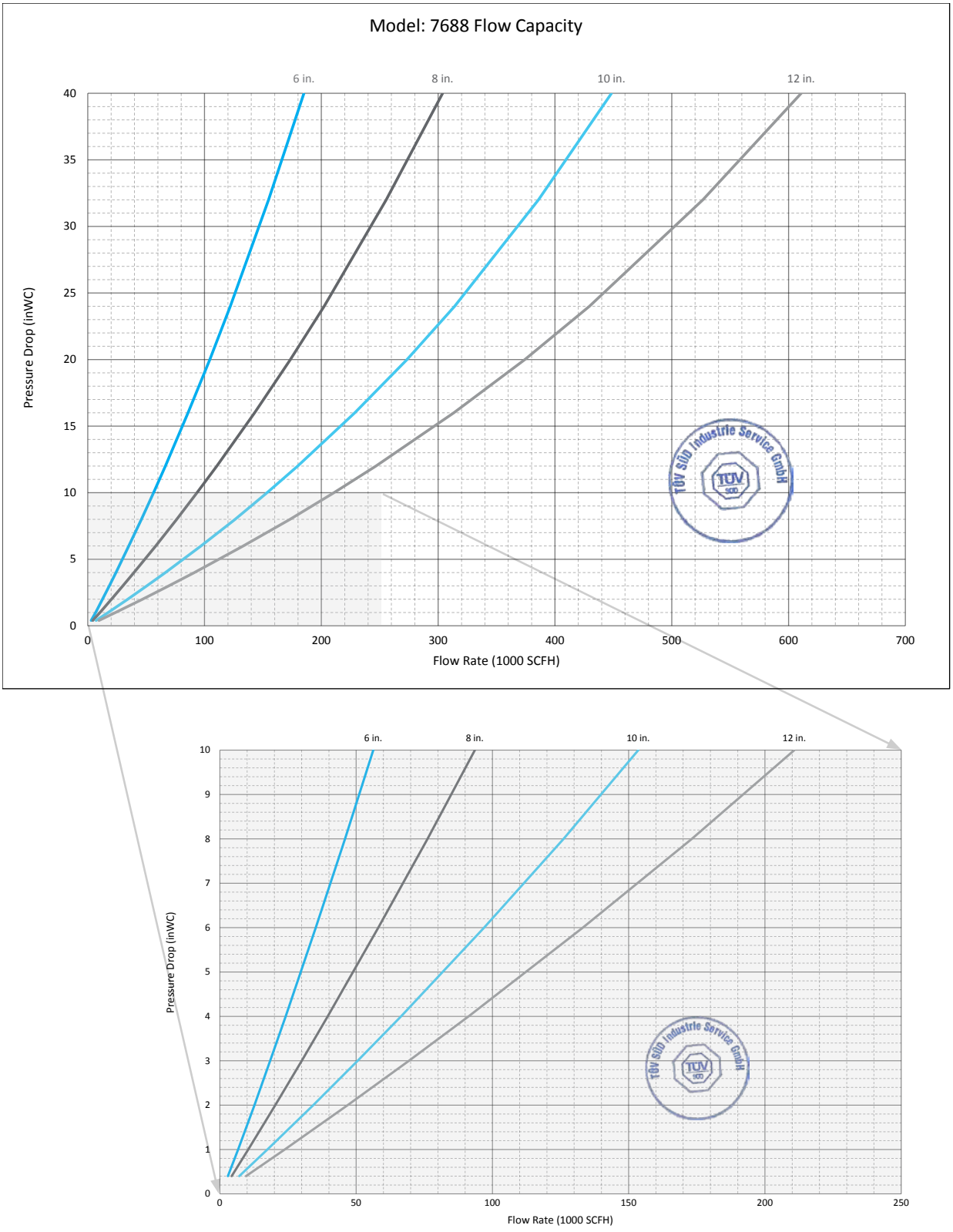
MODEL 7688 // FLOW CAPACITY (IN LINE)





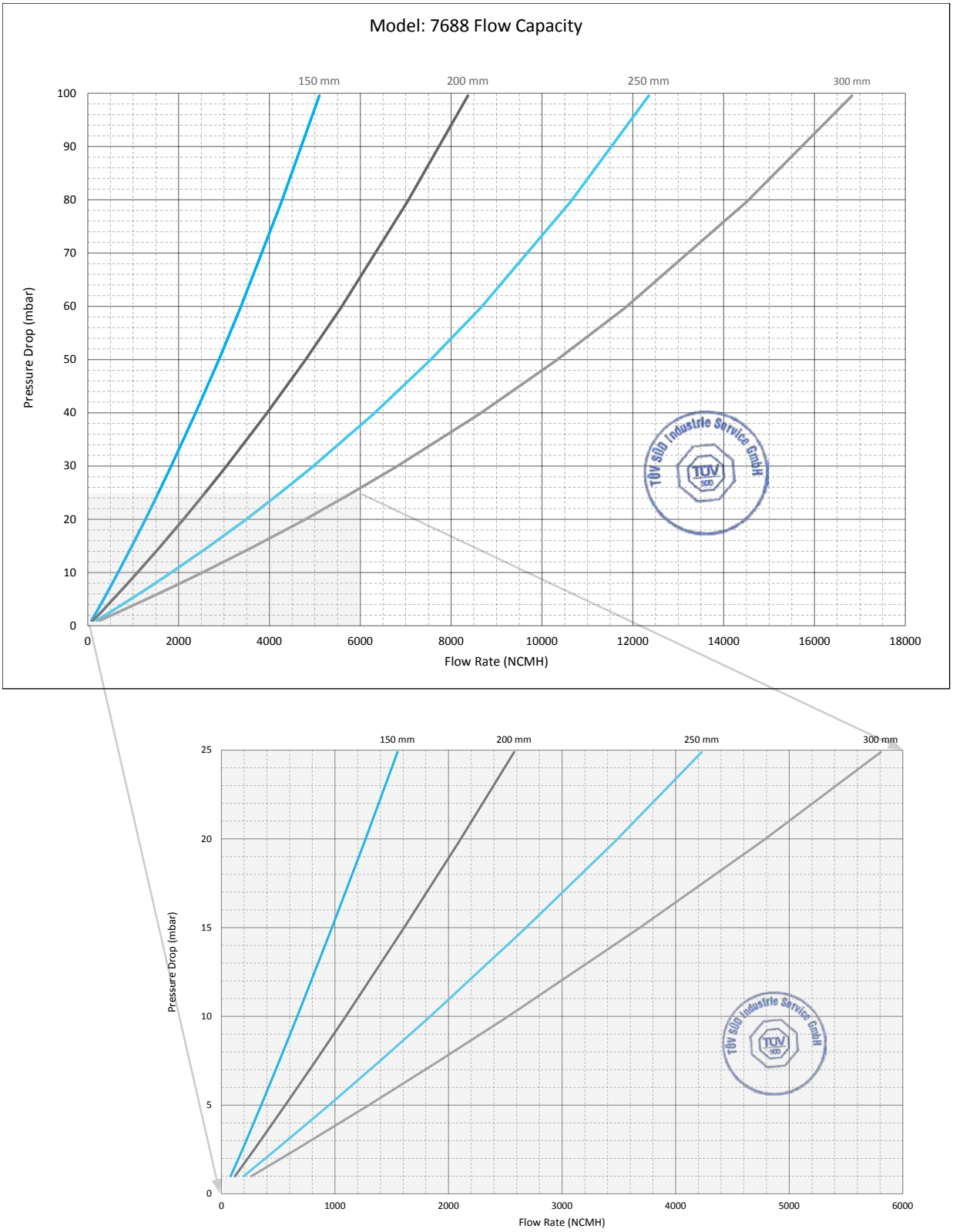
- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

MODEL 7688 // FLOW CAPACITY (IN-LINE)



- 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

MODEL 7688 // FLOW CAPACITY (IN LINE)



- 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

MODEL 7698 // IEC IIA

TECHNICAL DETAILS

- Sizes 2" through 12"
- Housing standard material: carbon steel, stainless steel, aluminum
- Flame element standard material: 316L stainless steel
- Other materials available upon request
- Operational Temperature Range -4 to 140 °F (-20 to 60 °C)
- Good for IEC gas group IIA (MESG ≥ 0.90 mm)
- Certified to ATEX Directive in compliance with EN ISO 16852:2010
  Certificate #: **IBExU12ATEX2015 X**
- Thermocouple is required for flame detection per the ATEX code

DEFLAGRATION FLAME ARRESTERS

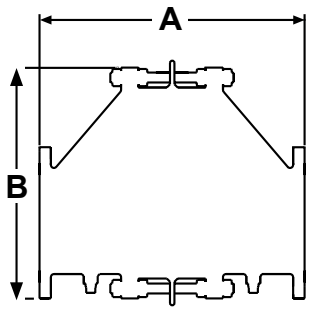
The 7698 model is a In-Line Horizontal Deflagration Flame Arrester designed to inhibit flame propagation in gas piping systems and to protect low pressure tanks containing flammable liquids. Arresters protect low flash point liquids from external sources of ignition. This provides increased fire protection and safety.

FEATURES & BENEFITS

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

OPTIONS

- Exterior painting or coating available
- DIN or ASME/ANSI drilling available
- Drains and instrument ports available
- Factory installed thermocouples for flame sensing

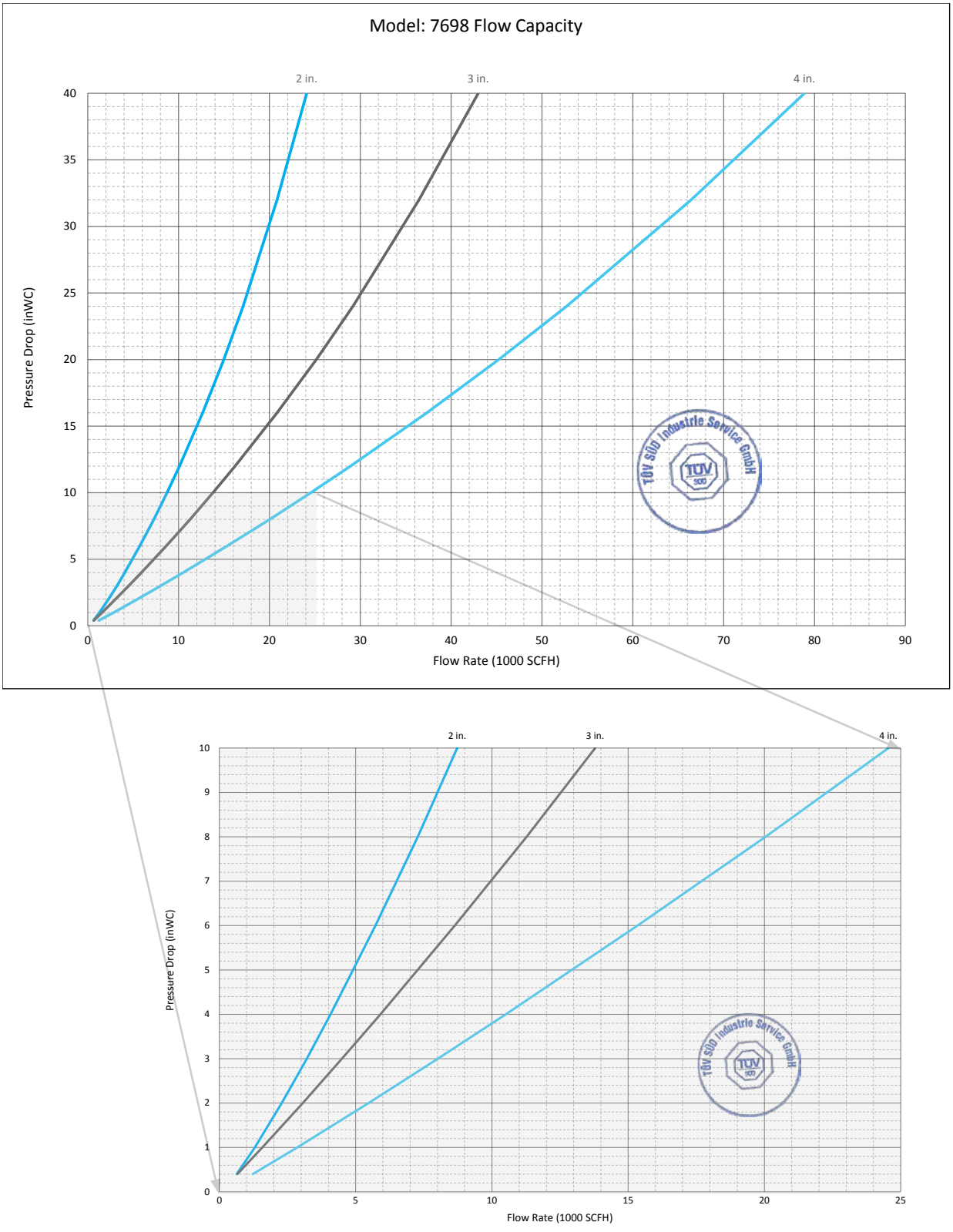


Specifications subject to change without notice. Certified dimensions available upon request.

Size* (Metric)	A Length (Metric)	B Height (Metric)	Maximum Operational Pressure* psia (bara)	Maximum Run Up (L/D)*	Burn Time t_{BT}* minutes	Approx Ship. Wt. Lbs. (Aluminum)	Approx Ship. Wt. Lbs. (Carbon or SS Body)
2" (50 mm)	13.75" (349 mm)	9.50" (241 mm)	23.2 (1.60)	50	10	32 (14 kg)	70 (32 kg)
3" (80 mm)	15.75" (400 mm)	11" (279 mm)	23.2 (1.60)	50	10	41 (19 kg)	86 (39 kg)
4" (100 mm)	18" (457 mm)	12.50" (318 mm)	17.4 (1.20)	20	10	55 (25 kg)	114 (52 kg)
6" (150 mm)	21" (533 mm)	16.50" (419 mm)	17.4 (1.20)	20	10	116 (53 kg)	222 (101 kg)
8" (200 mm)	25" (635 mm)	20.50" (521 mm)	17.4 (1.20)	20	2	221 (100 kg)	422 (191 kg)
10" (250 mm)	30" (762 mm)	24.50" (622 mm)	17.4 (1.20)	20	2	320 (145 kg)	635 (288 kg)
12" (300 mm)	32.50" (826 mm)	28.50" (724 mm)	17.4 (1.20)	20	2	397 (180 kg)	836 (379 kg)

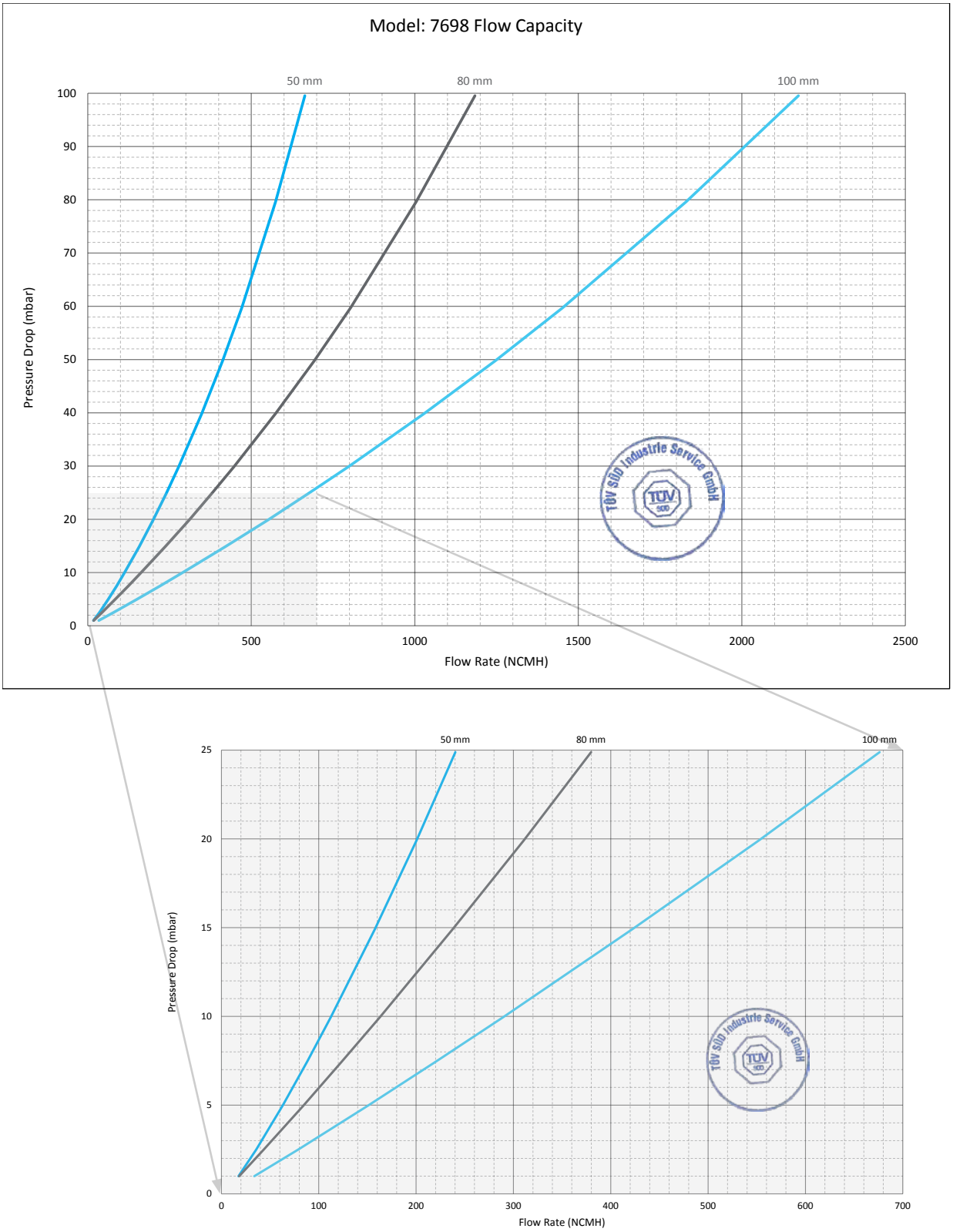
*Testing parameters based on EN ISO 16852:2010

MODEL 7698 // FLOW CAPACITY (IN-LINE)



