

SARASIN-RSBD[®]



SAFETY VALVES
STARFLOW-V[™]



INTRODUCTION

Trillium provides critical service and safety valves, specialized pumps, and service support to flow control and rotating equipment.

Our worldwide reputation is based on engineering excellence applied to a comprehensive range of specialized products and effective customer support. We have the capability to deliver complete valve solutions for major projects in the power generation, oil and gas exploration, and general industrial sectors. Our global network of service operations specializes in the maintenance, upgrade, and management of power and industrial assets at customer sites.

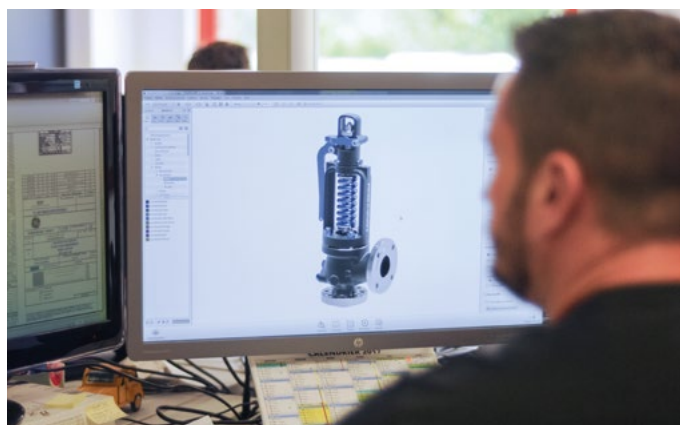
A Comprehensive Range of Premier Safety Valves

The Sarasin-RSBD® portfolio addresses a wide range of industrial applications in which protective action against overpressure is required. Sarasin-RSBD® products are recognized globally for their quality, innovative design, and durability. Today, our state-of-the-art facility in Vendin-le-Vieil, France, manufactures the following Sarasin-RSBD Pressure Relief Valves:

- Direct spring operated pressure relief valves
- Pilot operated pressure relief valves for general applications
- Starsteam® (V series) & Starflow-V™ (PV series) pressure relief valves for steam service
- Changeover valves

Safety Comes First, Always

End users who need safety valves that provide optimum performance, safety and reliability – turn to Sarasin-RSBD. We're especially focused on manufacturing the top safety valves and backup devices for your industry.



Applications

Starflow-V™ (PV series) Safety Valve is designed using the concepts of safety, high integrity performance, interchangeability, and simplicity. This range is manufactured for use in power plants...

- Conventional power plants
- Drum (subcritical) or Superheater inlet SHI (Supercritical)
- Superheater outlet SHO
- Reheater inlet (RHI) and Reheater outlet (RHO)
- Sootblower
- Oil & Gas applications – site boiler installations

... and also in industrial applications such as petrochemical, sugar plants, and pulp and paper.

Boiler

Set Pressure test up to 90 barg “live” steam. For pressure above the production test equipment capabilities, PG-73.5.2.2 is followed.

A primary vessel

Capacity: 1000L

Design Pressure: 100 barg

Design Temperature: 600°C

A secondary vessel

Capacity: 1000L

Design Pressure: 100 barg

Design Temperature: 310°C

Material testing service available

- Non-destructive examination (NDE) by radiography, ultrasonic, magnetic particle and liquid penetrant.
- Chemical analysis by computer controlled
- Direct reading emission spectrometer.
- Mechanical testing for tensile properties at ambient and elevated temperatures.
- Bend and hardness testing.
- Charpy testing at ambient, elevated and sub-zero temperatures.

Quality assurance

Trillium operates quality programs to cover the full scope of its activities. Comprehensive quality systems have been developed to serve the power, oil and gas, and industrial markets which they serve. The company holds approvals to or complies with:

- ASME Section III 'N', 'NPT', 'NV'
- ASME Section I 'V'
- ASME Section VIII Division 1 'UV'
- ISO 9001: 2015
- ISO 14001: 2015
- ISO 45001: 2018
- API Q1 TO API LICENCES API 6D (6D-0182) AND API 6A (6A-0445)
- API STD 520/526/527/2000
- ISO 4126

The quality systems have been approved for the supply of products to meet the requirements of the Pressure Equipment Directive (PED) and compliance modules A, D1, H, B+D have been applied in categories I through IV respectively. The company is committed to compliance with legislation and has an established environment and health and safety policy. An ongoing commitment to customer care is met through the process of continuous improvement and the further development of our systems and processes towards meeting ISO 9001:2015.

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ASME has set the bar for steam safety with section I code. Our products have been tested and approved to meet these standards...

ASME Code Section I—PG-67 Boiler

PG-67.1 Each boiler shall have at least one pressure relief valve. Boilers with more than 500 ft² (47m²) of bare tube water-heating surface shall have two or more pressure relief valves.

PG-67.2 The total combined relieving capacity for each boiler shall be such that all the steam that can be generated by the boiler is discharged without allowing the pressure to rise more than 6% above the highest pressure at which any valve is set and in no case to more than 6% above the maximum allowable working pressure (MAWP).

PG-67.2.1.1.2 The minimum required relieving capacity of the pressure relief valves shall not be less than the maximum designed steaming capacity at the MAWP of the boiler.

PG-67.3 One or more pressure relief valves on the boiler proper shall be set at or below the MAWP.

ASME Code Section I—PG-68 Superheater and Reheater

PG-68.1 Every attached superheater shall have one or more pressure relief valves in the steam flow path between the superheater outlet and the first stop valve.

PG-68.2 The discharge capacity of the pressure relief valve, or valves, on the boiler, as distinct from the superheater is at least 75% of the aggregate valve capacity required.

PG-68.4 Every reheater shall have one or more pressure relief valves, such that the total relieving capacity is at least equal to the maximum steam flow for which the heater is designed. The capacity of the reheater pressure relief valves shall not be included in the required relieving capacity for the boiler and superheater.

One or more pressure relief valves with a combined relieving capacity not less than 15% of the required total shall be located along the steam flow path between the reheater outlet and the first stop valve.

PG-68.6 Every pressure relief valve used on superheater or reheater discharging superheated steam at a temperature over 450°C (230°C) shall have a casing, including the base, body, and, if applicable, bonnet and spindle, of steel, steel alloy, or equivalent heat-resisting material.

PG-68.7 The capacity of a pressure relief valve on superheated steam shall be calculated by multiplying the capacity determined in accordance with PG-69.2 by the appropriated superheat correction factor Ksh, from Table PG- 68.7 or Table PG-68.7M.

ASME Code Section I—PG-69 Certification of Capacity of PRVs

PG-69.1.1 For steam service, capacity certification tests shall be conducted using dry saturated steam.

PG-69.1.4 For steam service, capacity certification tests shall be conducted at a pressure that does not exceed the set pressure by 3% or 2 psi (15 kPa), whichever is greater. Pressure relief valves shall be adjusted so that the blowdown does not exceed 4% of the set pressure.

ASME Code Section I—PG-70 Capacity of PRVs

PG-70.1 Subject to the minimum number required by PG-67.1, the number of pressure relief valves required shall be determined on the basis of the maximum designed steaming capacity, as determined by the boiler Manufacturer, and the relieving capacity marked on the valves by manufacturer.

ASME Code Section I—PG-71 Mounting

PG-71.1 When two or more pressure relief valves are used on a boiler, they may be mounted either separately or as a twin valves made by placing individual valves on Y-bases, or duplex valves having two valves in the same body casing.

When not more than two valves of different sizes are mounted singly on the same component (e.g., drum, economizer, superheater, etc.) the relieving capacity of the smaller valve shall be not less than 50% of that of the larger valve.

ASME Code Section I—PG-72 Operation of PRVs

PG-72.1 Pressure relief valves shall be designed and constructed to operate without chattering, with a minim blow-down of 2psi (15kPa) or 2% of the set pressure, whichever is greater, and to attain full lift at a pressure not greater than 3% above the set pressure

PG-72.2 The set pressure tolerance plus or minus shall not exceed that specified in the following table

Set Pressure, psi (MPa)	Tolerance, Plus or Minus From Set Pressure
≤ 70 (0.5)	2 psi (15 kPa)
> 70 (0.5) and ≤ 300 (2.1)	3% of set pressure
> 300 (2.1) and ≤ 1,000 (7.0)	10 psi (70 kPa)
> 1,000 (7.0)	1 % of set pressure

... to provide you reassurance and peace of mind.

ASME Code Section I—PG-73 Minimum Requirement for PRVs

PG-73.1.1 Pressure relief valves shall be either direct spring-loaded safety valves, direct spring-loaded safety relief valves, or pilot-operated pressure relief valves.

PG-73.2.4 To provide a means for verifying whether it is free, each safety valve or safety relief valve shall have a substantial lifting device, which when activated will release the seating force on the disk when the valve is subjected to pressure of at least 75% of the set pressure.

PG-73.2.5 The seat of a pressure relief valve shall be fastened to the body of the valve in such a way that there is no possibility of the seat lifting

PG-73.2.6 A body drain below seat level shall be provided in the valve and this drain shall not be plugged during or after field installation.

PG-73.2.9 Means shall be provided in the design of all valves for use under this Section, for sealing all external adjustments.

PG-73.2.10 Valve capacity may be restricted by restricting lift of a valve provided the following requirements are met:

(d) The lift restraining device shall be designed so that, if adjustable, the adjustable feature can be sealed. Seals shall be installed by the valve manufacturer or assembler at the time of initial adjustment.

(e) Valves shall not have their lifts restricted to a value less than 30% of full rated lift, or 0.080 in. (2 mm).

PG-73.2.11 A pressure relief valve over NPS 3 (DN80), used for pressure greater than 15 psig (100 kPa), shall have a flanged inlet connection or a welded inlet connection.

ASME Code Section I—PG-73.5 Testing by Manufacturers or Assemblers

PG-73.5.1 Pressure Testing. Each pressure relief valve to which the Certification Mark is to be applied shall be subjected to the following tests by the manufacturer or assembler:

(a) The pressure-containing parts of each valve shall be hydrostatically tested at a pressure at least 1.5 times the design pressure of the parts.

PG-73.5.2 Every valve shall be tested by the manufacturer or assembler to demonstrate its set point and pressure-containing integrity.

(a) Pressure relief valves for steam service shall be tested with steam. The blowdown control elements of the pressure relief valve shall be set to the manufacturer's specifications.

PG-73.5.2.2 When the valve is beyond the production test equipment capabilities, an alternative test method presented in PG-73.5.2.2.1 or PG-73.5.2.2.2 may be used, provided all of the following conditions are met:

(a) Testing the valve at full pressure may cause damage to the valve, or testing of the valve is impractical due to boiler system operational safety considerations

(b) The valve lift has been mechanically verified to meet or exceed the required lift

(c) The blowdown control elements of the safety valve are set to the valve manufacturer's specification

(d) The valve design is compatible with the alternative test method selected

PG-73.5.2.2.1 The valve, with its lift temporarily restricted during the test, if required to prevent valve damage, shall be tested on steam to demonstrate set pressure

PG-73.5.2.2.2 The valve may be fitted with an auxiliary lift assist device and tested on steam at a pressure less than the valve set pressure. The lift assist device and test procedure shall be calibrated to provide the set pressure setting within the tolerance of PG-72.2

PG-73.5.3 (a) After completion of the tests required by PG-73.5.2, a seat tightness test shall be conducted.

(1) For steam service pressure relief valves, the seat tightness shall be conducted using steam at the maximum expected operating pressure but at a pressure not exceeding the reseating pressure of the valve. When being tested, a valve exhibiting no sign of leakage shall be considered adequately tight.

Starflow-V™ (PV Series): Key Features & Benefits...

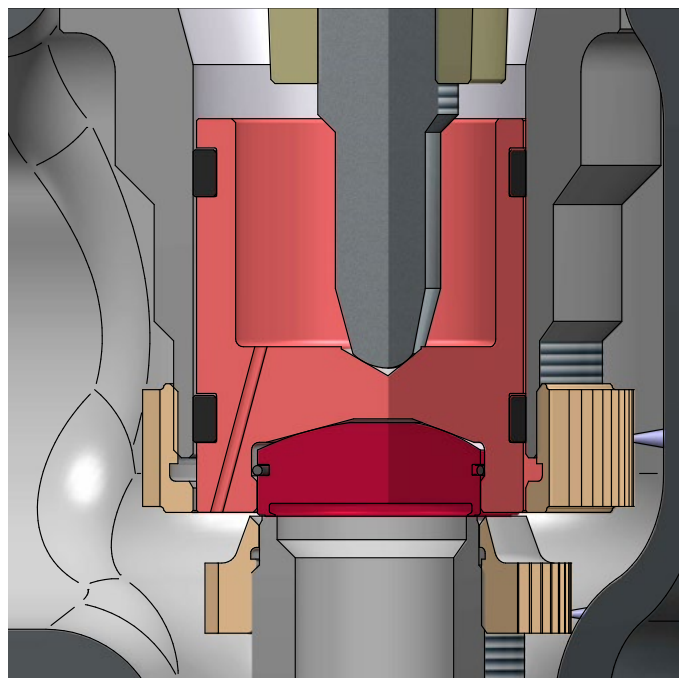
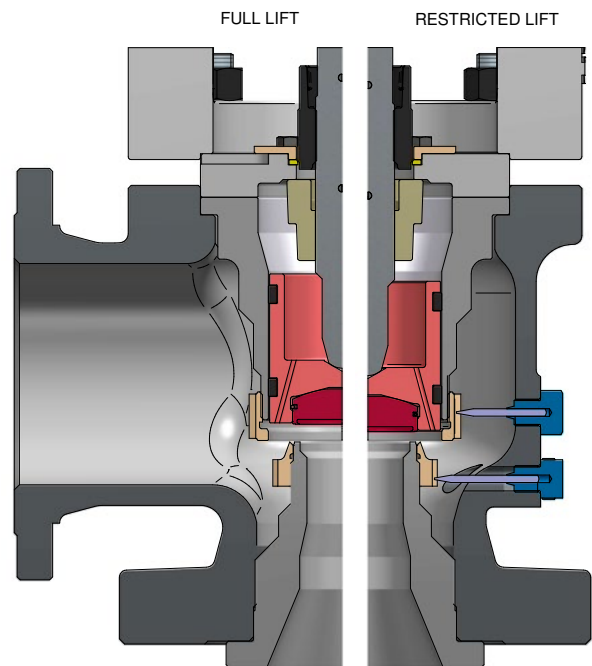
Anti-seizing design

Starflow-V™ safety valves provide a unique use of special gliding rings named Thermoglide™. This feature allows no metal contact between the disc-holder (piston) and the guide where seizing of similar materials normally occur.

“Hang-up” of guiding surfaces associated with comparable valves is simply eliminated with this unique feature; the first safety valve in the world to offer this technology to prevent such kind of failure. This new design and material is based on our extensive experience in nuclear applications where seizing is not allowed at any time.

Thermoglide™ design improves the gliding characteristics enabling the valve to quickly reach full lift and re-seat. The use of the Thermoglide™ rings improves valve response times when the valve open and closes. Steam loss is significantly reduced and boiler efficiency is improved resulting in cost savings for plant operations.

It also reduces downtime, preventing unplanned costs of maintenance activities; gliding coefficient of the rings reduces friction and galling, extending the spare parts life cycle.



Certified Restricted Lift

Starflow-V™ safety valves offer restricted lift of the seat to minimize steam loss, stabilize the valve operating cycle, and minimize chattering risks which are typically caused by valve oversizing. Additionally, this option offers:

- An efficient opening
- Reduction of the noise generated at the valve outlet for which silencer might be required.
- Minimization of built-up back pressure and associated reaction forces.

In any case, the valve adjustment meets ASME Code Section I § PG-73.2.10

Blowdown Chamber

Starflow-V™ safety valves provides dual adjusting ring to adjust the accumulation chamber volume and guarantee short and fast blowdown.

Leak-tight performances

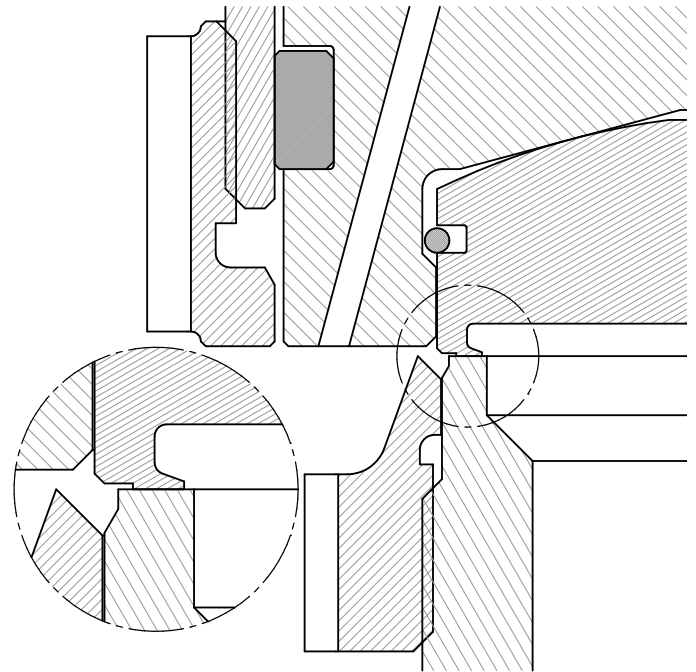
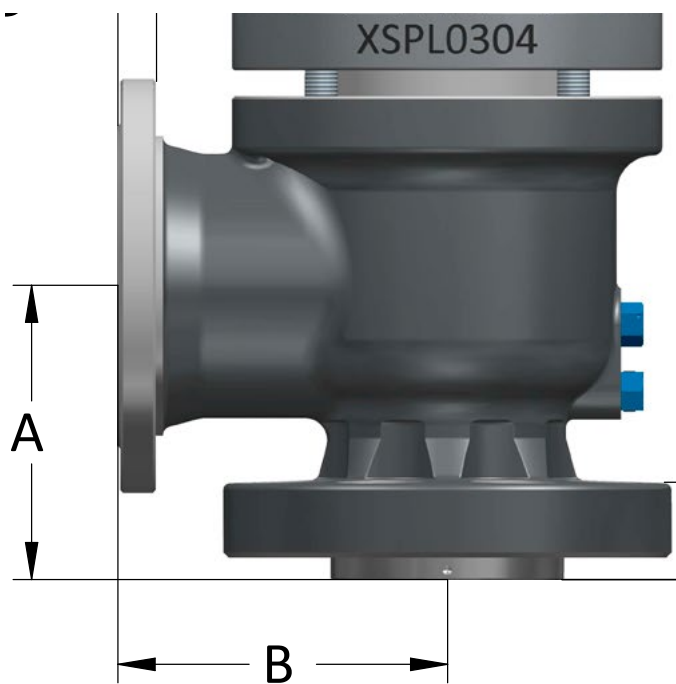
Starflow-V™ safety valves utilize a proven reliable disc design named Stardisc™. The lip of the disc guarantees perfect seat tightness due to its flexibility at high temperatures. Temperature differential between the steam process media and ambient temperature in the body bowl cause a downward axial deflection providing more contact stress on the nozzle seat, thus creating greater seat tightness at elevated temperature. The higher pressure and temperature, the better tightness.

Stardisc™ is constructed in Alloy 718, a high durability material providing a long lifespan.

Full nozzle design

Starflow-V™ safety valves is still the best option for easy lapping and/or spare parts replacement.

Starflow® & Starflow-V share the same body casting. Starflow® is the API STD 526 reliable valve with standardized center-to-Face dimensions A & B for easy interchangeability.



Open bonnet pre-drilled mounting surface for in-situ electronic valve testing.

Starflow-V™ safety valves use a open bonnet construction that includes a mounting surface (pre-drilled) for auxiliary lift assist devices.

This eliminates the need for any online drilling and overcomes any risk associated with machining pressure containing parts

Starflow-V™ (PV Series): Some figures

Starflow-V™ (PV series) Safety Valve is designed to meet the rigorous process conditions which are essential for supercritical steam boilers. The valves are designed to provide repeatability particularly at high pressure and high temperatures.

A key benefit of this valve is a uniquely engineered internal design that provides a fast response for overpressure and blowdown requirements which are demanded by ASME BPVC Section I code of practice.

Starflow-V™ (PV series) safety valves can be stamped according the ASME B&PV Code Section I (V) and also the ASME B&PV Code Section VIII (UV). The valves have not only been capacity tested and certified by the National Board of Pressure Vessel Inspectors but also meet the requirements of ISO 4126 part 1.

The flow capacity tested by the US National Board and carrying the ASME “V” code stamp is valid for both: full & restricted lift.

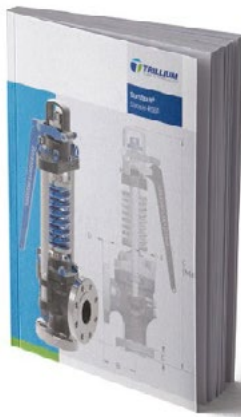
Product Name	STARFLOW-V™
Inlet sizes	1 1/2» through 6»
Inlet ratings	ANSI Class 150 through 1500 FLANGED (B16.5)
Orifice sizes	Fifteen sizes - [F] to [W]
Set pressure range	Up to 103 barg
Temperature range	Up to 649°C
Materials	SA 216 Gr.WCC SA 217 Gr.WC6/WC9/C12A SA 351 Gr. CF8M
NB Certificate	92034 & 92045 (Res. Lift)
Design STD	ASME BPVC section I & VIII

Starflow-V™ (PV Series) - Flanged Inlet Table

Outlet Size Combinations (in) - Orifice Area (cm ² - in ²)																	
Actual	in ²	0,373	0,589	0,996	1,457	1,667	2,758	3,983	5,303	7,069	10,148	14,173	23,997	38,548	55,438	Rating ASME B16.5	
	cm ²	2,406	3,800	6,426	9,400	10,755	17,794	25,697	34,213	45,606	65,471	91,439	154,819	248,696	357,664	Inlet	Outlet
Orifice	F	G	H	J	K	L	M	N	P	Q	R	T	V	W			
	PV72F1	PV73G1	PV73H1	PV23J1	PV34K1	PV34L1	PV46M1	PV46N1	PV46P1	PV68Q1	PV68R1	PV89T1	PV9BV1	PVAAW1	150	150	
	11/2 x 2	11/2 x 3	11/2 x 3	2 x 3	3 x 4	3 x 4	4 x 6	4 x 6	4 x 6	6 x 8	6 x 8	8 x 10	10 x 14	12 x 12 (dual)			
	PV72F2	PV73G2	PV23H2	PV34J2	PV34K2	PV46L2	PV46M2	PV46N2	PV46P2	PV68Q2	PV69R2	PV89T2	PV9BV2	PVAAW1	300	150/300	
	11/2 x 2	11/2 x 3	2 x 3	3 x 4	3 x 4	4 x 6	4 x 6	4 x 6	4 x 6	6 x 8	6 x 10	8 x 10	10 x 14	12 x 12 (dual)			
	PV72F3	PV73G3	PV23H3	PV34J3	PV34K3	PV46L3	PV46M3	PV46N3	PV46P3	PV68Q3	PV69R3				600	150/300	
	11/2 x 2	11/2 x 3	2 x 3	3 x 4	3 x 4	4 x 6	4 x 6	4 x 6	4 x 6	6 x 8	6 x 10	-	-	-			
	PV73F4	PV73G4	PV23H4	PV34J4	PV36K4	PV46L4	PV46M4	PV46N4	PV46P4						900	150 (from H Orifice)/300	
	11/2 x 3	11/2 x 3	2 x 3	3 x 4	3 x 6	4 x 6	4 x 6	4 x 6	4 x 6	-	-	-	-	-			
	PV73F5	PV23G5	PV23H5	PV34J5	PV36K5	PV46L5									1500	300	
	11/2 x 3	2 x 3	2 x 3	3 x 4	3 x 6	4 x 6	-	-	-	-	-	-	-	-			
	PV73F6	PV23G6													2500	300	
	11/2 x 3	2 x 3	-	-	-	-	-	-	-	-	-	-	-	-			

Inlet and outlet size combinations as Orifice sizes shown in the table above are compliant with API STD 526

Valve Selection



To assist in reading and understanding the different chapters of this document, here is an example of valve selection based on standard input data, split into 4 detailed steps.

1

Select valve orifice on saturated conditions

First of all, let's consider a pressure vessel that must be protect against overpressure. The safety valve has to be open at 60 barg (870.2 psig) @ 575°C. The required capacity is 50000 lb/h.

I use the appropriate "Capacity Table" section (page 90) to determine the required orifice designation. Based on the set pressure value 60 barg (870.2 psig) in the first column, I select the next upper orifice so that the valve relieving capacity will exceed the required capacity (50000 lb/hr).

Orifice J can discharge 59868 lb/h @ 59.98 barg and 60206 lb/h @ 60.33 barg

pound

ASME, B & PVC

W = 51.5KAP for "P" less than or equal to 1580 psia
W = 51.5KAP x [0.1906P-1,000 / 0.2292P-1,061] for "P" greater than 1580 psia

Apply correction factor for capacities on superheated steam.
 Starflow-V is certified as a restricted lift valve. As per ASME, B&PVC, Section I PG-73.2.10 (e) and internal procedure less than 55% of full rated lift, or 0.080 in. (2 mm).

Orifice Designation	Orifice Area		F	G	H	J	K	L	M	N
	[sq.in]	[sq.cm]	0,37	0,59	0,10	1,46	1,67	2,76	3,98	5,19
			2,41	3,80	6,43	9,40	10,75	17,79	25,70	34,00
Set Pressure [barg]	Set Pressure [psig]									
44,82	650		11513	18181	30744	44973	51455	85131	122943	163000
45,16	655		11600	18318	30975	45312	51843	85772	123869	164000
45,51	660		11687	18454	31208	45650	52230	86413	124794	165000
59,98	870		15240	24089	40032	59868	68497	112898	162739	218000
60,33	875		15327	24202	40925	60206	68884	113326	163661	217800
60,67	880		15413	24339	41157		68884	113967	164586	219130
63,09	915		18106	28434	48008	62916	71983	119093	171989	228980
63,43	920		16193	25570	43240	63253	72370	119734	172915	230220



WE ARE DEALING WITH A "SAFETY" PRODUCTS, THEREFORE WE ARE PROVIDING "SAFETY" and the linear interpolation method must be performed to define the accurate relieving capacity at the set pressure value; i.e 59887.314 lb/h @ 60 barg.

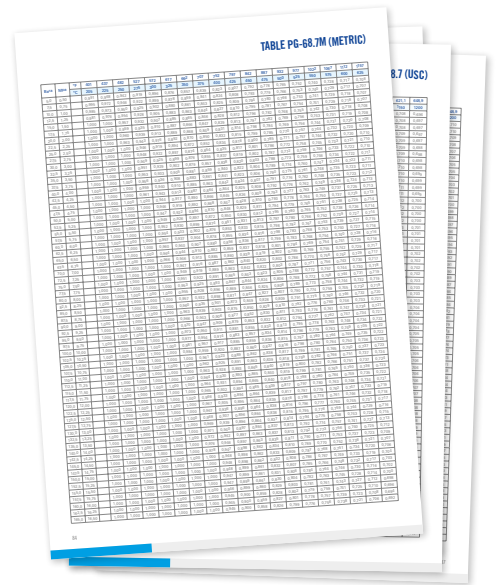
2

If applicable, apply superheat correction factor

In case of superheat conditions, the saturated capacity shall be multiplied by the superheat correction factor.

Cf. ASME Code Section I § PG-68.7 (English units) & PG-68.7M (Metric Units) or the same abacus in page 84-87.

Kindly be informed this abacus is based on the relieving pressure value (P1).



In this example :

P1 (Metric Units) = 60*1.03 (overpressure) + 1.013 (atmospheric pressure) = 62.813 bara

P1 (English Units) = 870.2264*1.03 (overpressure) + 14.7 (atmospheric pressure) = 911 psia

Based on the relieving pressure value, I select the superheat correction factor.

By the same, we are dealing with a safety products and then, the linear interpolation must be performed to define the accurate superheat correction factor; i.e. 0.740 à 62.813 bara

The correct flow capacity of the safety valve is reduced to only 44316.6 lb/h (59887*0.740).

This is insufficient compared to meet the capacity requirement of 50,000 lb/h and I'm now back to square one...

Orifice K can discharge 68497 lb/h @ 59.98 barg et 68884 lb/h @ 60.33 barg.

By linear interpolation method, the relieving capacity at the set pressure value is 68519.114 lb/h @ 60 barg on saturated steam conditions.

After applying the superheat correction factor, the correct relieving capacity at the set pressure value is 50704.1 lb/hr (68519.114*0.740) on this specific superheated steam conditions.

Kindly note the PRESSURE TEMPERATURE CLASS SECTION is based on the hypothesis that temperature at valve outlet is lower than the temperature at valve inlet. Otherwise, you can use the PRESSURE TEMPERATURE CLASS ALTERNATE SECTION.

Orifice Designation		F	G	H	J	K	L	M	N	P	Q	R	T	V	
Orifice Area [sq.in]		0,37	0,59	0,10	1,46	1,67	2,76	3,98	5,30	7,07	10,15	14,17	24,00	38,55	
Orifice Area [sq.cm]		2,41	3,80	6,43	9,40	10,75	17,79	25,70	34,21	45,61	65,47	91,44	154,82	248,70	
Set Pressure [barg]															
[psig]															
44,82	650	11513	18181	30744	44973	51455	85131	122943	163688	218199	313238	437478	740715	1189861	
45,16	655	11600	18318	30975	45312	51843	85772	123869	164920	219841	315596	440771	746291	1198817	
45,51	660	11687	18454	31206	45650	52230	86413	124794	166152	221484	317954	444064	751866	1207773	
59,98	870	15327	24202	40925	59868	68497	113326	163661	217899	290464	416980	582366	-	-	
60,33	875	15413	24339	41157	60200	68884	113967	164586	219131	292106	419337	585659	-	-	
63,09	915	16106	25434	43006	62915	71983	119093	171989	228986	308246	438199	612002	-	-	
63,43	920	16193	25570	43240	63253	72370	119734	172915	230220	306888	440557	615295	-	-	

3

Material & inlet rating selection

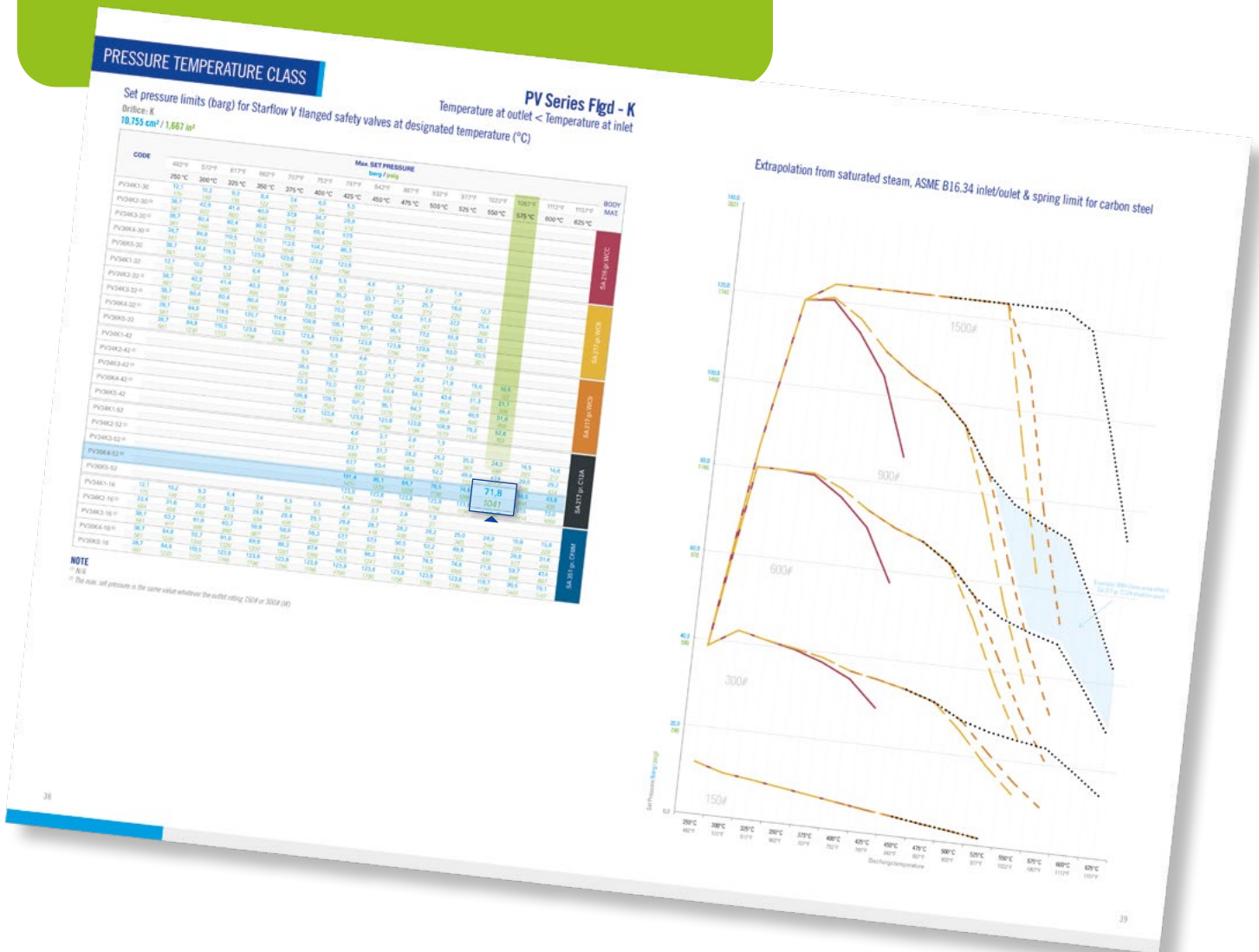
The valve designation will be PVxxKx-xx.

In the P/T table (PV SERIES FLG-K, p38), select the right material and the right inlet class which can withstand such a P/T rating.

Because of the high temperature (590°C), SA217 Gr. C12A carbon steel is mandatory.