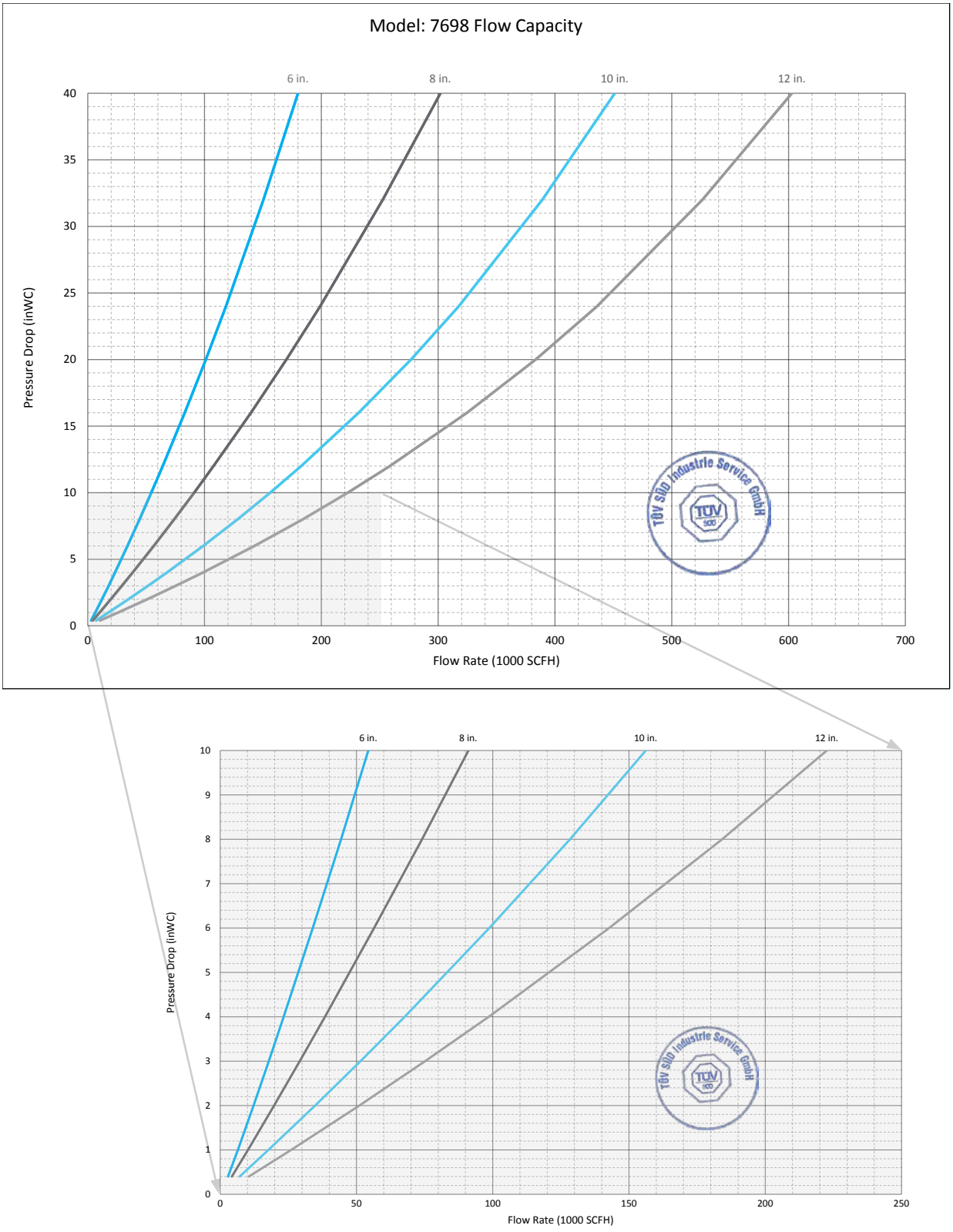
- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

MODEL 7698 // FLOW CAPACITY (IN LINE)



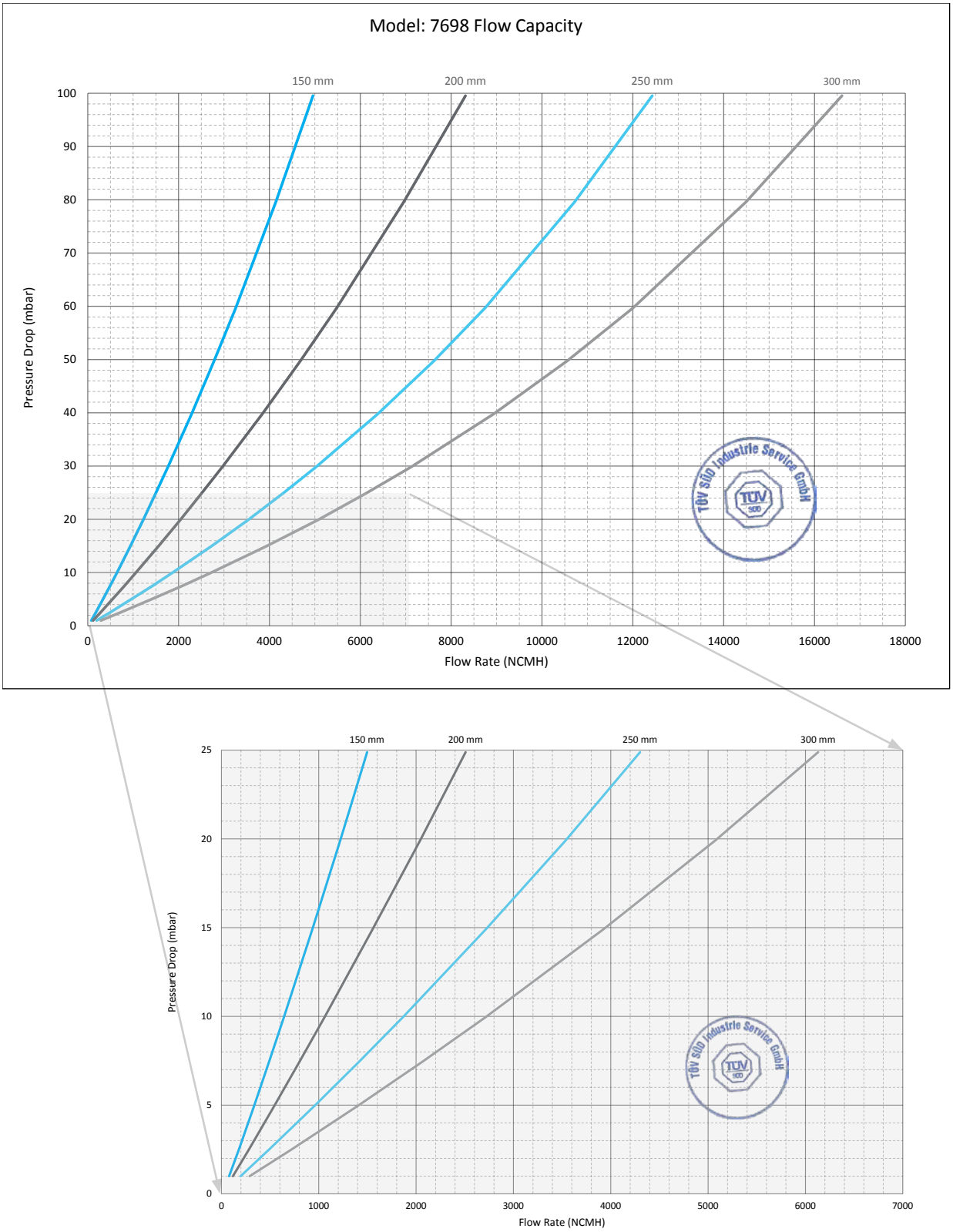
- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

MODEL 7698 // FLOW CAPACITY (IN-LINE)



- 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

MODEL 7698 // FLOW CAPACITY (IN LINE)



- 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

MODEL 7678 // IEC IIA

TECHNICAL DETAILS

- Sizes 2" through 12"
- Housing standard material: carbon steel, stainless steel, aluminum
- Flame element standard material: 316L stainless steel
- Other materials available upon request
- Operational Temperature Range -4 to 140 °F (-20 to 60 °C)
- Burn Time t_{BT} 2 minutes*
- IEC gas group IIA (MESG ≥ 0.90 mm)
- Certified to ATEX Directive in compliance with EN ISO 16852:2010 Certificate #: **IBExU12ATEX2019 X**
- Thermocouple is required for flame detection per the ATEX code

DEFLAGRATION FLAME ARRESTERS

The 7678 model is an End-Of-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. This provides increased fire protection and safety.

FEATURES & BENEFITS

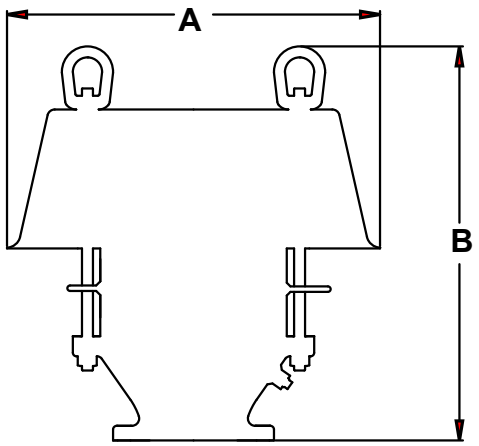
- Flame arrester element geometry maximizes flame quenching capability while minimizing pressure drop
- Proven spiral-wound, crimped-ribbon flame element provides reliable flame protection
- Modular design allows easy and cost-effective flame bank maintenance

OPTIONS

- Exterior painting or coating available
- DIN or ASME/ANSI drilling available
- Drains and instrument ports available
- Factory installed thermocouples for flame sensing

*Testing parameters based on EN ISO 16852:2010

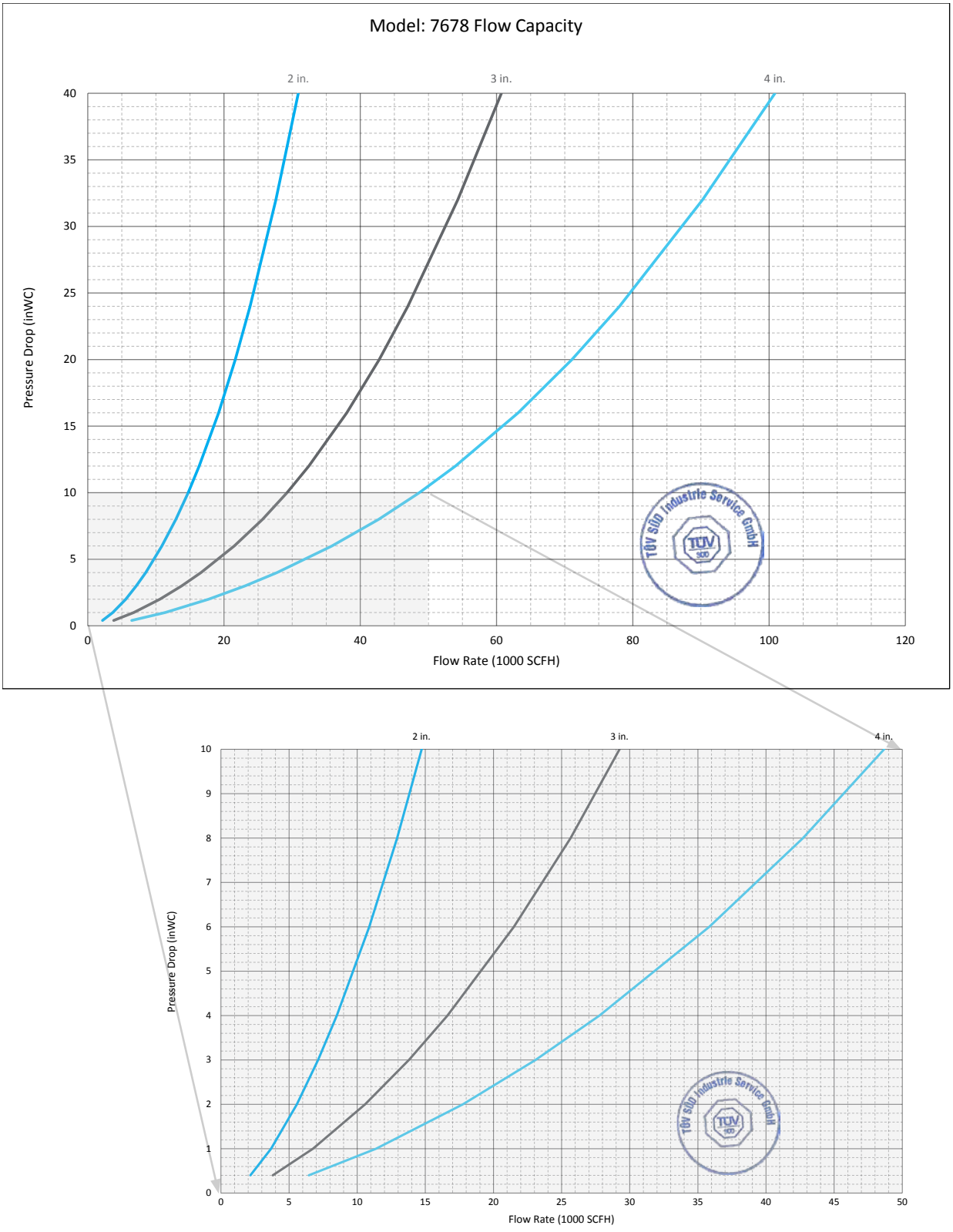
MODEL 7678 // SPECIFICATIONS



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

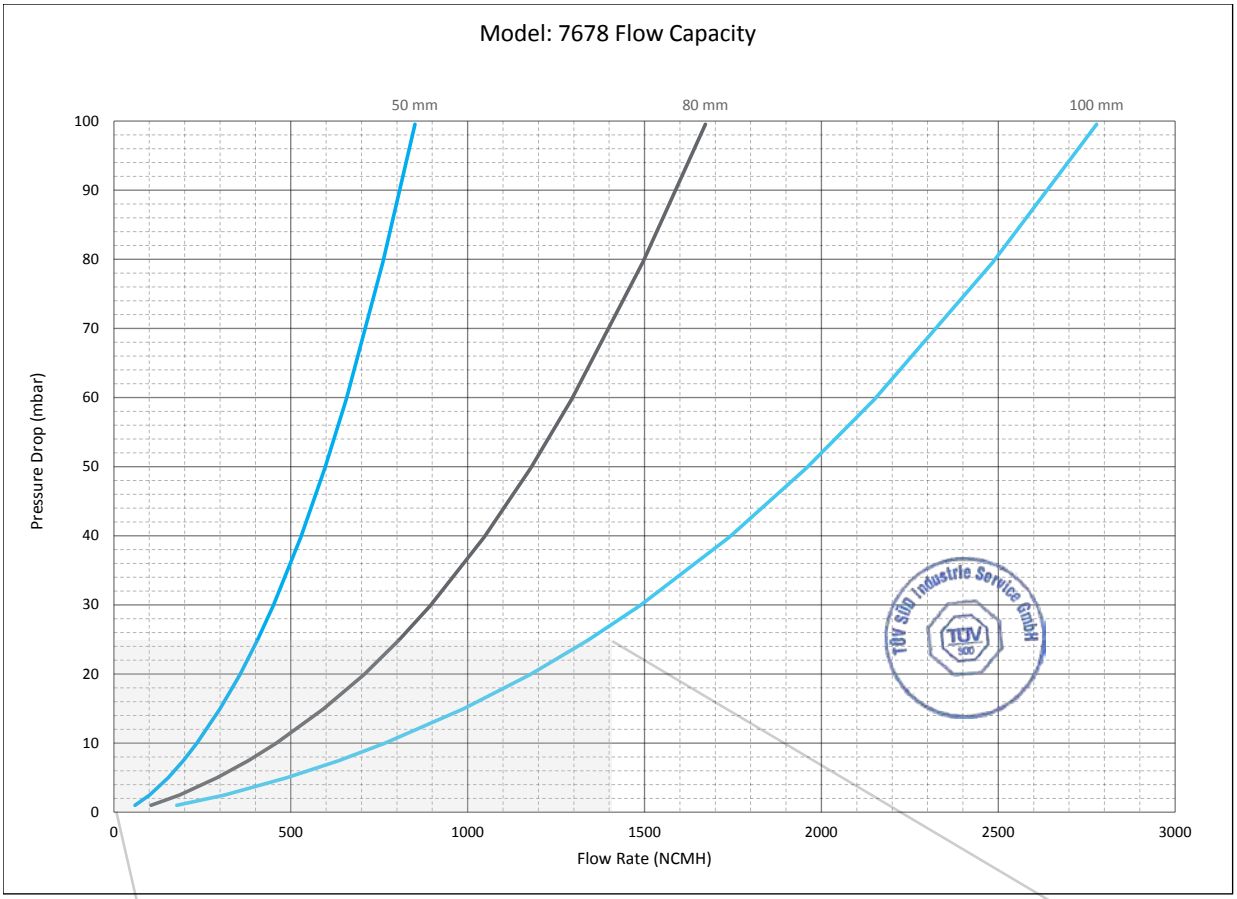
Size (Metric)	A Width (Metric)	B Height (Metric)	Approx Ship. Wt. Lbs. (Aluminum)	Approx Ship. Wt. Lbs. (Carbon or SS Body)
2" (50 mm)	13" (330 mm)	18" (457 mm)	22 (10 kg)	37 (17 kg)
3" (80 mm)	17" (432 mm)	18.7" (475 mm)	35 (16 kg)	65 (29 kg)
4" (100 mm)	19.5" (495 mm)	21.1" (536 mm)	49 (22 kg)	90 (41 kg)
6" (150 mm)	23.50" (597 mm)	24.2" (615 mm)	105 (48 kg)	168 (76 kg)
8" (200 mm)	28.3" (719 mm)	32" (813 mm)	160 (73 kg)	280 (127 kg)
10" (250 mm)	32.25" (819 mm)	36" (914 mm)	244 (111 kg)	417 (189 kg)
12" (300 mm)	40" (1016 mm)	39" (991 mm)	314 (142 kg)	567 (257 kg)

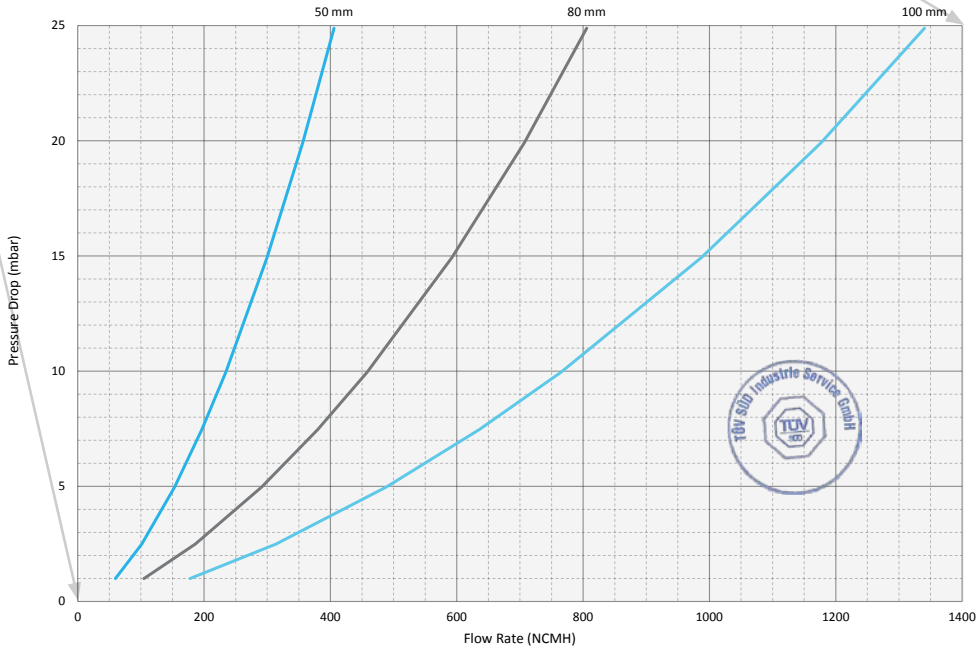
MODEL 7678 // FLOW CAPACITY (END OF LINE)