Inlet pressure class 900# can be selected either by tabulation or graphical method

The commercial code can now be completed: PV36K4-52! Great job!



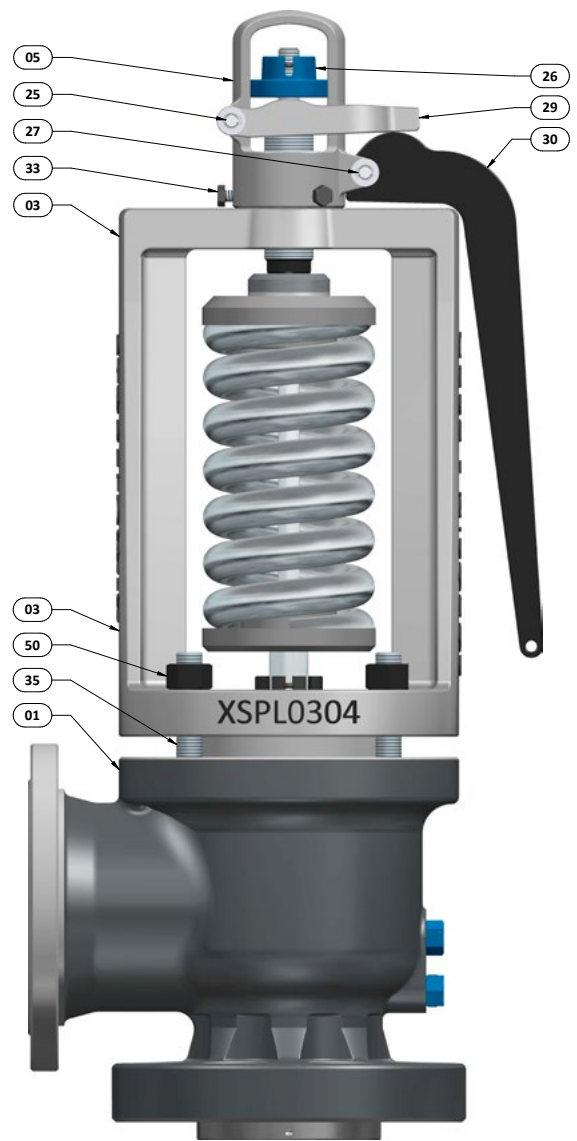
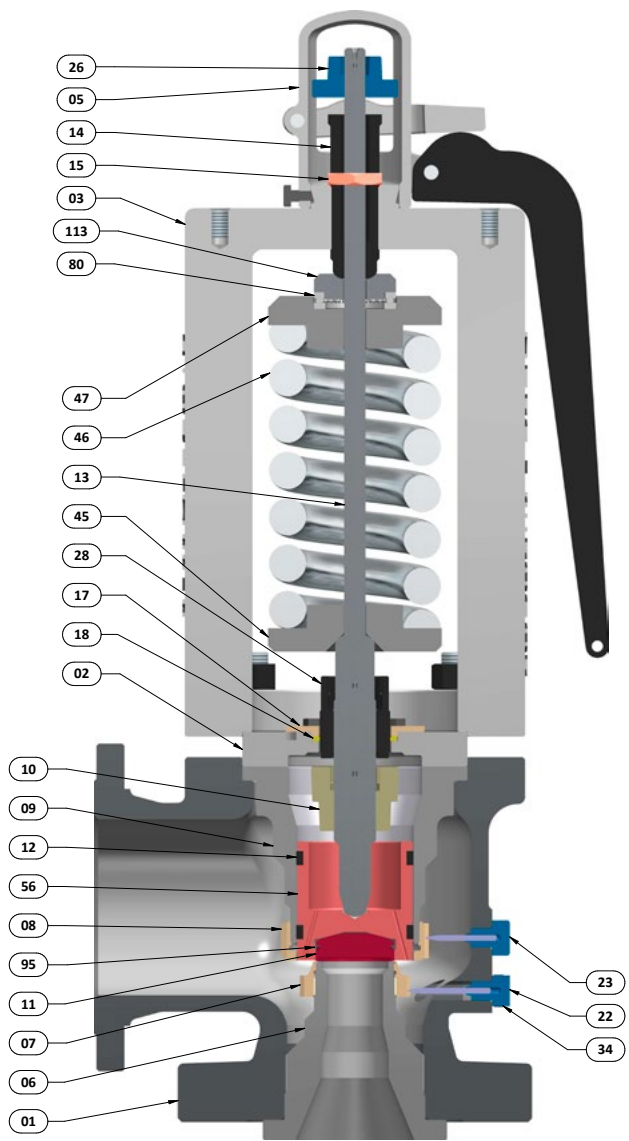
4

Let's keep it up. You can now move on the other chapter to gather additional information:

- Page 17: Bill of Materials (code 52)
- Page 24: Dimensions & Weights



1. Bill of material



BILL OF MATERIAL

REP	QTY	DESCRIPTIONS	30 425°C/800°F	32 550°C/1020°F	42 593°C/1100°F	52 625°C/1157°F	16 625°C/1157°F
1	1	BODY	SA216 Gr. WCC	SA217 Gr. WC6	SA217 Gr. WC9	SA217 Gr. C12A	SA351 Gr. CF8M
2	1	COVER	SA479 Gr. 316	SA479 Gr. 316	SA479 Gr. 316	SA479 Gr. 316	SA479 Gr. 316
3	1	YOKE	SA216 Gr. WCC	SA216 Gr. WCC	SA216 Gr. WCC	SA216 Gr. WCC	SA351 Gr. CF8M
5	1	CAP	SA216 Gr. WCC	SA216 Gr. WCC	SA216 Gr. WCC	SA216 Gr. WCC	SA351 Gr. CF8M
6	1	NOZZLE	SA479 Gr. 316L or SA351 Gr. CF8M (4" and over)	SA479 Gr. 316	SA479 Gr. 316	SA479 Gr. 316	SA479 Gr. 316
7	1	LOWER ADJUSTING RING	SA351 Gr. CF8M	SA351 Gr. CF8M	SA351 Gr. CF8M	SA351 Gr. CF8M	SA351 Gr. CF8M
8	1	UPPER ADJUSTING RING	SA351 Gr. CF8M	SA351 Gr. CF8M	SA351 Gr. CF8M	SA351 Gr. CF8M	SA351 Gr. CF8M
9	1	GUIDE	SA351 Gr. CF8M	SA351 Gr. CF8M	SA351 Gr. CF8M	SA351 Gr. CF8M	SA351 Gr. CF8M
10	1	LIFT STOP	SA351 Gr. CF8M	SA351 Gr. CF8M	SA351 Gr. CF8M	SA351 Gr. CF8M	SA351 Gr. CF8M
11	1	STARDISC	SB637 Gr. N07718	SB637 Gr. N07718	SB637 Gr. N07718	SB637 Gr. N07718	SB637 Gr. N07718
12	2	SLIDING RING	Thermoglide™	Thermoglide™	Thermoglide™	Thermoglide™	Thermoglide™
13	1	SPINDLE	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410
14	1	SET SCREW	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410
15	1	SET SCREW NUT	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410
17	1	WASHER RETAINER PLATE	SA479 Gr. 316L	SA479 Gr. 316L	SA479 Gr. 316L	SA479 Gr. 316L	SA479 Gr. 316L
18	1	FLOATING WASHER	SB164 Gr. N04400	SB164 Gr. N04400	SB164 Gr. N04400	SB164 Gr. N04400	SB164 Gr. N04400
22	1	LOWER ADJUSTING RING SCREW	SA479 Gr. 316L	SA479 Gr. 316L	SA479 Gr. 316L	SA479 Gr. 316L	SA479 Gr. 316L
23	1	UPPER ADJUSTING RING SCREW	SA479 Gr. 316L	SA479 Gr. 316L	SA479 Gr. 316L	SA479 Gr. 316L	SA479 Gr. 316L
25	1	FORK PIN	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410
26	1	SPINDLE NUT	A351 Gr. CF8M	A351 Gr. CF8M	A351 Gr. CF8M	A351 Gr. CF8M	A351 Gr. CF8M
27	1	LEVER PIN	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410
28	1	OVERLAP RING	SA351 Gr. CF8M	SA351 Gr. CF8M	SA351 Gr. CF8M	SA351 Gr. CF8M	SA351 Gr. CF8M
29	1	FORK	A216 Gr. WCC	A216 Gr. WCC	A216 Gr. WCC	A216 Gr. WCC	SA351 Gr. CF8M
30	1	LEVER	A216 Gr. WCC	A216 Gr. WCC	A216 Gr. WCC	A216 Gr. WCC	SA351 Gr. CF8M
33	3	CAP SCREW	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
34	1	DRAIN PLUG (1/2" NPTM)	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
35	4	COVER STUD	SA193 Gr. B7	SA193 Gr. B16	SA193 Gr. B16	SA193 Gr. B16	SA193 Gr. B8
45	1	LOWER SPRING WASHER	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410
46	1	SPRING	A232	A232	A232	A232	A313 Gr. 316
47	1	UPPER SPRING WASHER	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410
50	4	YOKE NUT	SA194 Gr. 2H	SA194 Gr. 2H	SA194 Gr. 7	SA194 Gr. 7	SA194 Gr. 8
56	1	DISC HOLDER	SA351 Gr. CF8M	SA351 Gr. CF8M	SA351 Gr. CF8M	SA351 Gr. CF8M	SA351 Gr. CF8M
113	1	INTERMEDIATE WASHER	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410	A479 Gr. 410

The below items are optional. Rep is given for your information. Visual is available at the end of this brochure.

31	1	TEST GAG	A216 Gr. WCC	A216 Gr. WCC	A216 Gr. WCC	A216 Gr. WCC	A216 Gr. WCC
108	1	WEATHERSHIELD	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel

The below items are ironmongery. Rep is given for your information. Please contact manufacturer for any further details if required.

70	1	SPINDLE NUT COTTER PIN	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
86	4	CIRCLIPS	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
87	4	COTTER PIN WASHER	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
89	1	LIFT STOP COTTER PIN	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
90	1	OVERLAP RING COTTER PIN	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
91	4	RETAINER PLATE SCREW	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
104	1	THRUST BEARING	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
105	4	LIFTING EYE BOLT	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel



2. Dimensons & Weight

DIMENSIONS & WEIGHTS

(metric)

FLANGE TYPE

Orifice F

	Inlet		Outlet		Dimensions [mm]											Weight [kg]±5%	
	Size (in)	class	Size (in)	Outlet	A±1.6	B±1.6	C±5	Z±5	L±5	D±1.6	E±1.6	H±0.5	F±0.5	R±1.6	S±10		T±10
PV72F11	1.5"	#150	2"	#150	124	121	596	735	145	22	38	96	40	250	100	165	26
PV72F21		#300			124	152	596	735	145	22	38	96	40				28
PV72F31		#600			124	152	595	735	145	22	38	96	40				28
PV73F42		#900	124	165	629	770	165	31	48	114	35	43					
PV73F52		#1500	124	165	629	770	165	31	48	114	35	43					
PV73F62		#2500	140	178	630	770	165	31	70	125	35	47					

Orifice G

	Inlet		Outlet		Dimensions [mm]											Weight [kg]±5%			
	Size (in)	class	Size (in)	Outlet	A±1.6	B±1.6	C±5	Z±5	L±5	D±1.6	E±1.6	H±0.5	F±0.5	R±1.6	S±10		T±10		
PV72F11	1.5"	#150	3"	#150	124	121	597	735	145	26	38	97	35	250	100	165	28		
PV72F21		#300				124	152	597	735	145	26	38	97				35	30	
PV72F31		#600				124	152	597	735	145	26	38	97				35	30	
PV73F42		#900			124	165	630	770	165	31	48	114	35				43		
PV73F52		2"			#1500	#300	156	171	662	807	190	31	57				114	28	54
PV73F62					#2500			171	662	807	190	31	70				129	34	59

Orifice H

	Inlet		Outlet		Dimensions [mm]											Weight [kg]±5%			
	Size (in)	class	Size (in)	Outlet	A±1.6	B±1.6	C±5	Z±5	L±5	D±1.6	E±1.6	H±0.5	F±0.5	R±1.6	S±10		T±10		
PV73H11	1.5"	#150	3"	#150	130	124	607	750	140	26	35	94	35	250	100	165	28		
PV23H21		#300					649	790	140	26	39	94	35				33		
PV23H31		#600					656	797	168	26	42	94	40				42		
PV23H41		#900			154	162	723	860	195	26	56	111	30				60		
PV23H52		#1500			#300	724	860	195	31	57	114	28	370				160	225	64

Orifice J

	Inlet		Outlet		Dimensions [mm]											Weight [kg]±5%				
	Size (in)	class	Size (in)	Outlet	A±1.6	B±1.6	C±5	Z±5	L±5	D±1.6	E±1.6	H±0.5	F±0.5	R±1.6	S±10		T±10			
PV23J11	2"	#150	3"	#150	137	124	645	785	165	26	36	101	35	250	100	165	38			
PV34J21		#300					181	683	825	165	26	46	139				52			
PV32J22		#300					196	683	825	165	34	46	139				35	370	160	225
PV34J31		#600			184	124	790	925	205	26	48	110	72							
PV34J41		#900					864	1000	250	26	55	118	0				430	200	290	102
PV34J52		#1500					864	1000	250	34	64	118	0				112			

Orifice K

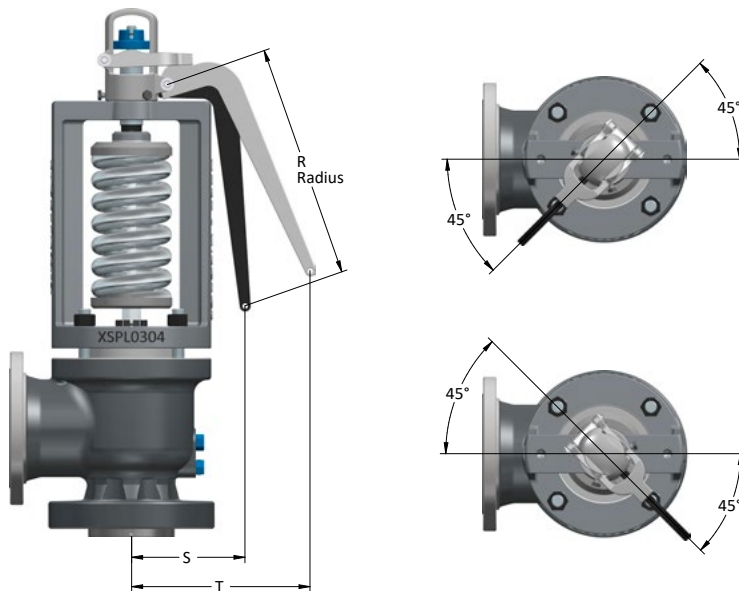
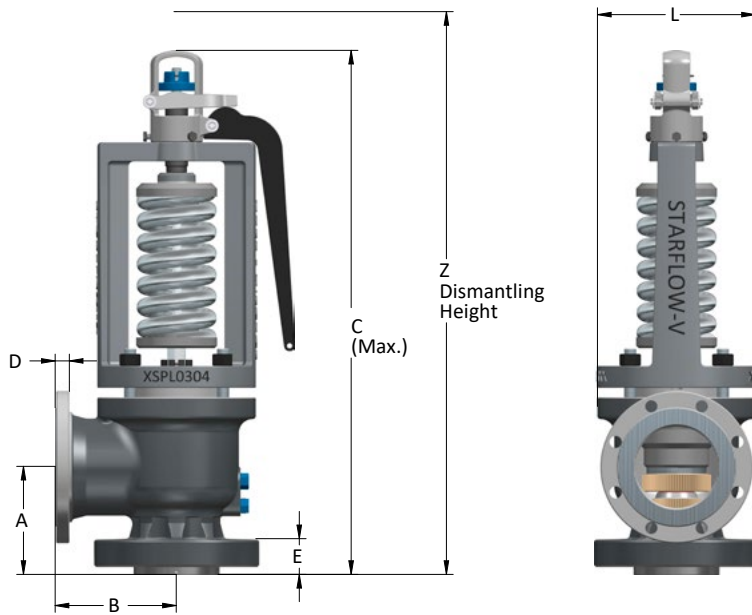
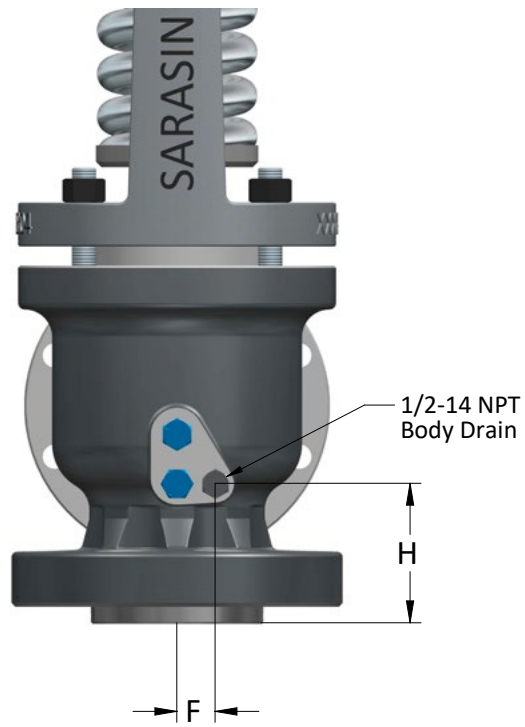
	Inlet		Outlet		Dimensions [mm]											Weight [kg]±5%				
	Size (in)	class	Size (in)	Outlet	A±1.6	B±1.6	C±5	Z±5	L±5	D±1.6	E±1.6	H±0.5	F±0.5	R±1.6	S±10		T±10			
PV34K11	3"	#150	4"	#150	156	162	724	860	195	26	40	110	35	370	160	225	60			
PV34K21		#300						184	181	790	925	205	26				48	110	35	64
PV34K31		#600						198	216	888	1020	255	28				55	119	0	109
PV36K41		#900			197	216	888	1020	255	39	64	124	0				430	200	290	124
PV36K52		#1500																		

Orifice L

	Inlet		Outlet		Dimensions [mm]											Weight [kg]±5%				
	Size (in)	class	Size (in)	Outlet	A±1.6	B±1.6	C±5	Z±5	L±5	D±1.6	E±1.6	H±0.5	F±0.5	R±1.6	S±10		T±10			
PV34L11	3"	#150	4"	#150	156	165	735	870	195	26	40	110	35	370	160	225	65			
PV46L21		#300						179	181	874	1010	250	28				50	131	45	107
PV46L31		#600						179	203	914	1050	265	28				56	131	45	128
PV46L32		#600			179	214	918	1055	265	39	56	131	45				430	200	290	130
PV46L41		#900																		197
PV46L42		#900			199	233	963	1100	290	39	64	128	35				430	200	290	171
PV46L52		#1500																		197

Orifice M

	Inlet		Outlet		Dimensions [mm]											Weight [kg]±5%				
	Size (in)	class	Size (in)	Outlet	A±1.6	B±1.6	C±5	Z±5	L±5	D±1.6	E±1.6	H±0.5	F±0.5	R±1.6	S±10		T±10			
PV46M11	4"	#150	6"	#150	178	184	876	1015	250	28	42	127	45	430	200	290	107			
PV46M21		#300					203	876	1015	250	28	48	129				45	112		
PV46M22		#300					203	876	1015	250	39	48	129				0	124		
PV46M31		#600			197	222	1019	1150	295	28	55	129	45				430	200	290	130
PV46M41		#900																		



FLANGE TYPE

Orifice N

	Inlet		Outlet		Dimensions [mm]											Weight [kg]±5%		
	Size (in)	class	Size (in)	Outlet	A±1.6	B±1.6	C±5	Z±5	L±5	D±1.6	E±1.6	H±0.5	F±0.5	R±1.6	S±10		T±10	
PV46N11	4"	#150	6"	#150	197	210	907	1040	250	28	42	136	45	430	200	290	113	
PV46N21		#300		#300			943	1075	250	28	48	134	45				120	
PV46N22		#300		#300			943	1075	250	39	48	134	45				122	
PV46N31		#600		#150			222	998	1125	295	28	55	136				45	135
PV46N41		#900					1019	1150	295	28	62	126	35				170	

Orifice P

	Inlet		Outlet		Dimensions [mm]											Weight [kg]±5%			
	Size (in)	class	Size (in)	Outlet	A±1.6	B±1.6	C±5	Z±5	L±5	D±1.6	E±1.6	H±0.5	F±0.5	R±1.6	S±10		T±10		
PV46P11	4"	#150	6"	#150	225	254	181	229	906	1045	250	28	42	126	45	430	200	290	120
PV46P21		#300		#300			989	1135	265	28	48	126	45	142					
PV46P31		#600		#300			1033	1170	295	28	55	126	45	165					
PV46P32		#900		#150			267	1033	1170	295	39	55	126	45	180				
PV46P41							254	1191	1330	315	28	62	133	0	630				240

Orifice Q

	Inlet		Outlet		Dimensions [mm]											Weight [kg]±5%	
	Size (in)	class	Size (in)	Outlet	A±1.6	B±1.6	C±5	Z±5	L±5	D±1.6	E±1.6	H±0.5	F±0.5	R±1.6	S±10		T±10
PV68Q11	6"	#150	8"	#150	240	241	1113	1250	315	31	47	143	45	630	240	360	195
PV68Q21		#300		#300			1208	1345	315	31	57	143	45				229
PV68Q31		#600					1273	1405	360	31	70	143	45				305

Orifice R

	Inlet		Outlet		Dimensions [mm]											Weight [kg]±5%		
	Size (in)	class	Size (in)	Outlet	A±1.6	B±1.6	C±5	Z±5	L±5	D±1.6	E±1.6	H±0.5	F±0.5	R±1.6	S±10		T±10	
PV68R11	6"	#150	8"	#150	240	267	241	1113	1245	315	31	47	145	45	630	240	360	199
PV68R21		#300	10"				1268	1400	315	33	57	143	45	285				
PV68R31		#600					1273	1410	360	33	70	143	45	322				

Orifice T

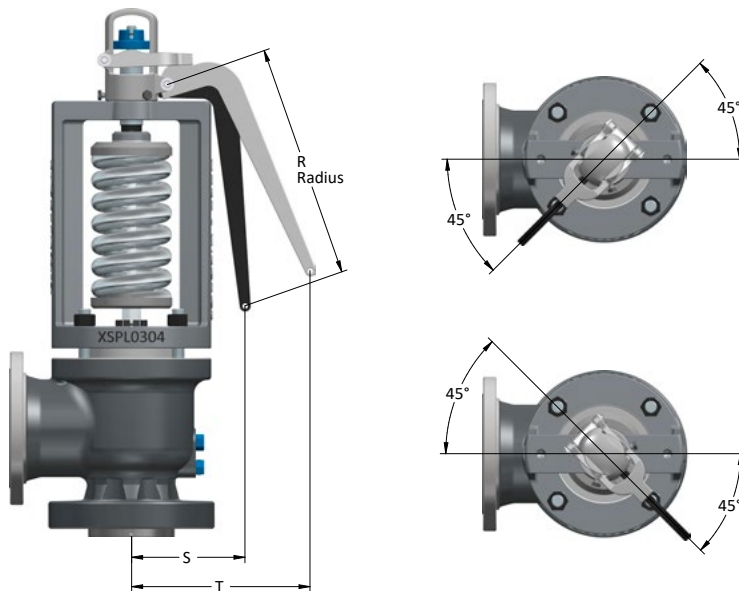
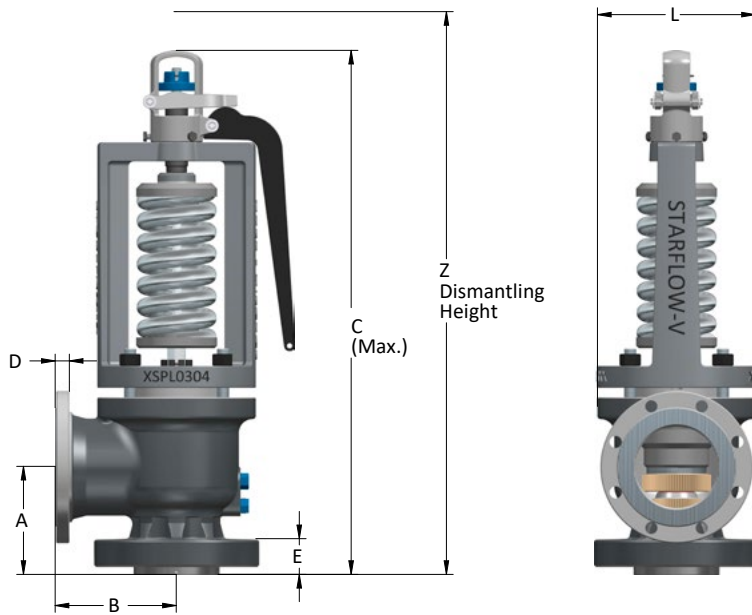
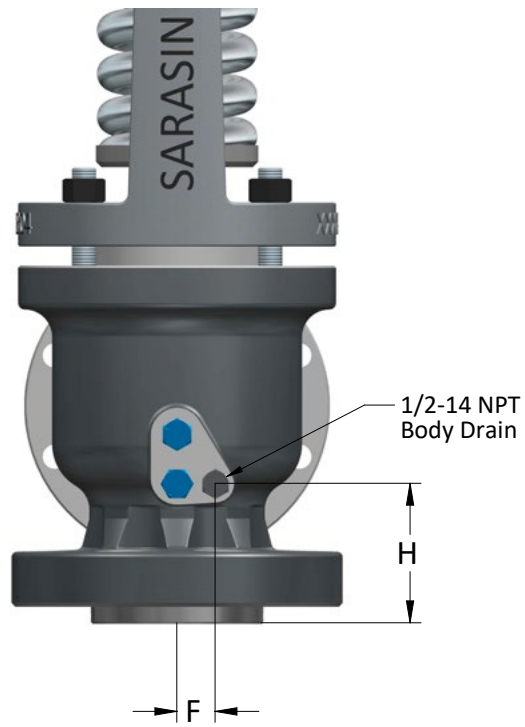
	Inlet		Outlet		Dimensions [mm]											Weight [kg]±5%	
	Size (in)	class	Size (in)	Outlet	A±1.6	B±1.6	C±5	Z±5	L±5	D±1.6	E±1.6	H±0.5	F±0.5	R±1.6	S±10		T±10
PV89T11	8"	#150	10"	#150	276	279	1341	1475	375	33	50	155	45	630	240	360	325
PV89T21		#300					1341	1475	375	33	63	155	45				355

Orifice V

	Inlet		Outlet		Dimensions [mm]											Weight [kg]±5%	
	Size (in)	class	Size (in)	Outlet	A±1.6	B±1.6	C±5	Z±5	L±5	D±1.6	E±1.6	H±0.5	F±0.5	R±1.6	S±10		T±10
PV9BV1	10"	#150	14"	#150	380	370	1560	1730	450	37	59	190	60	880	330	510	585
PV9BV2		#300					1765	1936	495	37	77	190	60				783

Orifice W

	Inlet		Outlet		Dimensions [mm]											Weight [kg]±5%	
	Size (in)	class	Size (in)	Outlet	A±1.6	B±1.6	C±5	Z±5	L±5	D±1.6	E±1.6	H±0.5	F±0.5	R±1.6	S±10		T±10
PVA2AW1	12"	#150	2x12"	#150	328	430	1772	1950	495	37	65	188	60	880	330	510	772
PVA2AW2		#300					1772	1950	495	37	85	188	60				890



FLANGE TYPE

Orifice F

Inlet		Outlet		Dimensions [in]											Weight [lb]±5%	
Size (in)	class	Size (in)	Outlet	A±0.06	B±0.06	C±0.2	Z±0.2	L±0.2	D±0.06	E±0.06	H±0.02	F±0.02	R±0.06	S±0.4	T±0.4	
1.5"	#150	2"	#150	4 7/8	4 3/4	23 1/2	29	5 1/2	6/7	1 1/2	37/9	14/7	9 5/6	4	6 1/2	58
	#300			6	23 1/2	29	5 1/2	6/7	1 1/2	37/9	14/7	62				
	#600				23 1/2	29	5 1/2	6/7	1 1/2	37/9	14/7	62				
	#900	3"	#300	4 7/8	6 1/2	25	30 1/2	6 1/2	12/9	1 7/8	4 1/2	13/8				94
	#1500					25	30 1/2	6 1/2	12/9	1 7/8	4 1/2	13/8				94
	#2500			5 1/2	7	25	30 1/2	6 1/2	12/9	2 3/4	5	13/8				104

Orifice G

Inlet		Outlet		Dimensions [in]											Weight [lb]±5%	
Size (in)	class	Size (in)	Outlet	A±0.06	B±0.06	C±0.2	Z±0.2	L±0.2	D±0.06	E±0.06	H±0.02	F±0.02	R±0.06	S±0.4	T±0.4	
1.5"	#150	3"	#150	4 7/8	4 3/4	23 1/2	29	5 1/2	1	1 1/2	35/6	13/8	9 5/6	4	6 1/2	62
	#300				6	23 1/2	29	5 1/2	1	1 1/2	35/6	13/8				66
	#600					23 1/2	29	5 1/2	1	1 1/2	35/6	13/8				66
	#900			6 1/2	25	30 1/2	6 1/2	12/9	1 7/8	4 1/2	13/8	94				
	2"			#1500	#300	6 1/8	6 3/4	26	32	7 1/2	12/9	2 1/4				4 1/2
#2500		26	32	7 1/2				12/9	2 3/4	5	11/3	129				

Orifice H

Inlet		Outlet		Dimensions [in]											Weight [lb]±5%												
Size (in)	class	Size (in)	Outlet	A±0.06	B±0.06	C±0.2	Z±0.2	L±0.2	D±0.06	E±0.06	H±0.02	F±0.02	R±0.06	S±0.4	T±0.4												
1.5"	#150	3"	#150	5 1/8	4 7/8	24	29 1/2	5 1/2	1	1 3/8	35/7	13/8	9 5/6	4	6 1/2	62											
	#300					25 1/2	31	5 1/2	1	1 1/2	35/7	13/8				73											
2"	#600			6 3/8	6	26	31 1/2	6 1/2	1	12/3	35/7	14/7				13/8	14 4/7	6 1/2	9	93							
	#900																			28 1/2	34	7 1/2	1	2 1/5	43/8	11/6	132
	#1500																			28 1/2	34	7 1/2	12/9	2 1/4	4 1/2	11/9	141

Orifice J

Inlet		Outlet		Dimensions [in]											Weight [lb]±5%							
Size (in)	class	Size (in)	Outlet	A±0.06	B±0.06	C±0.2	Z±0.2	L±0.2	D±0.06	E±0.06	H±0.02	F±0.02	R±0.06	S±0.4	T±0.4							
2"	#150	3"	#150	5 3/8	4 7/8	25 1/2	31	6 1/2	1	1 3/7	4	13/8	9 5/6	4	6 1/2	84						
	#300					7 1/8	27	32 1/2	6 1/2	1	1 4/5	5 1/2				115						
	3"			#300	4"	#300	7 1/4	4 7/8	7 5/7	27	32 1/2	6 1/2				1 1/3	1 4/5	5 1/2	14 4/7	6 1/2	9	122
				#600					31	36 1/2	8	1				1 8/9	4 1/3	159				
				#900					34	39 1/2	10	1				2 1/6	4 2/3	0				225
				#1500					34	39 1/2	10	1 1/3				2 1/2	4 2/3	0				247

Orifice K

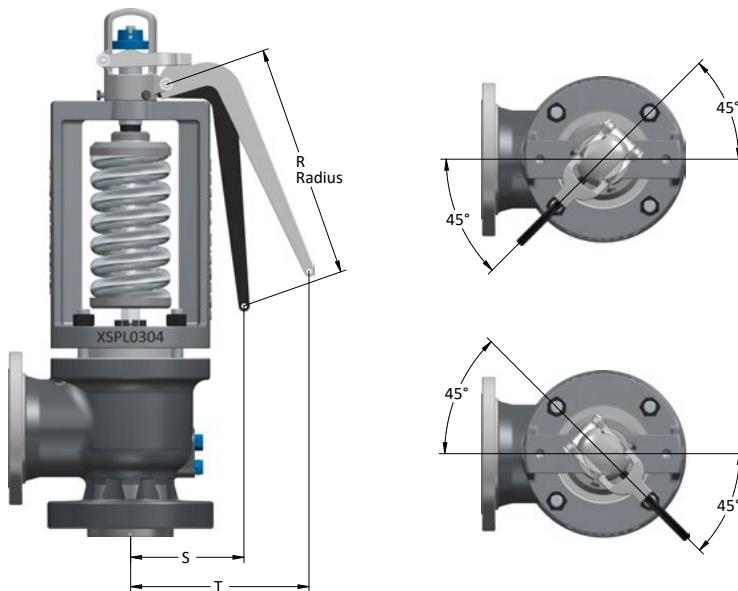
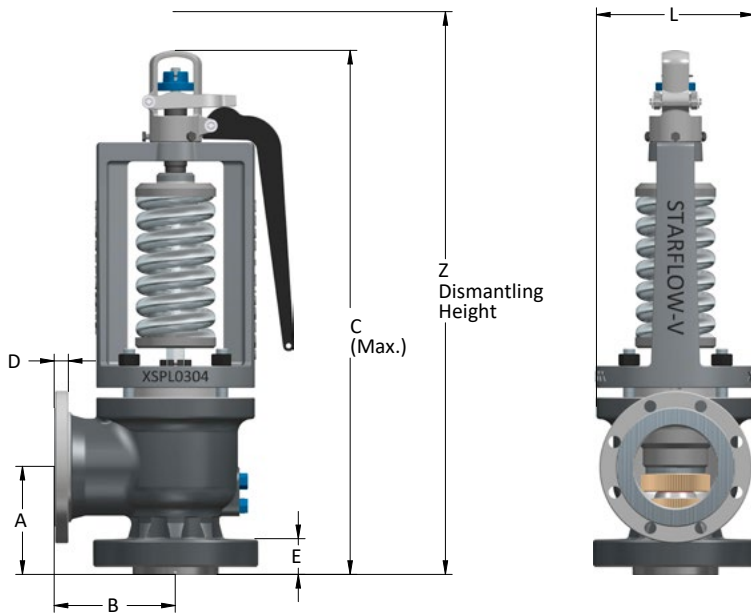
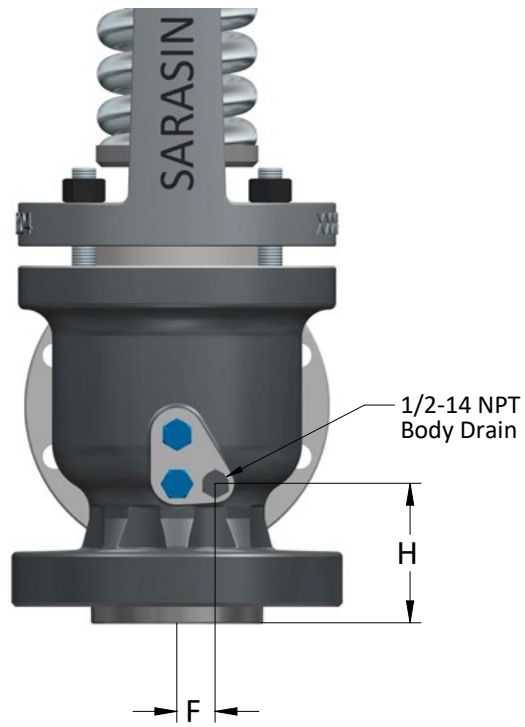
Inlet		Outlet		Dimensions [in]											Weight [lb]±5%					
Size (in)	class	Size (in)	Outlet	A±0.06	B±0.06	C±0.2	Z±0.2	L±0.2	D±0.06	E±0.06	H±0.02	F±0.02	R±0.06	S±0.4	T±0.4					
3"	#150	4"	#150	6 1/8	6 3/8	28 1/2	34	7 1/2	1	1 4/7	4 1/3	13/8	14 4/7	6 1/2	9	132				
	#300						34	7 1/2	1	1 4/5	4 1/3	17/9				141				
	#600			7 1/4	7 1/8	31	36 1/2	8	1	1 8/9	4 1/3	13/8				157				
	6"			#900	7 4/5	8 1/2	35	40	10	1	2 1/6	4 2/3				0	17	8	11 1/2	240
				#1500			7 3/4	8 1/2	35	40	10	1 1/2				2 1/2	4 7/8	0	273	

Orifice L

Inlet		Outlet		Dimensions [in]											Weight [lb]±5%										
Size (in)	class	Size (in)	Outlet	A±0.06	B±0.06	C±0.2	Z±0.2	L±0.2	D±0.06	E±0.06	H±0.02	F±0.02	R±0.06	S±0.4	T±0.4										
3"	#150	4"	#150	6 1/8	6 1/2	29	34 1/2	7 1/2	1	1 4/7	4 1/3	13/8	14 4/7	6 1/2	9	143									
	#300						7 1/8	34 1/2	40	10	1	2				5 1/7	17/9	236							
	#600						8	36	41 1/2	10 1/2	1	2 1/5				5 1/7	17/9	282							
	4"			#600	6"	#300	7	8 4/9	36	41 1/2	10 1/2	1 1/2				2 1/5	5 1/7	17/9	17	8	11 1/2	287			
				#900						7 3/4	8 3/4	38				43 1/2	11 1/2	1				2 1/2	5	13/8	353
				#1500						7 4/5	9 1/5	38				43 1/2	11 1/2	1 1/2				2 1/2	5	13/8	377
	4"			#1500	#300	7 3/4	8 3/4	41 1/2	47	12 1/2	11 1/2	1 1/2				2 7/9	5 7/9	25/9	17	8	11 1/2	456			

Orifice M

Inlet		Outlet		Dimensions [in]											Weight [lb]±5%								
Size (in)	class	Size (in)	Outlet	A±0.06	B±0.06	C±0.2	Z±0.2	L±0.2	D±0.06	E±0.06	H±0.02	F±0.02	R±0.06	S±0.4	T±0.4								
4"	#150	6"	#150	7	7 1/4	34 1/2	40	10	1	1 2/3	5	17/9	17	8	11 1/2	236							
	#300						34 1/2	40	10	1	1 8/9	5				17/9	247						
	#600						8	34 1/2	40	10	1 1/2	1 8/9				5	0	272					
	#900			7 3/4	8 3/4	40 1/8	45 1/2	11 1/2	1	36 1/2	41 1/2	10 1/2				1	2 1/6	5	17/9	287			
										#1500	7 3/4	8 3/4				40 1/8	45 1/2	11 1/2	1	2 4/9	5 1/9	17/9	375



FLANGE TYPE

Orifice N

	Inlet		Outlet		Dimensions [in]											Weight [lb]±5%		
	Size (in)	class	Size (in)	Outlet	A±0.06	B±0.06	C±0.2	Z±0.2	L±0.2	D±0.06	E±0.06	H±0.02	F±0.02	R±0.06	S±0.4		T±0.4	
PV46N11	4"	#150	6"	#150	7 3/4	8 1/4	35 1/2	41	10	1	1 2/3	5 1/3	1 7/9	17	8	11 1/2	249	
PV46N21		#300		#300			37	42 1/2	10	1	1 8/9	5 2/7	1 7/9				265	
PV46N22		#300		#300			37	42 1/2	10	1 1/2	1 8/9	5 2/7	1 7/9				269	
PV46N31		#600		#150			8 3/4	39 1/2	44 1/2	11 1/2	1	2 1/6	5 1/3				1 7/9	298
PV46N42		#900		#150			40	45 1/2	11 1/2	1	2 4/9	5	13/8				375	

Orifice P

	Inlet		Outlet		Dimensions [in]											Weight [lb]±5%	
	Size (in)	class	Size (in)	Outlet	A±0.06	B±0.06	C±0.2	Z±0.2	L±0.2	D±0.06	E±0.06	H±0.02	F±0.02	R±0.06	S±0.4		T±0.4
PV46P11	4"	#150	6"	#150	7 1/8	9	35 1/2	41	10	1	1 2/3	5	1 7/9	17	8	11 1/2	265
PV46P21		#300		#300	8 7/8	10	39	44 1/2	10 1/2	1	1 8/9	5	1 7/9				313
PV46P31		#600		#300			40 1/2	46	11 1/2	1	2 1/6	5	1 7/9				24 4/5
PV46P32		#600		#300	10 1/2	40 1/2	46	11 1/2	1 1/2	2 1/6	5	1 7/9	397				
PV46P41		#900		#150	10	47	52 1/2	12 1/2	1	2 4/9	5 1/4	0	24 4/5	9 1/2	14	472	

Orifice Q

	Inlet		Outlet		Dimensions [mm]											Weight [lb]±5%	
	Size (in)	class	Size (in)	Outlet	A±0.06	B±0.06	C±0.2	Z±0.2	L±0.2	D±0.06	E±0.06	H±0.02	F±0.02	R±0.06	S±0.4		T±0.4
PV68Q11	6"	#150	8"	#150	9 4/9	9 1/2	44	49	12 1/2	1 2/9	1 5/6	5 5/8	1 7/9	24 4/5	9 1/2	14	430
PV68Q21		#300		#300			47 1/2	53	12 1/2	1 2/9	2 1/4	5 5/8	1 7/9				505
PV68Q31		#600		#300			50	55 1/2	14	1 2/9	2 3/4	5 5/8	1 7/9				672

Orifice R

	Inlet		Outlet		Dimensions [in]											Weight [lb]±5%	
	Size (in)	class	Size (in)	Outlet	A±0.06	B±0.06	C±0.2	Z±0.2	L±0.2	D±0.06	E±0.06	H±0.02	F±0.02	R±0.06	S±0.4		T±0.4
PV69R11	6"	#150	8"	#150	9 4/9	10 1/2	44	49	12 1/2	1 2/9	1 5/6	5 2/3	1 7/9	24 4/5	9 1/2	14	439
PV69R21		#300	10"				50	55	12 1/2	1 2/7	2 1/4	5 5/8	1 7/9				628
PV69R31		#600	10"				50	55 1/2	14	1 2/7	2 3/4	5 5/8	1 7/9				710

Orifice T

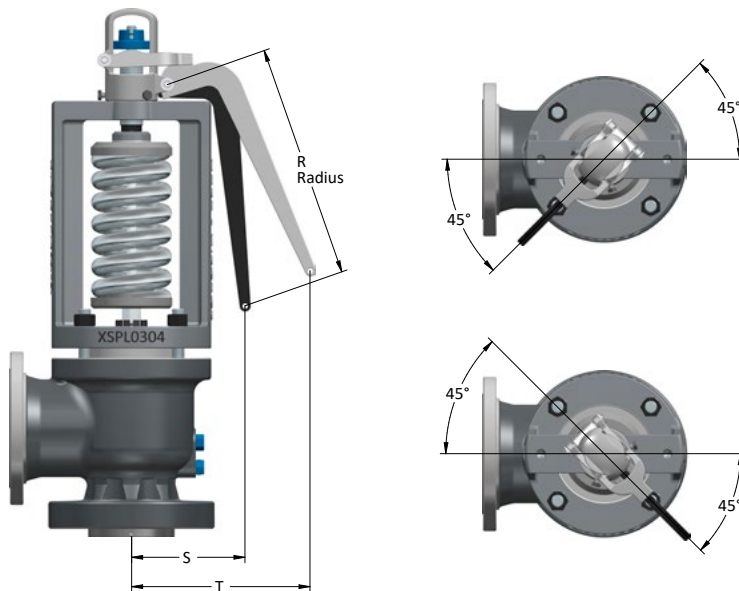
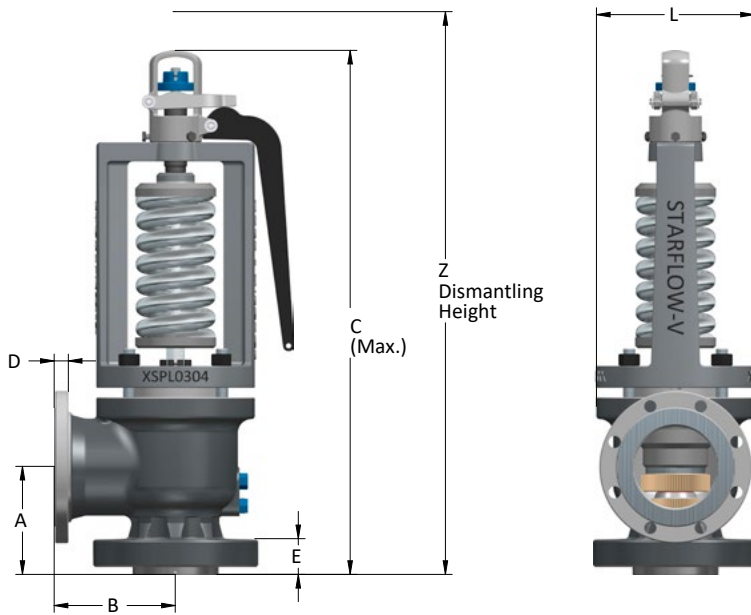
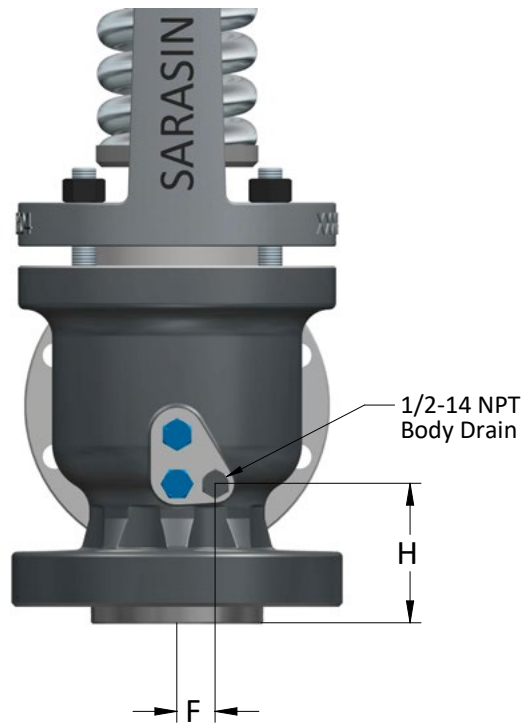
	Inlet		Outlet		Dimensions [in]											Weight [lb]±5%	
	Size (in)	class	Size (in)	Outlet	A±0.06	B±0.06	C±0.2	Z±0.2	L±0.2	D±0.06	E±0.06	H±0.02	F±0.02	R±0.06	S±0.4		T±0.4
PV89T11	8"	#150	10"	#150	10 7/8	11	53	58	15	1 2/7	2	6 1/8	1 7/9	24 4/5	9 1/2	14	717
PV89T21		#300					53	58	15	1 2/7	2 1/2	6 1/8	1 7/9				783

Orifice V

	Inlet		Outlet		Dimensions [in]											Weight [lb]±5%	
	Size (in)	class	Size (in)	Outlet	A±0.06	B±0.06	C±0.2	Z±0.2	L±0.2	D±0.06	E±0.06	H±0.02	F±0.02	R±0.06	S±0.4		T±0.4
PV9BV1	10"	#150	14"	#150	15	14 4/7	61 1/2	68	17 1/2	1 1/2	2 1/3	7 1/2	2 1/3	34 2/3	13	20	1290
PV9BV2		#300					69 1/2	76	19 1/2	1 1/2	3	7 1/2	2 1/3				1726

Orifice W

	Inlet		Outlet		Dimensions [in]											Weight [lb]±5%	
	Size (in)	class	Size (in)	Outlet	A±0.06	B±0.06	C±0.2	Z±0.2	L±0.2	D±0.06	E±0.06	H±0.02	F±0.02	R±0.06	S±0.4		T±0.4
PVA2AW1	12"	#150	2x12"	#150	13	17	70	77	19 1/2	1 1/2	2 5/9	7 2/5	2 1/3	34 2/3	13	20	1702
PVA2AW2		#300					70	77	19 1/2	1 1/2	3 1/3	7 2/5	2 1/3				1962





3. Pressure Temperature Class

Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

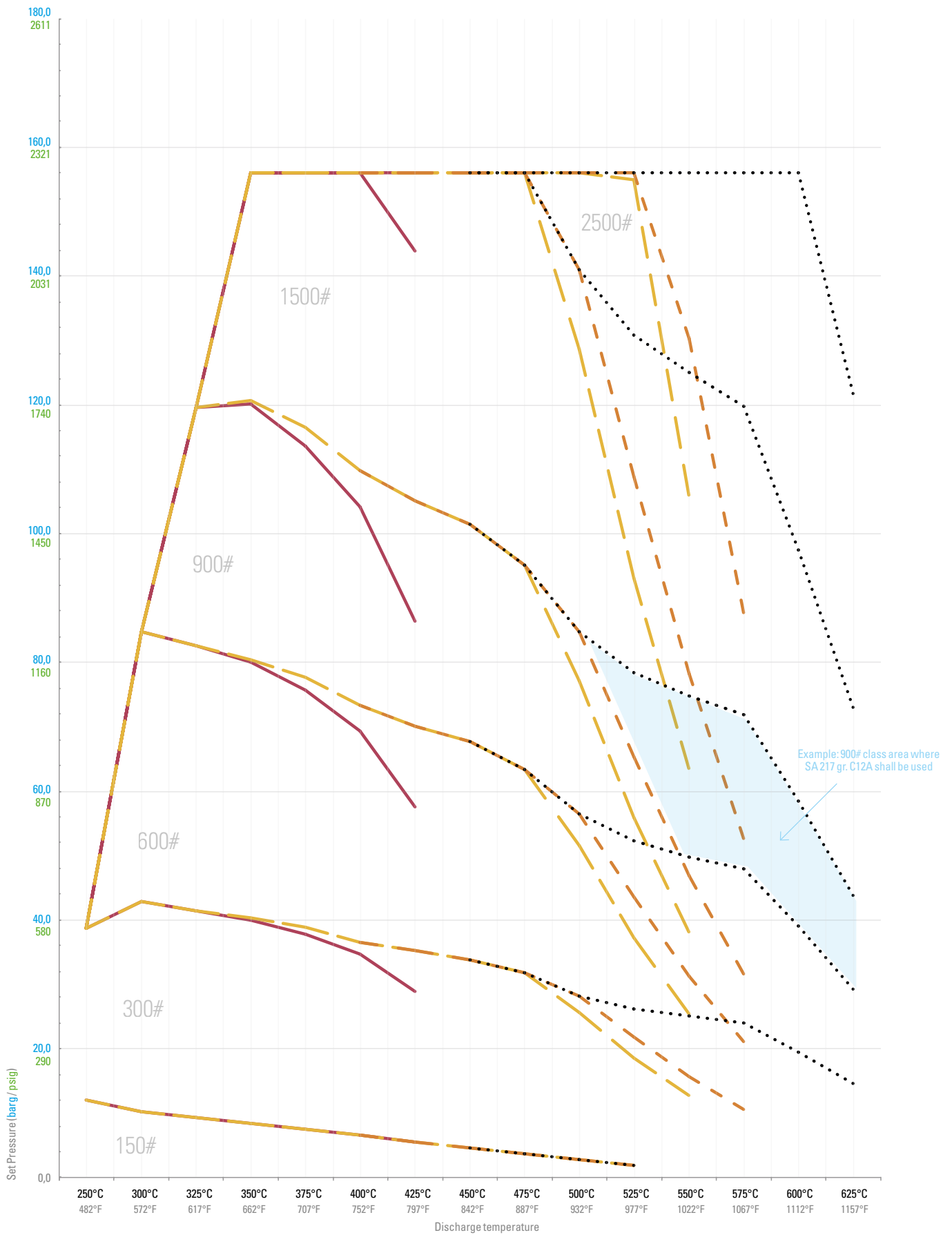
Orifice: F
2,406 cm² / 0,373 in²

CODE	Max. SET PRESSURE															BODY MAT.
	barg / psig															
	482°F	572°F	617°F	662°F	707°F	752°F	797°F	842°F	887°F	932°F	977°F	1022°F	1067°F	1112°F	1157°F	
250 °C	300 °C	325 °C	350 °C	375 °C	400 °C	425 °C	450 °C	475 °C	500 °C	525 °C	550 °C	575 °C	600 °C	625 °C		
PV72F1-30	12,1	10,2	9,3	8,4	7,4	6,5	5,5									SA 216 gr. WCC
	175	148	135	122	107	94	80									
PV72F2-30 ⁽²⁾	38,7	42,9	41,4	40,0	37,8	34,7	28,8									
	561	622	600	580	548	503	418									
PV72F3-30 ⁽²⁾	38,7	84,8	82,6	80,0	75,7	69,4	57,5									
	561	1230	1198	1160	1098	1007	834									
PV73F4-30	38,7	84,8	119,5	120,1	113,5	104,2	86,3									
	561	1230	1733	1742	1646	1511	1252									
PV73F5-30	38,7	84,8	119,5	156,0	156,0	156,0	143,8									
	561	1230	1733	2263	2263	2263	2086									
PV73F6-30	38,7	84,8	119,5	156,0	156,0	156,0	156,0									
	561	1230	1733	2263	2263	2263	2263									
PV72F1-32	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9					SA 217 gr. WCC6
	175	148	135	122	107	94	80	67	54	41	27					
PV72F2-32 ⁽²⁾	38,7	42,9	41,4	40,3	38,9	36,5	35,2	33,7	31,7	25,7	18,6	12,7				
	561	622	600	585	564	529	511	489	460	373	270	184				
PV72F3-32 ⁽²⁾	38,7	84,8	82,6	80,4	77,6	73,3	70,0	67,7	63,4	51,5	37,2	25,4				
	561	1230	1198	1166	1125	1063	1015	982	920	747	540	368				
PV73F4-32	38,7	84,8	119,5	120,7	116,5	109,8	105,1	101,4	95,1	77,2	55,8	38,1				
	561	1230	1733	1751	1690	1593	1524	1471	1379	1120	810	553				
PV73F5-32	38,7	84,8	119,5	156,0	156,0	156,0	156,0	156,0	156,0	128,6	93,0	63,5				
	561	1230	1733	2263	2263	2263	2263	2263	2263	1865	1349	921				
PV73F6-32	38,7	84,8	119,5	156,0	156,0	156,0	156,0	156,0	156,0	156,0	155,0	105,9				
	561	1230	1733	2263	2263	2263	2263	2263	2263	2263	2248	1536				
PV72F1-42						6,5	5,5	4,6	3,7	2,8	1,9					SA 217 gr. WCC9
						94	80	67	54	41	27					
PV72F2-42 ⁽²⁾						36,5	35,2	33,7	31,7	28,2	21,8	15,6	10,5			
						529	511	489	460	409	315	226	152			
PV72F3-42 ⁽²⁾						73,3	70,0	67,7	63,4	56,5	43,6	31,3	21,1			
						1063	1015	982	920	819	632	454	306			
PV73F4-42						109,8	105,1	101,4	95,1	84,7	65,4	46,9	31,6			
						1593	1524	1471	1379	1228	948	680	458			
PV73F5-42						156,0	156,0	156,0	156,0	140,9	108,9	78,2	52,6			
						2263	2263	2263	2263	2044	1579	1134	763			
PV73F6-42						156,0	156,0	156,0	156,0	156,0	156,0	130,3	87,7			
						2263	2263	2263	2263	2263	2263	1890	1272			
PV72F1-52								4,6	3,7	2,8	1,9					SA 217 gr. C12A
								67	54	41	27					
PV72F2-52 ⁽²⁾								33,7	31,7	28,2	26,2	25,0	24,0	19,5	14,6	
								489	460	409	380	363	348	283	212	
PV72F3-52 ⁽²⁾								67,7	63,4	56,5	52,2	49,8	47,9	39,0	29,2	
								982	920	819	757	722	695	566	424	
PV73F4-52								101,4	95,1	84,7	78,5	74,8	71,8	58,5	43,8	
								1471	1379	1228	1138	1085	1041	848	635	
PV73F5-52								156,0	156,0	140,9	130,8	124,9	119,7	97,5	73,0	
								2263	2263	2044	1897	1812	1736	1414	1059	
PV73F6-52								156,0	156,0	156,0	156,0	156,0	156,0	156,0	121,7	
								2263	2263	2263	2263	2263	2263	2263	1765	
PV72F1-16	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9					SA 351 gr. CF8M
	175	148	135	122	107	94	80	67	54	41	27					
PV72F2-16 ⁽²⁾	33,4	31,6	30,9	30,3	29,9	29,4	29,1	28,8	28,7	28,2	26,2	25,0	24,0	19,9	15,8	
	484	458	448	439	434	426	422	418	416	409	380	363	348	289	229	
PV72F3-16 ⁽²⁾	38,7	63,2	61,8	60,7	59,8	58,9	58,3	57,7	57,3	56,5	52,2	49,8	47,9	39,8	31,6	
	561	917	896	880	867	854	846	837	831	819	757	722	695	577	458	
PV73F4-16	38,7	84,8	92,7	91,0	89,6	88,3	87,4	86,5	86,0	84,7	78,5	74,8	71,8	59,7	47,4	
	561	1230	1345	1320	1300	1281	1268	1255	1247	1228	1138	1085	1041	866	687	
PV73F5-16	38,7	84,8	119,5	151,6	149,4	147,2	145,7	144,2	143,4	140,9	130,8	124,9	119,7	99,5	79,1	
	561	1230	1733	2199	2167	2135	2113	2091	2080	2044	1897	1812	1736	1443	1147	
PV73F6-16	38,7	84,8	119,5	156,0	156,0	156,0	156,0	156,0	156,0	156,0	156,0	156,0	156,0	156,0	131,8	
	561	1230	1733	2263	2263	2263	2263	2263	2263	2263	2263	2263	2263	2263	1912	

NOTE

⁽¹⁾ N/A
⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

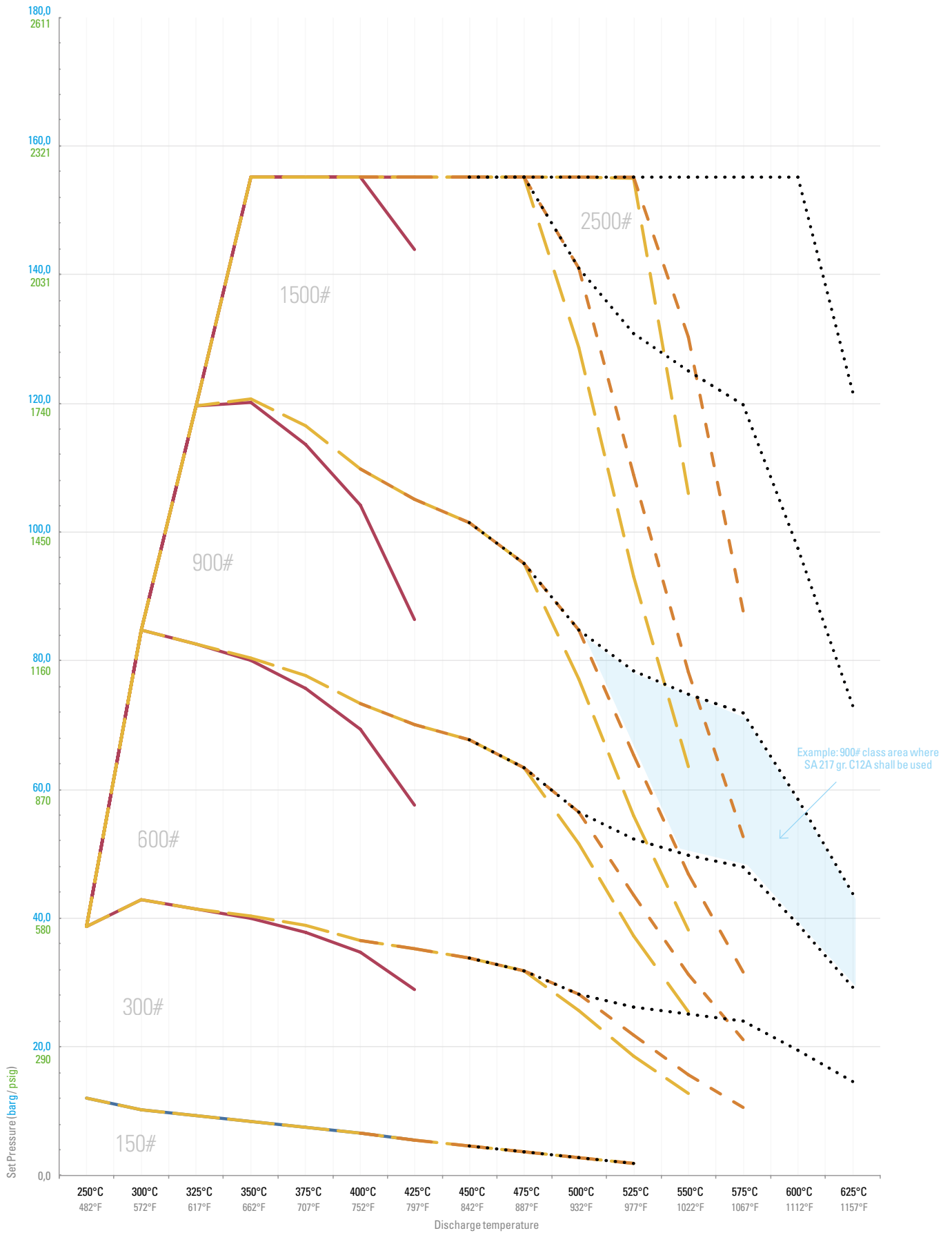
Orifice: G
3,800 cm² / 0,589 in²

CODE	Max. SET PRESSURE															BODY MAT.
	barg / psig															
	482°F	572°F	617°F	662°F	707°F	752°F	797°F	842°F	887°F	932°F	977°F	1022°F	1067°F	1112°F	1157°F	
250 °C	300 °C	325 °C	350 °C	375 °C	400 °C	425 °C	450 °C	475 °C	500 °C	525 °C	550 °C	575 °C	600 °C	625 °C		
PV73G1-30	12,1	10,2	9,3	8,4	7,4	6,5	5,5									SA 216 gr. WCC
	175	148	135	122	107	94	80									
PV73G2-30 ⁽²⁾	38,7	42,9	41,4	40,0	37,8	34,7	28,8									
	561	622	600	580	548	503	418									
PV73G3-30 ⁽²⁾	38,7	84,8	82,6	80,0	75,7	69,4	57,5									
	561	1230	1198	1160	1098	1007	834									
PV73G4-30	38,7	84,8	119,5	120,1	113,5	104,2	86,3									
	561	1230	1733	1742	1646	1511	1252									
PV23G5-30	38,7	84,8	119,5	155,1	155,1	155,1	143,8									
	561	1230	1733	2250	2250	2250	2086									
PV23G6-30	38,7	84,8	119,5	155,1	155,1	155,1	155,1									
	561	1230	1733	2250	2250	2250	2250									
PV73G1-32	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9					SA 217 gr. WCC6
	175	148	135	122	107	94	80	67	54	41	27					
PV73G2-32 ⁽²⁾	38,7	42,9	41,4	40,3	38,9	36,5	35,2	33,7	31,7	25,7	18,6	12,7				
	561	622	600	585	564	529	511	489	460	373	270	184				
PV73G3-32 ⁽²⁾	38,7	84,8	82,6	80,4	77,6	73,3	70,0	67,7	63,4	51,5	37,2	25,4				
	561	1230	1198	1166	1125	1063	1015	982	920	747	540	368				
PV73G4-32	38,7	84,8	119,5	120,7	116,5	109,8	105,1	101,4	95,1	77,2	55,8	38,1				
	561	1230	1733	1751	1690	1593	1524	1471	1379	1120	810	553				
PV23G5-32	38,7	84,8	119,5	155,1	155,1	155,1	155,1	155,1	155,1	128,6	93,0	63,5				
	561	1230	1733	2250	2250	2250	2250	2250	2250	1865	1349	921				
PV23G6-32	38,7	84,8	119,5	155,1	155,1	155,1	155,1	155,1	155,1	155,0	105,9					
	561	1230	1733	2250	2250	2250	2250	2250	2250	2248	1536					
PV73G1-42						6,5	5,5	4,6	3,7	2,8	1,9					SA 217 gr. WCC9
						94	80	67	54	41	27					
PV73G2-42 ⁽²⁾						36,5	35,2	33,7	31,7	28,2	21,8	15,6	10,5			
						529	511	489	460	409	315	226	152			
PV73G3-42 ⁽²⁾						73,3	70,0	67,7	63,4	56,5	43,6	31,3	21,1			
						1063	1015	982	920	819	632	454	306			
PV73G4-42						109,8	105,1	101,4	95,1	84,7	65,4	46,9	31,6			
						1593	1524	1471	1379	1228	948	680	458			
PV23G5-42						155,1	155,1	155,1	155,1	140,9	108,9	78,2	52,6			
						2250	2250	2250	2250	2044	1579	1134	763			
PV23G6-42						155,1	155,1	155,1	155,1	155,1	155,1	130,3	87,7			
						2250	2250	2250	2250	2250	2250	1890	1272			
PV73G1-52								4,6	3,7	2,8	1,9					SA 217 gr. C12A
								67	54	41	27					
PV73G2-52 ⁽²⁾								33,7	31,7	28,2	26,2	25,0	24,0	19,5	14,6	
								489	460	409	380	363	348	283	212	
PV73G3-52 ⁽²⁾								67,7	63,4	56,5	52,2	49,8	47,9	39,0	29,2	
								982	920	819	757	722	695	566	424	
PV73G4-52								101,4	95,1	84,7	78,5	74,8	71,8	58,5	43,8	
								1471	1379	1228	1138	1085	1041	848	635	
PV23G5-52								155,1	155,1	140,9	130,8	124,9	119,7	97,5	73,0	
								2250	2250	2044	1897	1812	1736	1414	1059	
PV23G6-52								155,1	155,1	155,1	155,1	155,1	155,1	155,1	121,7	
								2250	2250	2250	2250	2250	2250	2250	1765	
PV73G1-16	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9					SA 351 gr. CF8M
	175	148	135	122	107	94	80	67	54	41	27					
PV73G2-16 ⁽²⁾	33,4	31,6	30,9	30,3	29,9	29,4	29,1	28,8	28,7	28,2	26,2	25,0	24,0	19,5	15,8	
	484	458	448	439	434	426	422	418	416	409	380	363	348	289	229	
PV73G3-16 ⁽²⁾	38,7	63,2	61,8	60,7	59,8	58,9	58,3	57,7	57,3	56,5	52,2	49,8	47,9	39,8	31,6	
	561	917	896	880	867	854	846	837	831	819	757	722	695	577	458	
PV73G4-16	38,7	84,8	92,7	91,0	89,6	88,3	87,4	86,5	86,0	84,7	78,5	74,8	71,8	59,7	47,4	
	561	1230	1345	1320	1300	1281	1268	1255	1247	1228	1138	1085	1041	866	687	
PV23G5-16	38,7	84,8	119,5	151,6	149,4	147,2	145,7	144,2	143,4	140,9	130,8	124,9	119,7	99,5	79,1	
	561	1230	1733	2199	2167	2135	2113	2091	2080	2044	1897	1812	1736	1443	1147	
PV23G6-16	38,7	84,8	119,5	155,1	155,1	155,1	155,1	155,1	155,1	155,1	155,1	155,1	155,1	155,1	131,8	
	561	1230	1733	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	1912	