- 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

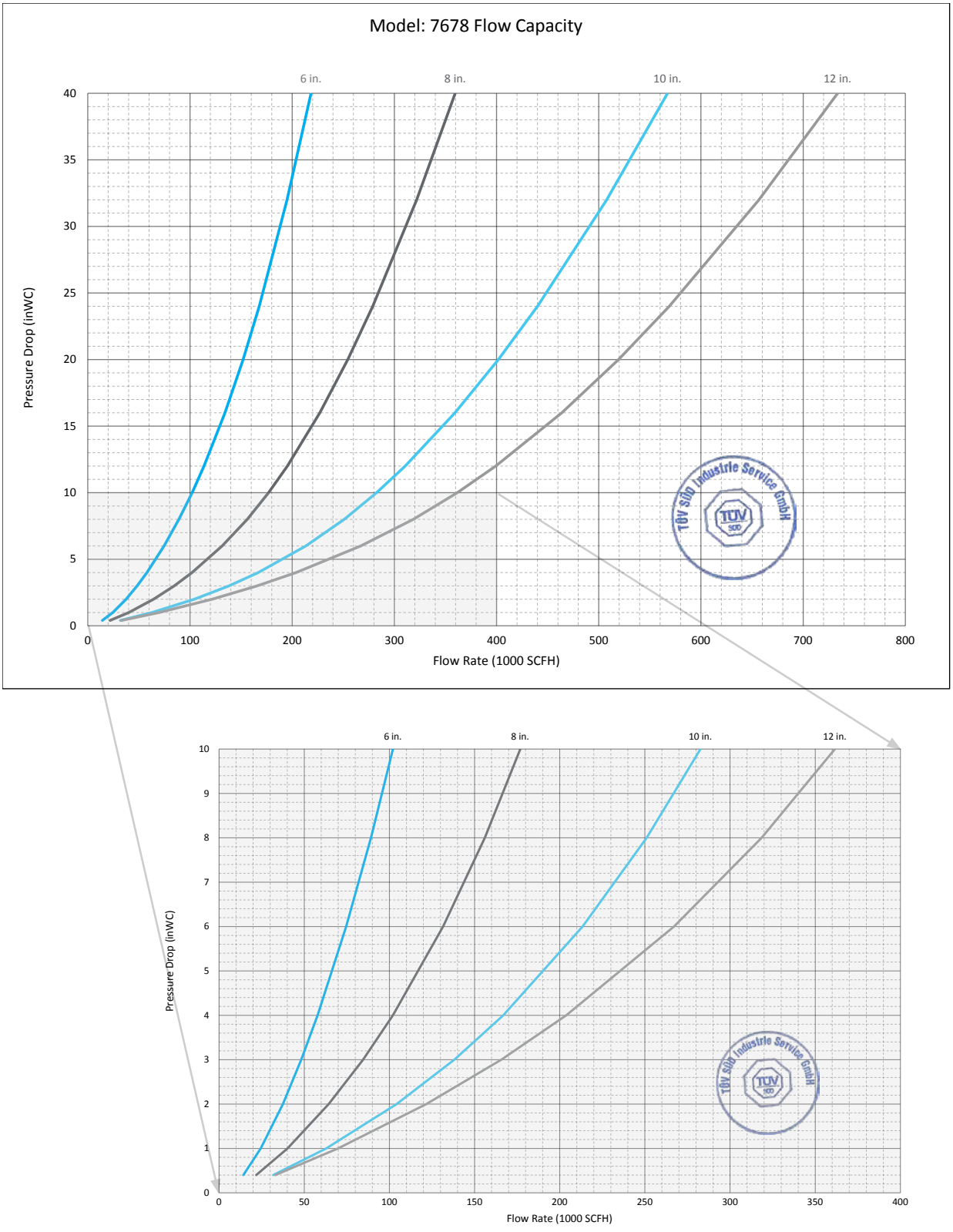
MODEL 7678 // FLOW CAPACITY (END OF LINE)





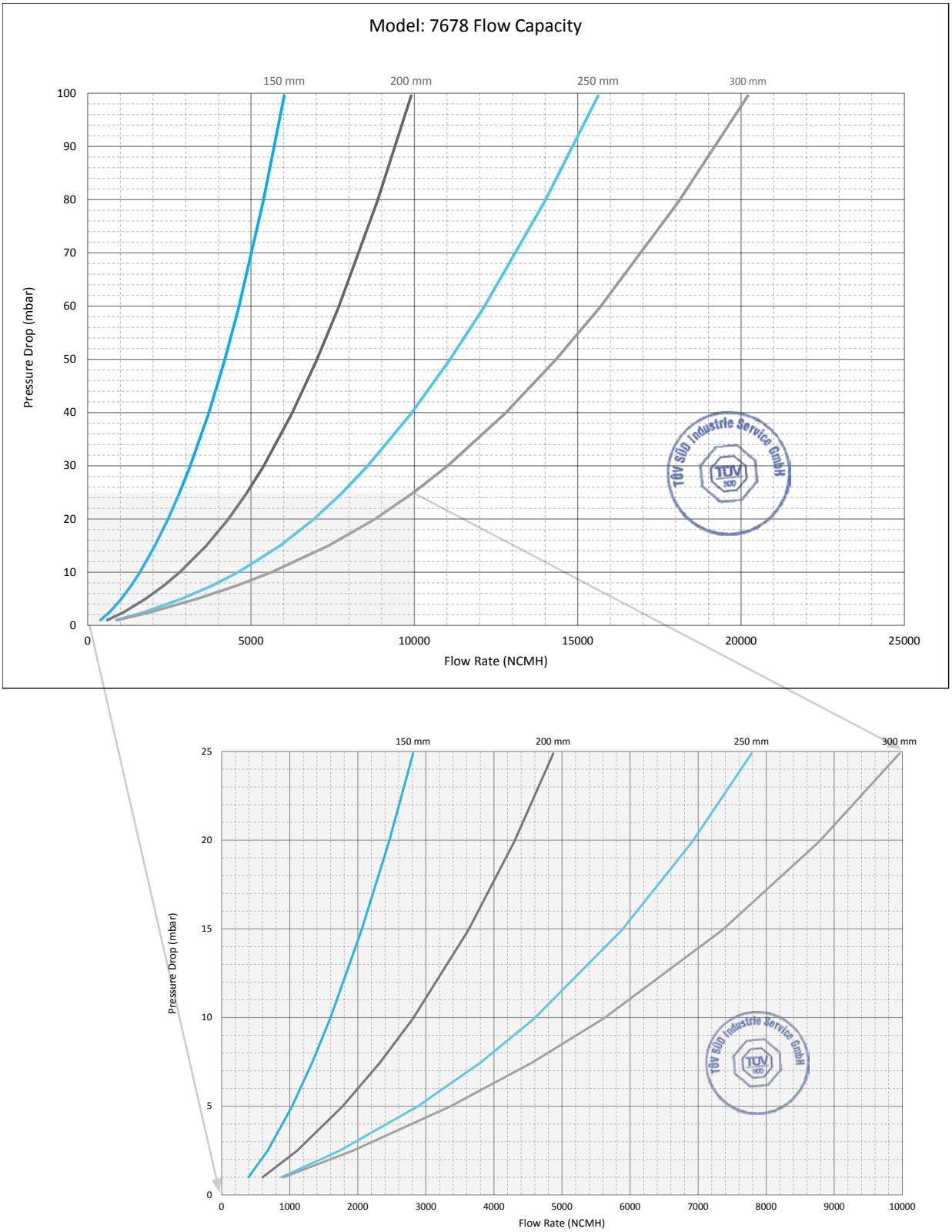
- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

MODEL 7678 // FLOW CAPACITY (END OF LINE)



- 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

MODEL 7678 // FLOW CAPACITY (END OF LINE)



- 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

MODEL 7658A

TECHNICAL DETAILS

- Sizes 2"x5" through 6"x12"
- Vertical or horizontal installation
- In-line or end-of-line deflagrations
- Unstable detonations
- Pre-ignition system pressure up to 15.7 psia (1.08 bara)
- Pre-ignition system temperatures -4 to 140°F (-20 to 60°C)
- Burn Time t_{BT} 10 minutes
- Bi-directional with respect to flow and ignition source
- Standard materials of construction are carbon steel or stainless steel
- Stainless Steel element is standard
- Low pressure drop with multiple element sizes available for each flange size
- Certified to ATEX Directive in compliance with EN ISO 16852:2010
  Certificate #: **IBExU12ATEX2160 X**
- Certified to USCG per 33 CFR Part 154 App. A Type II
  Certificate #: **CSA LO 4000-5704**
- Thermocouple is required for flame detection per the ATEX & USCG codes

FLAME ARRESTER

The Groth Model 7658A Deflagration & Detonation Flame Arrester inhibits flame propagation in gas piping systems. The design of the Model 7658A Flame Arrester makes it ideal to protect liquid storage tanks containing NEC Group D (IEC Class IIA) gases with a Maximum Experimental Safe Gap (MESG) equal to or greater than 0.90 mm.

FEATURES & BENEFITS

Housings are available in carbon steel , stainless steel or Alloy C276 and elements in stainless steel, Alloy C276 or other corrosion resistant alloys.

These arresters are compact with high flow capacity and low pressure drop. Elements are easily removed in-line for cleaning and maintenance and are economical to replace if necessary.

OPTIONS

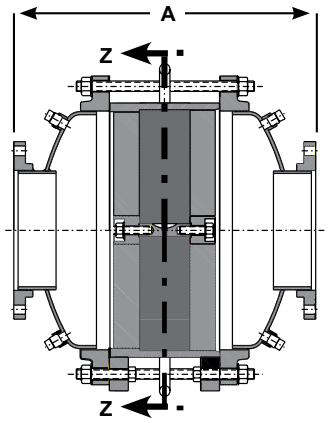
- Other materials available
- Sensor ports
- Large inspection and cleaning ports
- Swing bolts for fast element removal
- Factory installed thermocouples for flame sensing

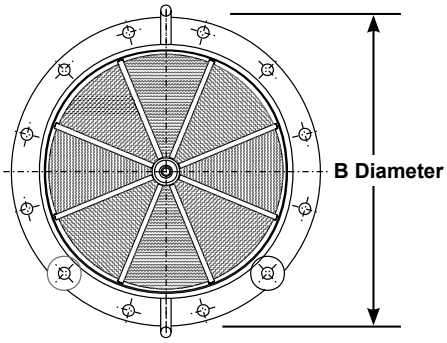
MODEL 7658A // SPECIFICATIONS

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

Housing Size (Metric)	A Length (Metric)	B Diameter (Metric)	Approx Ship. Wt. Lbs. (Metric)
5" (125 mm)	18" (457 mm)	9" (229 mm)	75 (34 kg)
6" (150 mm)	20.31" (516 mm)	11" (279 mm)	100 (45 kg)
8" (200 mm)	22.43" (570 mm)	13.5" (343 mm)	175 (79 kg)
12" (300 mm)	25.94" (659 mm)	19" (483 mm)	350 (159 kg)

* Larger sizes available on special applications.
All units with ANSI 150 RF flanges standard (other flange drillings available).





Section Z-Z

HOW TO ORDER

For easy ordering, select proper model numbers

MODEL # **SIZE** **MATERIAL** **OPTIONS**

□□□□□ – – – □□ x □□ – – – □ □ – – – – – – – – – – □ □

7658A

Flange Size
02 = 2"
Thru
06 = 6"

Element Size
05 = 5"
Thru
12 = 12"

Flame element winding
5 = Stainless Steel
Z = Special

Housing Material
3 = Carbon Steel
5 = Stainless Steel
Z = Special

O = No Options
S = Swing Bolts
I = Instrument Connections*
Z = Special Options

F = 150# R.F. ANSI Flange
D = DIN PN16 Flange
Z = Special Flange Drilling

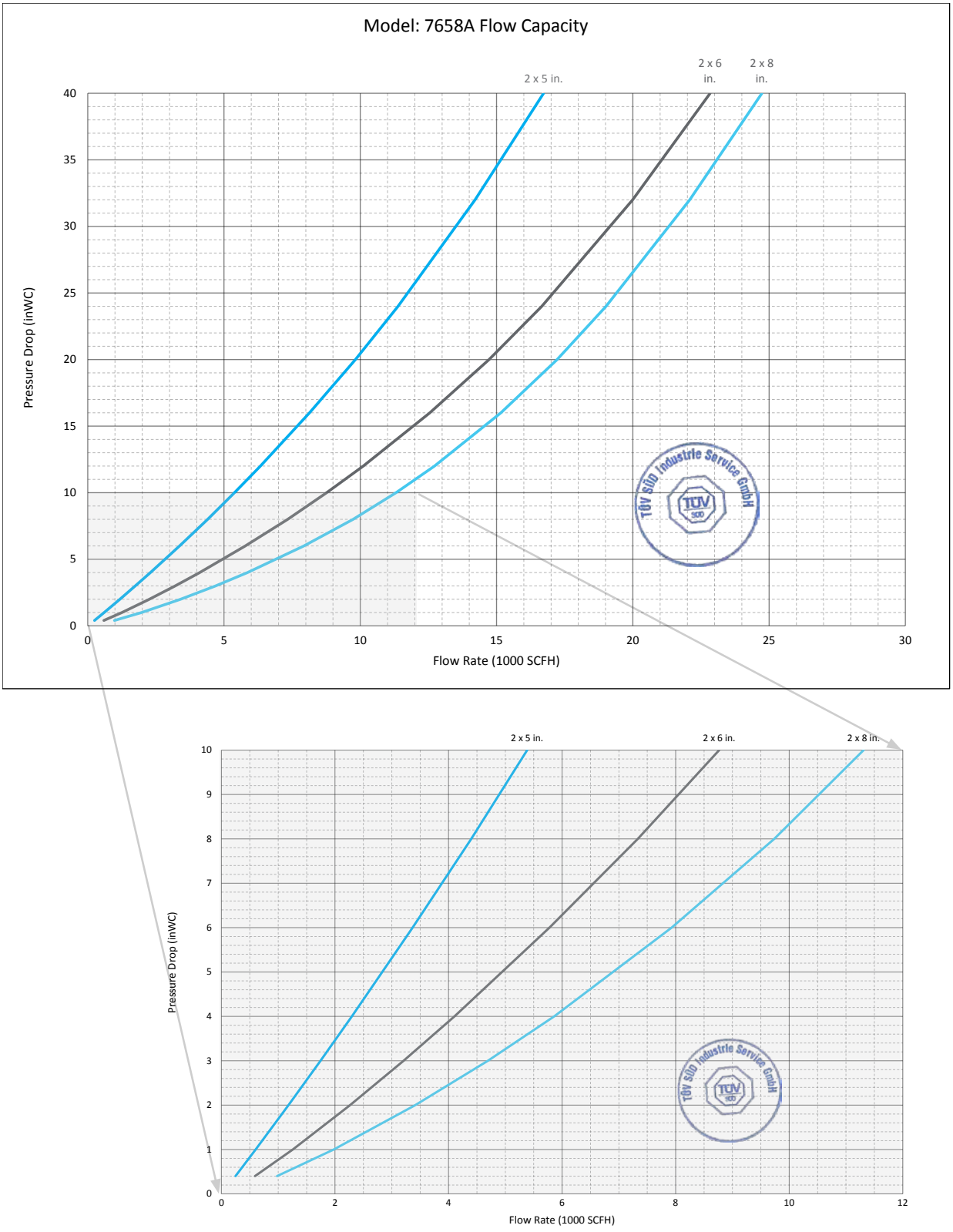
NOTES
- Include model number when ordering.
- For special options, consult factory.
- See flow table for available sizes.

* Customer specified size

EXAMPLE 7 6 5 8 A — 0 3 x 0 6 — 3 5 — F O

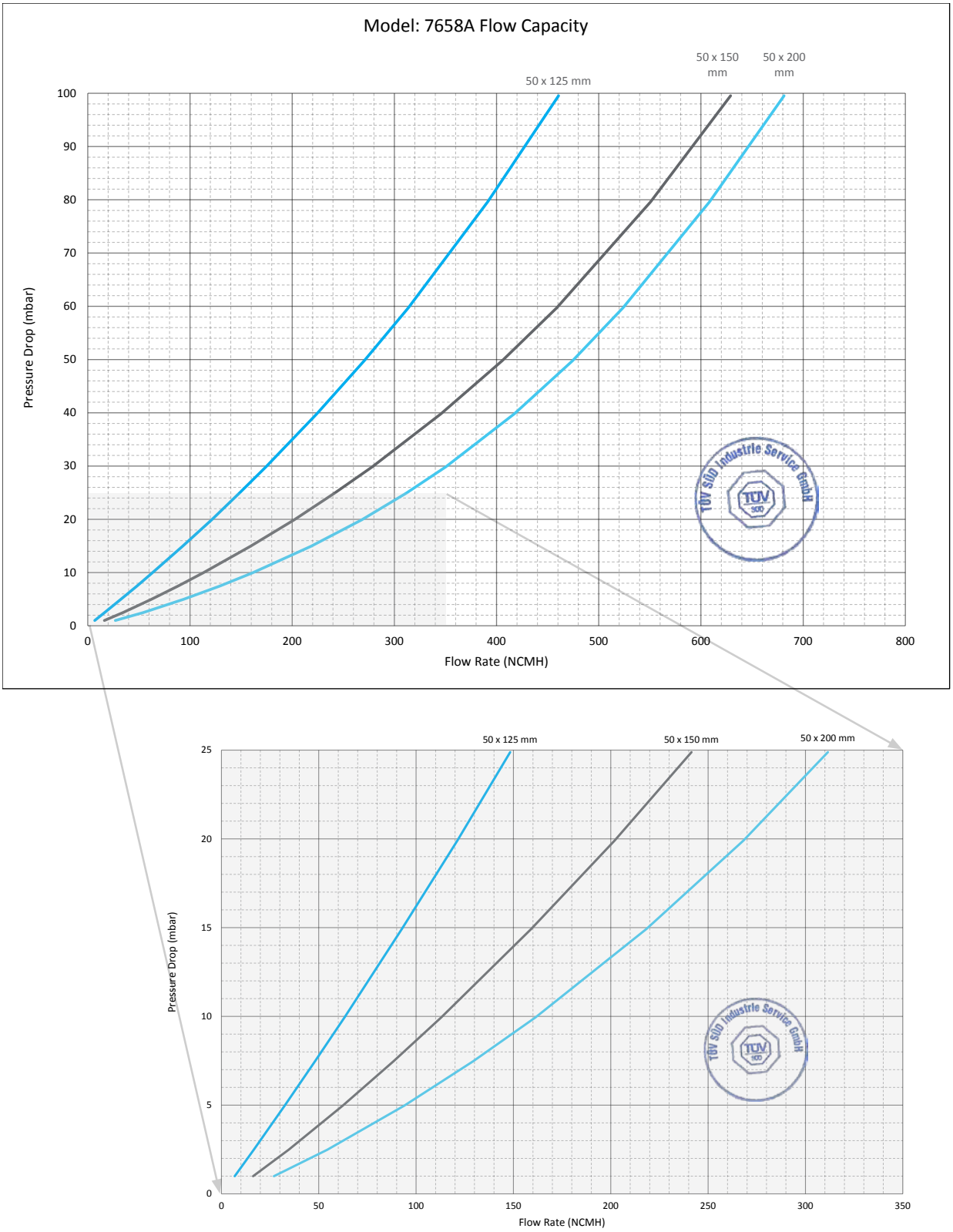
Indicates a 3" Model 7658A with Carbon Steel housing, 6" Stainless Steel Flame Element, ANSI Flanged Outlet and no other options.

MODEL 7658A // FLOW CAPACITY



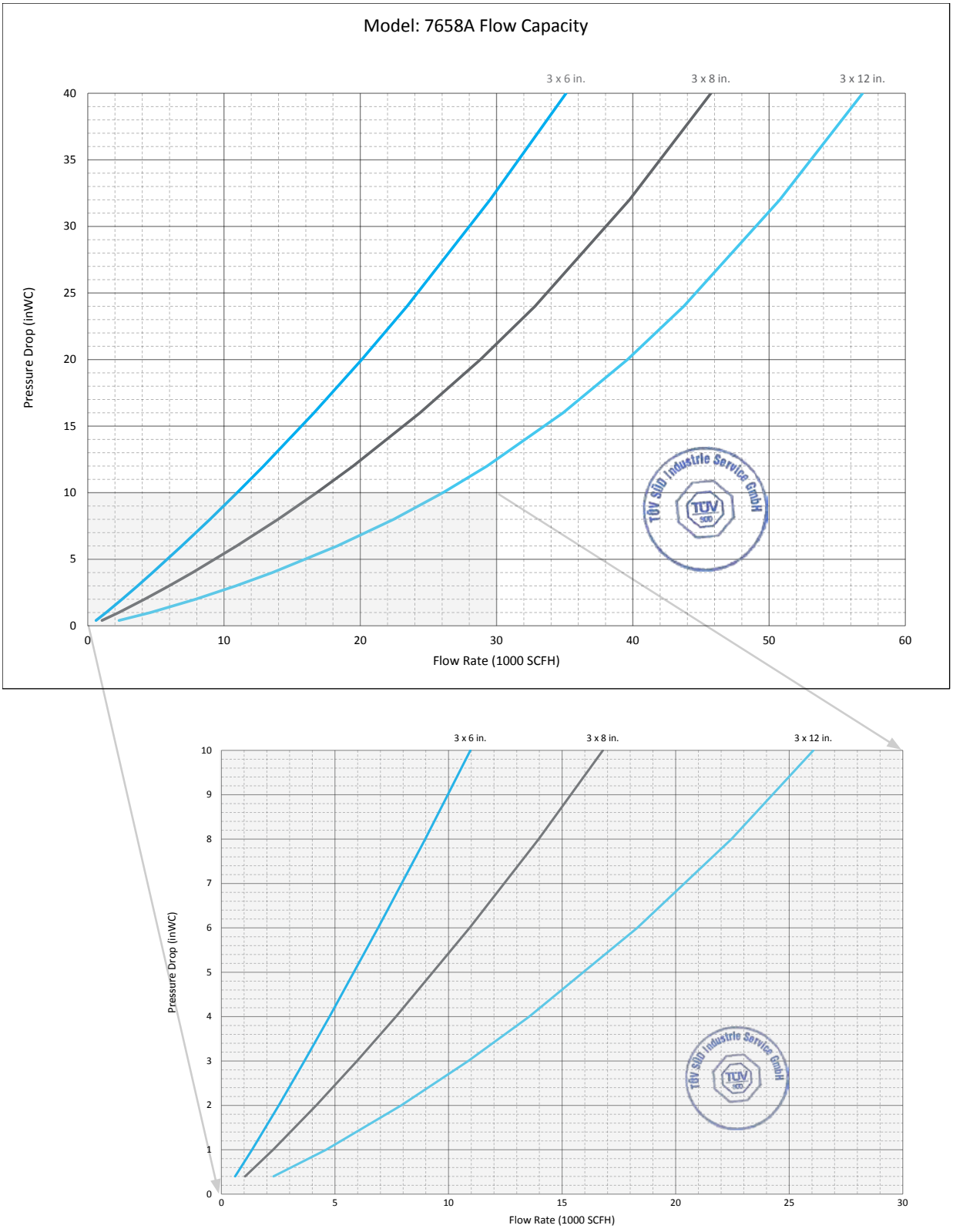
- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

MODEL 7658A // FLOW CAPACITY



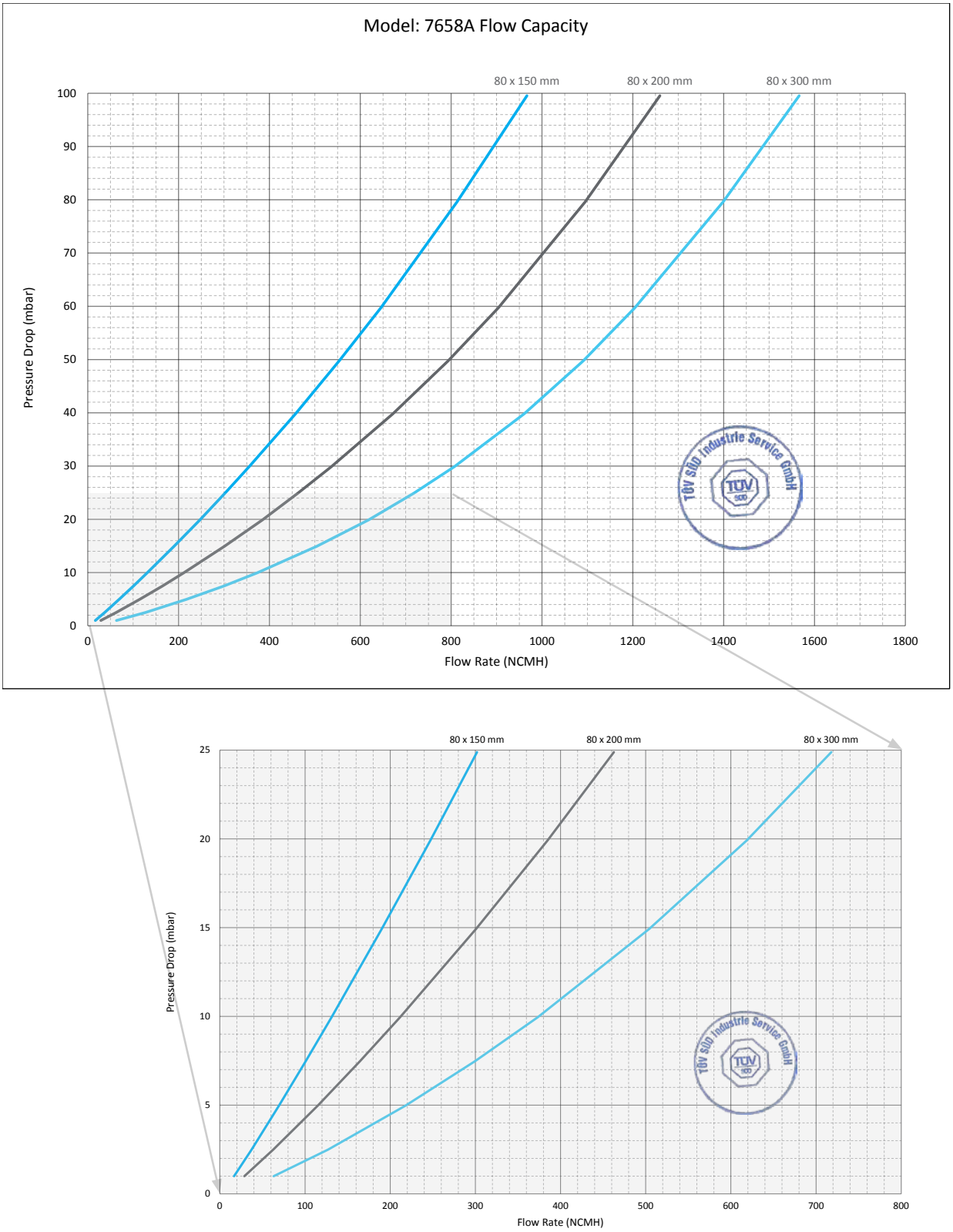
- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

MODEL 7658A // FLOW CAPACITY



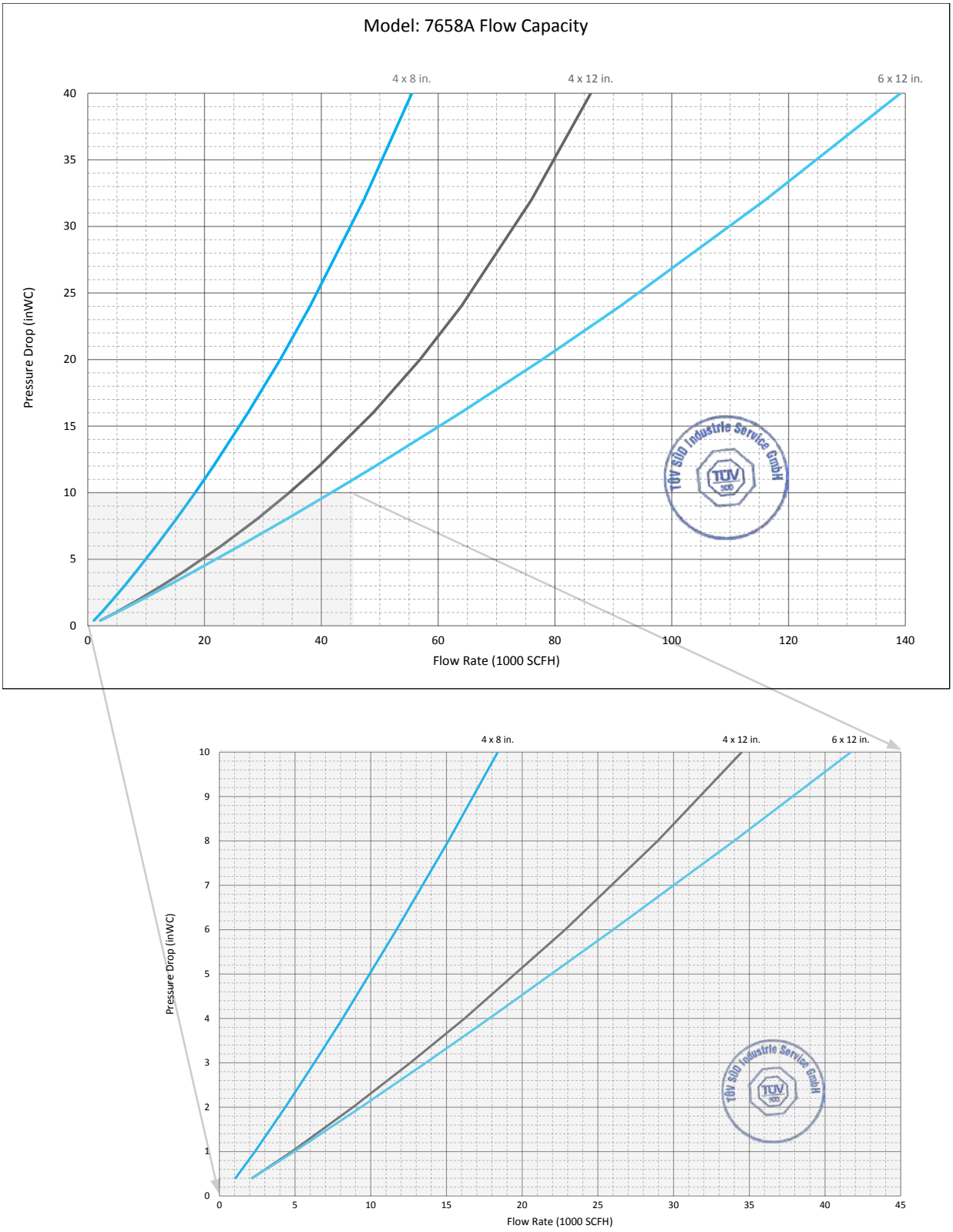
- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

MODEL 7658A // FLOW CAPACITY



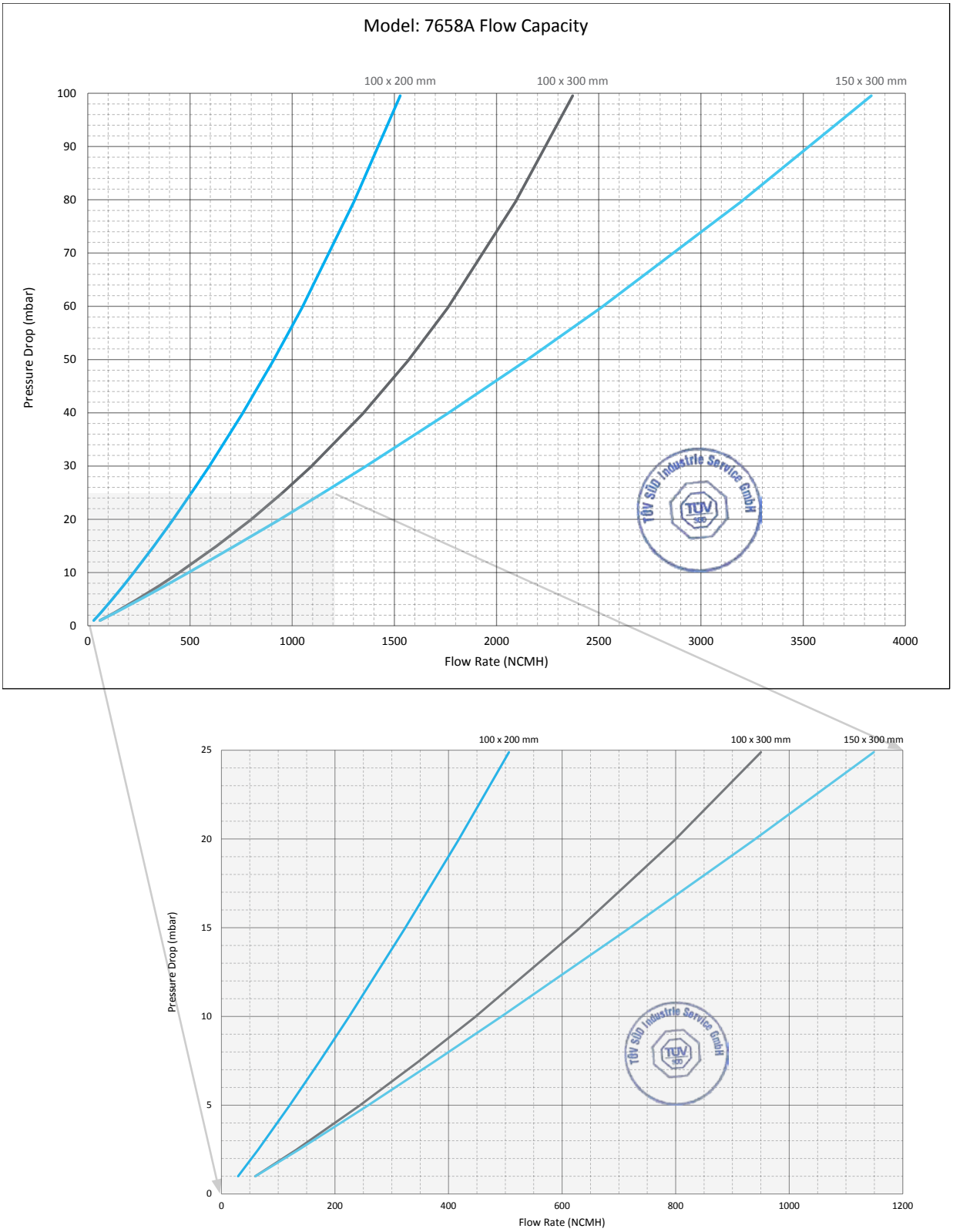
- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

MODEL 7658A // 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

MODEL 7658A // 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

MODEL 7661

TECHNICAL DETAILS

- Sizes 4"x16" through 12"x30"
- Vertical or horizontal installation
- In-line or end-of-line deflagrations
- Unstable detonations
- Pre-ignition system pressure up to 15.7 psia (1.08 bara)
- Pre-ignition system temperatures -4 to 140°F (-20 to 60°C)
- Burn Time t_{BT} 20 minutes
- Bi-directional with respect to flow and ignition source
- Standard materials of construction are carbon steel or stainless steel
- Stainless Steel element is standard
- Low pressure drop with multiple element sizes available for each flange size
- Certified to ATEX Directive in compliance with EN ISO 16852:2010
  Certificate #: **IBExU15ATEX2060 X** (Element Sizes 16", 20" and 24")
- Certified to USCG per 33CFR Part 154 App. A Type II
  Certificate #: **IBExU IB-16-8-115, IBExU IB-16-8-031** (Element Sizes 16", 20", 24" and 30")
- Thermocouple is required for flame detection per the ATEX & USCG codes

FLAME ARRESTER

The Groth Model 7661 Deflagration & Detonation Flame Arrester inhibits flame propagation in gas piping systems. The design of the Model 7661 Flame Arrester makes it ideal to protect liquid storage tanks containing NEC Group D (IEC Class IIA) gases with a Maximum Experimental Safe Gap (MESG) equal to or greater than 0.90 mm.

FEATURES & BENEFITS

Housings are available in carbon steel , stainless steel or Alloy C276 and elements in stainless steel, Alloy C276 or other corrosion resistant alloys.

These arresters are compact with high flow capacity and low pressure drop. Elements are easily removed in-line for cleaning and maintenance and are economical to replace if necessary.

OPTIONS

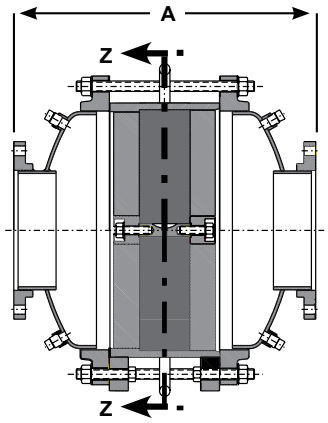
- Other materials available
- Sensor ports
- Large inspection and cleaning ports
- Swing bolts for fast element removal
- Factory installed thermocouples for flame sensing

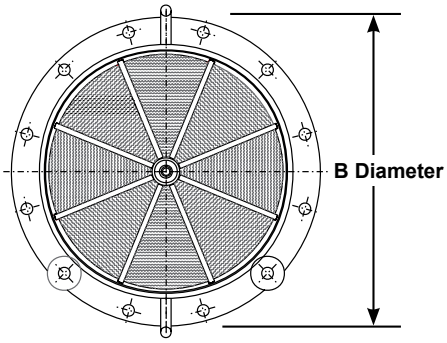
MODEL 7661 // SPECIFICATIONS

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

Housing Size (Metric)	A Length (Metric)	B Diameter (Metric)	Approx Ship. Wt. Lbs. (Metric)
16" (400 mm)	29.63" (753 mm)	23.50" (597 mm)	550 (249 kg)
20" (500 mm)	32.43" (824 mm)	27.50" (699 mm)	850 (386 kg)
24" (600 mm)	38.75" (984 mm)	32.00" (813 mm)	1200 (544 kg)
30" (750 mm)	42.88" (1089 mm)	38.75" (984 mm)	1900 (862 kg)

* Larger sizes available on special applications.
All units with ANSI 150 RF flanges standard (other flange drillings available).





Section Z-Z

HOW TO ORDER

For easy ordering, select proper model numbers

MODEL # **SIZE** **MATERIAL** **OPTIONS**

□□□□ – – – □□ x □□ – – – □ □ – – – – – – – – – – □ □

7661

Flange Size
04 = 4"
Thru
12 = 12"

Element Size
16 = 16"
Thru
30 = 30"

Flame element winding
5 = Stainless Steel
Z = Special

Housing Material
3 = Carbon Steel
5 = Stainless Steel
Z = Special

OPTIONS
O = No Options
S = Swing Bolts
I = Instrument Connections*
Z = Special Options

F = 150# R.F. ANSI Flange
D = DIN PN16 Flange
Z = Special Flange Drilling

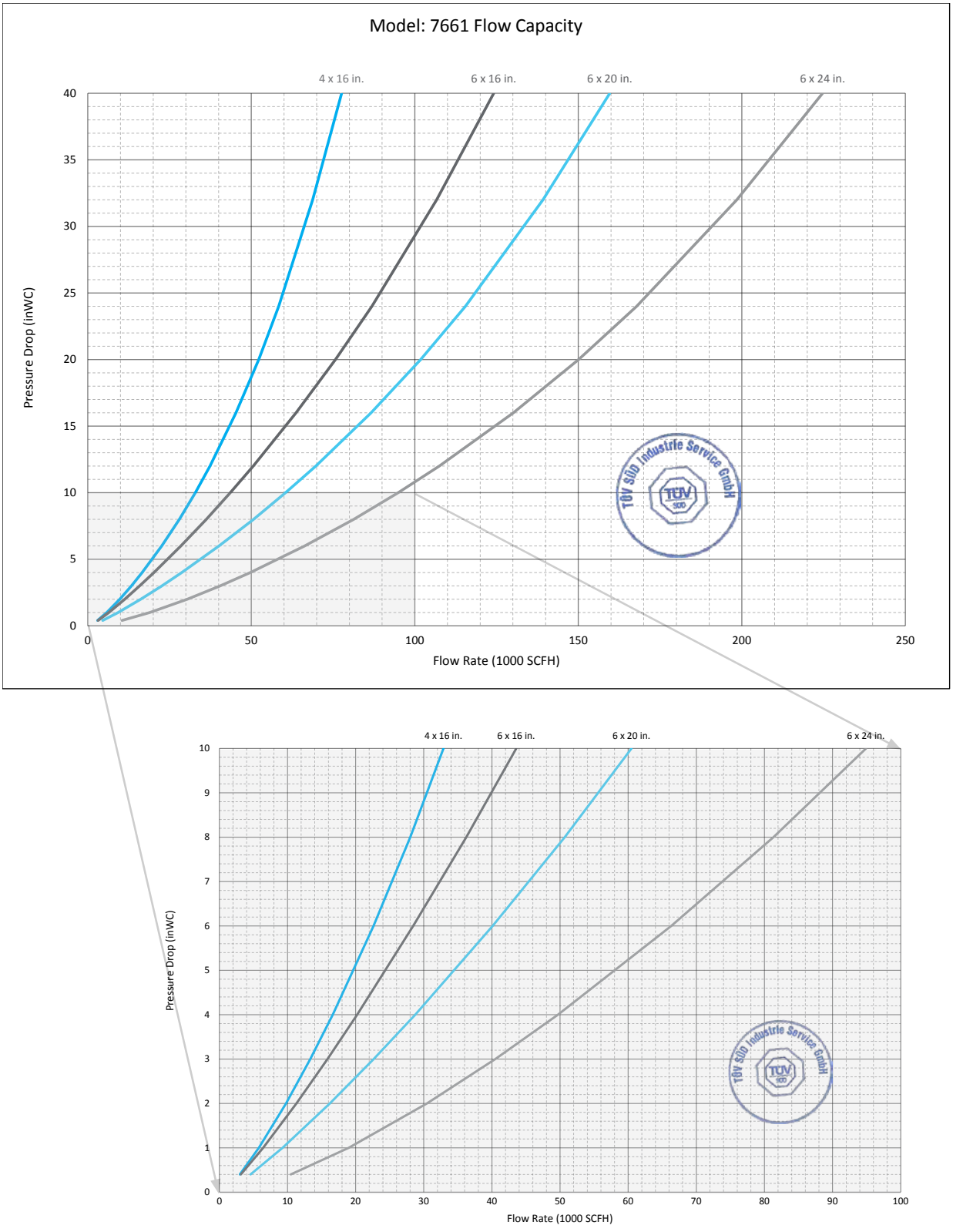
NOTES
- Include model number when ordering.
- For special options, consult factory.
- See flow table for available sizes.