NOTE

- ⁽¹⁾ N/A
- ⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

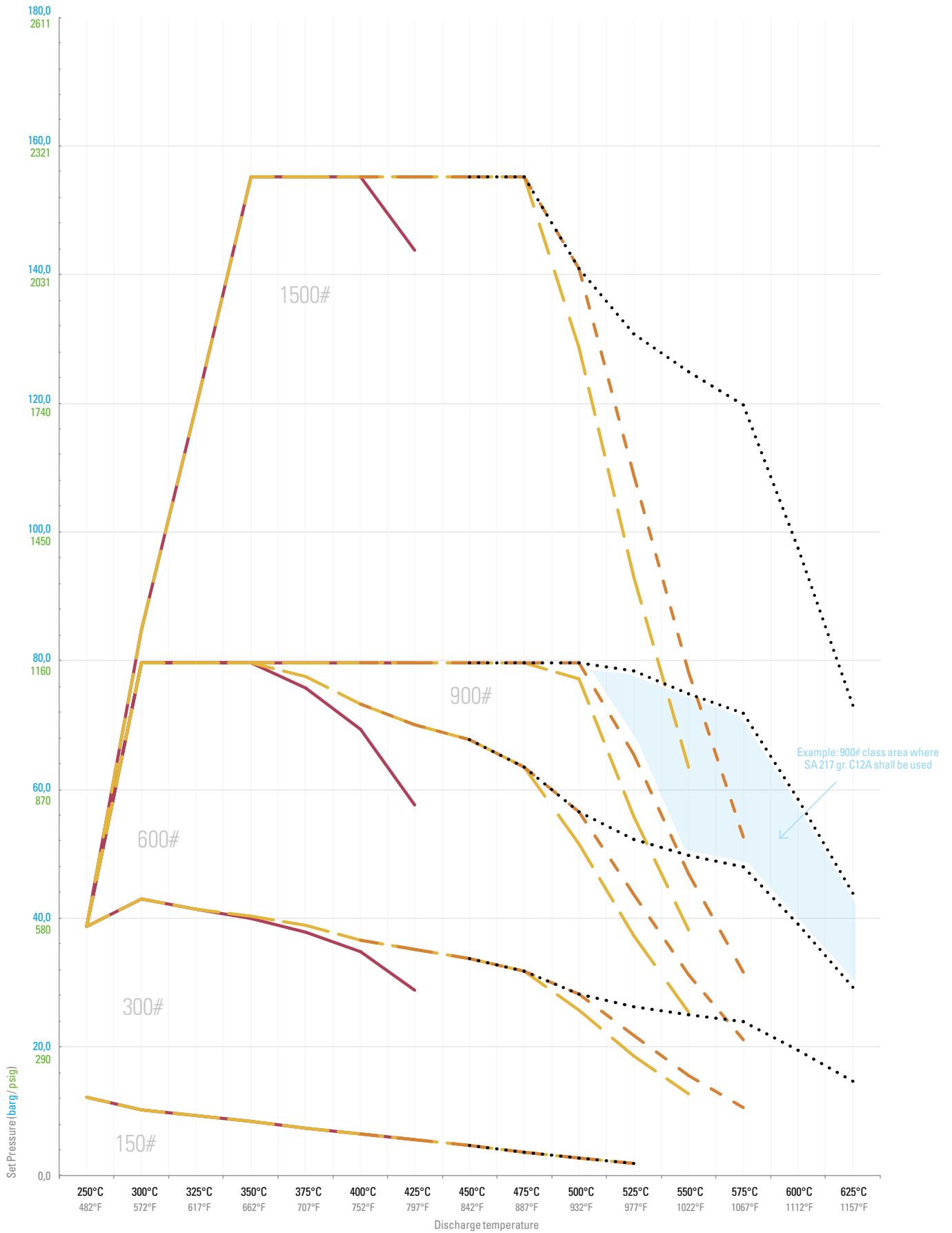
Orifice: H
6,426 cm² / 0,996 in²

CODE	Max. SET PRESSURE															BODY MAT.		
	barg / psig																	
	482°F	572°F	617°F	662°F	707°F	752°F	797°F	842°F	887°F	932°F	977°F	1022°F	1067°F	1112°F	1157°F			
250 °C	300 °C	325 °C	350 °C	375 °C	400 °C	425 °C	450 °C	475 °C	500 °C	525 °C	550 °C	575 °C	600 °C	625 °C				
PV73H1-30	12,1	10,2	9,3	8,4	7,4	6,5	5,5										SA 216 gr. WC6	
	175	148	135	122	107	94	80											
PV23H2-30 ⁽²⁾	38,7	42,9	41,4	40,0	37,8	34,7	28,8											
	561	622	600	580	548	503	418											
PV23H3-30 ⁽²⁾	38,7	79,6	79,6	79,6	75,7	69,4	57,5											
	561	1154	1154	1154	1098	1007	834											
PV23H4-30 ⁽²⁾	38,7	79,6	79,6	79,6	79,6	79,6	79,6											
	561	1154	1154	1154	1154	1154	1154											
PV23H5-30	38,7	84,8	119,5	155,1	155,1	155,1	143,8											
	561	1230	1733	2250	2250	2250	2086											
PV73H1-32	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9							SA 217 gr. WC6
	175	148	135	122	107	94	80	67	54	41	27							
PV23H2-32 ⁽²⁾	38,7	42,9	41,4	40,3	38,9	36,5	35,2	33,7	31,7	25,7	18,6	12,7						
	561	622	600	585	564	529	511	489	460	373	270	184						
PV23H3-32 ⁽²⁾	38,7	79,6	79,6	79,6	77,6	73,3	70,0	67,7	63,4	51,5	37,2	25,4						
	561	1154	1154	1154	1125	1063	1015	982	920	747	540	368						
PV23H4-32 ⁽²⁾	38,7	79,6	79,6	79,6	79,6	79,6	79,6	79,6	79,6	77,2	55,8	38,1						
	561	1154	1154	1154	1154	1154	1154	1154	1154	1120	810	553						
PV23H5-32	38,7	84,8	119,5	155,1	155,1	155,1	155,1	155,1	155,1	128,6	93,0	63,5						
	561	1230	1733	2250	2250	2250	2250	2250	2250	1865	1349	921						
PV73H1-42						6,5	5,5	4,6	3,7	2,8	1,9						SA 217 gr. WC9	
						94	80	67	54	41	27							
PV23H2-42 ⁽²⁾						36,5	35,2	33,7	31,7	28,2	21,8	15,6	10,5					
						529	511	489	460	409	315	226	152					
PV23H3-42 ⁽²⁾						73,3	70,0	67,7	63,4	56,5	43,6	31,3	21,1					
						1063	1015	982	920	819	632	454	306					
PV23H4-42 ⁽²⁾						79,6	79,6	79,6	79,6	79,6	65,4	46,9	31,6					
						1154	1154	1154	1154	1154	948	680	458					
PV23H5-42						155,1	155,1	155,1	155,1	140,9	108,9	78,2	52,6					
						2250	2250	2250	2250	2044	1579	1134	763					
PV73H1-52								4,6	3,7	2,8	1,9							SA 217 gr. C12A
								67	54	41	27							
PV23H2-52 ⁽²⁾								33,7	31,7	28,2	26,2	25,0	24,0	19,5	14,6			
								489	460	409	380	363	348	283	212			
PV23H3-52 ⁽²⁾								67,7	63,4	56,5	52,2	49,8	47,9	39,0	29,2			
								982	920	819	757	722	695	566	424			
PV23H4-52 ⁽²⁾								79,6	79,6	79,6	78,5	74,8	71,8	58,5	43,8			
								1154	1154	1154	1138	1085	1041	848	635			
PV23H5-52								155,1	155,1	140,9	130,8	124,9	119,7	97,5	73,0			
								2250	2250	2044	1897	1812	1736	1414	1059			
PV73H1-16	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9						SA 351 gr. CF8M	
	175	148	135	122	107	94	80	67	54	41	27							
PV23H2-16 ⁽²⁾	33,4	31,6	30,9	30,3	29,9	29,4	29,1	28,8	28,7	28,2	26,2	25,0	24,0	19,9	15,8			
	484	458	448	439	434	426	422	418	416	409	380	363	348	289	229			
PV23H3-16 ⁽²⁾	38,7	63,2	61,8	60,7	59,8	58,9	58,3	57,7	57,3	56,5	52,2	49,8	47,9	39,8	31,6			
	561	917	896	880	867	854	846	837	831	819	757	722	695	577	458			
PV23H4-16 ⁽²⁾	38,7	79,6	79,6	79,6	79,6	79,6	79,6	79,6	79,6	79,6	78,5	74,8	71,8	59,7	47,4			
	561	1154	1154	1154	1154	1154	1154	1154	1154	1154	1138	1085	1041	866	687			
PV23H5-16	38,7	84,8	119,5	151,6	149,4	147,2	145,7	144,2	143,4	140,9	130,8	124,9	119,7	99,5	79,1			
	561	1230	1733	2199	2167	2135	2113	2091	2080	2044	1897	1812	1736	1443	1147			

NOTE

- ⁽¹⁾ N/A
- ⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Temperature at outlet < Temperature at inlet

Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

Orifice: J

9,400 cm² / 1,457 in²

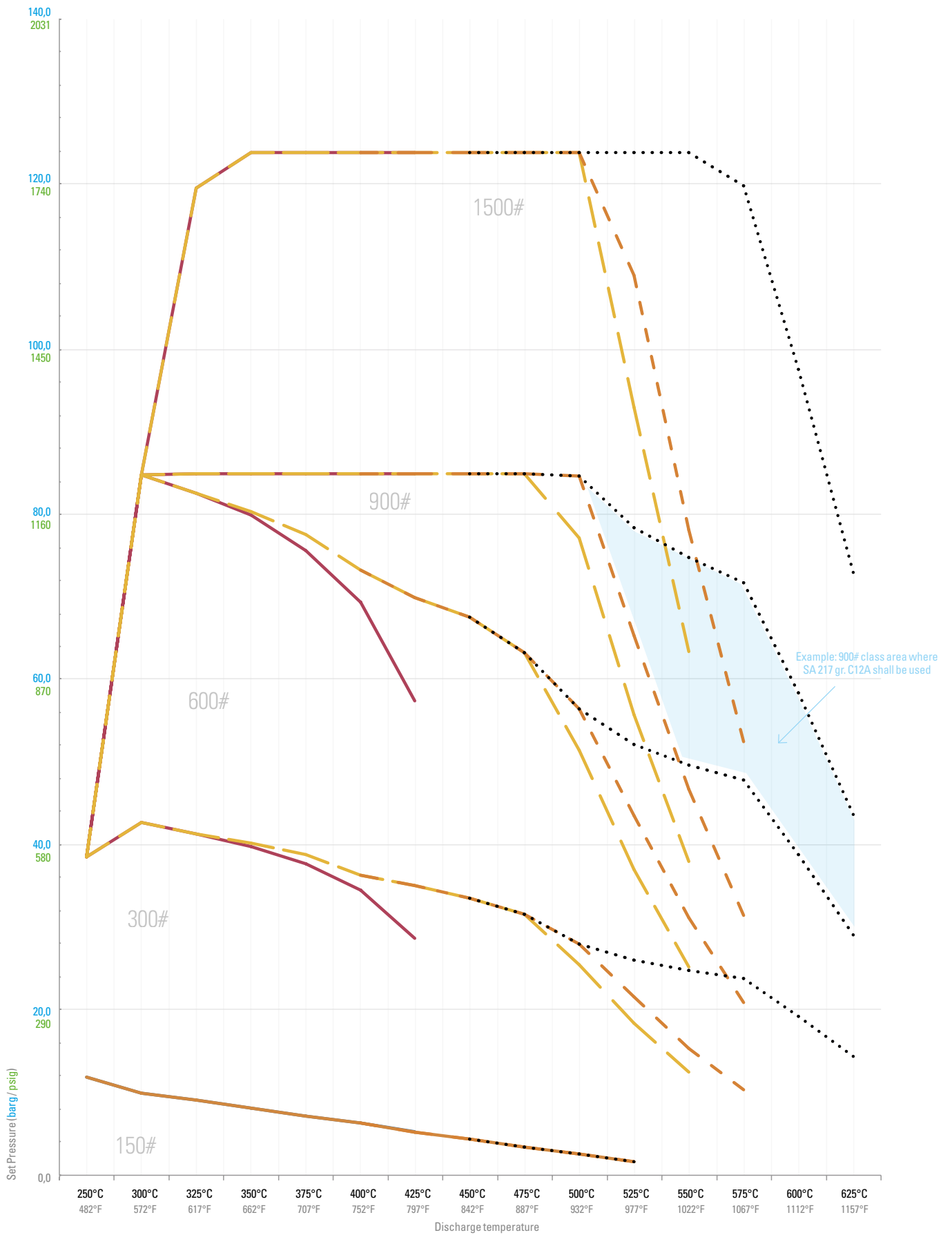
CODE	Max. SET PRESSURE															BODY MAT.	
	barg / psig																
	482°F	572°F	617°F	662°F	707°F	752°F	797°F	842°F	887°F	932°F	977°F	1022°F	1067°F	1112°F	1157°F		
250 °C	300 °C	325 °C	350 °C	375 °C	400 °C	425 °C	450 °C	475 °C	500 °C	525 °C	550 °C	575 °C	600 °C	625 °C			
PV23J1-30	12,1	10,2	9,3	8,4	7,4	6,5	5,5									SA 216 gr. WCC	
	175	148	135	122	107	94	80										
PV34J2-30 ⁽²⁾	38,7	42,9	41,4	40,0	37,8	34,7	28,8										
	561	622	600	580	548	503	418										
PV34J3-30 ⁽²⁾	38,7	84,8	82,6	80,0	75,7	69,4	57,5										
	561	1230	1198	1160	1098	1007	834										
PV34J4-30 ⁽²⁾	38,7	84,8	84,9	84,9	84,9	84,9	84,9										
	561	1230	1231	1231	1231	1231	1231										
PV23J5-30	38,7	84,8	119,5	123,8	123,8	123,8	123,8										
	561	1230	1733	1796	1796	1796	1796										
PV23J1-32	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9						SA 217 gr. WC6
	175	148	135	122	107	94	80	67	54	41	27						
PV34J2-32 ⁽²⁾	38,7	42,9	41,4	40,3	38,9	36,5	35,2	33,7	31,7	25,7	18,6	12,7					
	561	622	600	585	564	529	511	489	460	373	270	184					
PV34J3-32 ⁽²⁾	38,7	84,8	82,6	80,4	77,6	73,3	70,0	67,7	63,4	51,5	37,2	25,4					
	561	1230	1198	1166	1125	1063	1015	982	920	747	540	368					
PV34J4-32 ⁽²⁾	38,7	84,8	84,9	84,9	84,9	84,9	84,9	84,9	84,9	77,2	55,8	38,1					
	561	1230	1231	1231	1231	1231	1231	1231	1231	1120	810	553					
PV23J5-32	38,7	84,8	119,5	123,8	123,8	123,8	123,8	123,8	123,8	123,8	93,0	63,5					
	561	1230	1733	1796	1796	1796	1796	1796	1796	1796	1349	921					
PV23J1-42						6,5	5,5	4,6	3,7	2,8	1,9					SA 217 gr. WC9	
						94	80	67	54	41	27						
PV34J2-42 ⁽²⁾						36,5	35,2	33,7	31,7	28,2	21,8	15,6	10,5				
						529	511	489	460	409	315	226	152				
PV34J3-42 ⁽²⁾						73,3	70,0	67,7	63,4	56,5	43,6	31,3	21,1				
						1063	1015	982	920	819	632	454	306				
PV34J4-42 ⁽²⁾						84,9	84,9	84,9	84,9	84,7	65,4	46,9	31,6				
						1231	1231	1231	1231	1228	948	680	458				
PV23J5-42						123,8	123,8	123,8	123,8	123,8	108,9	78,2	52,6				
						1796	1796	1796	1796	1796	1579	1134	763				
PV23J1-52								4,6	3,7	2,8	1,9						SA 217 gr. C12A
								67	54	41	27						
PV34J2-52 ⁽²⁾								33,7	31,7	28,2	26,2	25,0	24,0	19,5	14,6		
								489	460	409	380	363	348	283	212		
PV34J3-52 ⁽²⁾								67,7	63,4	56,5	52,2	49,8	47,9	39,0	29,2		
								982	920	819	757	722	695	566	424		
PV34J4-52 ⁽²⁾								84,9	84,9	84,7	78,5	74,8	71,8	58,5	43,8		
								1231	1231	1228	1138	1085	1041	848	635		
PV23J5-52								123,8	123,8	123,8	123,8	123,8	119,7	97,5	73,0		
								1796	1796	1796	1796	1796	1736	1414	1059		
PV23J1-16	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9					SA 351 gr. CF8M	
	175	148	135	122	107	94	80	67	54	41	27						
PV34J2-16 ⁽²⁾	33,4	31,6	30,9	30,3	29,9	29,4	29,1	28,8	28,7	28,2	26,2	25,0	24,0	19,9	15,8		
	484	458	448	439	434	426	422	418	416	409	380	363	348	289	229		
PV34J3-16 ⁽²⁾	38,7	63,2	61,8	60,7	59,8	58,9	58,3	57,7	57,3	56,5	52,2	49,8	47,9	39,8	31,6		
	561	917	896	880	867	854	846	837	831	819	757	722	695	577	458		
PV34J4-16 ⁽²⁾	38,7	84,8	84,9	84,9	84,9	84,9	84,9	84,9	84,9	84,7	78,5	74,8	71,8	59,7	47,4		
	561	1230	1231	1231	1231	1231	1231	1231	1231	1228	1138	1085	1041	866	687		
PV23J5-16	38,7	84,8	119,5	123,8	123,8	123,8	123,8	123,8	123,8	123,8	123,8	119,7	99,5	79,1			
	561	1230	1733	1796	1796	1796	1796	1796	1796	1796	1796	1796	1736	1443	1147		

NOTE

⁽¹⁾ N/A

⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

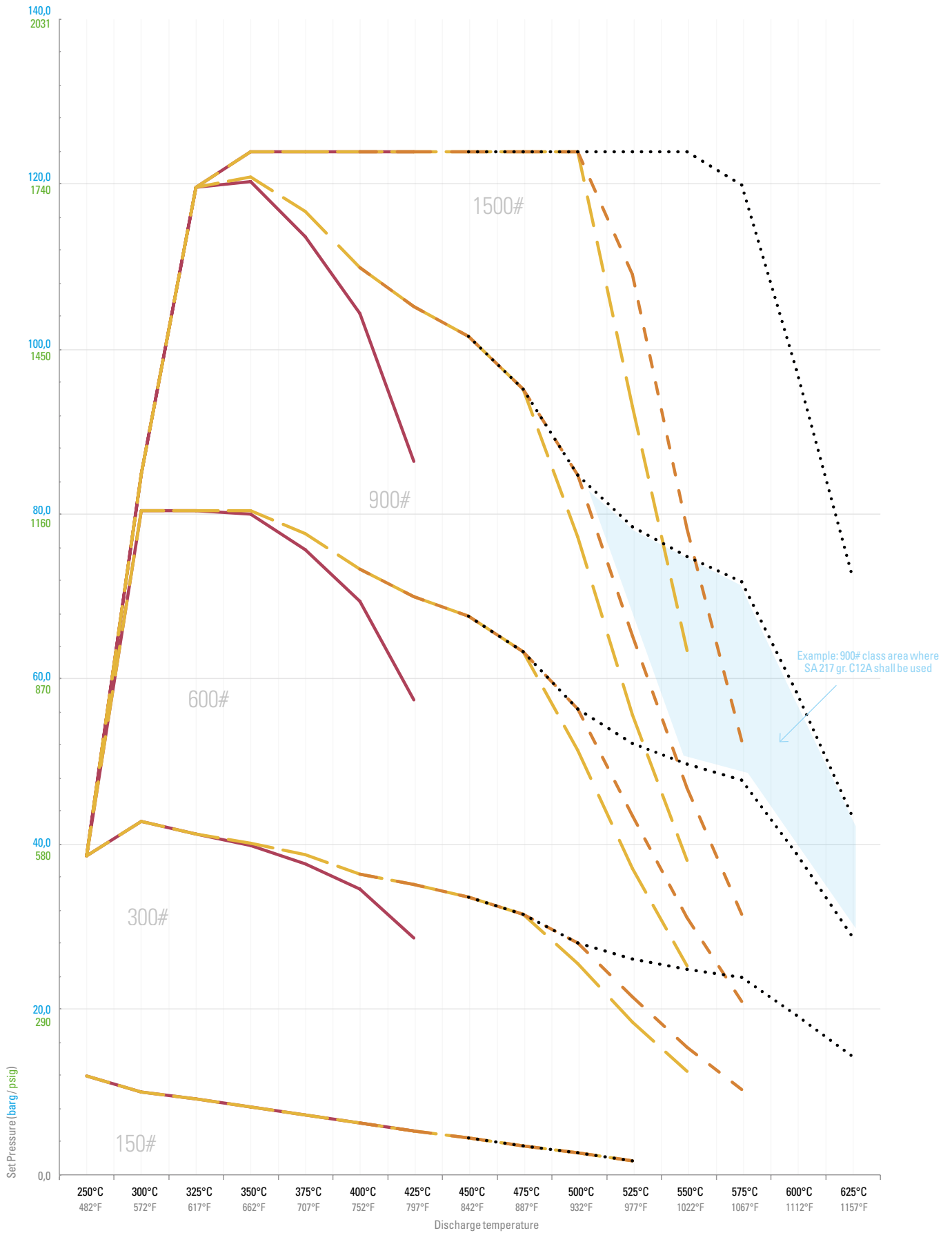
Orifice: K
10,755 cm² / 1,667 in²

CODE	Max. SET PRESSURE															BODY MAT.	
	barg / psig																
	482°F	572°F	617°F	662°F	707°F	752°F	797°F	842°F	887°F	932°F	977°F	1022°F	1067°F	1112°F	1157°F		
250 °C	300 °C	325 °C	350 °C	375 °C	400 °C	425 °C	450 °C	475 °C	500 °C	525 °C	550 °C	575 °C	600 °C	625 °C			
PV34K1-30	12,1	10,2	9,3	8,4	7,4	6,5	5,5									SA 216 gr. WCC	
	175	148	135	122	107	94	80										
PV34K2-30 ⁽²⁾	38,7	42,9	41,4	40,0	37,8	34,7	28,8										
	561	622	600	580	548	503	418										
PV34K3-30 ⁽²⁾	38,7	80,4	80,4	80,0	75,7	69,4	57,5										
	561	1166	1166	1160	1098	1007	834										
PV36K4-30 ⁽²⁾	38,7	84,8	119,5	120,1	113,5	104,2	86,3										
	561	1230	1733	1742	1646	1511	1252										
PV36K5-30	38,7	84,8	119,5	123,8	123,8	123,8	123,8										
	561	1230	1733	1796	1796	1796	1796										
PV34K1-32	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9						SA 217 gr. WC6
	175	148	135	122	107	94	80	67	54	41	27						
PV34K2-32 ⁽²⁾	38,7	42,9	41,4	40,3	38,9	36,5	35,2	33,7	31,7	25,7	18,6	12,7					
	561	622	600	585	564	529	511	489	460	373	270	184					
PV34K3-32 ⁽²⁾	38,7	80,4	80,4	80,4	77,6	73,3	70,0	67,7	63,4	51,5	37,2	25,4					
	561	1166	1166	1166	1125	1063	1015	982	920	747	540	368					
PV36K4-32 ⁽²⁾	38,7	84,8	119,5	120,7	116,5	109,8	105,1	101,4	95,1	77,2	55,8	38,1					
	561	1230	1733	1751	1690	1593	1524	1471	1379	1120	810	553					
PV36K5-32	38,7	84,8	119,5	123,8	123,8	123,8	123,8	123,8	123,8	123,8	93,0	63,5					
	561	1230	1733	1796	1796	1796	1796	1796	1796	1796	1349	921					
PV34K1-42						6,5	5,5	4,6	3,7	2,8	1,9					SA 217 gr. WC9	
						94	80	67	54	41	27						
PV34K2-42 ⁽²⁾						36,5	35,2	33,7	31,7	28,2	21,8	15,6	10,5				
						529	511	489	460	409	315	226	152				
PV34K3-42 ⁽²⁾						73,3	70,0	67,7	63,4	56,5	43,6	31,3	21,1				
						1063	1015	982	920	819	632	454	306				
PV36K4-42 ⁽²⁾						109,8	105,1	101,4	95,1	84,7	65,4	46,9	31,6				
						1593	1524	1471	1379	1228	948	680	458				
PV36K5-42						123,8	123,8	123,8	123,8	123,8	108,9	78,2	52,6				
						1796	1796	1796	1796	1796	1579	1134	763				
PV34K1-52								4,6	3,7	2,8	1,9						SA 217 gr. C12A
								67	54	41	27						
PV34K2-52 ⁽²⁾								33,7	31,7	28,2	26,2	25,0	24,0	19,5	14,6		
								489	460	409	380	363	348	283	212		
PV34K3-52 ⁽²⁾								67,7	63,4	56,5	52,2	49,8	47,9	39,0	29,2		
								982	920	819	757	722	695	566	424		
PV36K4-52 ⁽²⁾								101,4	95,1	84,7	78,5	74,8	71,8	58,5	43,8		
								1471	1379	1228	1138	1085	1041	848	635		
PV36K5-52								123,8	123,8	123,8	123,8	123,8	119,7	97,5	73,0		
								1796	1796	1796	1796	1796	1736	1414	1059		
PV34K1-16	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9					SA 351 gr. CF8M	
	175	148	135	122	107	94	80	67	54	41	27						
PV34K2-16 ⁽²⁾	33,4	31,6	30,9	30,3	29,9	29,4	29,1	28,8	28,7	28,2	26,2	25,0	24,0	19,9	15,8		
	484	458	448	439	434	426	422	418	416	409	380	363	348	289	229		
PV34K3-16 ⁽²⁾	38,7	63,2	61,8	60,7	59,8	58,9	58,3	57,7	57,3	56,5	52,2	49,8	47,9	39,8	31,6		
	561	917	896	880	867	854	846	837	831	819	757	722	695	577	458		
PV36K4-16 ⁽²⁾	38,7	84,8	92,7	91,0	89,6	88,3	87,4	86,5	86,0	84,7	78,5	74,8	71,8	59,7	47,4		
	561	1230	1345	1320	1300	1281	1268	1255	1247	1228	1138	1085	1041	866	687		
PV36K5-16	38,7	84,8	119,5	123,8	123,8	123,8	123,8	123,8	123,8	123,8	123,8	119,7	99,5	79,1			
	561	1230	1733	1796	1796	1796	1796	1796	1796	1796	1796	1796	1736	1443	1147		

NOTE

- ⁽¹⁾ N/A
- ⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

Orifice: L

17,794 cm² / 2,758 in²

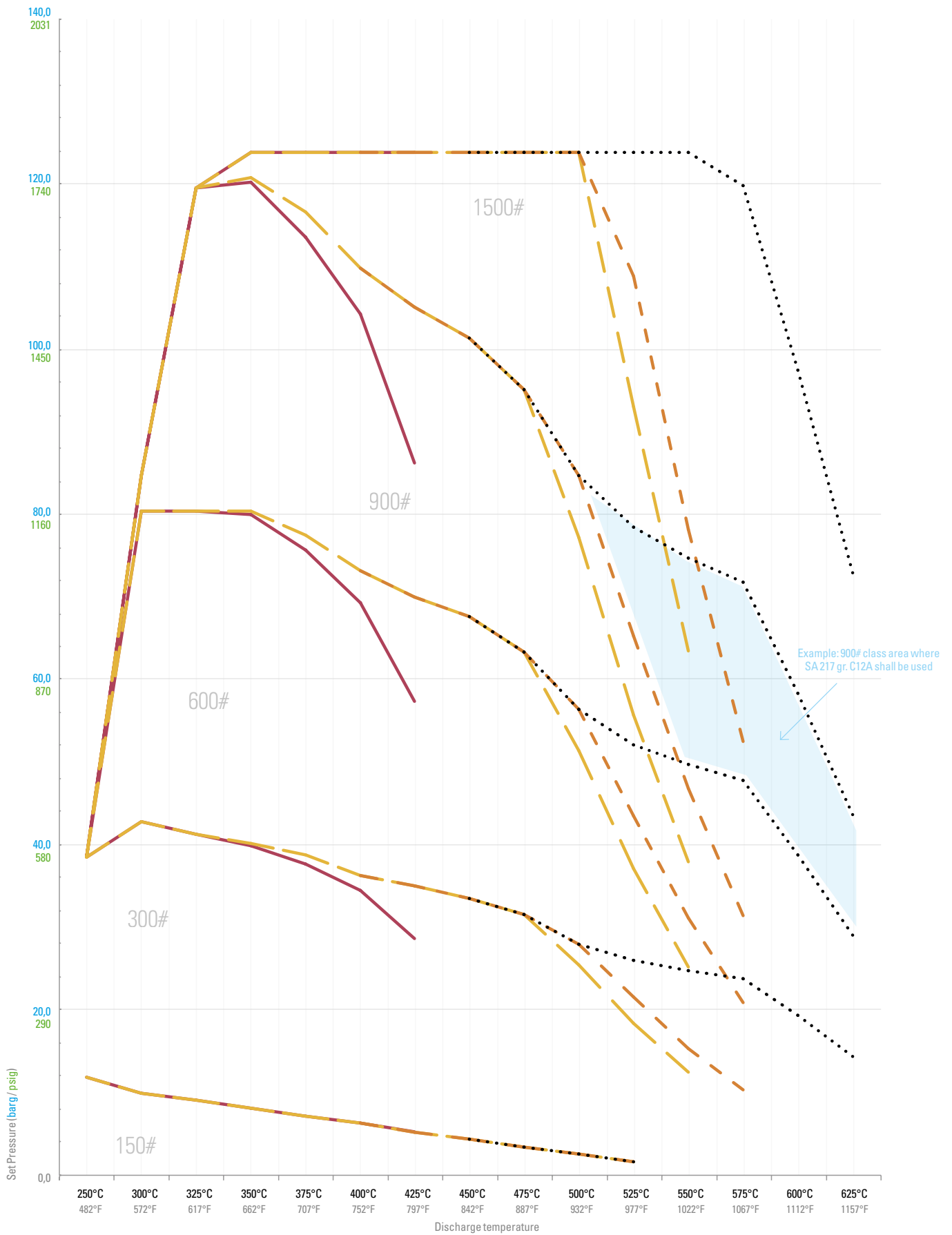
CODE	Max. SET PRESSURE															BODY MAT.	
	barg / psig																
	482°F	572°F	617°F	662°F	707°F	752°F	797°F	842°F	887°F	932°F	977°F	1022°F	1067°F	1112°F	1157°F		
250 °C	300 °C	325 °C	350 °C	375 °C	400 °C	425 °C	450 °C	475 °C	500 °C	525 °C	550 °C	575 °C	600 °C	625 °C			
PV34L1-30	12,1	10,2	9,3	8,4	7,4	6,5	5,5									SA 216 gr. WC6	
	175	148	135	122	107	94	80										
PV46L2-30 ⁽²⁾	38,7	42,9	41,4	40,0	37,8	34,7	28,8										
	561	622	600	580	548	503	418										
PV46L3-30 ⁽²⁾	38,7	80,4	80,4	80,0	75,7	69,4	57,5										
	561	1166	1166	1160	1098	1007	834										
PV46L4-30 ⁽²⁾	38,7	84,8	119,5	120,1	113,5	104,2	86,3										
	561	1230	1733	1742	1646	1511	1252										
PV46L5-30	38,7	84,8	119,5	123,8	123,8	123,8	123,8										
	561	1230	1733	1796	1796	1796	1796										
PV34L1-32	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9						SA 217 gr. WC6
	175	148	135	122	107	94	80	67	54	41	27						
PV46L2-32 ⁽²⁾	38,7	42,9	41,4	40,3	38,9	36,5	35,2	33,7	31,7	25,7	18,6						
	561	622	600	585	564	529	511	489	460	373	270	12,7					
PV46L3-32 ⁽²⁾	38,7	80,4	80,4	80,4	77,6	73,3	70,0	67,7	63,4	51,5	37,2	25,4					
	561	1166	1166	1166	1125	1063	1015	982	920	747	540	368					
PV46L4-32 ⁽²⁾	38,7	84,8	119,5	120,7	116,5	109,8	105,1	101,4	95,1	77,2	55,8	38,1					
	561	1230	1733	1751	1690	1593	1524	1471	1379	1120	810	553					
PV46L5-32	38,7	84,8	119,5	123,8	123,8	123,8	123,8	123,8	123,8	123,8	93,0	63,5					
	561	1230	1733	1796	1796	1796	1796	1796	1796	1796	1349	921					
PV34L1-42						6,5	5,5	4,6	3,7	2,8	1,9					SA 217 gr. WC9	
						94	80	67	54	41	27						
PV46L2-42 ⁽²⁾						36,5	35,2	33,7	31,7	28,2	21,8	15,6	10,5				
						529	511	489	460	409	315	226	152				
PV46L3-42 ⁽²⁾						73,3	70,0	67,7	63,4	56,5	43,6	31,3	21,1				
						1063	1015	982	920	819	632	454	306				
PV46L4-42 ⁽²⁾						109,8	105,1	101,4	95,1	84,7	65,4	46,9	31,6				
						1593	1524	1471	1379	1228	948	680	458				
PV46L5-42						123,8	123,8	123,8	123,8	123,8	108,9	78,2	52,6				
						1796	1796	1796	1796	1796	1579	1134	763				
PV34L1-52								4,6	3,7	2,8	1,9						SA 217 gr. C12A
								67	54	41	27						
PV46L2-52 ⁽²⁾								33,7	31,7	28,2	26,2	25,0	24,0	19,5	14,6		
								489	460	409	380	363	348	283	212		
PV46L3-52 ⁽²⁾								67,7	63,4	56,5	52,2	49,8	47,9	39,0	29,2		
								982	920	819	757	722	695	566	424		
PV46L4-52 ⁽²⁾								101,4	95,1	84,7	78,5	74,8	71,8	58,5	43,8		
								1471	1379	1228	1138	1085	1041	848	635		
PV46L5-52								123,8	123,8	123,8	123,8	123,8	119,7	97,5	73,0		
								1796	1796	1796	1796	1796	1736	1414	1059		
PV34L1-16	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9					SA 351 gr. CF8M	
	175	148	135	122	107	94	80	67	54	41	27						
PV46L2-16 ⁽²⁾	33,4	31,6	30,9	30,3	29,9	29,4	29,1	28,8	28,7	28,2	26,2	25,0	24,0	19,9	15,8		
	484	458	448	439	434	426	422	418	416	409	380	363	348	289	229		
PV46L3-16 ⁽²⁾	38,7	63,2	61,8	60,7	59,8	58,9	58,3	57,7	57,3	56,5	52,2	49,8	47,9	39,8	31,6		
	561	917	896	880	867	854	846	837	831	819	757	722	695	577	458		
PV46L4-16 ⁽²⁾	38,7	84,8	92,7	91,0	89,6	88,3	87,4	86,5	86,0	84,7	78,5	74,8	71,8	59,7	47,4		
	561	1230	1345	1320	1300	1281	1268	1255	1247	1228	1138	1085	1041	866	687		
PV46L5-16	38,7	84,8	119,5	123,8	123,8	123,8	123,8	123,8	123,8	123,8	123,8	123,8	119,7	99,5	79,1		
	561	1230	1733	1796	1796	1796	1796	1796	1796	1796	1796	1796	1736	1443	1147		

NOTE

⁽¹⁾ N/A

⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

Orifice: M

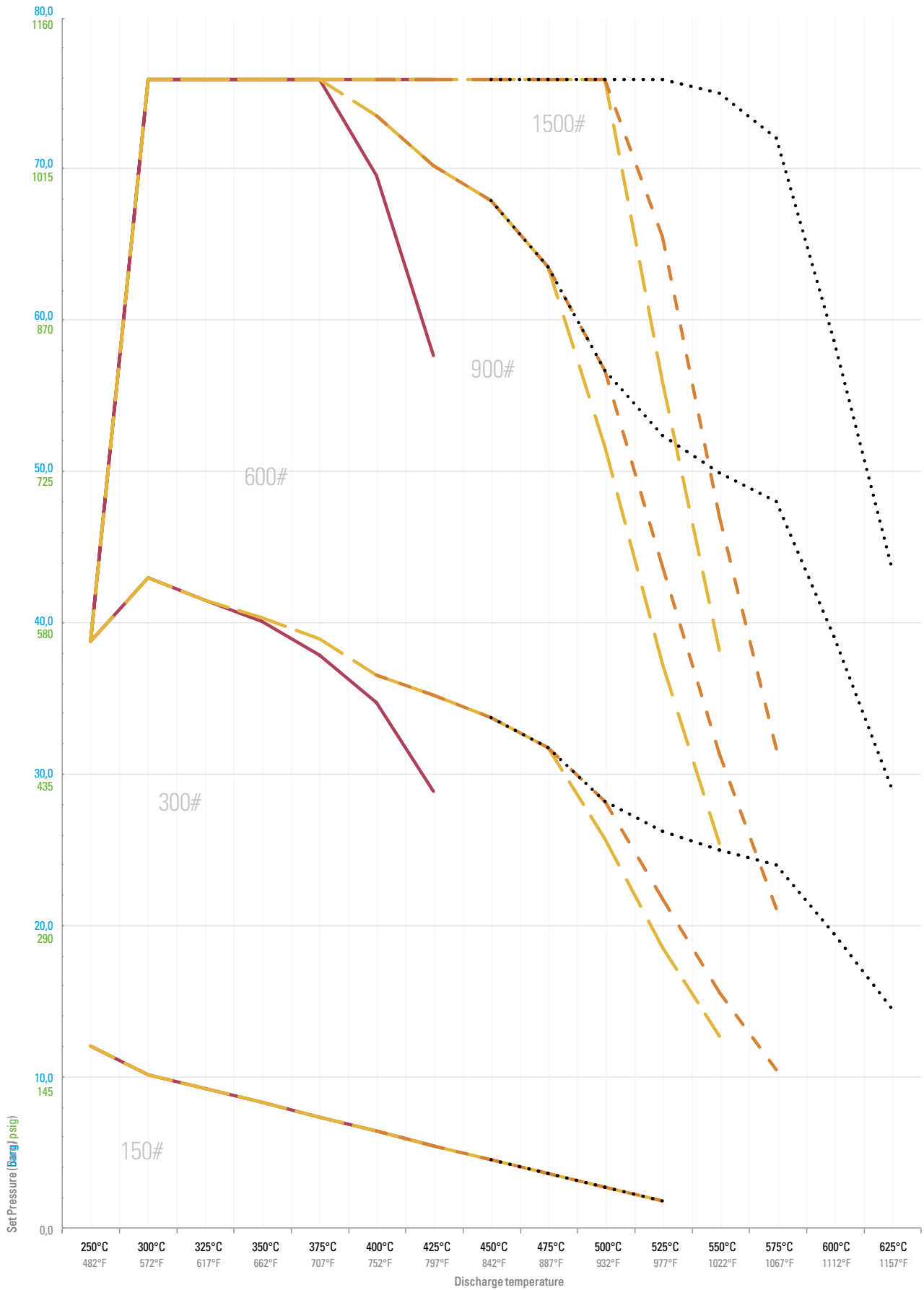
25,697 cm² / 3,983 in²

CODE	Max. SET PRESSURE															BODY MAT.
	barg / psig															
	482°F 250 °C	572°F 300 °C	617°F 325 °C	662°F 350 °C	707°F 375 °C	752°F 400 °C	797°F 425 °C	842°F 450 °C	887°F 475 °C	932°F 500 °C	977°F 525 °C	1022°F 550 °C	1067°F 575 °C	1112°F 600 °C	1157°F 625 °C	
PV46M1-30	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80									SA 216 gr. WC6
PV46M2-30 ⁽²⁾	38,7 561	42,9 622	41,4 600	40,0 580	37,8 548	34,7 503	28,8 418									
PV46M3-30 ⁽²⁾	38,7 561	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	69,4 1007	57,5 834								
PV46M4-30 ⁽²⁾	38,7 561	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098								
PV46M1-32	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					SA 217 gr. WC6
PV46M2-32 ⁽²⁾	38,7 561	42,9 622	41,4 600	40,3 585	38,9 564	36,5 529	35,2 511	33,7 489	31,7 460	25,7 373	18,6 270	12,7 184				
PV46M3-32 ⁽²⁾	38,7 561	75,7 1098	75,7 1098	75,7 1098	75,7 1098	73,3 1063	70,0 1015	67,7 982	63,4 920	51,5 747	37,2 540	25,4 368				
PV46M4-32 ⁽²⁾	38,7 561	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	55,8 810	38,1 553					
PV46M1-42						6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					SA 217 gr. WC9
PV46M2-42 ⁽²⁾						36,5 529	35,2 511	33,7 489	31,7 460	28,2 409	21,8 315	15,6 226	10,5 152			
PV46M3-42 ⁽²⁾						73,3 1063	70,0 1015	67,7 982	63,4 920	56,5 819	43,6 632	31,3 454	21,1 306			
PV46M4-42 ⁽²⁾						75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	65,4 948	46,9 680	31,6 458			
PV46M1-52								4,6 67	3,7 54	2,8 41	1,9 27					SA 217 gr. C12A
PV46M2-52 ⁽²⁾								33,7 489	31,7 460	28,2 409	26,2 380	25,0 363	24,0 348	19,5 283	14,6 212	
PV46M3-52 ⁽²⁾								67,7 982	63,4 920	56,5 819	52,2 757	49,8 722	47,9 695	39,0 566	29,2 424	
PV46M4-52 ⁽²⁾								75,7 1098	75,7 1098	75,7 1098	75,7 1098	74,8 1085	71,8 1041	58,5 848	43,8 635	
PV46M1-16	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					SA 351 gr. CF8M
PV46M2-16 ⁽²⁾	33,4 484	31,6 458	30,9 448	30,3 439	29,9 434	29,4 426	29,1 422	28,8 418	28,7 416	28,2 409	26,2 380	25,0 363	24,0 348	19,9 289	15,8 229	
PV46M3-16 ⁽²⁾	38,7 561	63,2 917	61,8 896	60,7 880	59,8 867	58,9 867	58,3 854	57,7 846	57,3 837	56,5 831	52,2 757	49,8 722	47,9 695	39,8 577	31,6 458	
PV46M4-16 ⁽²⁾	38,7 561	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	74,8 1085	71,8 1041	59,7 866	47,4 687	

NOTE

- ⁽¹⁾ N/A
- ⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

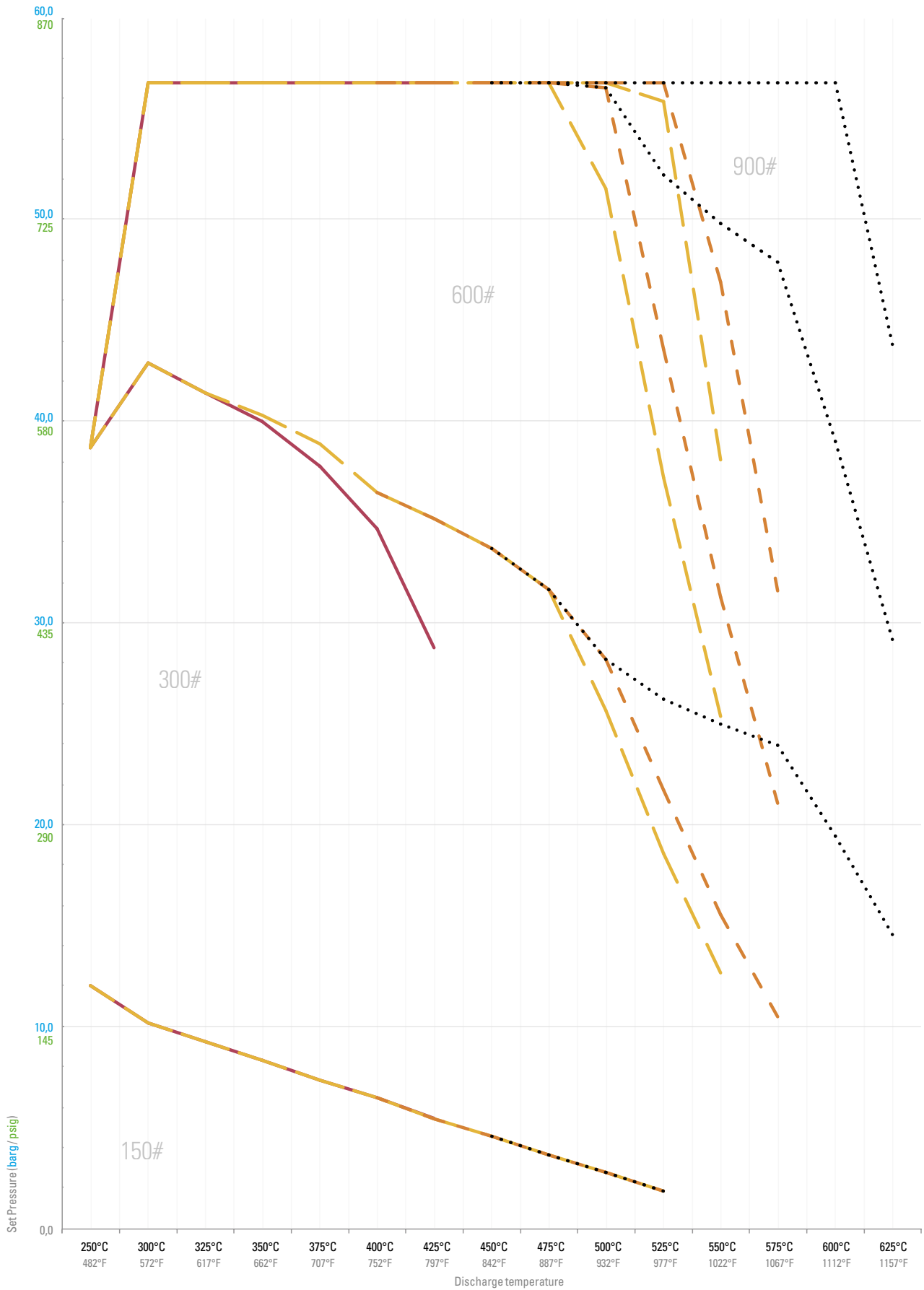
Orifice: N
34,213 cm² / 5,303 in²

CODE	Max. SET PRESSURE															BODY MAT.
	barg / psig															
	482°F 250 °C	572°F 300 °C	617°F 325 °C	662°F 350 °C	707°F 375 °C	752°F 400 °C	797°F 425 °C	842°F 450 °C	887°F 475 °C	932°F 500 °C	977°F 525 °C	1022°F 550 °C	1067°F 575 °C	1112°F 600 °C	1157°F 625 °C	
PV46N1-30	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	5,5 80								SA 216 gr. WC9
PV46N2-30 ⁽²⁾	38,7 561	42,9 622	41,4 600	40,0 580	37,8 548	34,7 503	28,8 418									
PV46N3-30 ⁽²⁾	38,7 561	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824									
PV46N4-30 ⁽²⁾	38,7 561	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824									
PV46N1-32	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					SA 217 gr. WC6
PV46N2-32 ⁽²⁾	38,7 561	42,9 622	41,4 600	40,3 585	38,9 564	36,5 529	35,2 511	33,7 489	31,7 460	25,7 373	18,6 270	12,7 184				
PV46N3-32 ⁽²⁾	38,7 561	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	51,5 747	37,2 540	25,4 368				
PV46N4-32 ⁽²⁾	38,7 561	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	55,8 810	38,1 553				
PV46N1-42						6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					SA 217 gr. WC9
PV46N2-42 ⁽²⁾						36,5 529	35,2 511	33,7 489	31,7 460	28,2 409	21,8 315	15,6 226	10,5 152			
PV46N3-42 ⁽²⁾						56,8 824	56,8 824	56,8 824	56,8 824	56,5 819	43,6 632	31,3 454	21,1 306			
PV46N4-42 ⁽²⁾						56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 680	46,9 458	31,6			
PV46N1-52							4,6 67	3,7 54	2,8 41	1,9 27						SA 217 gr. C12A
PV46N2-52 ⁽²⁾							33,7 489	31,7 460	28,2 409	26,2 380	25,0 363	24,0 348	19,5 283	14,6 212		
PV46N3-52 ⁽²⁾							56,8 824	56,8 824	56,5 819	52,2 757	49,8 722	47,9 695	39,0 566	29,2 424		
PV46N4-52 ⁽²⁾							56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	43,8 635	
PV46N1-16	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					SA 351 gr. CF8M
PV46N2-16 ⁽²⁾	33,4 484	31,6 458	30,9 448	30,3 439	29,9 434	29,4 426	29,1 422	28,8 418	28,7 416	28,2 409	26,2 380	25,0 363	24,0 348	19,9 289	15,8 229	
PV46N3-16 ⁽²⁾	38,7 561	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,5 819	52,2 757	49,8 722	47,9 695	39,8 577	31,6 458	
PV46N4-16 ⁽²⁾	38,7 561	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	47,4 687	

NOTE

- ⁽¹⁾ N/A
- ⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

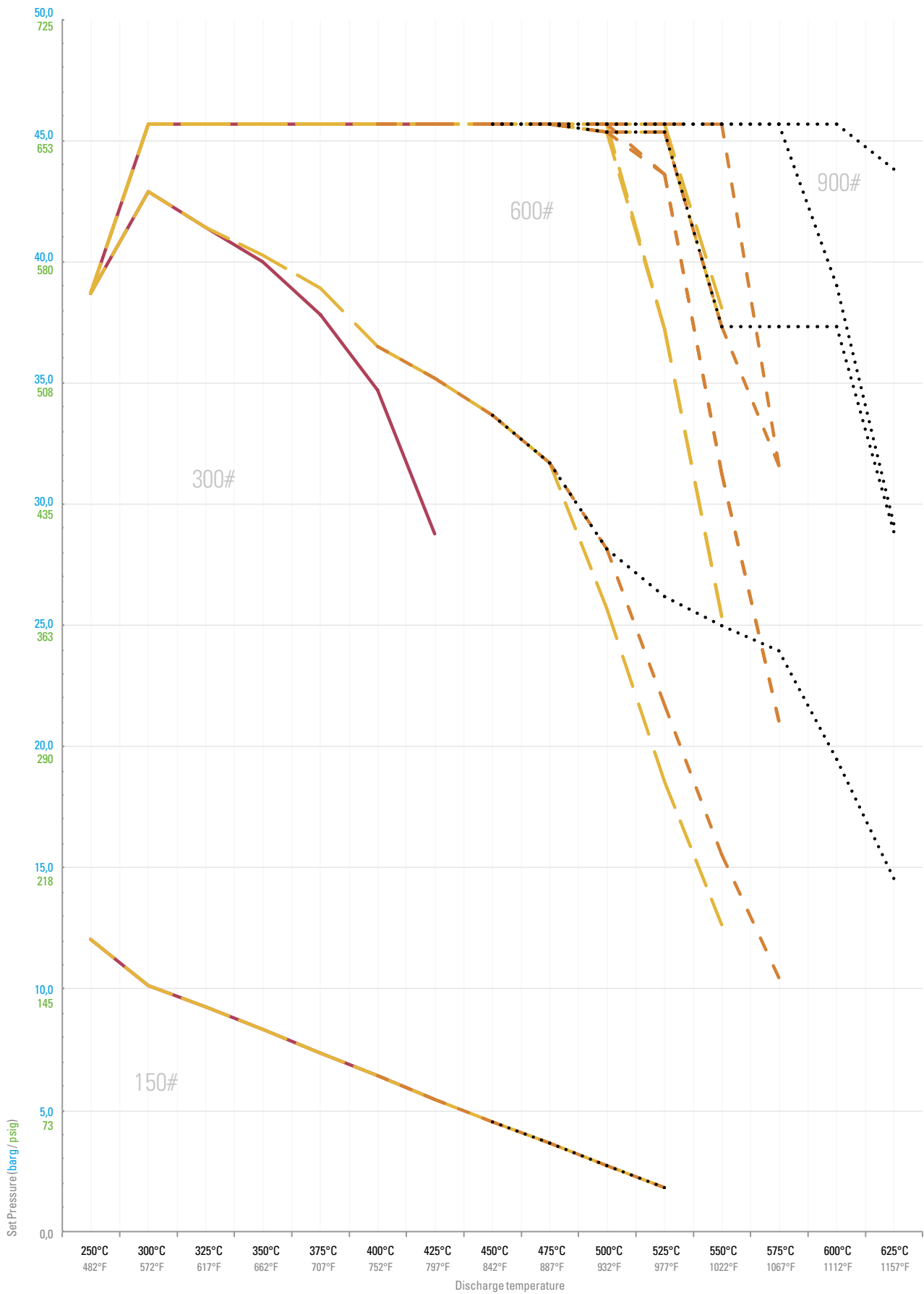
Orifice: P
45,606 cm² / 7,069 in²

CODE	Max. SET PRESSURE															BODY MAT.					
	barg / psig																				
	482°F	572°F	617°F	662°F	707°F	752°F	797°F	842°F	887°F	932°F	977°F	1022°F	1067°F	1112°F	1157°F						
250 °C	300 °C	325 °C	350 °C	375 °C	400 °C	425 °C	450 °C	475 °C	500 °C	525 °C	550 °C	575 °C	600 °C	625 °C							
PV46P1-30	12,1	10,2	9,3	8,4	7,4	6,5	5,5										SA 216 gr. WC6				
	175	148	135	122	107	94	80														
	38,7	42,9	41,4	40,0	37,8	34,7	28,8														
PV46P2-30 ⁽²⁾	561	622	600	580	548	503	418														
	38,7	45,7	45,7	45,7	45,7	45,7	45,7														
	561	663	663	663	663	663	663														
PV46P3-30 ⁽²⁾	38,7	45,7	45,7	45,7	45,7	45,7	45,7														
	561	663	663	663	663	663	663														
	38,7	45,7	45,7	45,7	45,7	45,7	45,7														
PV46P4-30 ⁽²⁾	561	663	663	663	663	663	663														
	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9							SA 217 gr. WC6			
	175	148	135	122	107	94	80	67	54	41	27										
38,7	42,9	41,4	40,3	38,9	36,5	35,2	33,7	31,7	25,7	18,6	12,7										
PV46P2-32 ⁽²⁾	561	622	600	585	564	529	511	489	460	373	270	184									
	38,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,3	37,2	25,4									
	561	663	663	663	663	663	663	663	663	663	658	540	368								
PV46P3-32	38,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	37,2	25,4								
	561	663	663	663	663	663	663	663	663	663	663	663	540	368							
	38,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	37,2	25,4								
PV46P3-32-W	561	663	663	663	663	663	663	663	663	663	663	663	540	368							
	38,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,3	37,3								
	561	663	663	663	663	663	663	663	663	663	663	658	541								
PV46P4-32	38,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	38,1									
	561	663	663	663	663	663	663	663	663	663	663	663	553								
	38,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	38,1									
PV46P4-32-W	561	663	663	663	663	663	663	663	663	663	663	663	553								
						6,5	5,5	4,6	3,7	2,8	1,9						SA 217 gr. WC9				
						94	80	67	54	41	27										
					36,5	35,2	33,7	31,7	28,2	21,8	15,6	10,5									
PV46P2-42 ⁽²⁾						529	511	489	460	409	315	226	152								
						45,7	45,7	45,7	45,7	45,7	43,6	31,3	21,1								
						663	663	663	663	663	658	632	454	306							
PV46P3-42						45,7	45,7	45,7	45,7	45,7	43,6	31,3	21,1								
						663	663	663	663	663	632	454	306								
						45,7	45,7	45,7	45,7	45,7	45,3	37,3	31,6								
PV46P3-42-W						663	663	663	663	663	632	454	306								
						45,7	45,7	45,7	45,7	45,7	45,3	37,3	31,6								
						663	663	663	663	663	658	658	541	458							
PV46P4-42						45,7	45,7	45,7	45,7	45,7	45,7	45,7	31,6								
						663	663	663	663	663	663	663	663	458							
						45,7	45,7	45,7	45,7	45,7	45,7	45,7	31,6								
PV46P4-42-W						663	663	663	663	663	663	663	458								
						4,6	3,7	2,8	1,9									SA 217 gr. C12A			
						67	54	41	27												
					33,7	31,7	28,2	26,2	25,0	24,0	19,5	14,6									
PV46P2-52 ⁽²⁾						489	460	409	380	363	348	283	212								
						45,7	45,7	45,3	45,3	37,3	37,3	37,3	28,9								
						663	663	658	658	541	541	541	419								
PV46P3-52 ⁽²⁾						45,7	45,7	45,7	45,7	45,7	45,7	39,0	29,2								
						663	663	663	663	663	663	663	566	424							
						45,7	45,7	45,7	45,7	45,7	45,7	45,7	43,8								
PV46P3-52-W						663	663	663	663	663	663	663	635								
						4,6	3,7	2,8	1,9										SA 351 gr. CF8M		
						67	54	41	27												
					33,7	31,7	28,2	26,2	25,0	24,0	19,9	15,8									
PV46P2-16 ⁽²⁾						484	458	448	439	434	426	422	418	416	409	380	363	348		289	229
						38,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,3	45,3	37,3	37,3		37,3	28,9
						561	663	663	663	663	663	663	663	663	658	658	541	541		541	419
PV46P3-16 ⁽²⁾						38,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7		39,8	31,6
						561	663	663	663	663	663	663	663	663	663	663	663	663		577	458
						38,687	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7		45,7	45,7
PV46P4-16-W						561	663	663	663	663	663	663	663	663	663	663	663	663		663	663

NOTE

- ⁽¹⁾ N/A
- ⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)
- ⁽³⁾ The max. set pressure is the same value for the next upper class 600# inlet rating (PV46P3) and 900# inlet rating (PV46P4), limited by the 150# outlet rating.

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

Orifice: Q

65,471 cm² / 10,148 in²

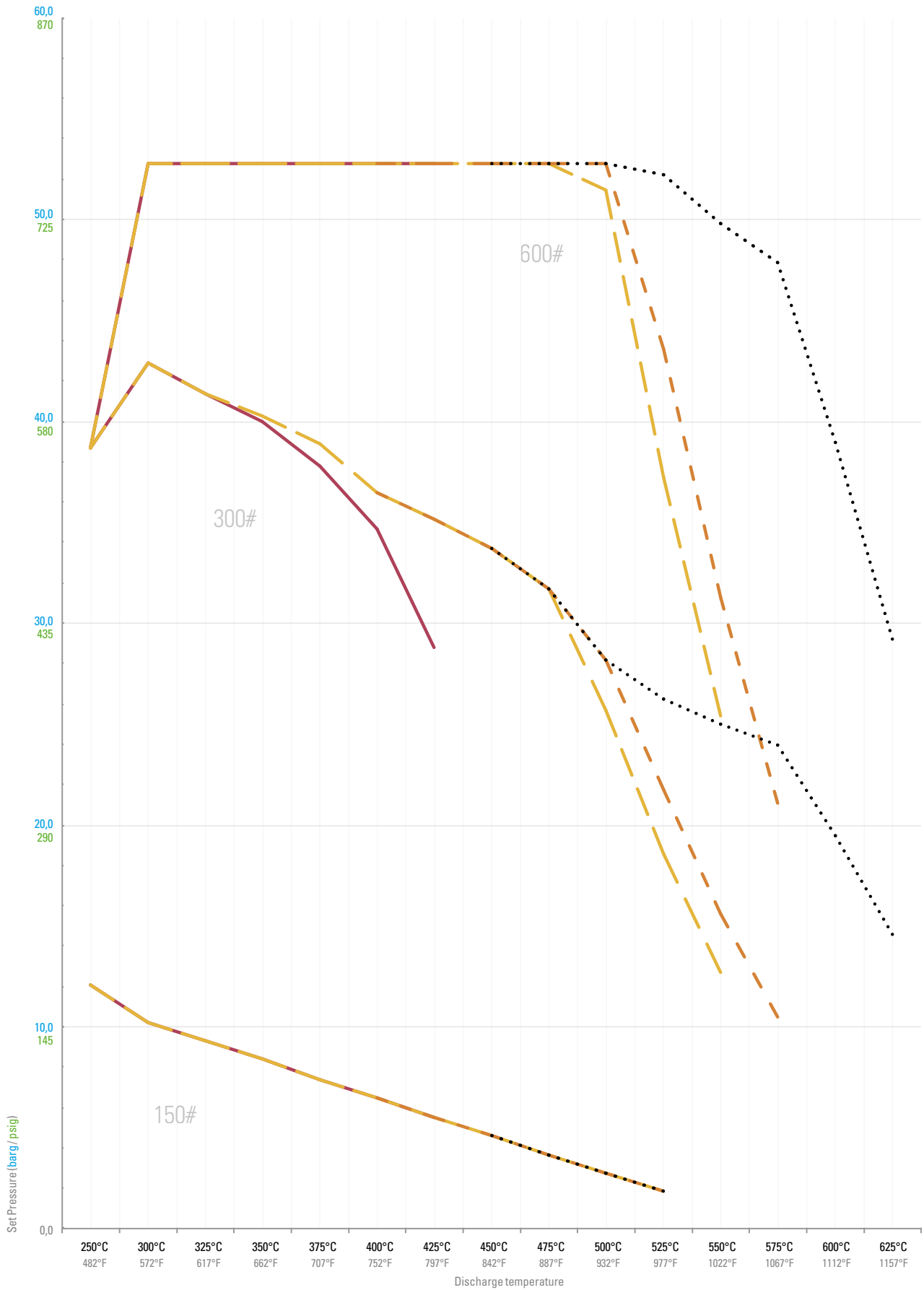
CODE	Max. SET PRESSURE															BODY MAT.
	barg / psig															
	482°F 250 °C	572°F 300 °C	617°F 325 °C	662°F 350 °C	707°F 375 °C	752°F 400 °C	797°F 425 °C	842°F 450 °C	887°F 475 °C	932°F 500 °C	977°F 525 °C	1022°F 550 °C	1067°F 575 °C	1112°F 600 °C	1157°F 625 °C	
PV68Q1-30	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80									SA 216 gr. WCC
PV68Q2-30 ⁽²⁾	38,7 561	42,9 622	41,4 600	40,0 585	37,8 564	34,7 529	28,8 511									
PV68Q3-30 ⁽²⁾	38,7 561	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	SA 217 gr. WCC
PV68Q1-32	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27				SA 217 gr. WCC	
PV68Q2-32 ⁽²⁾	38,7 561	42,9 622	41,4 600	40,3 585	38,9 564	36,5 529	35,2 511	33,7 489	31,7 460	25,7 373	18,6 270	12,7 184				SA 217 gr. WCC
PV68Q3-32 ⁽²⁾	38,7 561	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	51,5 747	37,2 540	25,4 368			SA 217 gr. WCC	
PV68Q1-42						6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					SA 217 gr. WCC
PV68Q2-42 ⁽²⁾						36,5 529	35,2 511	33,7 489	31,7 460	28,2 409	21,8 315	15,6 226	10,5 152		SA 217 gr. WCC	
PV68Q3-42 ⁽²⁾						52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	43,6 632	31,3 454	21,1 306			SA 217 gr. WCC
PV68Q1-52								4,6 67	3,7 54	2,8 41	1,9 27				SA 217 gr. C12A	
PV68Q2-52 ⁽²⁾								33,7 489	31,7 460	28,2 409	26,2 380	25,0 363	24,0 348	19,5 283		14,6 212
PV68Q3-52 ⁽²⁾								52,8 766	52,8 766	52,8 766	52,2 757	49,8 722	47,9 695	39,0 566	29,2 424	SA 217 gr. C12A
PV68Q1-16	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27				SA 351 gr. CF8M	
PV68Q2-16 ⁽²⁾	33,4 484	31,6 458	30,9 448	30,3 439	29,9 434	29,4 426	29,1 422	28,8 418	28,7 416	28,2 409	26,2 380	25,0 363	24,0 348	19,9 289		15,8 229
PV68Q3-16 ⁽²⁾	38,7 561	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,2 757	49,8 722	47,9 695	39,8 577	31,6 458	SA 351 gr. CF8M

NOTE

⁽¹⁾ N/A

⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

Orifice: R

91,439 cm² / 14,173 in²

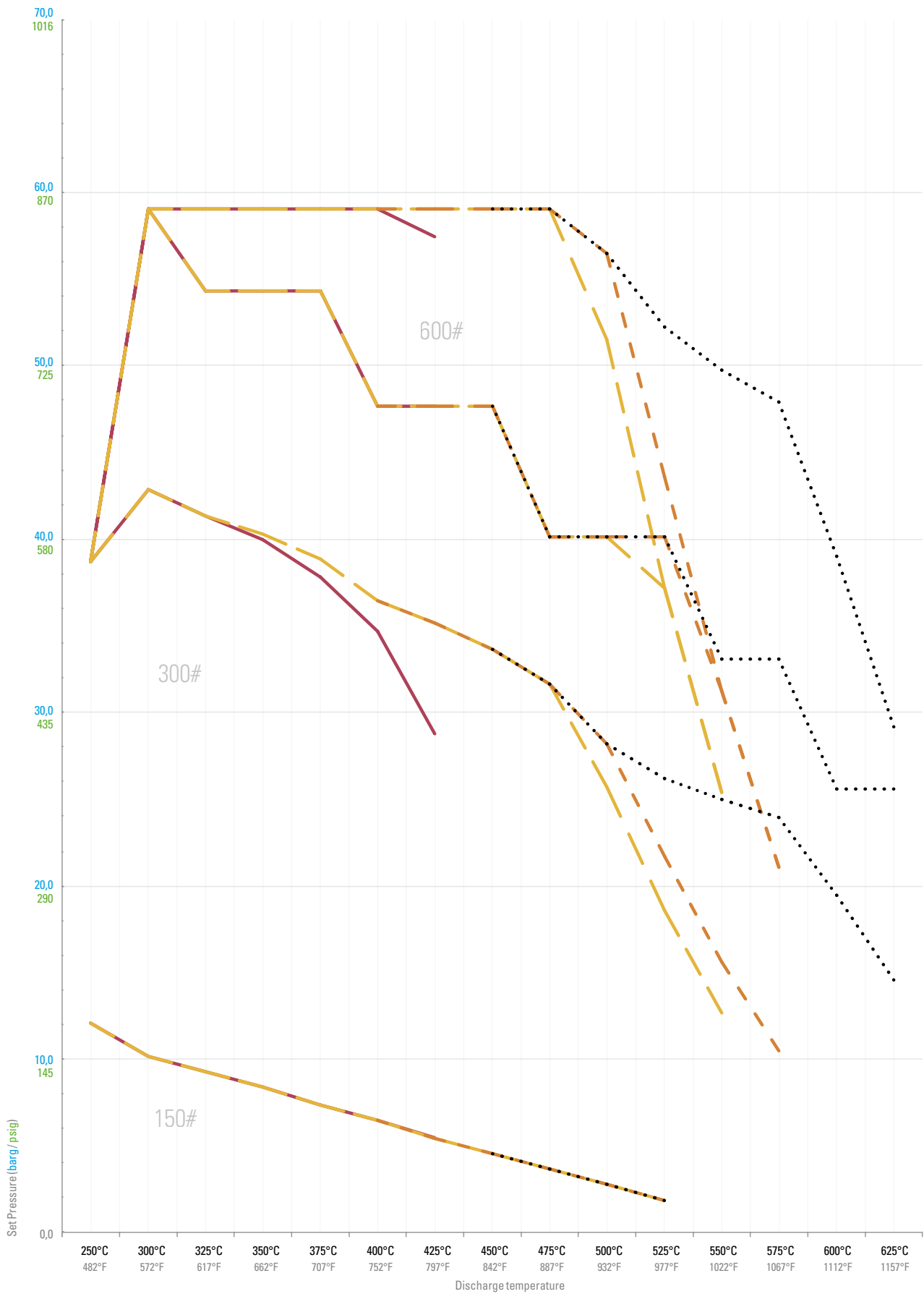
CODE	Max. SET PRESSURE															BODY MAT.	
	barg / psig																
	482°F	572°F	617°F	662°F	707°F	752°F	797°F	842°F	887°F	932°F	977°F	1022°F	1067°F	1112°F	1157°F		
250 °C	300 °C	325 °C	350 °C	375 °C	400 °C	425 °C	450 °C	475 °C	500 °C	525 °C	550 °C	575 °C	600 °C	625 °C			
PV68R1-30	12,1	10,2	9,3	8,4	7,4	6,5	5,5									SA 216 gr. WCC	
	175	148	135	122	107	94	80										
PV68R2-30 ⁽²⁾	38,7	42,9	41,4	40,0	37,8	34,7	28,8										
	561	622	600	580	548	503	418										
PV68R3-30	38,7	59,1	54,4	54,4	54,4	47,7	47,7										
	561	857	789	789	789	692	692										
PV68R3-30-W	38,7	59,1	59,1	59,1	59,1	59,1	57,5										
	561	857	857	857	857	857	834										
PV68R1-32	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9						SA 217 gr. WCC
	175	148	135	122	107	94	80	67	54	41	27						
PV68R2-32 ⁽²⁾	38,7	42,9	41,4	40,3	38,9	36,5	35,2	33,7	31,7	25,7	18,6	12,7					
	561	622	600	585	564	529	511	489	460	373	270	184					
PV68R3-32	38,7	59,1	54,4	54,4	54,4	47,7	47,7	40,2	40,2	37,2	25,4						
	561	857	789	789	789	692	692	692	583	583	540	368					
PV68R3-32-W	38,7	59,1	59,1	59,1	59,1	59,1	59,1	59,1	51,5	37,2	25,4						
	561	857	857	857	857	857	857	857	747	540	368						
PV68R1-42						6,5	5,5	4,6	3,7	2,8	1,9					SA 217 gr. WCC	
						94	80	67	54	41	27						
PV68R2-42 ⁽²⁾						36,5	35,2	33,7	31,7	28,2	21,8	15,6	10,5				
						529	511	489	460	409	315	226	152				
PV68R3-42						47,7	47,7	47,7	40,2	40,2	31,3	21,1					
						692	692	692	583	583	583	454	306				
PV68R3-42-W						59,1	59,1	59,1	59,1	56,5	43,6	31,3	21,1				
						857	857	857	857	819	632	454	306				
PV68R1-52								4,6	3,7	2,8	1,9						
								67	54	41	27						
PV68R2-52 ⁽²⁾								33,7	31,7	28,2	26,2	25,0	24,0	19,5	14,6		
								489	460	409	380	363	348	283	212		
PV68R3-52								47,7	40,2	40,2	40,2	33,1	33,1	25,6	25,6		
								692	583	583	583	480	480	371	371		
PV68R3-52-W								59,1	59,1	56,5	52,2	49,8	47,9	39,0	29,2		
								857	857	819	757	722	695	566	424		
PV68R1-16	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9					SA 351 gr. CF8M	
	175	148	135	122	107	94	80	67	54	41	27						
PV68R2-16 ⁽²⁾	33,4	31,6	30,9	30,3	29,9	29,4	29,1	28,8	28,7	28,2	26,2	25,0	24,0	19,9	15,8		
	484	458	448	439	434	426	422	418	416	409	380	363	348	289	229		
PV68R3-16	38,7	58,3	54,0	54,0	54,0	47,7	47,7	47,7	40,2	40,2	40,2	33,1	33,1	25,6	25,6		
	561	846	783	783	783	692	692	692	583	583	583	480	480	371	371		
PV68R3-16-W	38,687	59,06	59,06	59,06	59,06	58,9	58,3	57,7	57,3	56,5	52,2	49,8	47,9	39,8	31,6		
	561	857	857	857	857	854	846	837	831	819	757	722	695	577	458		