* Customer specified size

EXAMPLE 7661 — 04 x 16 — 35 — FO

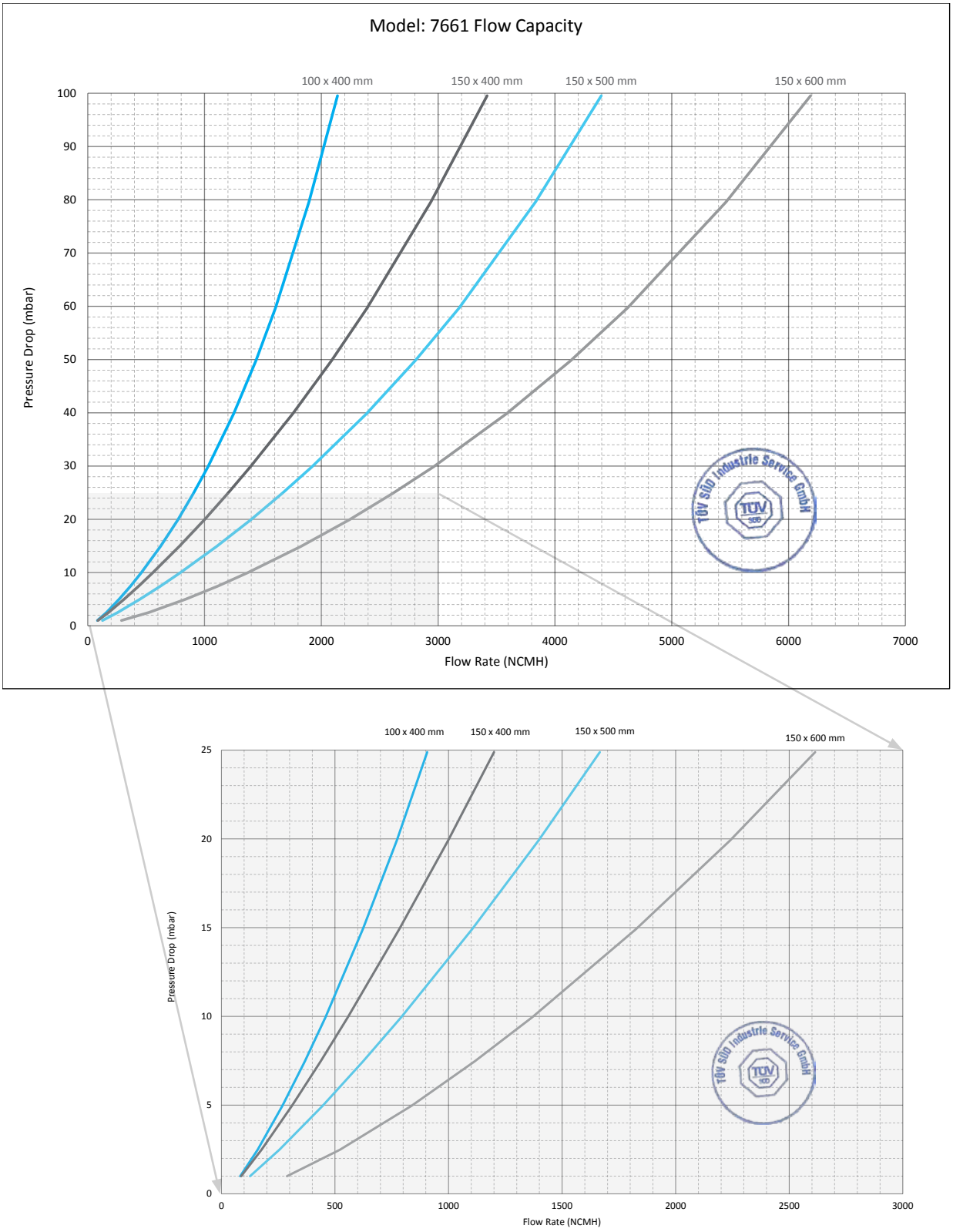
Indicates a 4" Model 7661 with Carbon Steel housing, 16" Stainless Steel Flame Element, ANSI Flanged Outlet and no other options.

MODEL 7661 // FLOW CAPACITY



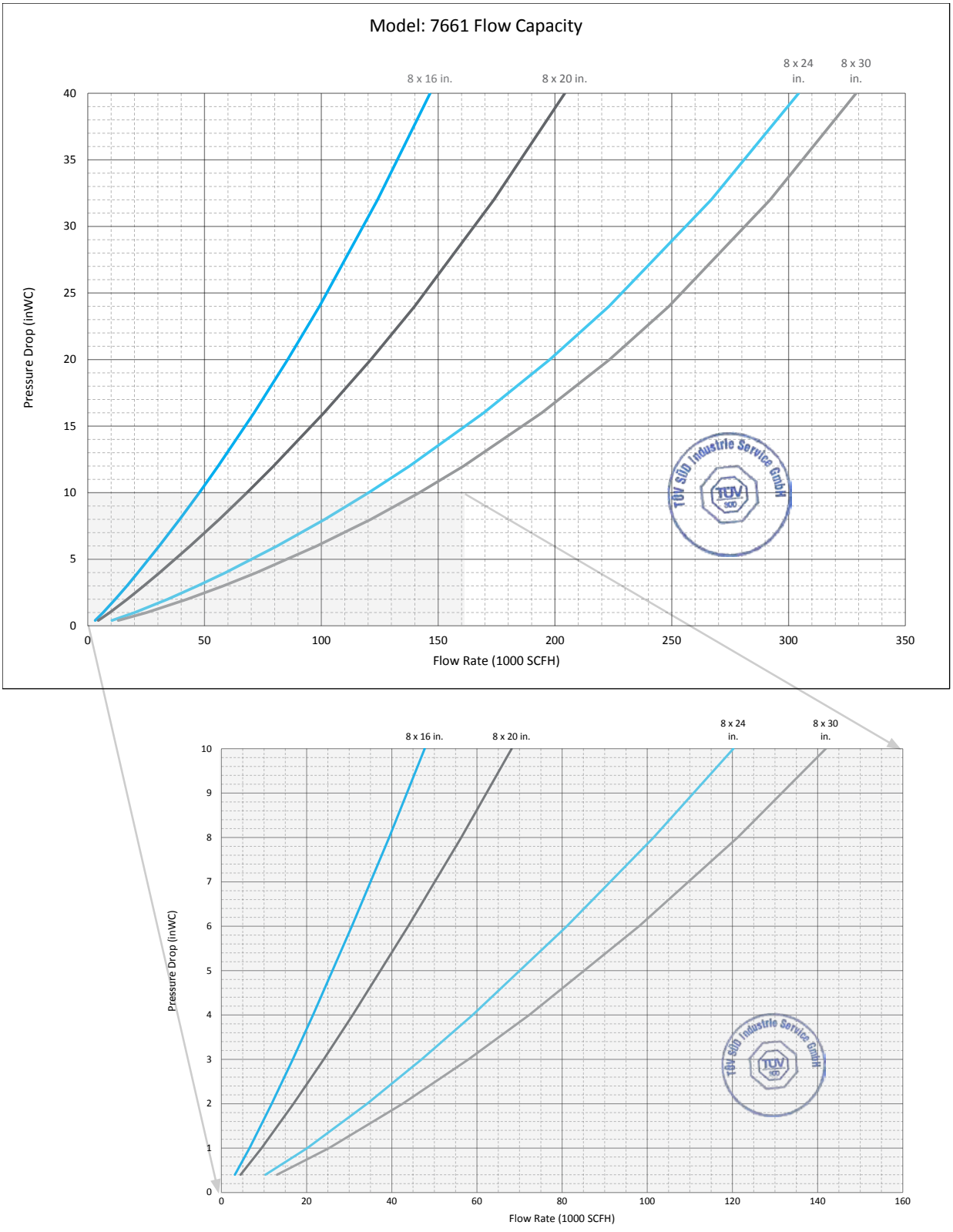
- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

MODEL 7661 // FLOW CAPACITY



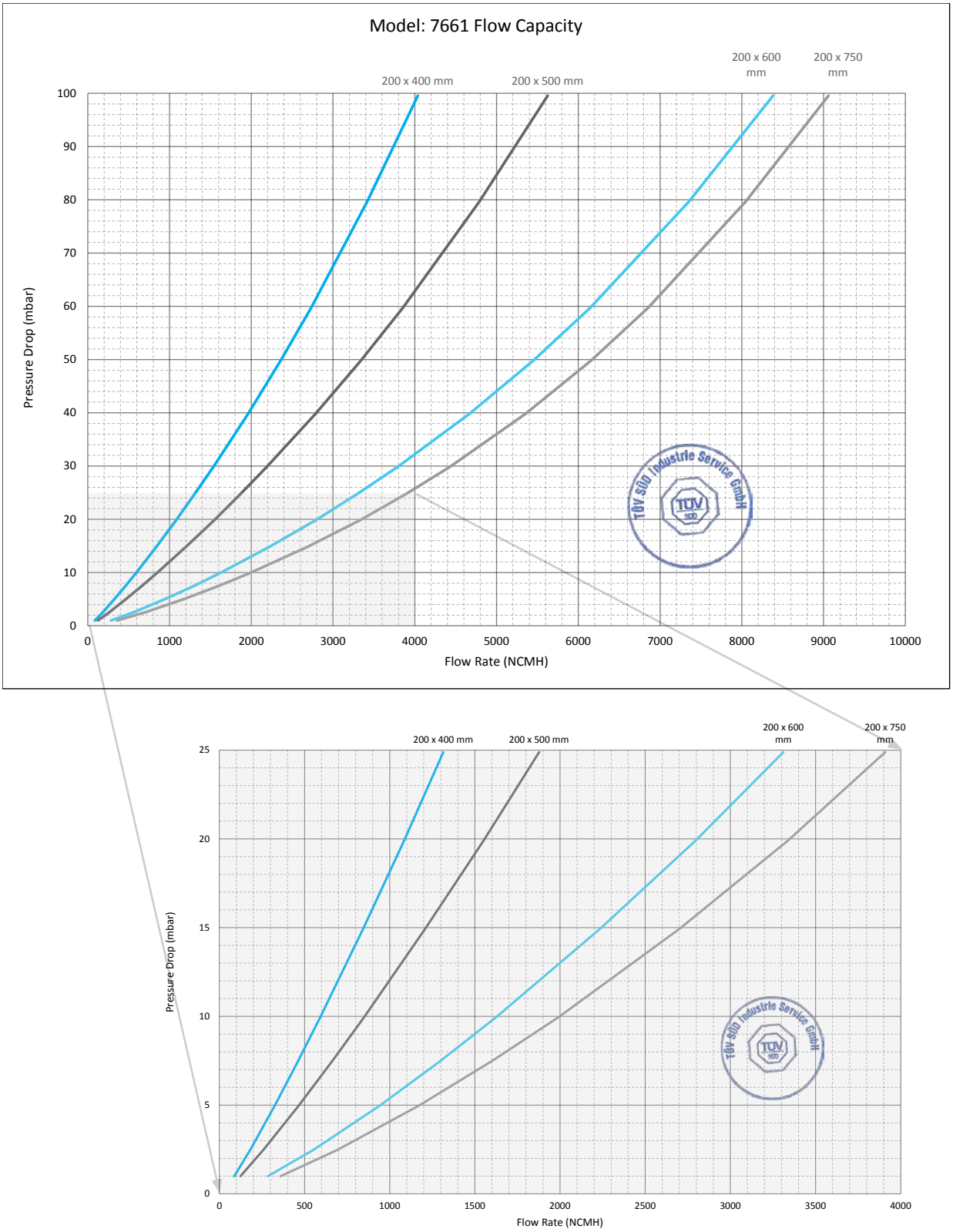
- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

MODEL 7661 // FLOW CAPACITY



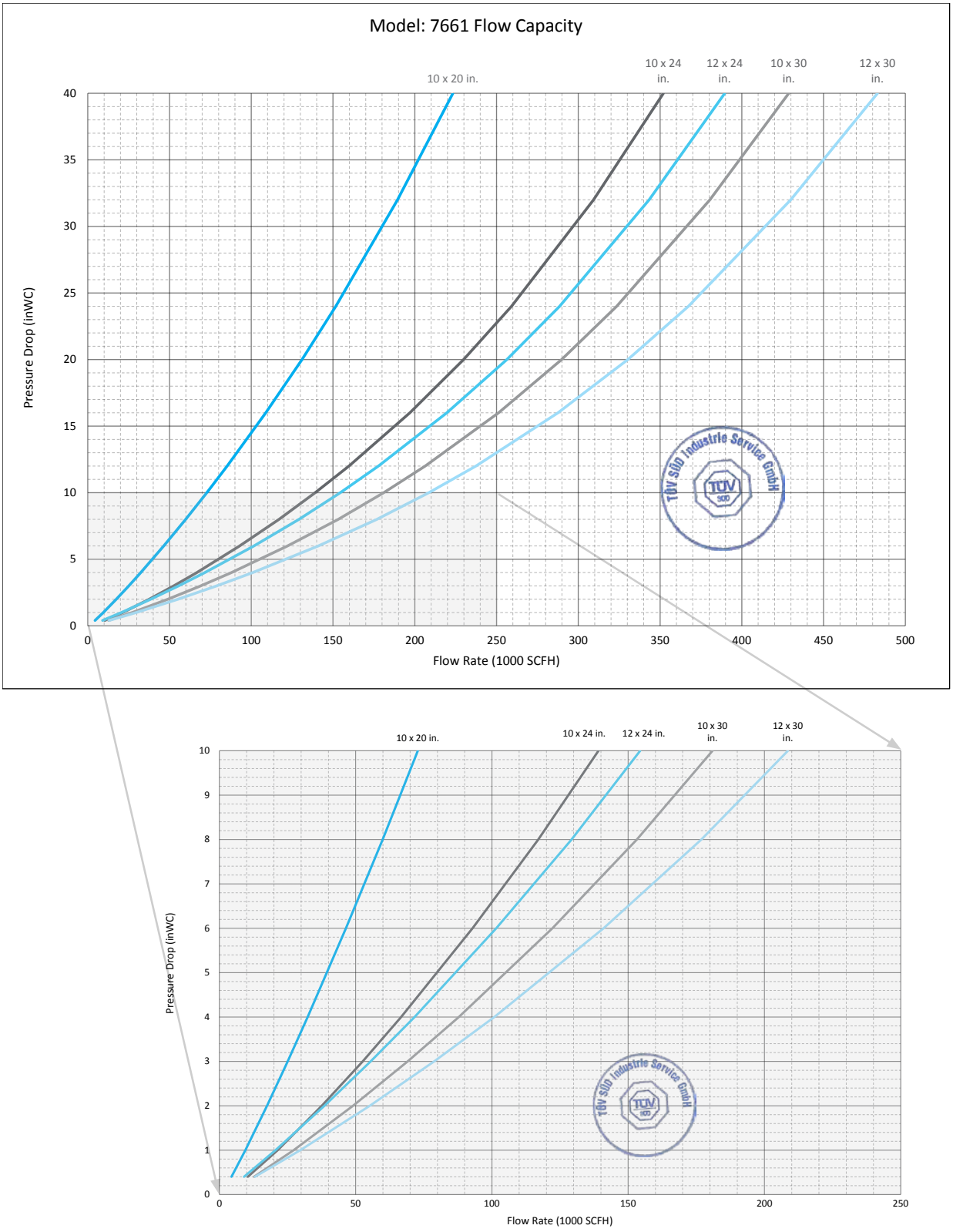
- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

MODEL 7661 // FLOW CAPACITY



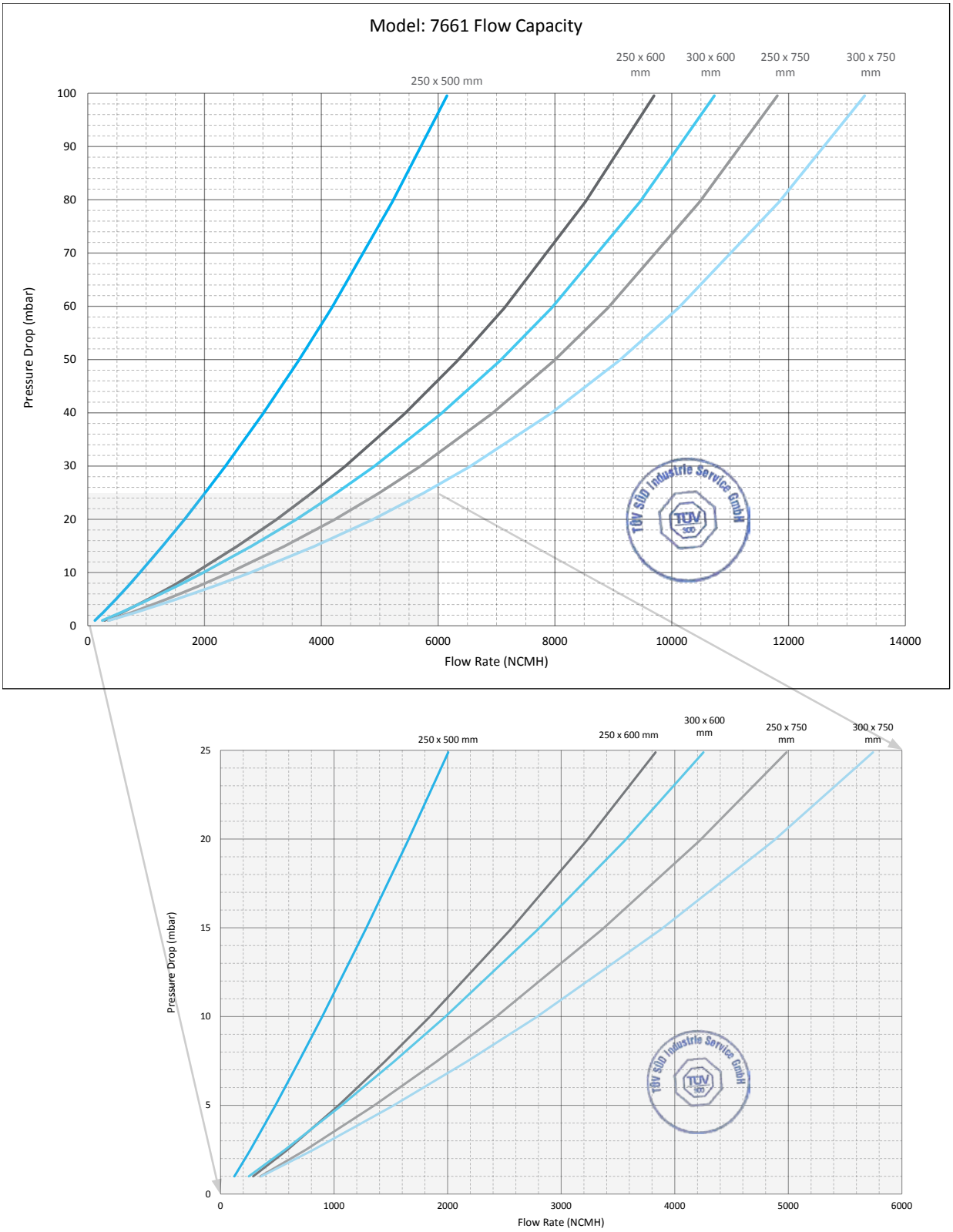
- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