NOTE

⁽¹⁾ N/A

⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

Orifice: T

154,819 cm² / 23,997 in²

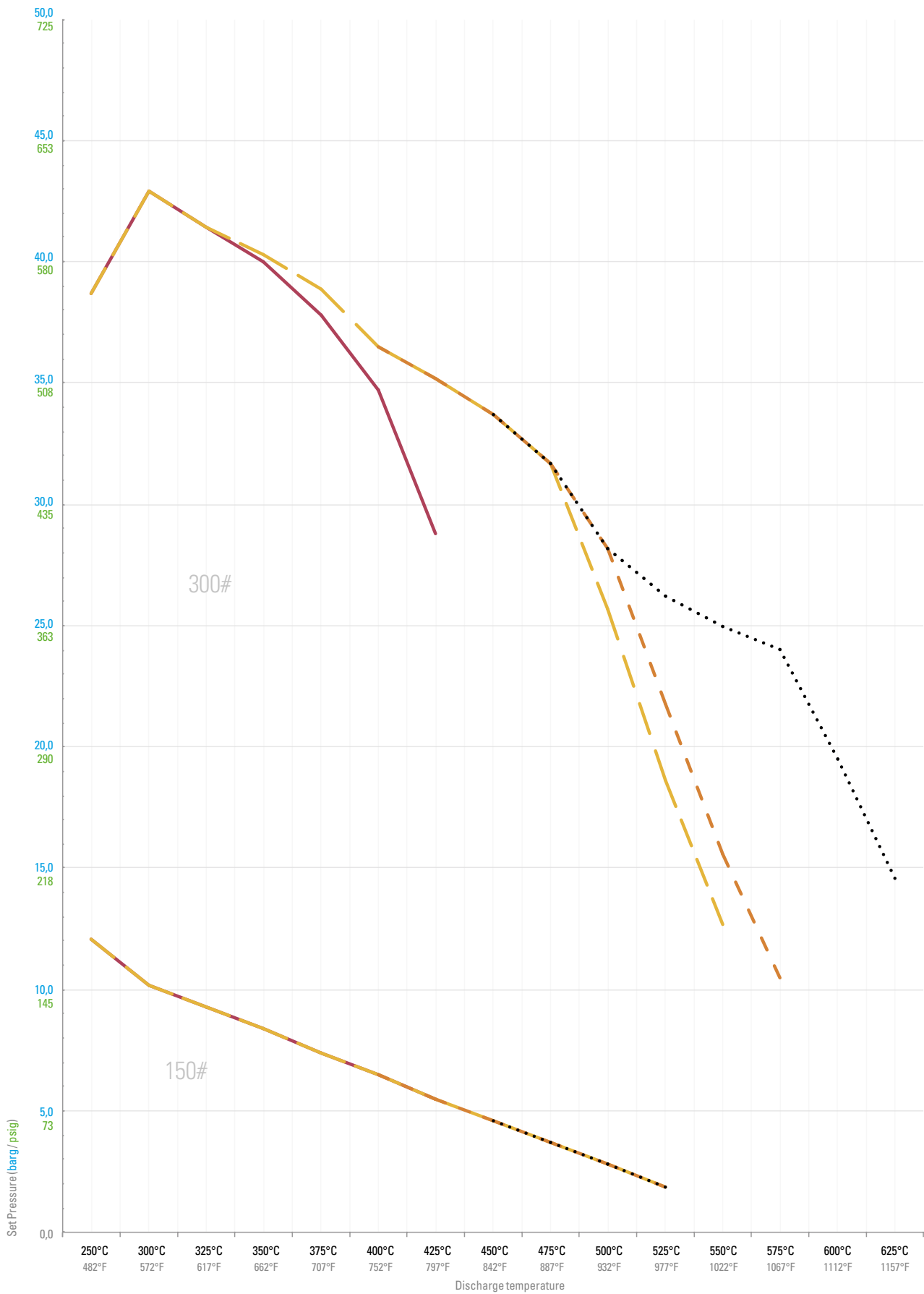
CODE	Max. SET PRESSURE															BODY MAT.
	barg / psig															
	482°F 250 °C	572°F 300 °C	617°F 325 °C	662°F 350 °C	707°F 375 °C	752°F 400 °C	797°F 425 °C	842°F 450 °C	887°F 475 °C	932°F 500 °C	977°F 525 °C	1022°F 550 °C	1067°F 575 °C	1112°F 600 °C	1157°F 625 °C	
PV89T1-30	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80									SA 216 gr. WC6
PV89T2-30 ⁽²⁾	38,7 561	42,9 622	41,4 600	40,0 580	37,8 548	34,7 503	28,8 418									
PV89T1-32	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					SA 217 gr. WC6
PV89T2-32 ⁽²⁾	38,7 561	42,9 622	41,4 600	40,3 585	38,9 564	36,5 529	35,2 511	33,7 489	31,7 460	25,7 373	18,6 270	12,7 184				
PV89T1-42						6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					SA 217 gr. WC9
PV89T2-42 ⁽²⁾						36,5 529	35,2 511	33,7 489	31,7 460	28,2 409	21,8 315	15,6 226	10,5 152			
PV89T1-52								4,6 67	3,7 54	2,8 41	1,9 27					SA 217 gr. C12A
PV89T2-52 ⁽²⁾								33,7 489	31,7 460	28,2 409	26,2 380	25,0 363	24,0 348	19,5 283	14,6 212	
PV89T1-16	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					SA 351 gr. CF8M
PV89T2-16 ⁽²⁾	33,4 484	31,6 458	30,9 448	30,3 439	29,9 434	29,4 426	29,1 422	28,8 418	28,7 416	28,2 409	26,2 380	25,0 363	24,0 348	19,9 289	15,8 229	

NOTE

⁽¹⁾ N/A

⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

Orifice: V

248,696 cm² / 38,548 in²

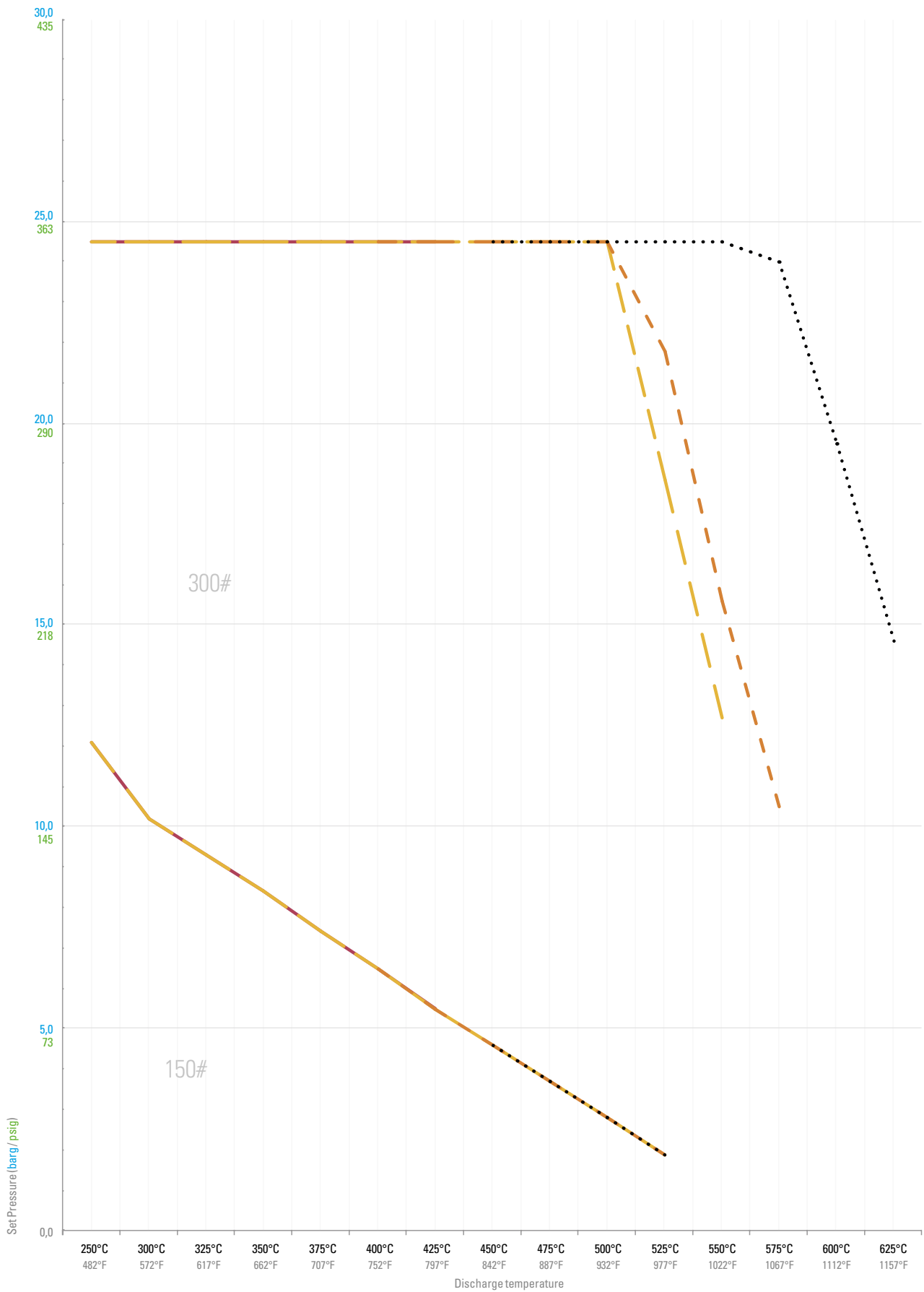
CODE	Max. SET PRESSURE barg / psig															BODY MAT.
	482°F	572°F	617°F	662°F	707°F	752°F	797°F	842°F	887°F	932°F	977°F	1022°F	1067°F	1112°F	1157°F	
	250 °C	300 °C	325 °C	350 °C	375 °C	400 °C	425 °C	450 °C	475 °C	500 °C	525 °C	550 °C	575 °C	600 °C	625 °C	
PV9BV1-30	12,1	10,2	9,3	8,4	7,4	6,5	5,5									
	175	148	135	122	107	94	80									
PV9BV2-30 ⁽²⁾	24,5	24,5	24,5	24,5	24,5	24,5	24,5									
	355	355	355	355	355	355	355									
PV9BV1-32	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9					
	175	148	135	122	107	94	80	67	54	41	27					
PV9BV2-32 ⁽²⁾	24,5	24,5	24,5	24,5	24,5	24,5	24,5	24,5	24,5	24,5	18,6	12,7				
	355	355	355	355	355	355	355	355	355	355	270	184				
PV9BV1-42						6,5	5,5	4,6	3,7	2,8	1,9					
						94	80	67	54	41	27					
PV9BV2-42 ⁽²⁾						24,5	24,5	24,5	24,5	24,5	21,8	15,6	10,5			
						355	355	355	355	355	315	226	152			
PV9BV1-52								4,6	3,7	2,8	1,9					
								67	54	41	27					
PV9BV2-52 ⁽²⁾								24,5	24,5	24,5	24,5	24,5	24,0	19,5	14,6	
								355	355	355	355	355	348	283	212	
PV9BV1-16	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9					
	175	148	135	122	107	94	80	67	54	41	27					
PV9BV2-16 ⁽²⁾	24,5	24,5	24,5	24,5	24,5	24,5	24,5	24,5	24,5	24,5	24,5	24,5	24,0	19,9	15,8	
	355	355	355	355	355	355	355	355	355	355	355	355	348	289	229	

NOTE

⁽¹⁾ N/A

⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

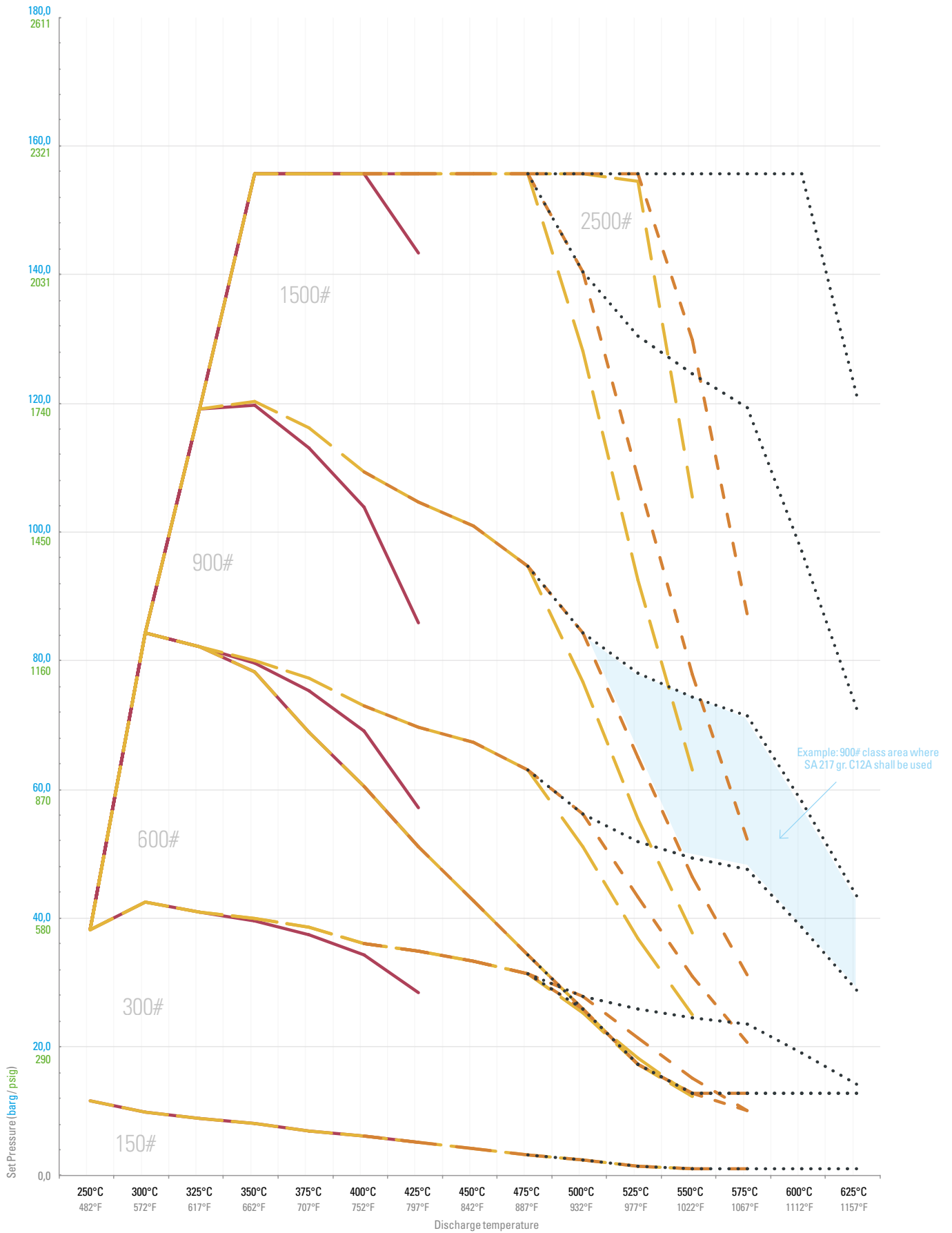
Orifice: F
2,406 cm² / 0,373 in²

CODE	Max. SET PRESSURE															BODY MAT.	
	barg / psig																
	482°F 250 °C	572°F 300 °C	617°F 325 °C	662°F 350 °C	707°F 375 °C	752°F 400 °C	797°F 425 °C	842°F 450 °C	887°F 475 °C	932°F 500 °C	977°F 525 °C	1022°F 550 °C	1067°F 575 °C	1112°F 600 °C	1157°F 625 °C		
PV72F1-30	12,1	10,2	9,3	8,4	7,4	6,5	5,5										SA 216 gr. WC6
	175	148	135	122	107	94	80										
PV72F2-30 ⁽²⁾	38,7	42,9	41,4	40,0	37,8	34,7	28,8										
	561	622	600	580	548	503	418										
PV72F3-30	38,7	84,8	82,6	78,6	69,3	60,9	51,5										
	561	1230	1198	1141	1005	883	747										
PV72F3-30-W	38,7	84,8	82,6	80,0	75,7	69,4	57,5										
	561	1230	1198	1160	1098	1007	834										
PV73F4-30	38,7	84,8	119,5	120,1	113,5	104,2	86,3										SA 217 gr. WC6
	561	1230	1733	1742	1646	1511	1252										
PV73F5-30	38,7	84,8	119,5	156,0	156,0	156,0	143,8										
	561	1230	1733	2263	2263	2263	2086										
PV73F6-30	38,7	84,8	119,5	156,0	156,0	156,0	156,0										
	561	1230	1733	2263	2263	2263	2263										
PV72F1-32	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9						
	175	148	135	122	107	94	80	67	54	41	28						
PV72F2-32	38,7	42,9	41,4	40,3	38,9	36,5	35,2	33,7	31,7	25,7	17,6						
	561	622	600	585	564	529	511	489	460	373	255						
PV72F2-32-W	38,7	42,9	41,4	40,3	38,9	36,5	35,2	33,7	31,7	25,7	18,6	12,7					
	561	622	600	585	564	529	511	489	460	373	270	184					
PV72F3-32	38,7	84,8	82,6	78,6	69,3	60,9	51,5	43,1	34,6	26,2	17,6						
	561	1230	1198	1141	1005	883	747	625	502	380	255						
PV72F3-32-W	38,7	84,8	82,6	80,4	77,6	73,3	70,0	67,7	63,4	51,5	37,2	25,4					
	561	1230	1198	1166	1125	1063	1015	982	920	747	540	368					
PV73F4-32	38,7	84,8	119,5	120,7	116,5	109,8	105,1	101,4	95,1	77,2	55,8	38,1					
	561	1230	1733	1751	1690	1593	1524	1471	1379	1120	810	553					
PV73F5-32	38,7	84,8	119,5	156,0	156,0	156,0	156,0	156,0	128,6	93,0	63,5						
	561	1230	1733	2263	2263	2263	2263	2263	2263	1865	1349	921					
PV73F6-32	38,7	84,8	119,5	156,0	156,0	156,0	156,0	156,0	156,0	155,0	105,9						
	561	1230	1733	2263	2263	2263	2263	2263	2263	2248	1536						
PV72F1-42						6,5	5,5	4,6	3,7	2,8	1,9						SA 217 gr. WC6
						94	80	67	54	41	27						
PV72F2-42						36,5	35,2	33,7	31,7	26,2	17,6						
						529	511	489	460	380	255						
PV72F2-42-W						36,5	35,2	33,7	31,7	28,2	21,8	15,6	10,5				
						529	511	489	460	409	315	226	152				
PV72F3-42						60,9	51,5	43,1	34,6	26,2	17,6						
						883	747	625	502	380	255						
PV72F3-42-W						73,3	70,0	67,7	63,4	56,5	43,6	31,3	21,1				
						1063	1015	982	920	819	632	454	306				
PV73F4-42						109,8	105,1	101,4	95,1	84,7	65,4	46,9	31,6				
						1593	1524	1471	1379	1228	948	680	458				
PV73F5-42						156,0	156,0	156,0	156,0	140,9	108,9	78,2	52,6				
						2263	2263	2263	2263	2044	1579	1134	763				
PV73F6-42						156,0	156,0	156,0	156,0	156,0	156,0	130,3	87,7				
						2263	2263	2263	2263	2263	2263	1890	1272				
PV72F1-52									3,7	2,8	1,9						SA 217 gr. C12A
									54	41	27						
PV72F2-52									31,7	26,2	17,6						
									460	380	255						
PV72F2-52-W									31,7	28,2	26,2	25,0	24,0	19,5	14,6		
									460	409	380	363	348	283	212		
PV72F3-52									34,6	26,2	17,6						
									502	380	255						
PV72F3-52-W									63,4	56,5	52,2	49,8	47,9	39,0	29,2		
									920	819	757	722	695	566	424		
PV73F4-52									95,1	84,7	78,5	74,8	71,8	58,5	43,8		
									1379	1228	1138	1085	1041	848	635		
PV73F5-52									156,0	140,9	130,8	124,9	119,7	97,5	73,0		
									2263	2044	1897	1812	1736	1414	1059		
PV73F6-52									156,0	156,0	156,0	156,0	156,0	156,0	121,7		
									2263	2263	2263	2263	2263	2263	1765		
PV72F1-16	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9						SA 351 gr. CF8M
	175	148	135	122	107	94	80	67	54	41	27						
PV72F2-16	33,4	31,6	30,9	30,3	29,9	29,4	29,1	28,8	28,7	26,2	17,6						
	484	458	448	439	434	426	422	418	416	380	255						
PV72F2-16-W	33,4	31,6	30,9	30,3	29,9	29,4	29,1	28,8	28,7	28,2	26,2	25,0	24,0	19,9	15,8		
	484	458	448	439	434	426	422	418	416	409	380	363	348	289	229		
PV72F3-16	38,7	63,2	61,8	60,7	59,8	58,9	51,5	43,1	34,6	26,2	17,6						
	561	917	896	880	867	854	747	625	502	380	255						
PV72F3-16-W	38,7	63,2	61,8	60,7	59,8	58,9	58,3	57,7	57,3	56,5	52,2	49,8	47,9	39,8	31,6		
	561	917	896	880	867	854	846	837	831	819	757	722	695	577	458		
PV73F4-16	38,7	84,8	92,7	91,0	89,6	88,3	87,4	86,5	86,0	84,7	78,5	74,8	71,8	59,7	47,4		
	561	1230	1345	1320	1300	1281	1268	1255	1247	1228	1138	1085	1041	866	687		
PV73F5-16	38,7	84,8	119,5	151,6	149,4	147,2	145,7	144,2	143,4	140,9	130,8	124,9	119,7	99,5	79,1		
	561	1230	1733	2199	2167	2135	2113	2091	2080	2044	1897	1812	1736	1443	1147		
PV73F6-16	38,7	84,8	119,5	156,0	156,0	156,0	156,0	156,0	156,0	156,0	156,0	156,0	156,0	156,0	131,8		
	561	1230	1733	2263	2263	2263	2263	2263	2263	2263	2263	2263	2263	2263	1912		

NOTE

⁽¹⁾ N/A
⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

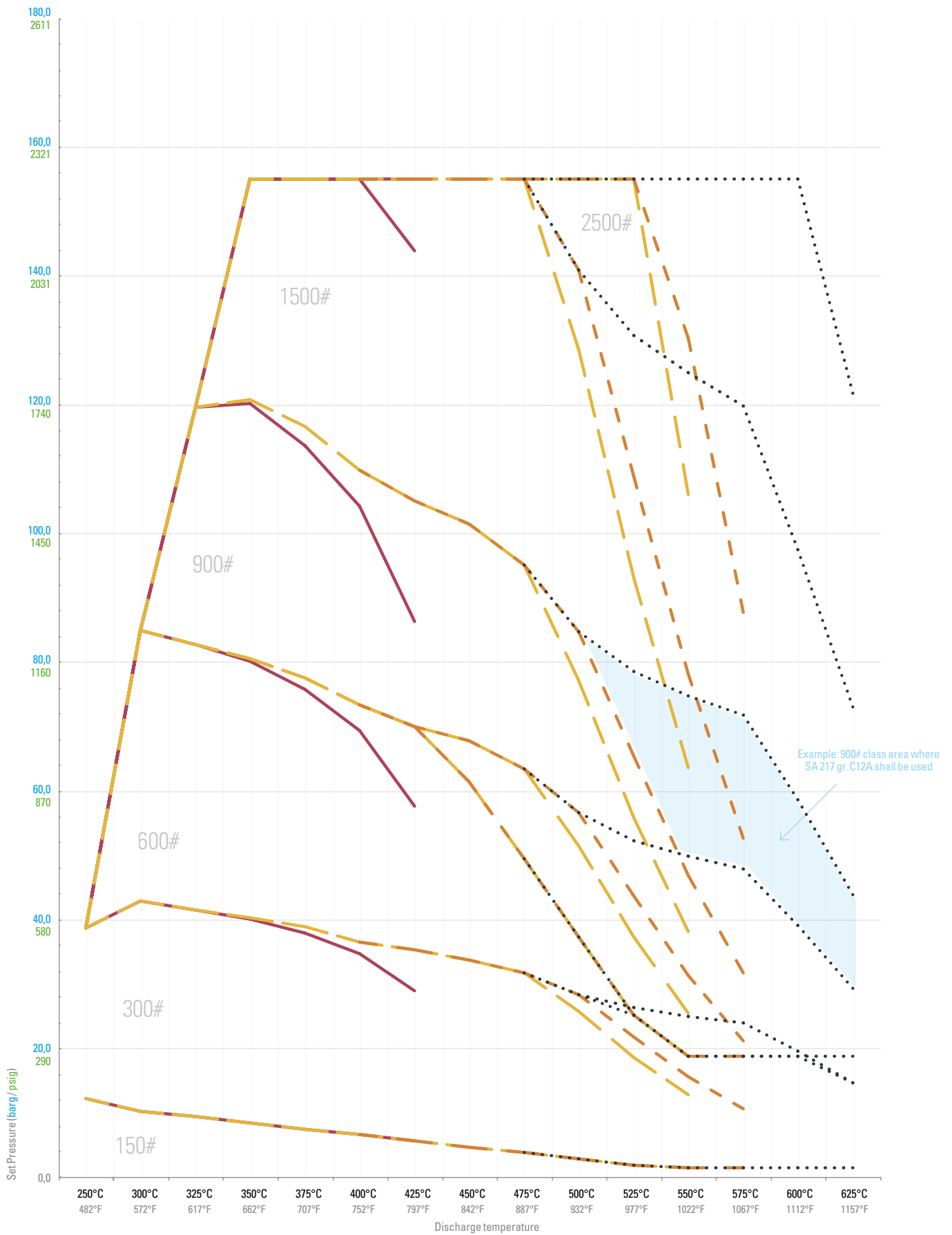
Orifice: G
3,800 cm² / 0,589 in²

CODE	Max. SET PRESSURE															BODY MAT.	
	barg / psig																
	482°F	572°F	617°F	662°F	707°F	752°F	797°F	842°F	887°F	932°F	977°F	1022°F	1067°F	1112°F	1157°F		
250 °C	300 °C	325 °C	350 °C	375 °C	400 °C	425 °C	450 °C	475 °C	500 °C	525 °C	550 °C	575 °C	600 °C	625 °C			
PV73G1-30	12,1	10,2	9,3	8,4	7,4	6,5	5,5									SA 216 gr. WCC	
	175	148	135	122	107	94	80										
PV73G2-30 ⁽²⁾	38,7	42,9	41,4	40,0	37,8	34,7	28,8										
	561	622	600	580	548	503	418										
PV73G3-30 ⁽²⁾	38,7	84,8	82,6	80,0	75,7	69,4	57,5										
	561	1230	1198	1160	1098	1007	834										
PV73G4-30	38,7	84,8	119,5	120,1	113,5	104,2	86,3										
	561	1230	1733	1742	1646	1511	1252										
PV23G5-30	38,7	84,8	119,5	155,1	155,1	155,1	143,8										
	561	1230	1733	2250	2250	2250	2086										
PV23G6-30	38,7	84,8	119,5	155,1	155,1	155,1	155,1										
	561	1230	1733	2250	2250	2250	2250										
PV73G1-32	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9						SA 217 gr. WCC
	175	148	135	122	107	94	80	67	54	41	27						
PV73G2-32 ⁽²⁾	38,7	42,9	41,4	40,3	38,9	36,5	35,2	33,7	31,7	25,7	18,6	12,7 ⁽⁴⁾					
	561	622	600	585	564	529	511	489	460	373	270	184 ⁽⁴⁾					
PV73G3-32	38,7	84,8	82,6	80,4	77,6	73,3	70,0	61,3	49,3	37,3	25,0						
	561	1230	1198	1166	1125	1063	1015	889	715	541	363						
PV73G3-32-W	38,7	84,8	82,6	80,4	77,6	73,3	70,0	67,7	63,4	51,5	37,2	25,4					
	561	1230	1198	1166	1125	1063	1015	982	920	747	540	368					
PV73G4-32	38,7	84,8	119,5	120,7	116,5	109,8	105,1	101,4	95,1	77,2	55,8	38,1					
	561	1230	1733	1751	1690	1593	1524	1471	1379	1120	810	553					
PV23G5-32	38,7	84,8	119,5	155,1	155,1	155,1	155,1	155,1	155,1	128,6	93,0	63,5					
	561	1230	1733	2250	2250	2250	2250	2250	2250	1865	1349	921					
PV23G6-32	38,7	84,8	119,5	155,1	155,1	155,1	155,1	155,1	155,1	155,1	155,0	105,9					
	561	1230	1733	2250	2250	2250	2250	2250	2250	2250	2248	1536					
PV73G1-42						6,5	5,5	4,6	3,7	2,8	1,9					SA 217 gr. WCC9	
						94	80	67	54	41	27						
PV73G2-42 ⁽²⁾						36,5	35,2	33,7	31,7	28,2	21,8	15,6	10,5				
						529	511	489	460	409	315	226	152				
PV73G3-42						73,3	70,0	61,3	49,3	37,3	25,0						
						1063	1015	889	715	541	363						
PV73G3-42-W						73,3	70,0	67,7	63,4	56,5	43,6	31,3	21,1				
						1063	1015	982	920	819	632	454	306				
PV73G4-42						109,8	105,1	101,4	95,1	84,7	65,4	46,9	31,6				
						1593	1524	1471	1379	1228	948	680	458				
PV23G5-42						155,1	155,1	155,1	155,1	140,9	108,9	78,2	52,6				
						2250	2250	2250	2250	2044	1579	1134	763				
PV23G6-42						155,1	155,1	155,1	155,1	155,1	155,1	130,3	87,7				
						2250	2250	2250	2250	2250	2250	1890	1272				
PV73G1-52									3,7	2,8	1,9						SA 217 gr. C12A
									54	41	27						
PV73G2-52									31,7	28,2	25,0						
									460	409	363						
PV73G2-52-W									31,7	28,2	26,2	25,0	24,0	19,5	14,6		
									460	409	380	363	348	283	212		
PV73G3-52									49,3	37,3	25,0						
									715	541	363						
PV73G3-52-W									63,4	56,5	52,2	49,8	47,9	39,0	29,2		
									920	819	757	722	695	566	424		
PV73G4-52									95,1	84,7	78,5	74,8	71,8	58,5	43,8		
									1379	1228	1138	1085	1041	848	635		
PV23G5-52									155,1	140,9	130,8	124,9	119,7	97,5	73,0		
									2250	2044	1897	1812	1736	1414	1059		
PV23G6-52									155,1	155,1	155,1	155,1	155,1	155,1	121,7		
									2250	2250	2250	2250	2250	2250	1765		
PV73G1-16	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9					SA 351 gr. CF8M	
	175	148	135	122	107	94	80	67	54	41	27						
PV73G2-16	33,4	31,6	30,9	30,3	29,9	29,4	29,1	28,8	28,7	28,2	25,0						
	484	458	448	439	434	426	422	418	416	409	363						
PV73G2-16-W	33,4	31,6	30,9	30,3	29,9	29,4	29,1	28,8	28,7	28,2	26,2	25,0	24,0	19,9	15,8		
	484	458	448	439	434	426	422	418	416	409	380	363	348	289	229		
PV73G3-16	38,7	63,2	61,8	60,7	59,8	58,9	58,3	57,7	49,3	37,3	25,0						
	561	917	896	880	867	854	846	837	715	541	363						
PV73G3-16-W	38,7	63,2	61,8	60,7	59,8	58,9	58,3	57,7	57,3	56,5	52,2	49,8	47,9	39,8	31,6		
	561	917	896	880	867	854	846	837	831	819	757	722	695	577	458		
PV73G4-16	38,7	84,8	92,7	91,0	89,6	88,3	87,4	86,5	86,0	84,7	78,5	74,8	71,8	59,7	47,4		
	561	1230	1345	1320	1300	1281	1268	1255	1247	1228	1138	1085	1041	866	687		
PV23G5-16	38,7	84,8	119,5	151,6	149,4	147,2	145,7	144,2	143,4	140,9	130,8	124,9	119,7	99,5	79,1		
	561	1230	1733	2199	2167	2135	2113	2091	2080	2044	1897	1812	1736	1443	1147		
PV23G6-16	38,7	84,8	119,5	155,1	155,1	155,1	155,1	155,1	155,1	155,1	155,1	155,1	155,1	155,1	131,8		
	561	1230	1733	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	1912		