MODEL 7661 // FLOW CAPACITY



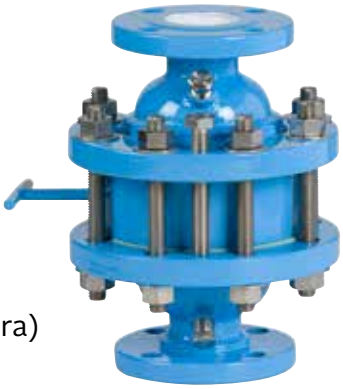
- The test equipment, procedures, and reporting methods utilized by Groth Corporation meet the requirements of standards API 2000/ISO 28300 and ISO 16852. The equipment, methods, and results have been reviewed and certified by TÜV SÜD.
- Flow data are for in-line mounting and does not include entrance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

MODEL 7661 // 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

MODEL 7758A



TECHNICAL DETAILS

- Sizes 2"x4" through 12"x30"
- Vertical or horizontal installation
- In-line or end-of-line deflagrations
- Stable detonations
- Unstable detonations (element sizes <=12")
- Pre-ignition system pressure up to 19.7 psia (1.36 bara) (see specifications table)
- Pre-ignition system temperatures -4 to 140°F (-20 to 60°C)
- Bi-directional with respect to flow and ignition source
- Available in carbon steel, stainless steel, Alloy C276, and other materials
- Wafer mesh element is standard
- Low pressure drop with multiple element sizes available for each flange size
- Certified to ATEX Directive in compliance with EN ISO 16852:2010 Certificate #: **IBExU12ATEX2170 X** (Element Sizes 4", 6", 8" and 12" Unstable detonations)
- Certified to ATEX Directive in compliance with EN ISO 16852:2010 Certificate #: **IBExU12ATEX2171 X** (Element Sizes 20", 26" and 30" Stable detonations)
- Thermocouple is required for flame detection per the ATEX code

FLAME ARRESTER

The Groth Model 7758A Deflagration & Detonation Flame Arrester inhibits flame propagation in gas piping systems. The design makes it ideal to protect liquid storage tanks containing both NEC Group D and Group C vapors (IEC Class IIA and IIB1 through IIB3 vapors) with a Maximum Experimental Safe Gap (MESG) equal to or greater than 0.026" [0.65 mm].

FEATURES & BENEFITS

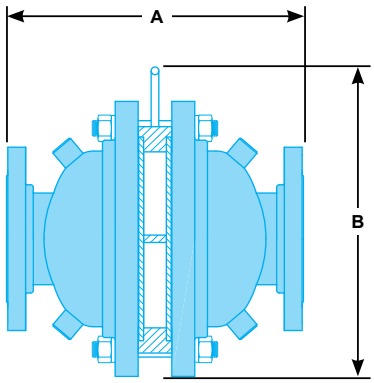
Housings are available in carbon steel, stainless steel, and Alloy C276 and elements in stainless steel, Alloy C276 and other corrosion resistant alloys.

These arresters are compact with high flow capacity and low pressure drop. Wafer mesh elements are easily removed in-line for cleaning and maintenance and are economical to replace if necessary. Contact the factory for additional features and options.

OPTIONS

- Other materials available
- Sensor ports
- Large inspection and cleaning ports
- Swing bolts for fast element removal
- Factory installed thermocouples for flame sensing

MODEL 7758A // SPECIFICATIONS

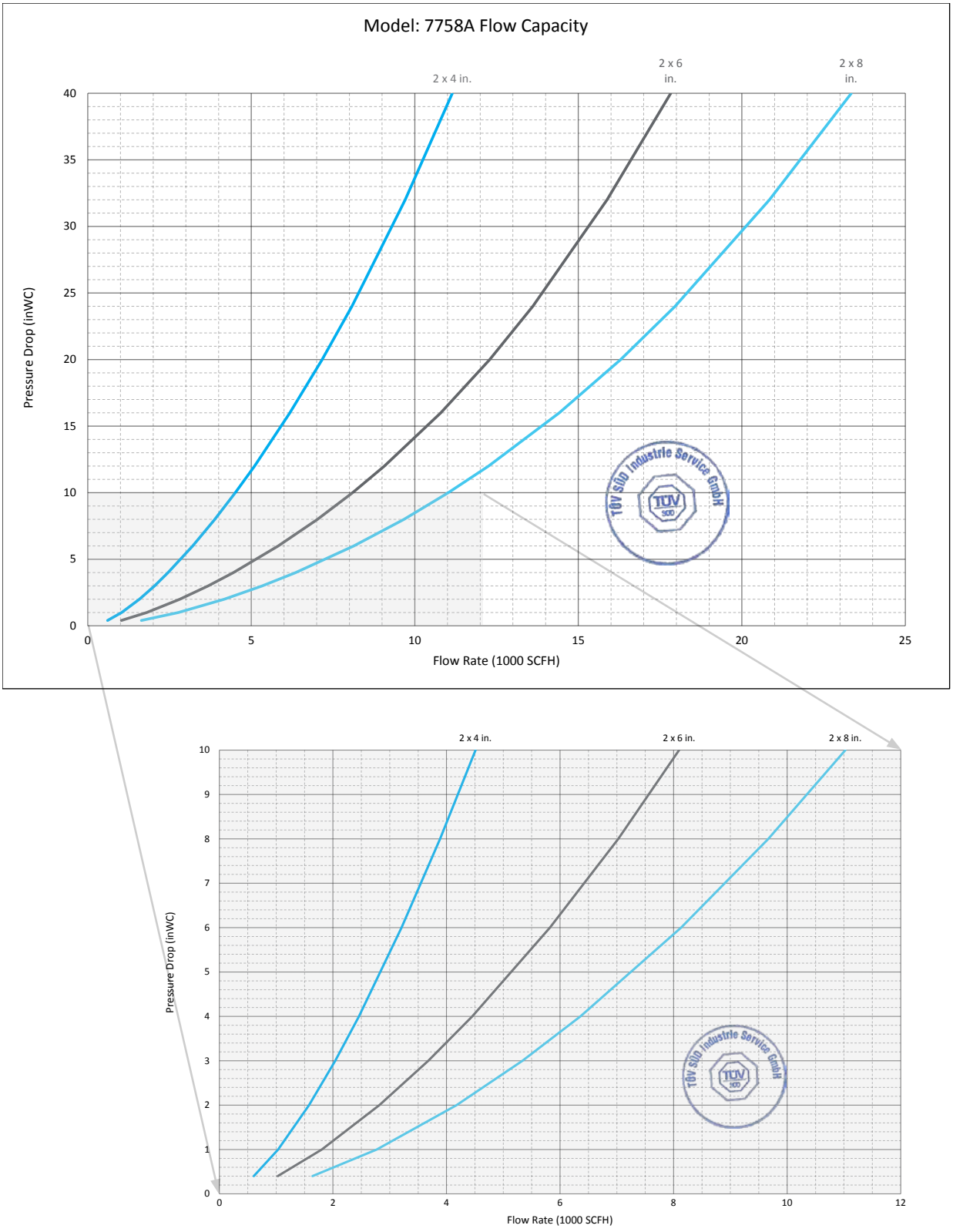


Specifications subject to change without notice. Certified dimensions available upon request.

Flange Size* (Metric)	Element Size (Metric)	A Length (Metric)	B Height (Metric)	Maximum Burn Time minutes	Maximum Pre-Ignition Pressure			Ship. Wt. Lbs.
					Deflagrations psia (bara)	Stable Detonations psia (bara)	Unstable Detonations psia (bara)	
2” (50 mm)	4” (100 mm)	12” (305 mm)	11” (279 mm)	30	19.7 (1.36)	19.7 (1.36)	19.7 (1.36)	54 (25 kg)
2” (50 mm)	6” (150 mm)	12.75” (324 mm)	11” (279 mm)	30	19.7 (1.36)	19.7 (1.36)	19.7 (1.36)	77 (35 kg)
2” (50 mm)	8” (200 mm)	15.50” (394 mm)	15.50” (394 mm)	5	19.7 (1.36)	19.7 (1.36)	19.7 (1.36)	114 (52 kg)
3” (80 mm)	6” (150 mm)	12.75” (324 mm)	11” (279 mm)	30	19.7 (1.36)	19.7 (1.36)	19.7 (1.36)	88 (40 kg)
3” (80 mm)	8” (200 mm)	16” (406 mm)	15” (381 mm)	5	19.7 (1.36)	19.7 (1.36)	19.7 (1.36)	125 (57 kg)
3” (80 mm)	12” (300 mm)	18.31” (465 mm)	19” (483 mm)	5	18.0 (1.24)	18.0 (1.24)	18.0 (1.24)	269 (122 kg)
4” (100 mm)	8” (203 mm)	16.75” (425 mm)	15.25” (387 mm)	5	19.7 (1.36)	19.7 (1.36)	19.7 (1.36)	134 (61 kg)
4” (100 mm)	12” (300 mm)	19” (483 mm)	19” (483 mm)	5	18.0 (1.24)	18.0 (1.24)	18.0 (1.24)	275 (125 kg)
4” (100 mm)	20” (500 mm)	23.69” (602 mm)	27.50” (699 mm)	30	17.2 (1.188)	17.2 (1.188)		645 (293 kg)
6” (150 mm)	12” (300 mm)	18.31” (465 mm)	19” (483 mm)	5	18.0 (1.24)	18.0 (1.24)	18.0 (1.24)	287 (130 kg)
6” (150 mm)	20” (500 mm)	23.69” (602 mm)	27.50” (699 mm)	30	17.2 (1.188)	17.2 (1.188)		657 (299 kg)
6” (150 mm)	26” (650 mm)	29.06” (738 mm)	34.25” (870 mm)	30	17.2 (1.188)	17.2 (1.188)		1062 (483 kg)
6” (150 mm)	30” (750 mm)	32.31” (821 mm)	38.75” (984 mm)	30	17.2 (1.188)	17.2 (1.188)		1407 (640 kg)
8” (200 mm)	20” (500 mm)	23.69” (602 mm)	27.50” (699 mm)	30	17.2 (1.188)	17.2 (1.188)		677 (308 kg)
8” (200 mm)	26” (650 mm)	29.06” (738 mm)	34.25” (870 mm)	30	17.2 (1.188)	17.2 (1.188)		1082 (492 kg)
8” (200 mm)	30” (750 mm)	32.31” (821 mm)	38.75” (984 mm)	30	17.2 (1.188)	17.2 (1.188)		1427 (649 kg)
10” (250 mm)	26” (650 mm)	29.06” (738 mm)	34.25” (870 mm)	30	17.2 (1.188)	17.2 (1.188)		1100 (500 kg)
10” (250 mm)	30” (750 mm)	32.31” (821 mm)	38.75” (984 mm)	30	17.2 (1.188)	17.2 (1.188)		1445 (657 kg)
12” (300 mm)	30” (750 mm)	32.31” (821 mm)	38.75” (984 mm)	30	17.2 (1.188)	17.2 (1.188)		1491 (678 kg)

* Consult factory for larger sizes.

MODEL 7758A // 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

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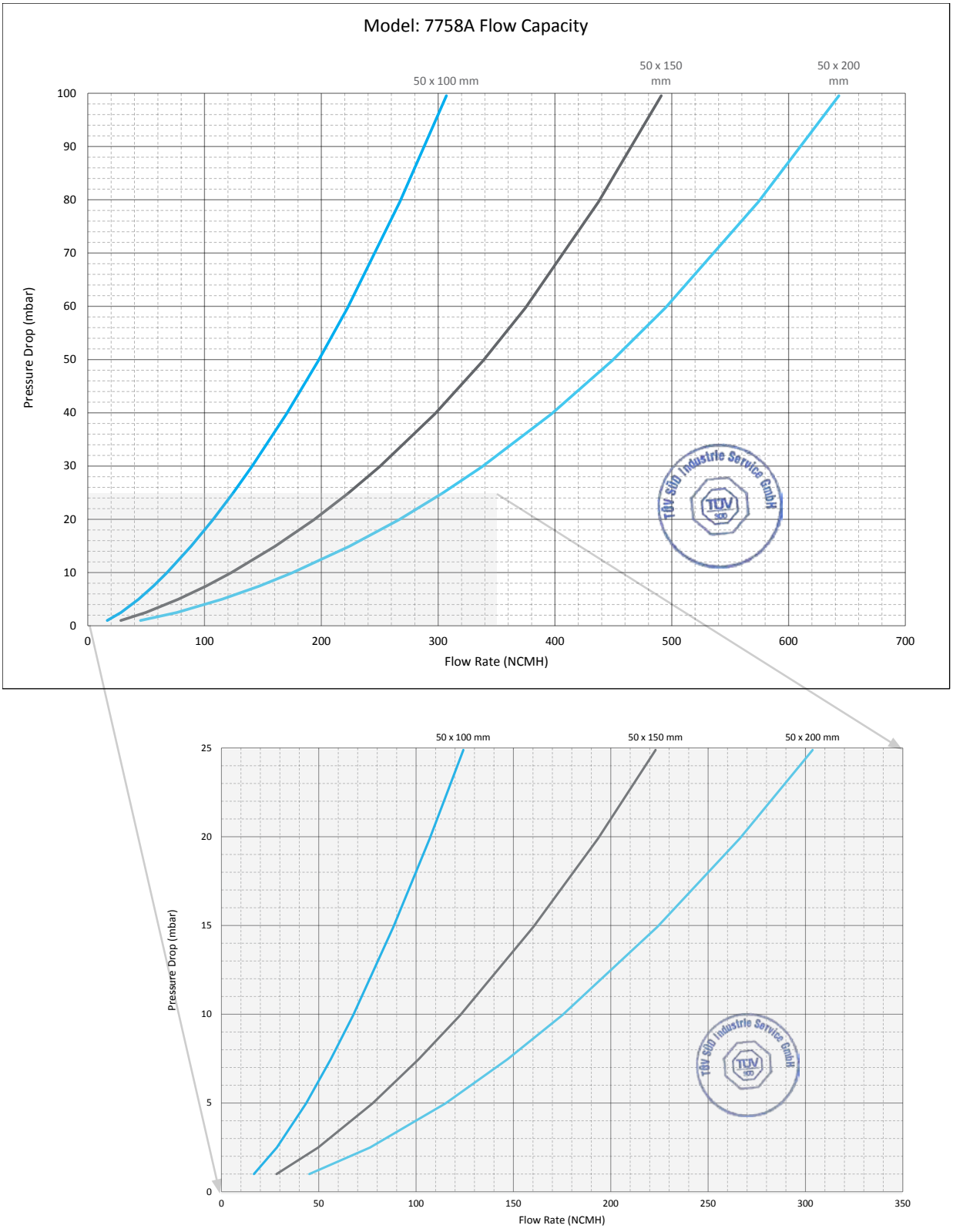

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- Flow values based on air at 0°C venting to atmospheric pressure of 1.01325 bara

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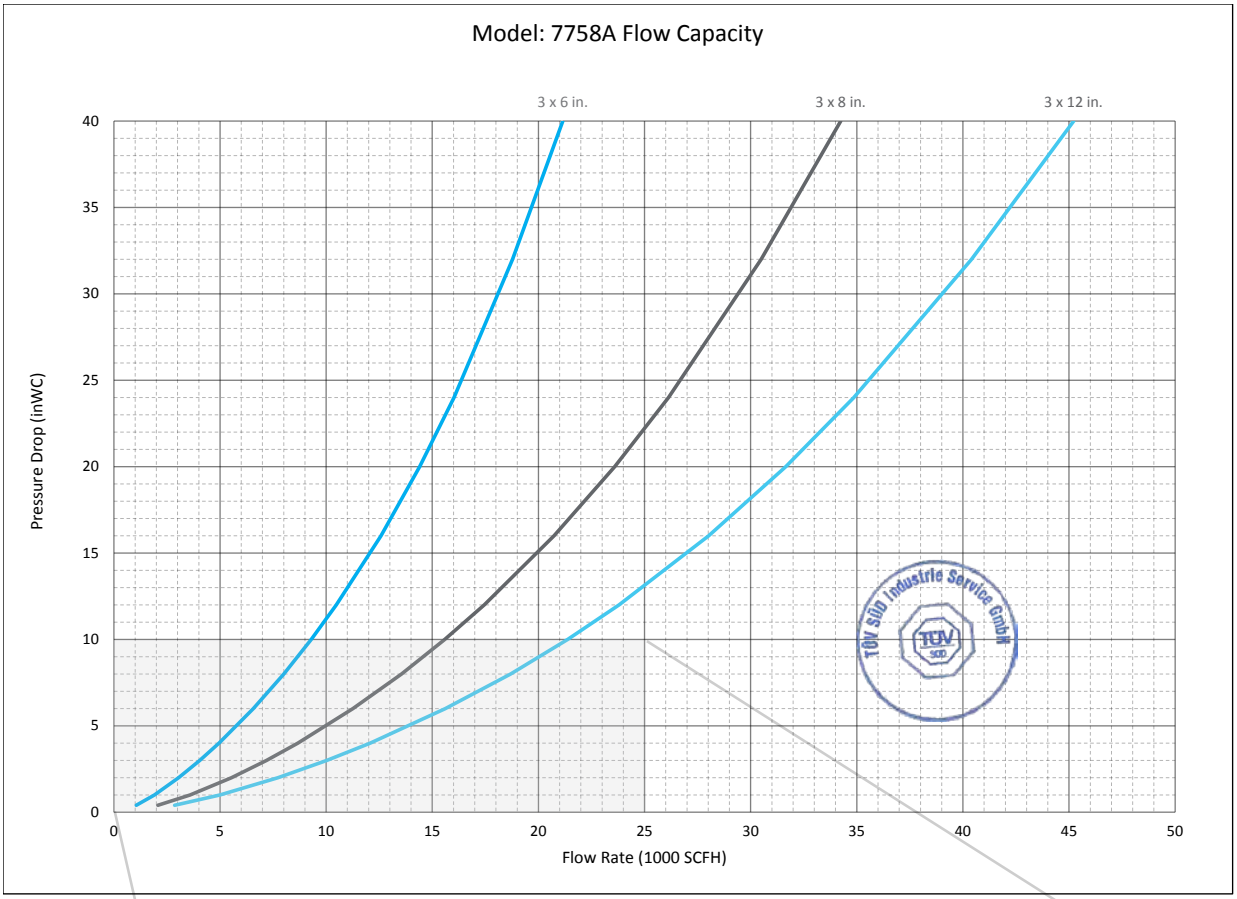