NOTE

- ⁽¹⁾ N/A
- ⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)
- ⁽⁴⁾ Only valid for #300 outlet rating

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

Orifice: H
6,426 cm² / 0,996 in²

CODE	Max. SET PRESSURE															BODY MAT.	
	barg / psig																
	482°F 250 °C	572°F 300 °C	617°F 325 °C	662°F 350 °C	707°F 375 °C	752°F 400 °C	797°F 425 °C	842°F 450 °C	887°F 475 °C	932°F 500 °C	977°F 525 °C	1022°F 550 °C	1067°F 575 °C	1112°F 600 °C	1157°F 625 °C		
PV73H1-30	12,1	10,2	9,3	8,4	7,4	6,5	5,5										SA 216 gr. WCC
	175	148	135	122	107	94	80										
PV23H2-30 ⁽²⁾	38,7	42,9	41,4	40,0	37,8	34,7	28,8										
	561	622	600	580	548	503	418										
PV23H3-30 ⁽³⁾	38,7	79,6	73,4	66,3	58,4	51,3	43,4										
	561	1154	1064	961	847	744	629										
PV23H3-30-W	38,7	79,6	79,6	79,6	75,7	69,4	57,5										
	561	1154	1154	1154	1098	1007	834										
PV23H4-30-W	38,7	79,6	79,6	79,6	79,6	79,6	79,6										
	561	1154	1154	1154	1154	1154	1154										
PV23H5-30	38,7	84,8	119,5	155,1	155,1	155,1	143,8										
	561	1230	1733	2250	2250	2250	2086										
PV73H1-32	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9						SA 217 gr. WCC
	175	148	135	122	107	94	80	67	54	41	27						
PV23H2-32	38,7	42,9	41,4	40,3	38,9	36,5	35,2	33,7	29,2	22,1	14,8						
	561	622	600	585	564	529	511	489	423	320	215						
PV23H2-32-W	38,7	42,9	41,4	40,3	38,9	36,5	35,2	33,7	31,7	25,7	18,6	12,7					
	561	622	600	585	564	529	511	489	460	373	270	184					
PV23H3-32 ⁽³⁾	38,7	79,6	73,4	66,3	58,4	51,3	43,4	36,3	29,2	22,1	14,8						
	561	1154	1064	961	847	744	629	526	423	320	215						
PV23H3-32-W	38,7	79,6	79,6	79,6	77,6	73,3	70,0	67,7	63,4	51,5	37,2	25,4					
	561	1154	1154	1154	1125	1063	1015	982	920	747	540	368					
PV23H4-32-W	38,7	79,6	79,6	79,6	79,6	79,6	79,6	79,6	79,6	77,2	55,8	38,1					
	561	1154	1154	1154	1154	1154	1154	1154	1154	1120	810	553					
PV23H5-32	38,7	84,8	119,5	155,1	155,1	155,1	155,1	155,1	155,1	128,6	93,0	63,5					
	561	1230	1733	2250	2250	2250	2250	2250	2250	1865	1349	921					
PV73H1-42						6,5	5,5	4,6	3,7	2,8	1,9						SA 217 gr. WC9
						94	80	67	54	41	27						
PV23H2-42						36,5	35,2	33,7	29,2	22,1	14,8						
						529	511	489	423	320	215						
PV23H2-42-W						36,5	35,2	33,7	31,7	28,2	21,8	15,6	10,5				
						529	511	489	460	409	315	226	152				
PV23H3-42 ⁽³⁾						51,3	43,4	36,3	29,2	22,1	14,8						
						744	629	526	423	320	215						
PV23H3-42-W						73,3	70,0	67,7	63,4	56,5	43,6	31,3	21,1				
						1063	1015	982	920	819	632	454	306				
PV23H4-42-W						79,6	79,6	79,6	79,6	79,6	63,6	46,9	31,6				
						1154	1154	1154	1154	1154	923	680	458				
PV23H5-42						155,1	155,1	155,1	155,1	140,9	108,9	78,2	52,6				
						2250	2250	2250	2250	2044	1579	1134	763				
PV73H1-52									3,7	2,8	1,9						SA 217 gr. C12A
									54	41	27						
PV23H2-52 ⁽²⁾									29,2	22,1	14,8						
									423	320	215						
PV23H2-52-W									31,7	28,2	26,2	25,0	24,0	19,5	14,6		
									460	409	380	363	348	283	212		
PV23H3-52-W									63,4	56,5	52,2	49,8	47,9	39,0	29,2		
									920	819	757	722	695	566	424		
PV23H4-52-W									79,6	79,6	76,7	74,8	71,8	58,5	43,8		
									1154	1154	1112	1085	1041	848	635		
PV23H5-52									155,1	140,9	130,8	124,9	119,7	97,5	73,0		
									2250	2044	1897	1812	1736	1414	1059		
PV73H1-16	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9						SA 351 gr. CF8M
	175	148	135	122	107	94	80	67	54	41	27						
PV23H2-16	33,4	31,6	30,9	30,3	29,9	29,4	29,1	28,8	28,7	22,1	14,8						
	484	458	448	439	434	426	422	418	416	320	215						
PV23H2-16-W	33,4	31,6	30,9	30,3	29,9	29,4	29,1	28,8	28,7	28,2	26,2	25,0	24,0	19,9	15,8		
	484	458	448	439	434	426	422	418	416	409	380	363	348	289	229		
PV23H3-16	38,7	63,2	61,8	60,7	58,4	51,3	43,4	36,3	29,2	22,1	14,8						
	561	917	896	880	847	744	629	526	423	320	215						
PV23H3-16-W	38,7	63,2	61,8	60,7	59,8	58,9	58,3	57,7	57,3	56,5	52,2	49,8	47,9	39,8	31,6		
	561	917	896	880	867	854	846	837	831	819	757	722	695	577	458		
PV23H4-16	38,7	79,6	73,4	66,3	58,4	51,3	43,4	36,3	29,2	22,1	14,8						
	561	1154	1064	961	847	744	629	526	423	320	215						
PV23H4-16-W	38,7	79,6	79,6	79,6	79,6	79,6	79,6	79,6	79,6	76,7	74,8	71,8	59,7	47,4			
	561	1154	1154	1154	1154	1154	1154	1154	1154	1112	1085	1041	866	687			
PV23H5-16	38,7	84,8	119,5	151,6	149,4	147,2	145,7	144,2	143,4	140,9	130,8	124,9	119,7	99,5	79,1		
	561	1230	1733	2199	2167	2135	2113	2091	2080	2044	1897	1812	1736	1443	1147		

NOTE

⁽¹⁾ N/A

⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)

⁽³⁾ The max. set pressure is the same value for the next upper class 600# inlet rating (PV23H3) and 900# inlet rating (PV23H4), limited by the 150# outlet rating.

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Temperature at outlet = Temperature at inlet

Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

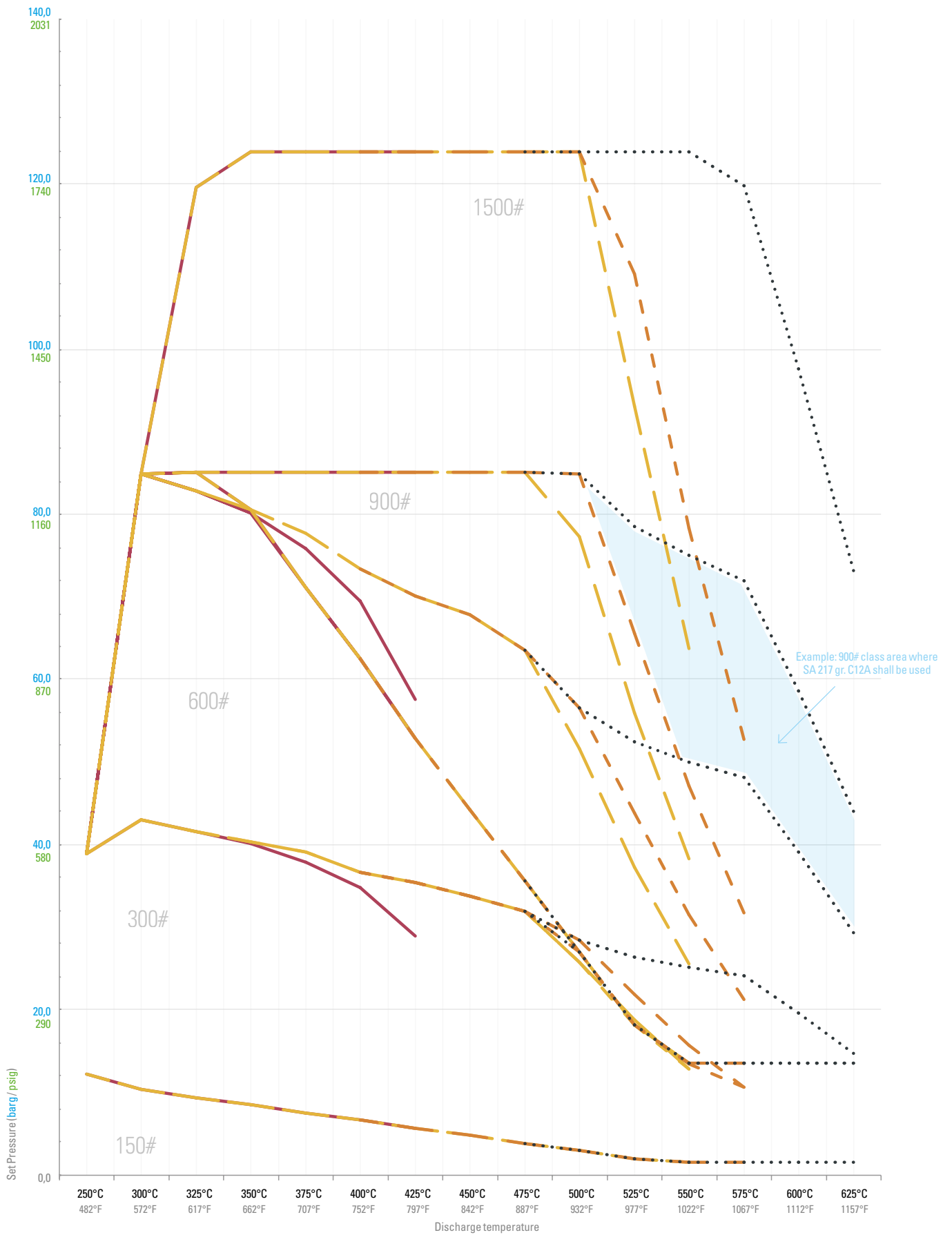
Orifice: J
 9,400 cm² / 1,457 in²

CODE	Max. SET PRESSURE															BODY MAT.	
	barg / psig																
	482°F 250 °C	572°F 300 °C	617°F 325 °C	662°F 350 °C	707°F 375 °C	752°F 400 °C	797°F 425 °C	842°F 450 °C	887°F 475 °C	932°F 500 °C	977°F 525 °C	1022°F 550 °C	1067°F 575 °C	1112°F 600 °C	1157°F 625 °C		
PV23J1-30	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80										SA 216 gr. WC6
PV34J2-30 ⁽²⁾	38,7 561	42,9 622	41,4 600	40,0 580	37,8 548	34,7 503	28,8 418										
PV34J3-30	38,7 561	84,8 1230	82,6 1198	80,0 1160	70,9 1028	62,3 903	52,7 764										
PV34J3-30-W	38,7 561	84,8 1230	82,6 1198	80,0 1160	75,7 1098	69,4 1007	57,5 834										
PV34J4-30	38,7 561	84,8 1230	84,9 1231	80,5 1167	70,9 1028	62,3 903	52,7 764										
PV34J4-30-W	38,7 561	84,8 1230	84,9 1231	84,9 1231	84,9 1231	84,9 1231	84,9 1231										
PV23J5-30	38,7 561	84,8 1230	119,5 1733	123,8 1796	123,8 1796	123,8 1796	123,8 1796										
PV23J1-32	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27						
PV34J2-32	38,7 561	42,9 622	41,4 600	40,3 585	38,9 564	36,5 529	35,2 511	33,7 489	31,7 460	25,7 373	18,0 261						
PV34J2-32-W	38,7 561	42,9 622	41,4 600	40,3 585	38,9 564	36,5 529	35,2 511	33,7 489	31,7 460	25,7 373	18,6 270	12,7 184					
PV34J3-32	38,7 561	84,8 1230	82,6 1198	80,4 1166	70,9 1028	62,3 903	52,7 764	44,1 639	35,4 514	26,8 389	18,0 261						
PV34J3-32-W	38,7 561	84,8 1230	82,6 1198	80,4 1166	77,6 1125	73,3 1063	70,0 1015	67,7 982	63,4 920	51,5 747	37,2 540	25,4 368					
PV34J4-32	38,7 561	84,8 1230	84,9 1231	80,5 1167	70,9 1028	62,3 903	52,7 764	44,1 639	35,4 514	26,8 389	18,0 261						
PV34J4-32-W	38,7 561	84,8 1230	84,9 1231	84,9 1231	84,9 1231	84,9 1231	84,9 1231	84,9 1231	84,9 1231	77,2 1120	55,8 810	38,1 553					
PV23J5-32	38,7 561	84,8 1230	119,5 1733	123,8 1796	123,8 1796	123,8 1796	123,8 1796	123,8 1796	123,8 1796	123,8 1796	93,0 1349	63,5 921					
PV23J1-42						6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27						SA 217 gr. WC9
PV34J2-42						36,5 529	35,2 511	33,7 489	31,7 460	26,8 389	18,0 261						
PV34J2-42-W						36,5 529	35,2 511	33,7 489	31,7 460	28,2 409	21,8 315	15,6 226	10,5 152				
PV34J3-42 ⁽³⁾						62,3 903	52,7 764	44,1 639	35,4 514	26,8 389	18,0 261						
PV34J3-42-W						73,3 1063	70 1015	67,7 982	63,4 920	56,5 819	43,6 632	31,3 454	21,1 306				
PV34J4-42-W						84,9 1231	84,9 1231	84,9 1231	84,9 1231	84,7 1228	65,4 948	46,9 680	31,6 458				
PV23J5-42						123,8 1796	123,8 1796	123,8 1796	123,8 1796	123,8 1796	108,9 1579	78,2 1134	52,6 763				
PV23J1-52									3,7 54	2,8 41	1,9 27						
PV34J2-52									31,7 460	26,8 389	18,0 261						
PV34J2-52-W									31,7 460	28,2 409	26,2 380	25,0 363	24,0 348	19,5 283	14,6 212		
PV34J3-52 ⁽³⁾									35,4 514	26,8 389	18,0 261						
PV34J3-52-W									63,4 920	56,5 819	43,6 632	31,3 454	21,1 306				
PV34J4-52-W									84,9 1231	84,7 1228	78,5 1138	74,8 1085	71,8 1041	58,5 848	43,8 635		
PV23J5-52									123,8 1796	123,8 1796	123,8 1796	123,8 1796	119,7 1736	97,5 1414	73,0 1059		
PV23J1-16	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27						SA 351 gr. CF8M
PV34J2-16	33,4 484	31,6 458	30,9 448	30,3 439	29,9 434	29,4 426	29,1 422	28,8 418	28,7 416	26,8 389	18,0 261						
PV34J2-16-W	33,4 484	31,6 458	30,9 448	30,3 439	29,9 434	29,4 426	29,1 422	28,8 418	28,7 416	26,2 409	26,2 380	25,0 363	24,0 348	19,9 289	15,8 229		
PV34J3-16	38,7 561	63,2 917	61,8 896	60,7 880	59,8 867	58,9 854	52,7 764	44,1 639	35,4 514	26,8 389	18,0 261						
PV34J3-16-W	38,687 561	63,2 917	61,8 896	60,7 880	59,8 867	58,9 854	58,3 846	57,7 837	57,3 831	56,5 819	52,2 757	49,8 722	47,9 695	39,8 566	31,6 424		
PV34J4-16	38,7 561	84,8 1230	84,9 1231	80,5 1167	70,9 1028	62,3 903	52,7 764	44,1 639	35,4 514	26,8 389	18,0 261						
PV34J4-16-W	38,7 561	84,8 1230	84,9 1231	84,9 1231	84,9 1231	84,9 1231	84,9 1231	84,9 1231	84,9 1231	84,7 1228	78,5 1138	74,8 1085	71,8 1041	59,7 866	47,4 687		
PV23J5-16	38,7 561	84,8 1230	119,5 1733	123,8 1796	123,8 1796	123,8 1796	123,8 1796	123,8 1796	123,8 1796	123,8 1796	123,8 1796	123,8 1796	119,7 1736	99,5 1443	79,1 1147		

NOTE

- ⁽¹⁾ N/A
- ⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)
- ⁽³⁾ The max. set pressure is the same value for the next upper class 900# inlet rating (PV34J4), limited by the 150# outlet rating.

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

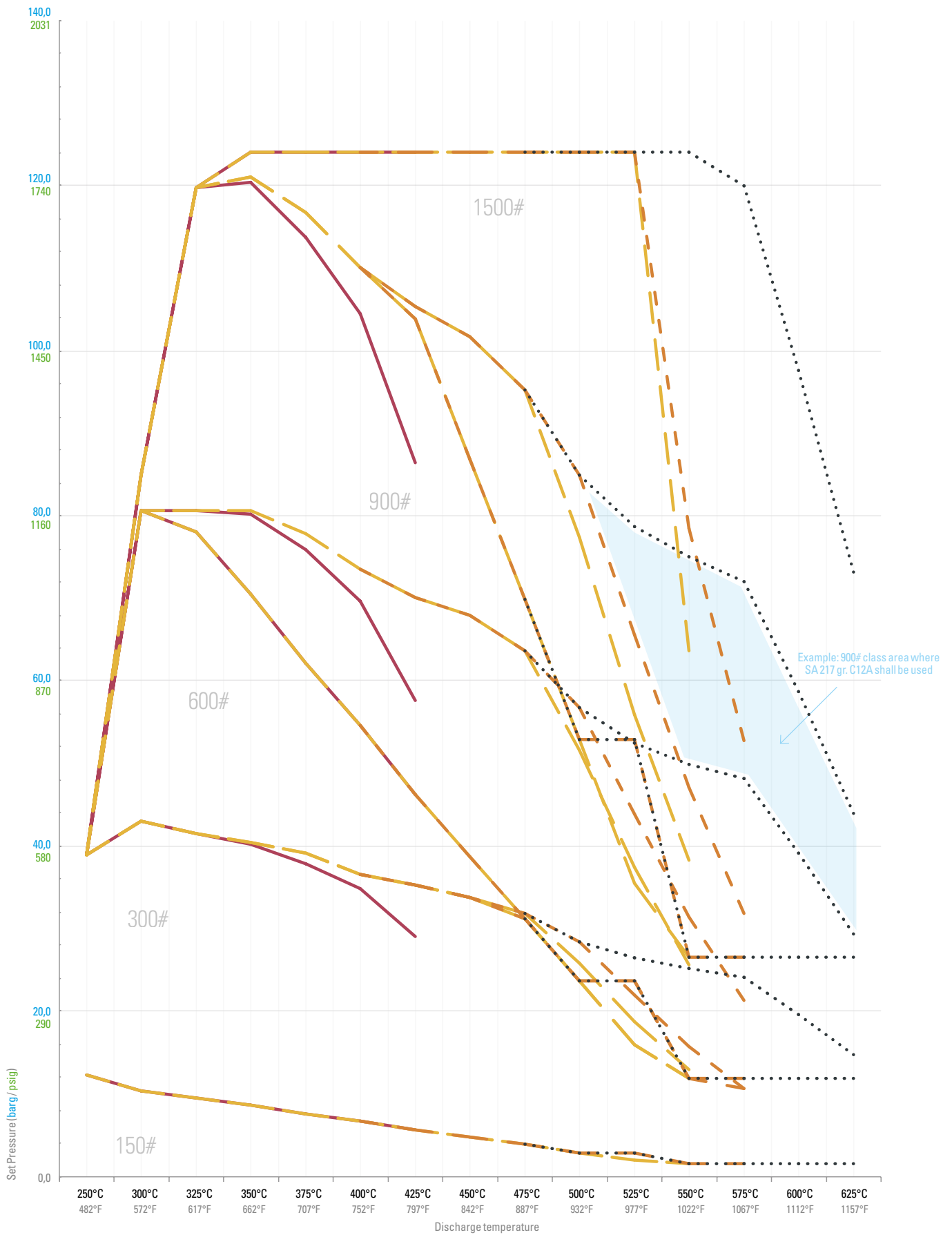
Orifice: K
10,755 cm² / 1,667 in²

CODE	Max. SET PRESSURE															BODY MAT.	
	barg / psig																
	482°F 250 °C	572°F 300 °C	617°F 325 °C	662°F 350 °C	707°F 375 °C	752°F 400 °C	797°F 425 °C	842°F 450 °C	887°F 475 °C	932°F 500 °C	977°F 525 °C	1022°F 550 °C	1067°F 575 °C	1112°F 600 °C	1157°F 625 °C		
PV34K1-30	12,1	10,2	9,3	8,4	7,4	6,5	5,5										SA 216 gr. WCC
	175	148	135	122	107	94	80										
PV34K2-30 ⁽¹⁾	38,7	42,9	41,4	40,0	37,8	34,7	28,8										
	561	622	600	580	548	503	418										
PV34K3-30	38,7	80,4	77,9	70,4	62,0	54,5	46,1										
	561	1166	1130	1021	899	790	688										
PV34K3-30-W	38,7	80,4	80,4	80,0	75,7	69,4	57,5										
	561	1166	1166	1160	1098	1007	834										
PV36K4-30 ⁽²⁾	38,7	84,8	119,5	120,1	113,5	104,2	86,3										SA 217 gr. WCC6
	561	1230	1733	1742	1646	1511	1252										
PV36K5-30	38,7	84,8	119,5	123,8	123,8	123,8	123,8										
	561	1230	1733	1796	1796	1796	1796										
PV34K1-32	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9						
	175	148	135	122	107	94	80	67	54	41	27						
PV34K2-32	38,7	42,9	41,4	40,3	38,9	36,5	35,2	33,7	31,0	23,5	15,7						
	561	622	600	585	564	529	511	489	450	340	228						
PV34K2-32-W	38,7	42,9	41,4	40,3	38,9	36,5	35,2	33,7	31,7	25,7	18,6	12,7					
	561	622	600	585	564	529	511	489	460	373	270	184					
PV34K3-32	38,7	80,4	77,9	70,4	62,0	54,5	46,1	38,5	31,0	23,5	15,7						
	561	1166	1130	1021	899	790	688	559	450	340	228						
PV34K3-32-W	38,7	80,4	80,4	80,4	77,6	73,3	70,0	67,7	63,4	51,5	37,2	25,4					
	561	1166	1166	1166	1125	1063	1015	982	920	747	540	368					
PV36K4-32	38,7	84,8	119,5	120,7	116,5	109,8	103,7	86,7	69,7	52,8	35,4						
	561	1230	1733	1751	1690	1593	1504	1258	1012	766	514						
PV36K4-32-W	38,7	84,8	119,5	120,7	116,5	109,8	105,1	101,4	95,1	77,2	55,8	38,1					
	561	1230	1733	1751	1690	1593	1524	1471	1379	1120	810	553					
PV36K5-32	38,7	84,8	119,5	123,8	123,8	123,8	123,8	123,8	123,8	123,8	123,8	63,5					
	561	1230	1733	1796	1796	1796	1796	1796	1796	1796	1796	921					
PV34K1-42						6,5	5,5	4,6	3,7	2,8	2,8						SA 217 gr. WCC9
						94	80	67	54	41	41						
PV34K2-42						36,5	35,2	33,7	31,0	23,5	23,5						
						529	511	489	450	340	340						
PV34K2-42-W						36,5	35,2	33,7	31,7	28,2	21,8	15,6	10,5				
						529	511	489	460	409	315	226	152				
PV34K3-42						54,5	46,1	38,5	31,0	23,5	23,5						
						790	688	559	450	340	340						
PV34K3-42-W						73,3	70,0	67,7	63,4	56,5	43,6	31,3	21,1				
						1063	1015	982	920	819	632	454	306				
PV36K4-42						109,8	103,7	86,7	69,7	52,8	52,8						
						1593	1504	1258	1012	766	766						
PV36K4-42-W						109,8	105,1	101,4	95,1	84,7	65,4	46,9	31,6				
						1593	1524	1471	1379	1228	948	680	458				
PV36K5-42						123,8	123,8	123,8	123,8	123,8	123,8	78,2	52,6				
						1796	1796	1796	1796	1796	1796	1134	763				
PV34K1-52									3,7	2,8	2,8						SA 217 gr. C12A
									54	41	41						
PV34K2-52 ⁽³⁾									31,0	23,5	23,5						
									450	340	340						
PV34K2-52-W									31,7	28,2	26,2	25,0	24,0	19,5	14,6		
									460	409	380	363	348	283	212		
PV34K3-52-W									63,4	56,5	52,2	49,8	47,9	39,0	29,2		
									920	819	757	722	695	566	424		
PV36K4-52									69,7	52,8	52,8						
									1012	766	766						
PV36K4-52-W									95,1	84,7	78,5	74,8	71,8	58,5	43,8		
									1379	1228	1138	1085	1041	848	635		
PV36K5-52									123,8	123,8	123,8	123,8	119,7	97,5	73,0		
									1796	1796	1796	1796	1736	1414	1059		
PV34K1-16	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	2,8						SA 351 gr. CF8M
	175	148	135	122	107	94	80	67	54	41	41						
PV34K2-16	33,4	31,6	30,9	30,3	29,9	29,4	29,1	28,8	28,7	23,5	23,5						
	484	458	448	439	434	426	422	418	416	340	340						
PV34K2-16-W	33,4	31,6	30,9	30,3	29,9	29,4	29,1	28,8	28,7	28,2	26,2	25,0	24,0	19,9	15,8		
	484	458	448	439	434	426	422	418	416	409	380	363	348	289	229		
PV34K3-16	38,7	63,2	61,8	60,7	59,8	54,5	46,1	38,5	31,0	23,5	23,5						
	561	917	896	880	867	790	688	559	450	340	340						
PV34K3-16-W	38,7	63,2	61,8	60,7	59,8	58,9	58,3	57,7	57,3	56,5	52,2	49,8	47,9	39,8	31,6		
	561	917	896	880	867	854	846	837	831	819	757	722	695	577	458		
PV36K4-16	38,7	84,8	92,7	91,0	89,6	88,3	87,4	44,1	69,7	52,8	52,8						
	561	1230	1345	1320	1300	1281	1268	639	1012	766	766						
PV36K4-16-W	38,7	84,8	92,7	91,0	89,6	88,3	87,4	86,5	86,0	84,7	78,5	74,8	71,8	59,7	47,4		
	561	1230	1345	1320	1300	1281	1268	1255	1247	1228	1138	1085	1041	866	687		
PV36K5-16	38,7	84,8	119,5	123,8	123,8	123,8	123,8	123,8	123,8	123,8	123,8	123,8	119,7	99,5	79,1		
	561	1230	1733	1796	1796	1796	1796	1796	1796	1796	1796	1796	1736	1443	1147		

NOTE

- ⁽¹⁾ N/A
- ⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)
- ⁽³⁾ The max. set pressure is the same value for the next upper class 600# inlet rating (PV34K3), limited by the 150# outlet rating.