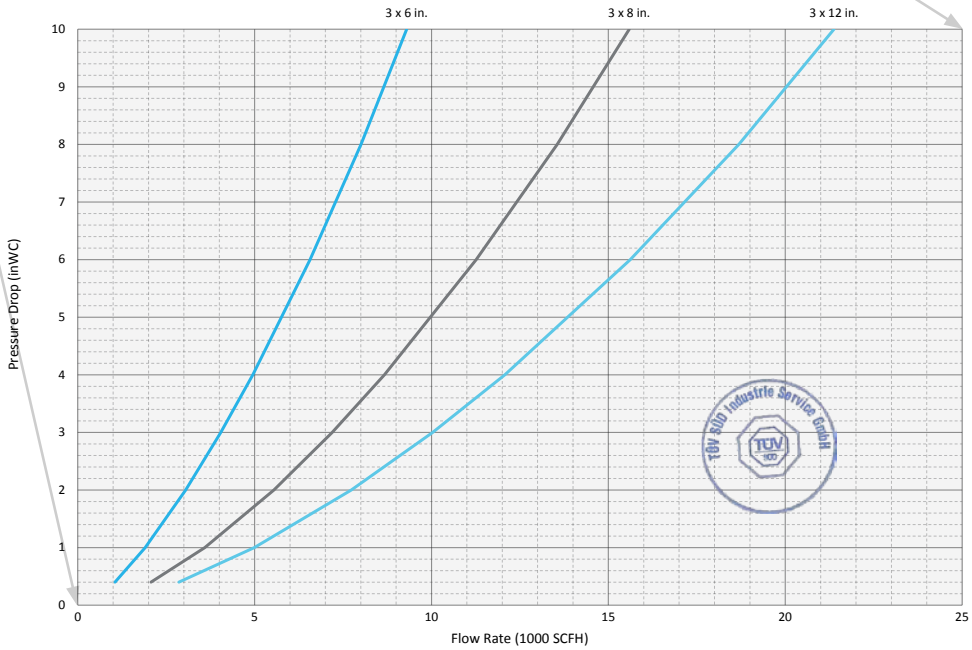

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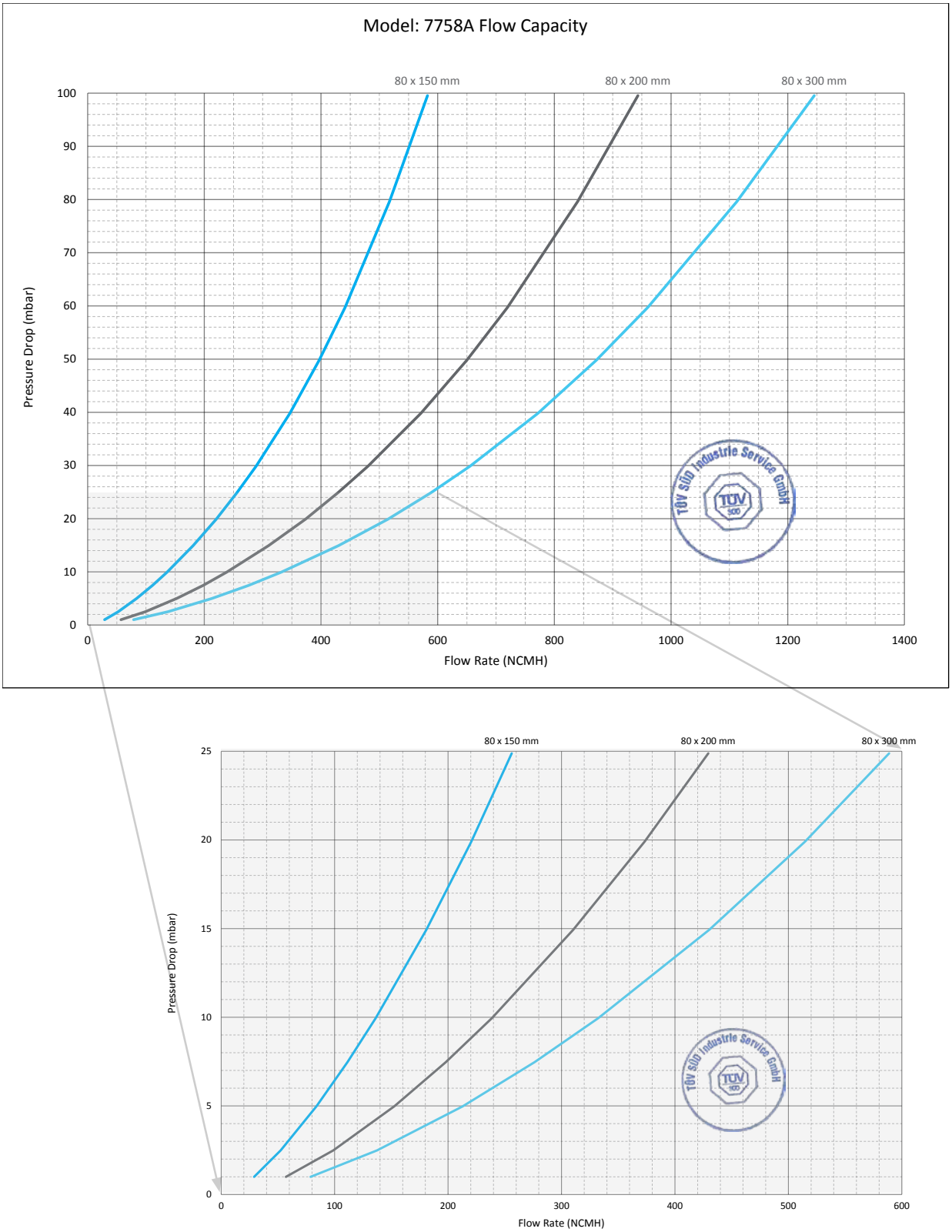

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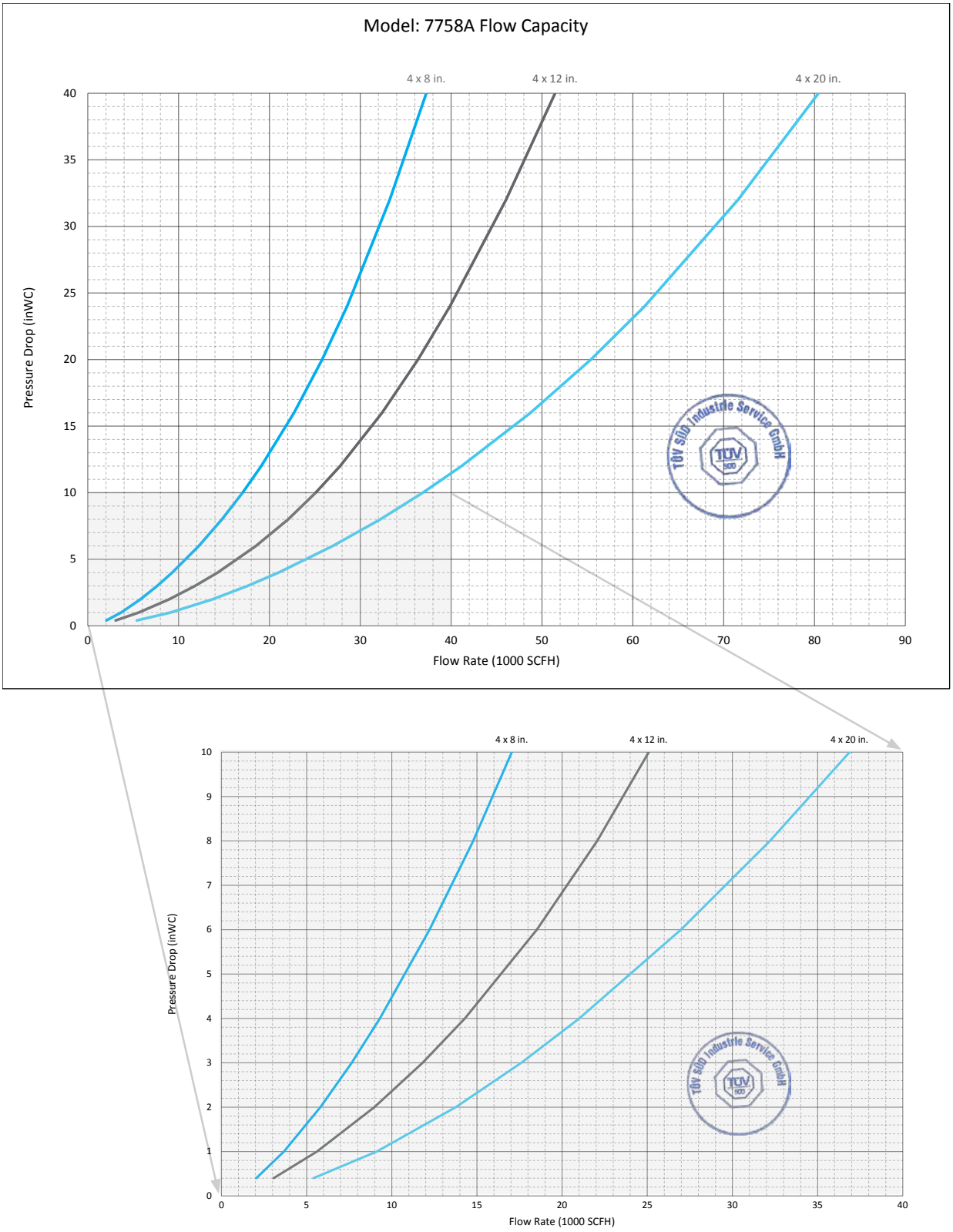

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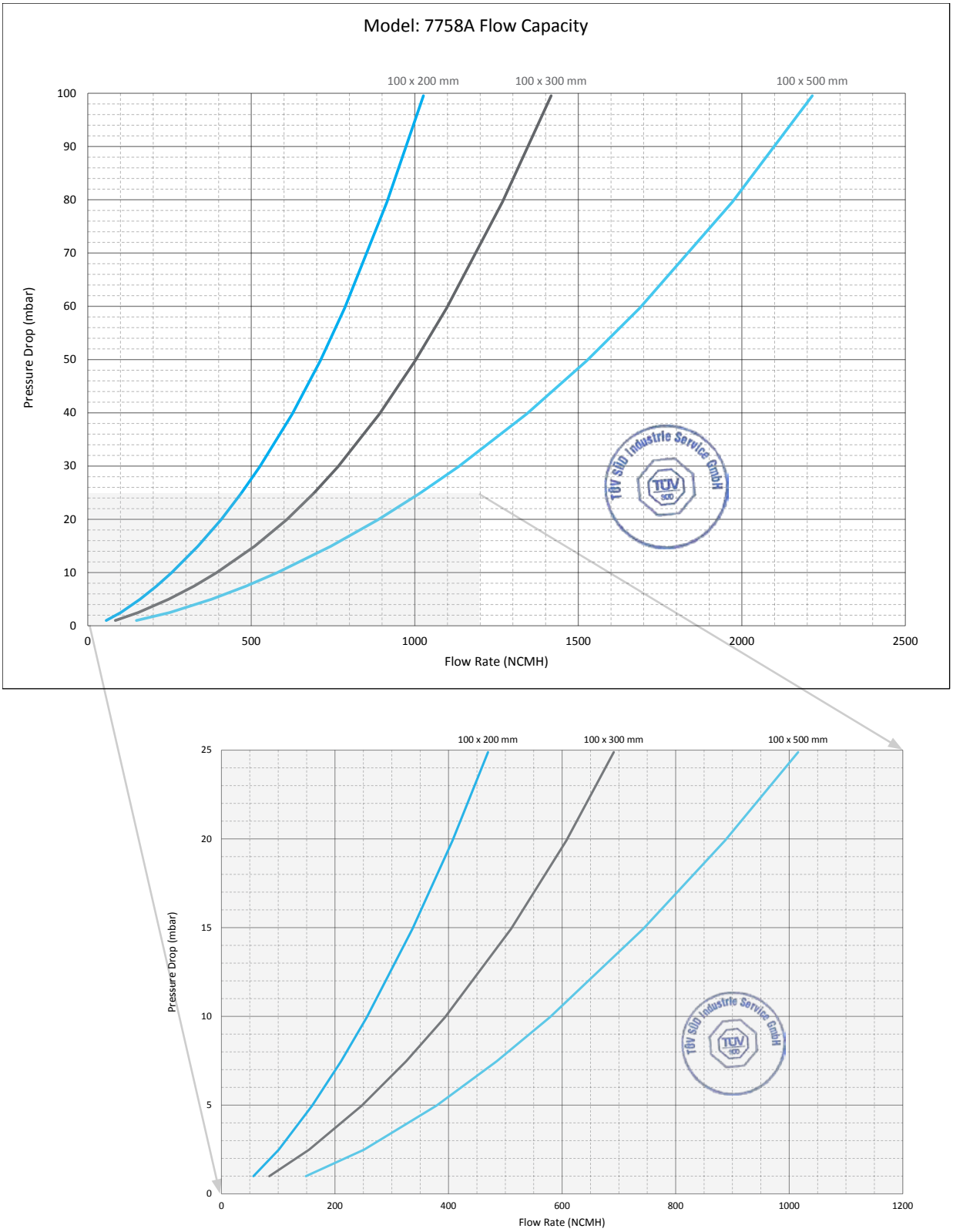

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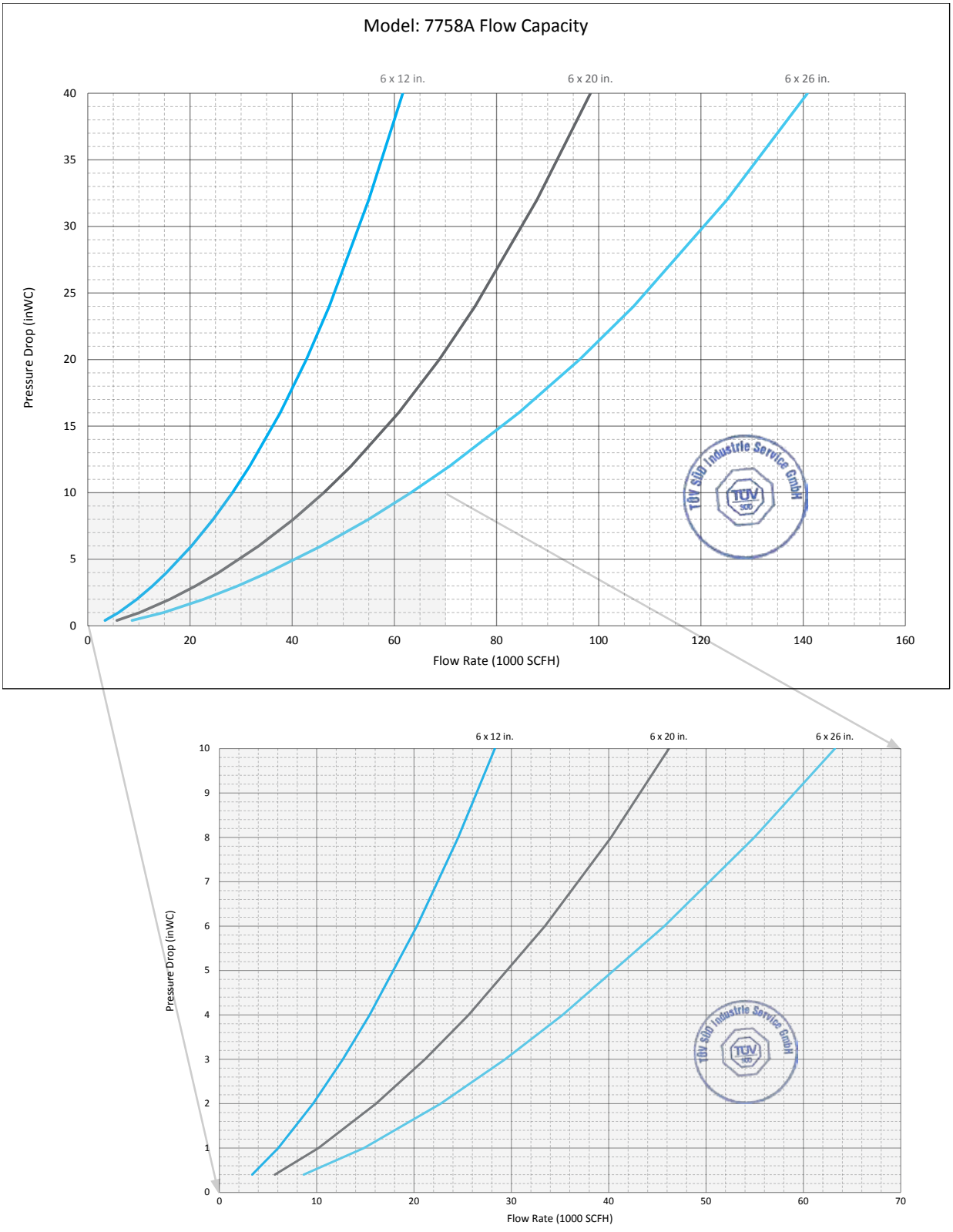

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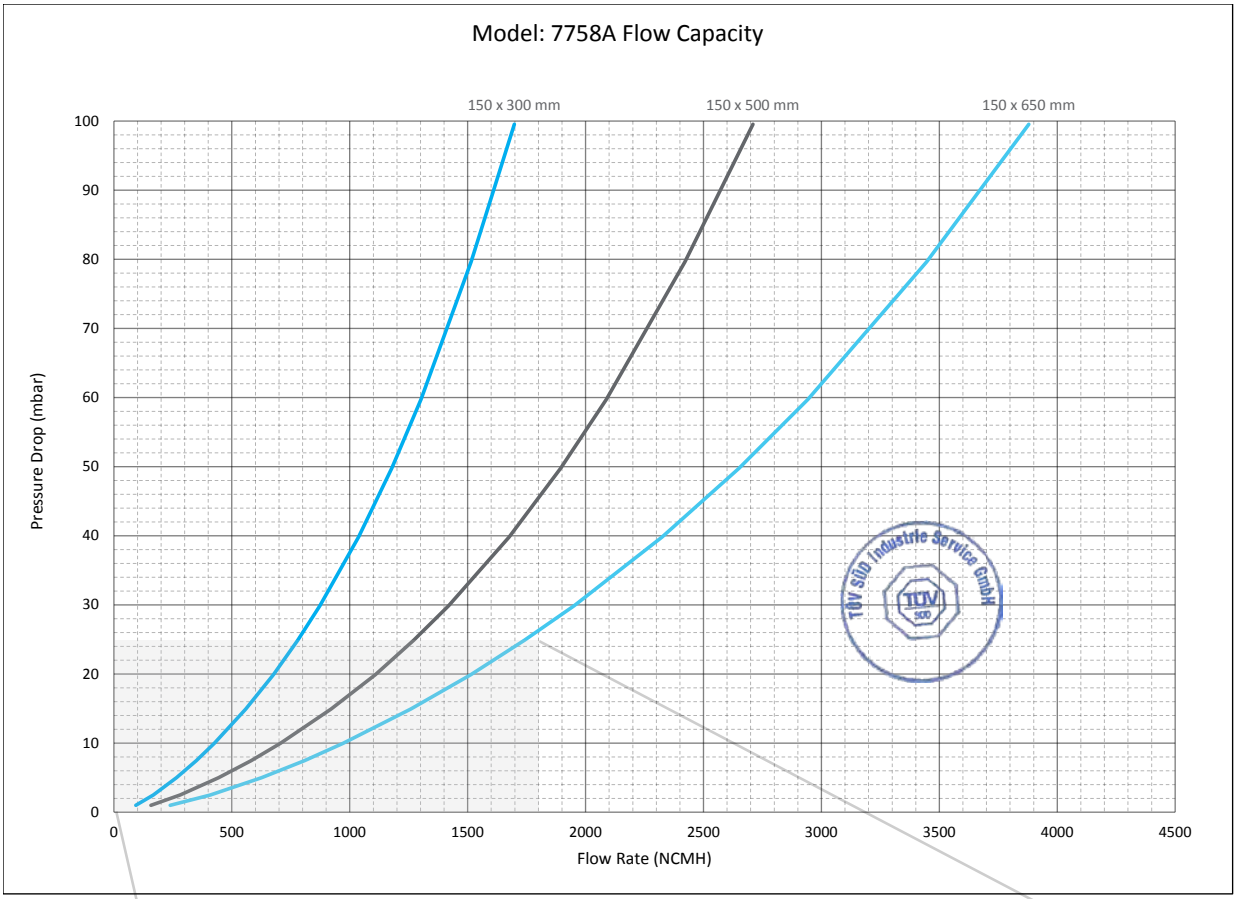

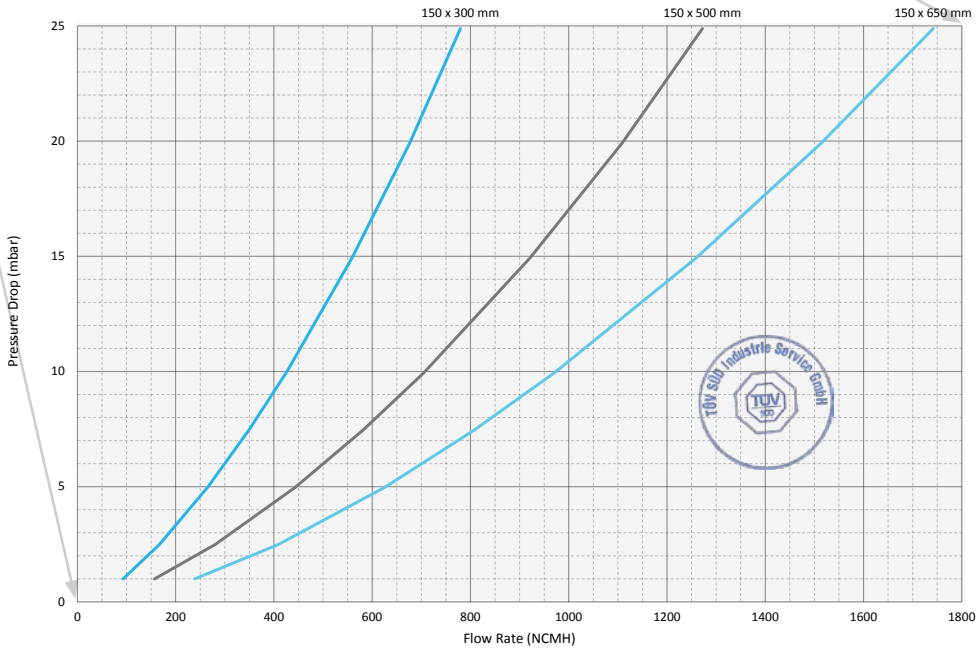

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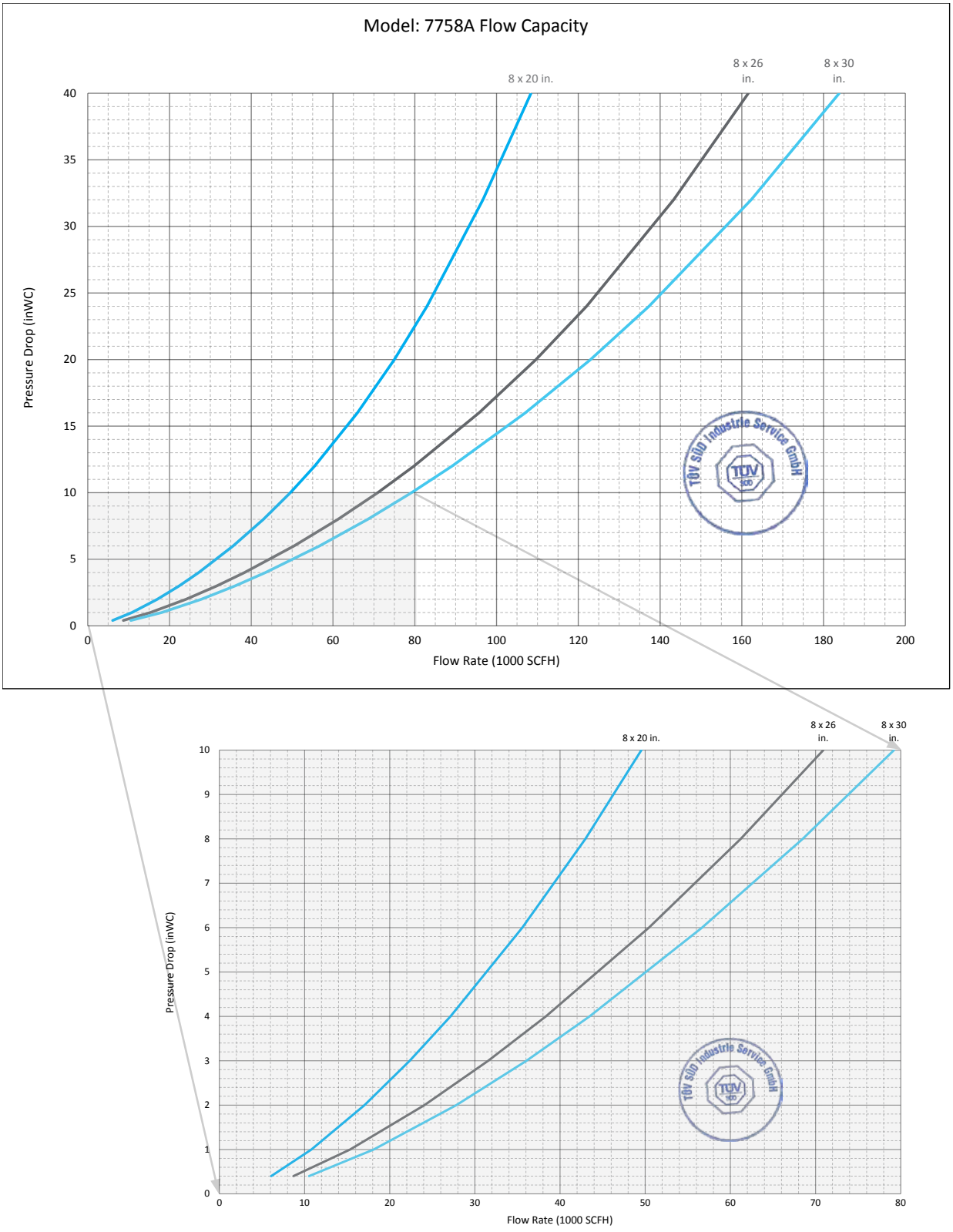

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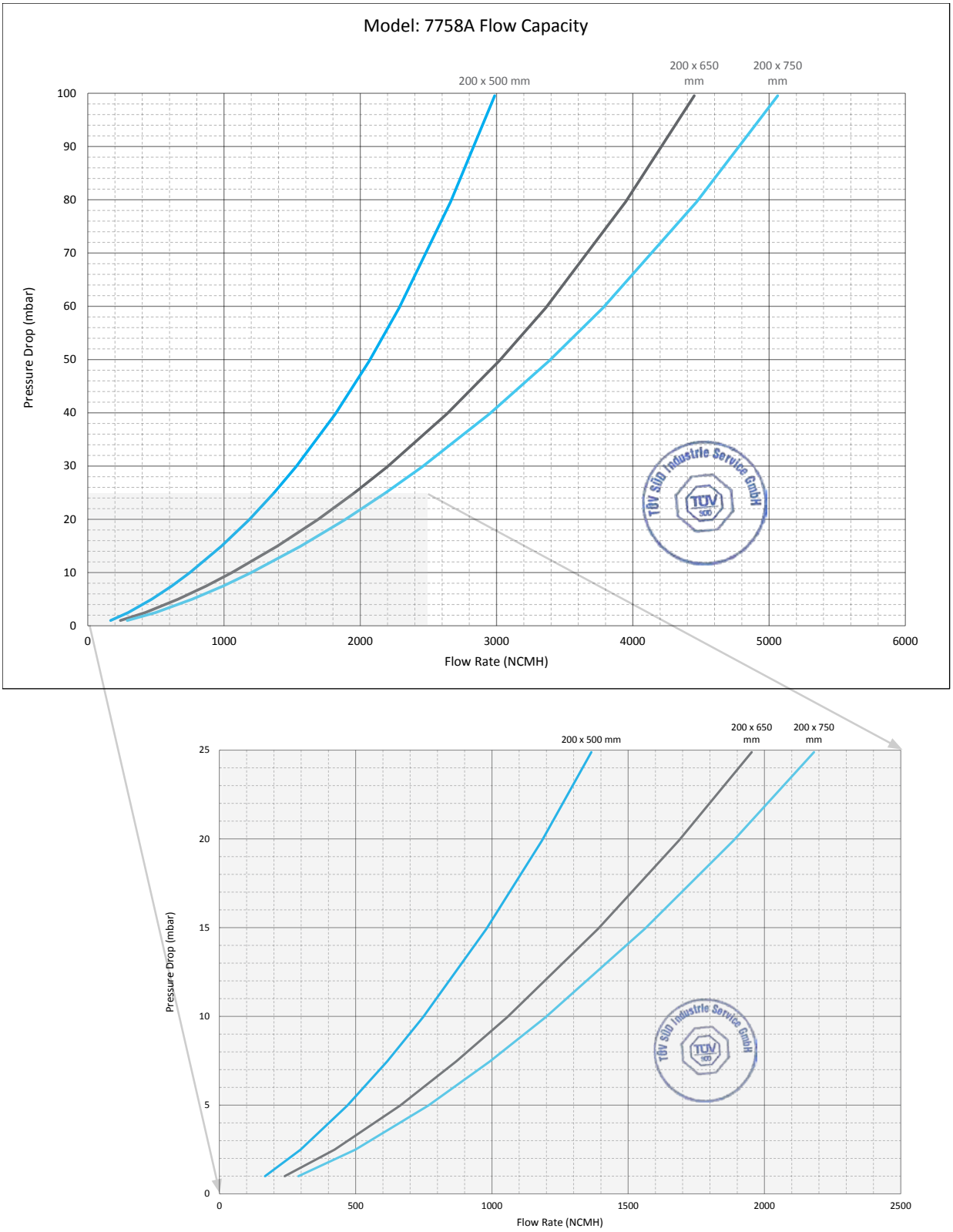

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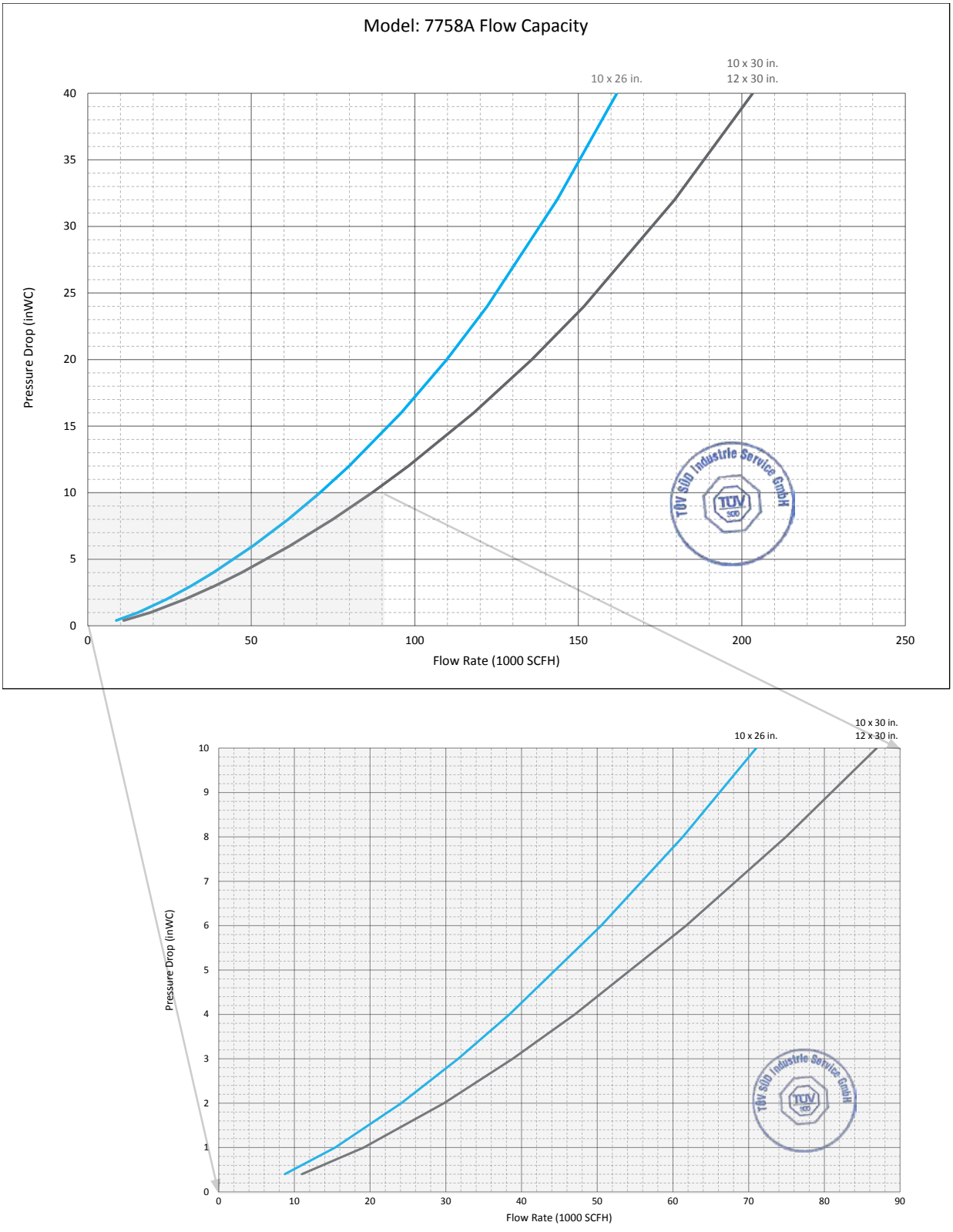

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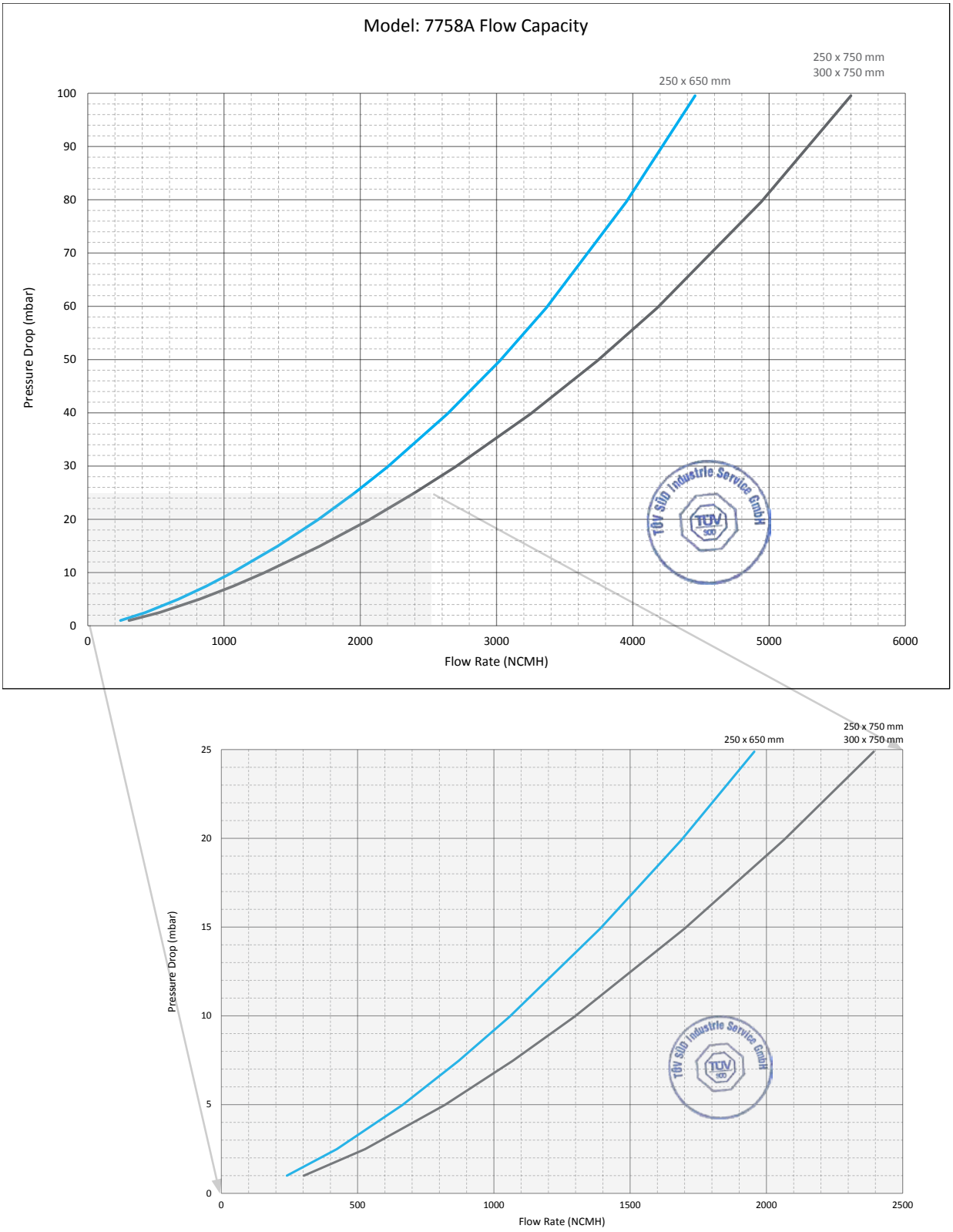

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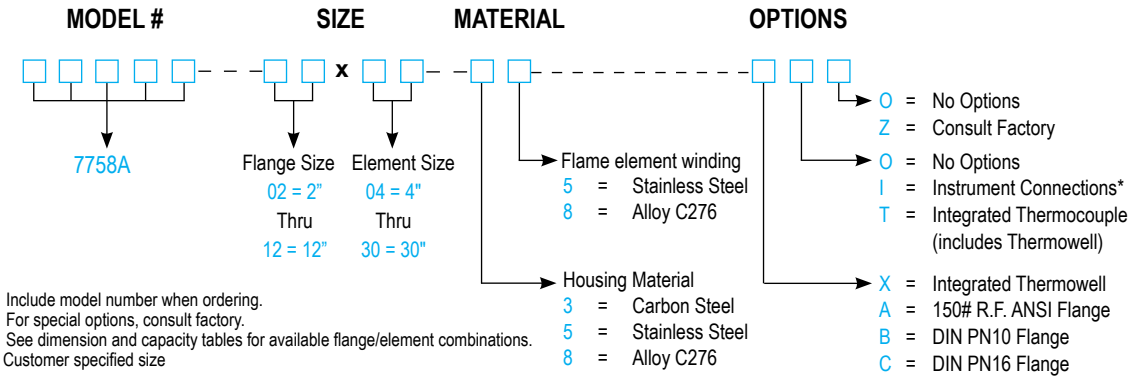
HOW TO ORDER

For easy ordering, select proper model numbers



NOTES

- Include model number when ordering.
- For special options, consult factory.
- See dimension and capacity tables for available flange/element combinations.

* Customer specified size

EXAMPLE 7 7 5 8 A — 0 3 x 0 8 — 3 5 — A O O

Indicates a 3" Model 7758A with Carbon Steel housing, 8" Stainless Steel Flame Element, ANSI Flanged Outlet and no other options.

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