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

Orifice: L

17,794 cm² / 2,758 in²

CODE	Max. SET PRESSURE															BODY MAT.	
	barg / psig																
	482°F	572°F	617°F	662°F	707°F	752°F	797°F	842°F	887°F	932°F	977°F	1022°F	1067°F	1112°F	1157°F		
250 °C	300 °C	325 °C	350 °C	375 °C	400 °C	425 °C	450 °C	475 °C	500 °C	525 °C	550 °C	575 °C	600 °C	625 °C			
PV34L1-30	12,1	10,2	9,3	8,4	7,4	6,5	5,5										SA 216 gr. WCC
	175	148	135	122	107	94	80										
PV46L2-30 ⁽²⁾	38,7	42,9	41,4	40,0	37,8	34,7	28,8										
	561	622	600	580	548	503	418										
PV46L3-30 ⁽²⁾	38,7	80,4	80,4	80,0	75,7	69,4	57,5										
	561	1166	1166	1160	1098	1007	834										
PV46L4-30	38,7	84,8	105,9	95,7	84,3	74,0	62,6										
	561	1230	1536	1388	1222	1074	909										
PV46L4-30-W	38,7	84,8	119,5	120,1	113,5	104,2	86,3										
	561	1230	1733	1742	1646	1511	1252										
PV46L5-30	38,7	84,8	119,5	123,8	123,8	123,8	123,8										
	561	1230	1733	1796	1796	1796	1796										
PV34L1-32	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9						SA 217 gr. WCC
	175	148	135	122	107	94	80	67	54	41	27						
PV46L2-32 ⁽²⁾	38,7	42,9	41,4	40,3	38,9	36,5	35,2	33,7	31,7	25,7	18,6	12,7 ⁽⁴⁾					
	561	622	600	585	564	529	511	489	460	373	270	184 ⁽⁴⁾					
PV46L3-32	38,7	80,4	80,4	80,4	77,6	73,3	62,6	52,4	42,1	31,9	21,4						
	561	1166	1166	1166	1125	1063	909	760	611	463	310						
PV46L3-32-W	38,7	80,4	80,4	80,4	77,6	73,3	70,0	67,7	63,4	51,5	51,5	25,4					
	561	1166	1166	1166	1125	1063	1015	982	920	747	747	368					
PV46L4-32	38,7	84,8	105,9	95,7	84,3	74,0	62,6	52,4	42,1	31,9	31,9						
	561	1230	1536	1388	1222	1074	909	760	611	463	463						
PV46L4-32-W	38,7	84,8	119,5	120,7	116,5	109,8	105,1	101,4	95,1	77,2	77,2	38,1					
	561	1230	1733	1751	1690	1593	1524	1471	1379	1120	1120	553					
PV46L5-32	38,7	84,8	119,5	123,8	123,8	123,8	123,8	123,8	123,8	123,8	93,0	63,5					
	561	1230	1733	1796	1796	1796	1796	1796	1796	1796	1349	921					
PV34L1-42						6,5	5,5	4,6	3,7	2,8	1,9						SA 217 gr. WCC9
						94	80	67	54	41	27						
PV46L2-42						36,5	35,2	33,7	31,7	28,2	21,4						
						529	511	489	460	409	310						
PV46L2-42-W						36,5	35,2	33,7	31,7	28,2	21,8	15,6	10,5				
						529	511	489	460	409	315	226	152				
PV46L3-42						73,3	62,6	52,4	42,1	31,9	21,4						
						1063	909	760	611	463	310						
PV46L3-42-W						73,3	70,0	67,7	63,4	56,5	56,5	31,3	21,1				
						1063	1015	982	920	819	819	454	306				
PV46L4-42						74,0	62,6	52,4	42,1	31,9	31,9						
						1074	909	760	611	463	463						
PV46L4-42-W						109,8	105,1	101,4	95,1	84,7	84,7	46,9	31,6				
						1593	1524	1471	1379	1228	1228	680	458				
PV46L5-42						123,8	123,8	123,8	123,8	123,8	108,9	78,2	52,6				
						1796	1796	1796	1796	1796	1796	1579	1134	763			
PV34L1-52									3,7	2,8	1,9						SA 217 gr. C12A
									54	41	27						
PV46L2-52									31,7	28,2	21,4						
									460	409	310						
PV46L2-52-W									31,7	28,2	28,2	25,0	24,0	19,5	14,6		
									460	409	409	363	348	283	212		
PV46L3-52 ⁽³⁾									42,1	31,9	21,4						
									611	463	310						
PV46L3-52-W									63,4	56,5	56,5	49,8	47,9	39,0	29,2		
									920	819	819	722	695	566	424		
PV46L4-52-W									95,1	84,7	84,7	74,8	71,8	58,5	43,8		
									1379	1228	1228	1085	1041	848	635		
PV46L5-52									123,8	123,8	123,8	123,8	119,7	97,5	73,0		
									1796	1796	1796	1796	1736	1414	1059		
PV34L1-16	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9						SA 351 gr. CF8M
	175	148	135	122	107	94	80	67	54	41	27						
PV46L2-16	33,4	31,6	30,9	30,3	29,9	29,4	29,1	28,8	28,7	28,2	21,4						
	484	458	448	439	434	426	422	418	416	409	310						
PV46L2-16-W	33,4	31,6	30,9	30,3	29,9	29,4	29,1	28,8	28,7	28,2	26,2	25,0	24,0	19,9	15,8		
	484	458	448	439	434	426	422	418	416	409	380	363	348	289	229		
PV46L3-16	38,7	63,2	61,8	60,7	59,8	58,9	58,3	52,4	42,1	31,9	21,4						
	561	917	896	880	867	854	846	760	611	463	310						
PV46L3-16-W	38,7	63,2	61,8	60,7	59,8	58,9	58,3	57,3	57,3	56,5	56,5	49,8	47,9	39,8	31,6		
	561	917	896	880	867	854	846	837	831	819	819	722	695	577	458		
PV46L4-16	38,7	84,8	92,7	91,0	84,3	74,0	62,6	52,4	42,1	31,9	31,9						
	561	1230	1345	1320	1222	1074	909	760	611	463	463						
PV46L4-16-W	38,7	84,8	92,7	91,0	89,6	88,3	87,4	86,5	86,0	84,7	84,7	74,8	71,8	59,7	47,4		
	561	1230	1345	1320	1300	1281	1268	1255	1247	1228	1228	1085	1041	866	687		
PV46L5-16	38,7	84,8	119,5	123,8	123,8	123,8	123,8	123,8	123,8	123,8	123,8	123,8	119,7	99,5	79,1		
	561	1230	1733	1796	1796	1796	1796	1796	1796	1796	1796	1796	1736	1443	1147		

NOTE

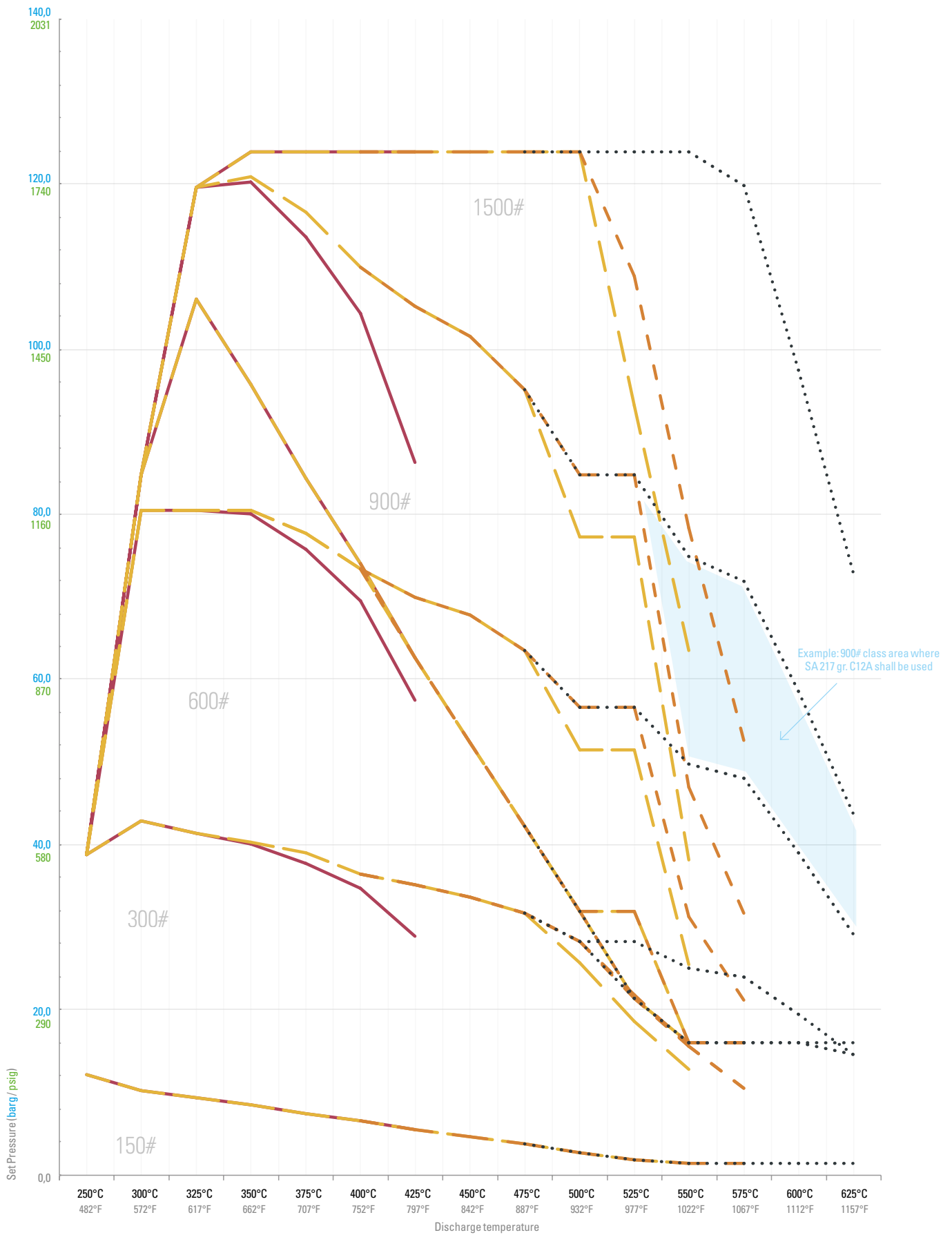
⁽¹⁾ N/A

⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)

⁽³⁾ The max. set pressure is the same value for the next upper class 900# inlet rating (PV46L4), limited by the 150# outlet rating.

⁽⁴⁾ Only valid for #300 outlet rating

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

Orifice: M

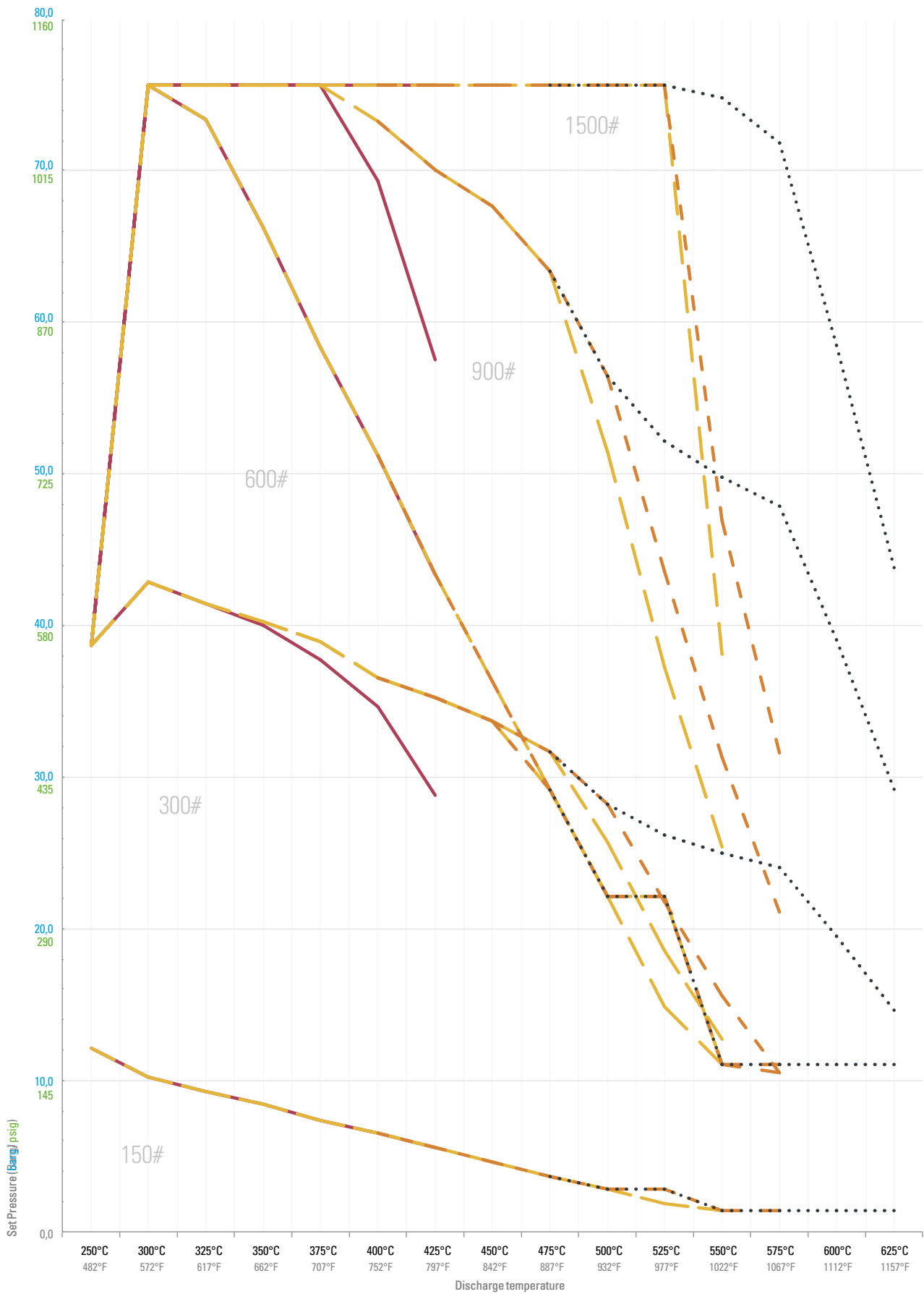
25,697 cm² / 3,983 in²

CODE	Max. SET PRESSURE															BODY MAT.
	barg / psig															
	482°F 250 °C	572°F 300 °C	617°F 325 °C	662°F 350 °C	707°F 375 °C	752°F 400 °C	797°F 425 °C	842°F 450 °C	887°F 475 °C	932°F 500 °C	977°F 525 °C	1022°F 550 °C	1067°F 575 °C	1112°F 600 °C	1157°F 625 °C	
PV46M1-30	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80									SA 216 gr. WCC
PV46M2-30 ⁽¹⁾	38,7 561	42,9 622	41,4 600	40,0 580	37,8 548	34,7 503	28,8 418									
PV46M3-30 ⁽²⁾	38,7 561	75,7 1098	73,4 1064	66,3 961	58,4 847	51,3 744	43,4 629									
PV46M3-30-W	38,7 561	75,7 1098	75,7 1098	75,7 1098	75,7 1098	69,4 1007	57,5 834									
PV46M4-30-W	38,7 561	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098									
PV46M1-32	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					SA 217 gr. WCC
PV46M2-32	38,7 561	42,9 622	41,4 600	40,3 585	38,9 564	36,5 529	35,2 511	33,7 489	29,2 423	22,1 320	14,8 215					
PV46M2-32-W	38,7 561	42,9 622	41,4 600	40,3 585	38,9 564	36,5 529	35,2 511	33,7 489	31,7 460	25,7 373	18,6 270	12,7 184				
PV46M3-32 ⁽²⁾	38,7 561	75,7 1098	73,4 1064	66,3 961	58,4 847	51,3 744	43,4 629	36,3 526	29,2 423	22,1 320	22,1 320					
PV46M3-32-W	38,7 561	75,7 1098	75,7 1098	75,7 1098	75,7 1098	73,3 1063	70,0 1015	67,7 982	63,4 920	51,5 747	37,2 540	25,4 368				
PV46M4-32-W	38,7 561	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	38,1 553			
PV46M1-42						6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	2,8 41					SA 217 gr. WCC
PV46M2-42						36,5 529	35,2 511	33,7 489	29,2 423	22,1 320	22,1 320					
PV46M2-42-W						36,5 529	35,2 511	33,7 489	31,7 460	28,2 409	21,8 315	15,6 226	10,5 152			
PV46M3-42 ⁽²⁾						51,3 744	43,4 629	36,3 526	29,2 423	22,1 320	22,1 320					
PV46M3-42-W						73,3 1063	70,0 1015	67,7 982	63,4 920	56,5 819	43,6 632	31,3 454	21,1 306			
PV46M4-42-W						75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	46,9 680	31,6 458		
PV46M1-52									3,7 54	2,8 41	2,8 41					SA 217 gr. C12A
PV46M2-52 ⁽²⁾									29,2 423	22,1 320	22,1 320					
PV46M2-52-W									31,7 460	28,2 409	26,2 380	25,0 363	24,0 348	19,5 283	14,6 212	
PV46M3-52-W									63,4 920	56,5 819	52,2 757	49,8 722	47,9 695	39,0 566	29,2 424	
PV46M4-52-W									75,7 1098	75,7 1098	75,7 1098	74,8 1085	71,8 1041	58,5 848	43,8 635	
PV46M1-16	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					SA 351 gr. CF8M
PV46M2-16	33,4 484	31,6 458	30,9 448	30,3 439	29,9 434	29,4 426	29,1 422	28,8 418	28,7 416	22,1 320	14,8 215					
PV46M2-16-W	33,4 484	31,6 458	30,9 448	30,3 439	29,9 434	29,4 426	29,1 422	28,8 418	28,7 416	28,2 409	26,2 380	25,0 363	24,0 348	19,9 289	15,8 229	
PV46M3-16	38,7 561	63,2 917	61,8 896	60,7 880	58,4 847	51,3 744	43,4 629	36,3 526	29,2 423	22,1 320	14,8 215					
PV46M3-16-W	38,7 561	63,2 917	61,8 896	60,7 880	59,8 867	58,9 854	58,3 846	57,7 837	57,3 831	56,5 819	52,2 767	49,8 722	47,9 695	39,8 577	31,6 458	
PV46M4-16	38,7 561	75,7 1098	73,4 1064	66,3 961	58,4 847	51,3 744	43,4 629	36,3 526	29,2 423	22,1 320	22,1 320					
PV46M4-16-W	38,7 561	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	75,7 1098	74,8 1085	71,8 1041	59,7 866	47,4 687	

NOTE

- ⁽¹⁾ N/A
- ⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)
- ⁽³⁾ The max. set pressure is the same value for the next upper class 600# inlet rating (PV46M3) and 900# inlet rating (PV46M4), limited by the 150# outlet rating.

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

Orifice: N
34,213 cm² / 5,303 in²

CODE	Max. SET PRESSURE															BODY MAT.
	barg / psig															
	482°F 250 °C	572°F 300 °C	617°F 325 °C	662°F 350 °C	707°F 375 °C	752°F 400 °C	797°F 425 °C	842°F 450 °C	887°F 475 °C	932°F 500 °C	977°F 525 °C	1022°F 550 °C	1067°F 575 °C	1112°F 600 °C	1157°F 625 °C	
PV46N1-30	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80									SA 216 gr. WCC
PV46N2-30 ⁽¹⁾	38,7 561	42,9 622	41,4 600	40,0 580	37,8 548	34,7 503	28,8 418									
PV46N3-30 ⁽²⁾	38,7 561	56,8 824	55,1 799	49,8 722	43,8 636	38,5 559	32,6 473									
PV46N3-30-W	38,7 561	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824									
PV46N4-30-W	38,7 561	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824									
PV46N1-32	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					
PV46N2-32	38,7 561	42,9 622	41,4 600	40,3 585	38,9 564	36,5 529	27,3 473	21,9 395	16,6 318	11,1 241						
PV46N2-32-W	38,7 561	42,9 622	41,4 600	40,3 585	38,9 564	36,5 529	35,2 511	33,7 489	31,7 460	25,7 373	18,6 270	12,7 184				
PV46N3-32 ⁽²⁾	38,7 561	56,8 824	55,1 799	49,8 722	43,8 636	38,5 559	32,6 473	27,3 395	21,9 318	16,6 241	11,1 161					
PV46N3-32-W	38,7 561	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	51,5 747	37,2 540	25,4 368				
PV46N4-32-W	38,7 561	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	38,1 553			
PV46N1-42						6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					SA 217 gr. WCC
PV46N2-42						36,5 529	32,6 473	27,3 395	21,9 318	16,6 241	11,1 161					
PV46N2-42-W						36,5 529	35,2 511	33,7 489	31,7 460	28,2 409	21,8 315	15,6 226	10,5 152			
PV46N3-42 ⁽²⁾						38,5 559	32,6 473	27,3 395	21,9 318	16,6 241	11,1 161					
PV46N3-42-W						56,8 824	56,8 824	56,8 824	56,8 824	56,5 819	43,6 632	31,3 454	21,1 306			
PV46N4-42-W						56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	46,9 680	31,6 458			
PV46N1-52									3,7 54	2,8 41	1,9 27					SA 217 gr. C12A
PV46N2-52 ⁽²⁾									21,9 318	16,6 241	11,1 161					
PV46N2-52-W									31,7 460	28,2 409	26,2 380	25,0 363	24,0 348	19,5 283	14,6 212	
PV46N3-52-W									56,8 824	56,5 819	52,2 757	49,8 722	47,9 695	39,0 566	29,2 424	
PV46N4-52-W									56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	43,8 635	
PV46N1-16	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					
PV46N2-16	33,4 484	31,6 458	30,9 448	30,3 439	29,9 434	29,4 426	29,1 422	28,8 395	28,7 318	28,2 241	26,2 161					
PV46N2-16-W	33,4 484	31,6 458	30,9 448	30,3 439	29,9 434	29,4 426	29,1 422	28,8 418	28,7 416	28,2 409	26,2 380	25,0 363	24,0 348	19,9 289	15,8 229	
PV46N3-16	38,7 561	56,8 824	55,1 799	49,8 722	43,8 636	38,5 559	32,6 473	27,3 395	21,9 318	16,6 241	11,1 161					
PV46N3-16-W	38,7 561	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,5 819	52,2 757	49,8 722	47,9 695	39,8 577	31,6 458	
PV46N4-16	38,7 561	56,8 824	55,1 799	49,8 722	43,8 636	38,5 559	32,6 473	27,3 395	21,9 318	16,6 241	11,1 161					
PV46N4-16-W	38,7 561	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	56,8 824	47,4 687	

NOTE

- ⁽¹⁾ N/A
- ⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)
- ⁽³⁾ The max. set pressure is the same value for the next upper class 600# inlet rating (PV46N3) and 900# inlet rating (PV46N4), limited by the 150# outlet rating.

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

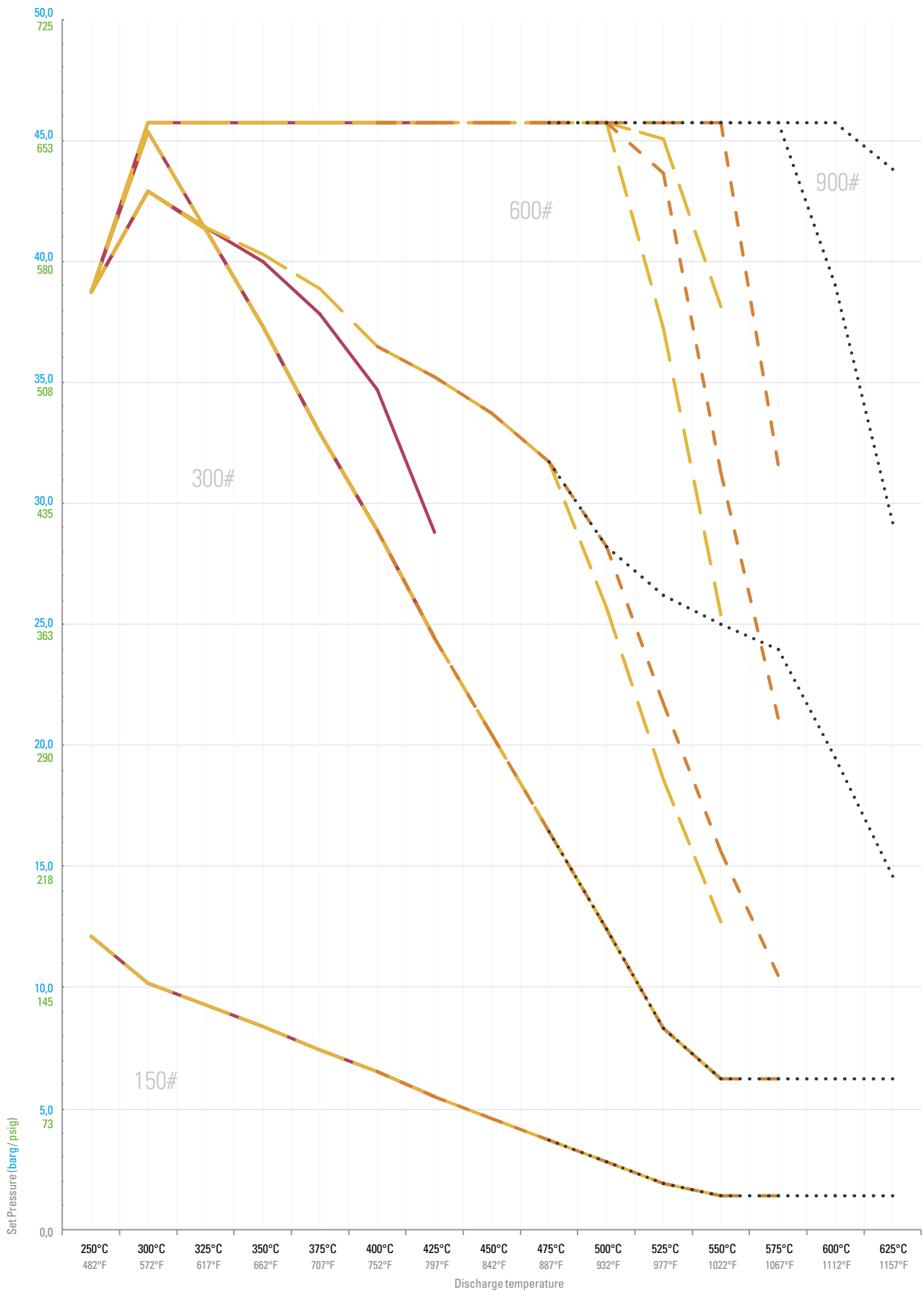
Orifice: P
45,606 cm² / 7,069 in²

CODE	Max. SET PRESSURE															BODY MAT.	
	barg / psig																
	482°F 250 °C	572°F 300 °C	617°F 325 °C	662°F 350 °C	707°F 375 °C	752°F 400 °C	797°F 425 °C	842°F 450 °C	887°F 475 °C	932°F 500 °C	977°F 525 °C	1022°F 550 °C	1067°F 575 °C	1112°F 600 °C	1157°F 625 °C		
PV46P1-30	12,1	10,2	9,3	8,4	7,4	6,5	5,5										SA 216 gr. WC6
	175	148	135	122	107	94	80										
PV46P2-30	38,7	42,9	41,3	37,3	32,9	28,9	24,4										
	561	622	599	541	477	419	355										
PV46P2-30-W	38,7	42,9	41,4	40,0	37,8	34,7	28,8										
	561	622	600	580	548	503	418										
PV46P3-30 ⁽¹⁾	38,7	45,3	41,3	37,3	32,9	28,9	24,4										
	561	658	599	541	477	419	355										
PV46P3-30-W	38,7	45,7	45,7	45,7	45,7	45,7	45,7										
	561	663	663	663	663	663	663										
PV46P4-30-W	38,7	45,7	45,7	45,7	45,7	45,7	45,7										
	561	663	663	663	663	663	663										
PV46P1-32	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9						SA 217 gr. WC6
	175	148	135	122	107	94	80	67	54	41	27						
PV46P2-32	38,7	42,9	41,3	37,3	32,9	28,9	24,4	20,4	16,4	12,4	8,4						
	561	622	599	541	477	419	355	297	239	180	121						
PV46P2-32-W	38,7	42,9	41,4	40,3	38,9	36,5	35,2	33,7	31,7	25,7	18,6	12,7					
	561	622	600	585	564	529	511	489	460	373	270	184					
PV46P3-32 ⁽¹⁾	38,7	45,3	41,3	37,3	32,9	28,9	24,4	20,4	16,4	12,4	8,4						
	561	658	599	541	477	419	355	297	239	180	121						
PV46P3-32-W	38,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	37,2	25,4					
	561	663	663	663	663	663	663	663	663	663	540	368					
PV46P4-32-W	38,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,0	38,1					
	561	663	663	663	663	663	663	663	663	663	663	553					
PV46P1-42						6,5	5,5	4,6	3,7	2,8	1,9						SA 217 gr. WC6
						94	80	67	54	41	27						
PV46P2-42 ⁽¹⁾						28,9	24,4	20,4	16,4	12,4	8,4						
						419	355	297	239	180	121						
PV46P2-42-W						36,5	35,2	33,7	31,7	28,2	21,8	15,6	10,5				
						529	511	489	460	409	315	226	152				
PV46P3-42-W						45,7	45,7	45,7	45,7	45,7	43,6	31,3	21,1				
						663	663	663	663	663	632	454	306				
PV46P4-42-W						45,7	45,7	45,7	45,7	45,7	45,7	45,7	31,6				
						663	663	663	663	663	663	663	458				
PV46P1-52									3,7	2,8	1,9						SA 217 gr. C12A
									54	41	27						
PV46P2-52 ⁽¹⁾									16,4	12,4	8,4						
									239	180	121						
PV46P2-52-W									31,7	28,2	26,2	25,0	24,0	19,5	14,6		
									460	409	380	363	348	283	212		
PV46P3-52-W									45,7	45,7	45,7	45,7	45,7	39,0	29,2		
									663	663	663	663	663	566	424		
PV46P4-52-W									45,7	45,7	45,7	45,7	45,7	45,7	43,8		
									663	663	663	663	663	663	635		
PV46P1-16	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	1,9						SA 351 gr. CF8M
	175	148	135	122	107	94	80	67	54	41	27						
PV46P2-16	33,4	31,6	30,9	30,3	29,9	28,9	24,4	20,4	16,4	12,4	8,4						
	484	458	448	439	434	419	355	297	239	180	121						
PV46P2-16-W	33,4	31,6	30,9	30,3	29,9	29,4	29,1	28,8	28,7	28,2	26,2	25,0	24,0	19,9	15,8		
	484	458	448	439	434	426	422	418	416	409	380	363	348	289	229		
PV46P3-16	38,7	45,3	41,3	37,3	32,9	28,9	24,4	20,4	16,4	12,4	8,4						
	561	658	599	541	477	419	355	297	239	180	121						
PV46P3-16-W	38,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	39,8	31,6		
	561	663	663	663	663	663	663	663	663	663	663	663	663	577	458		
PV46P4-16	38,7	45,3	41,3	37,3	32,9	28,9	24,4	20,4	16,4	12,4	8,4						
	561	658	599	541	477	419	355	297	239	180	121						
PV46P4-16-W	38,687	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7	45,7		
	561	663	663	663	663	663	663	663	663	663	663	663	663	663	663		

NOTE

- ⁽¹⁾ N/A
- ⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)
- ⁽³⁾ The max. set pressure is the same value for the next upper class 600# inlet rating (PV46P3) and 900# inlet rating (PV46P4), limited by the 150# outlet rating.

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

Orifice: Q

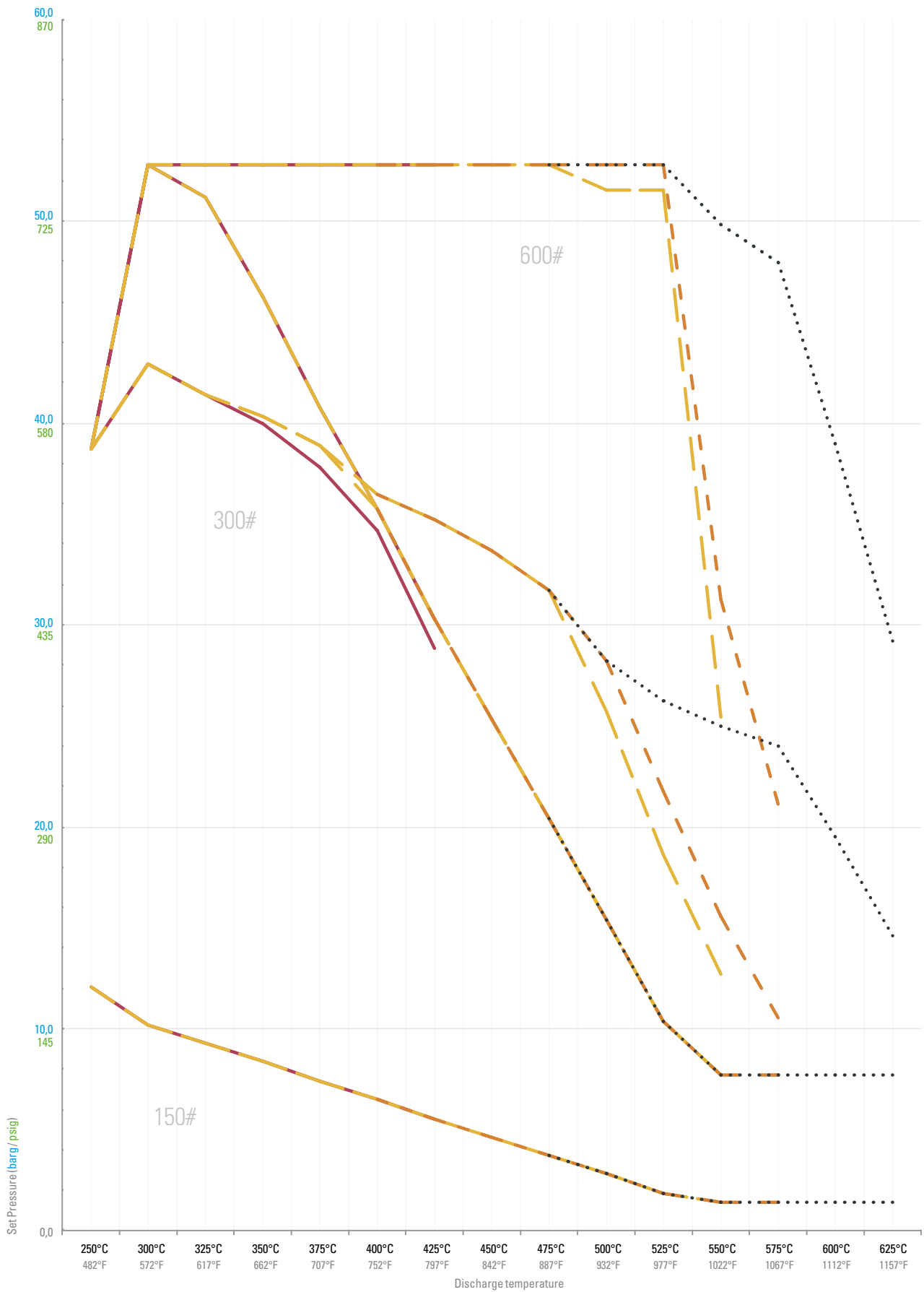
65,471 cm² / 10,148 in²

CODE	Max. SET PRESSURE															BODY MAT.
	barg / psig															
	482°F 250 °C	572°F 300 °C	617°F 325 °C	662°F 350 °C	707°F 375 °C	752°F 400 °C	797°F 425 °C	842°F 450 °C	887°F 475 °C	932°F 500 °C	977°F 525 °C	1022°F 550 °C	1067°F 575 °C	1112°F 600 °C	1157°F 625 °C	
PV68Q1-30	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	5,5 80								SA 216 gr. WC6
PV68Q2-30 ⁽²⁾	38,7 561	42,9 622	41,4 600	40,0 580	37,8 548	34,7 503	28,8 418									
PV68Q3-30	38,7 561	52,8 766	51,2 742	46,2 671	40,7 591	35,8 519	30,3 439									
PV68Q3-30-W	38,7 561	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766									
PV68Q1-32	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					SA 217 gr. WC6
PV68Q2-32	38,7 561	42,9 622	41,4 600	40,3 585	38,9 564	35,8 519	30,3 439	25,3 367	20,4 295	15,4 224	10,3 150					
PV68Q2-32-W	38,7 561	42,9 622	41,4 600	40,3 585	38,9 564	36,5 529	35,2 511	33,7 489	31,7 460	25,7 373	18,6 270	12,7 184				
PV68Q3-32	38,7 561	52,8 766	51,2 742	46,2 671	40,7 591	35,8 519	30,3 439	25,3 367	20,4 295	15,4 224	10,3 150					
PV68Q3-32-W	38,7 561	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	51,5 747	51,5 747	25,4 368				
PV68Q1-42						6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					SA 217 gr. WC9
PV68Q2-42 ⁽²⁾						35,8 519	30,3 439	25,3 367	20,4 295	15,4 224	10,3 150					
PV68Q2-42-W						36,5 529	35,2 511	33,7 489	31,7 460	28,2 409	21,8 315	15,6 226	10,5 152			
PV68Q3-42-W						52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	31,3 454	21,1 306			
PV68Q1-52								3,7 54	2,8 41	1,9 27						SA 217 gr. C12A
PV68Q2-52 ⁽²⁾								20,4 295	15,4 224	10,3 150						
PV68Q2-52-W								31,7 460	28,2 409	26,2 380	25,0 363	24,0 348	19,5 283	14,6 212		
PV68Q3-52-W								52,8 766	52,8 766	52,8 766	49,8 722	47,9 695	39,0 566	29,2 424		
PV68Q1-16	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					SA 351 gr. CF8M
PV68Q2-16	33,4 484	31,6 458	30,9 448	30,3 439	29,9 434	29,4 426	29,1 422	28,8 422	28,7 418	28,2 416	26,2 409	25,0 380	24,0 363	19,9 289	15,8 229	
PV68Q2-16-W	33,4 484	31,6 458	30,9 448	30,3 439	29,9 434	29,4 426	29,1 422	28,8 422	28,7 418	28,2 416	26,2 409	25,0 380	24,0 363	19,9 289	15,8 229	
PV68Q3-16	38,7 561	52,8 766	51,2 742	46,2 671	40,7 591	35,8 519	30,3 439	25,3 367	20,4 295	15,4 224	10,3 150					
PV68Q3-16-W	38,687 561	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	52,8 766	49,8 722	47,9 695	39,8 577	31,6 458	

NOTE

- ⁽¹⁾ N/A
- ⁽²⁾ The max. set pressure is the same value whatever the outlet rating 150# or 300# (W)
- ⁽³⁾ The max. set pressure is the same value for the next upper class 600# inlet rating (PV68Q3), limited by the 150# outlet rating.

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

Orifice: R

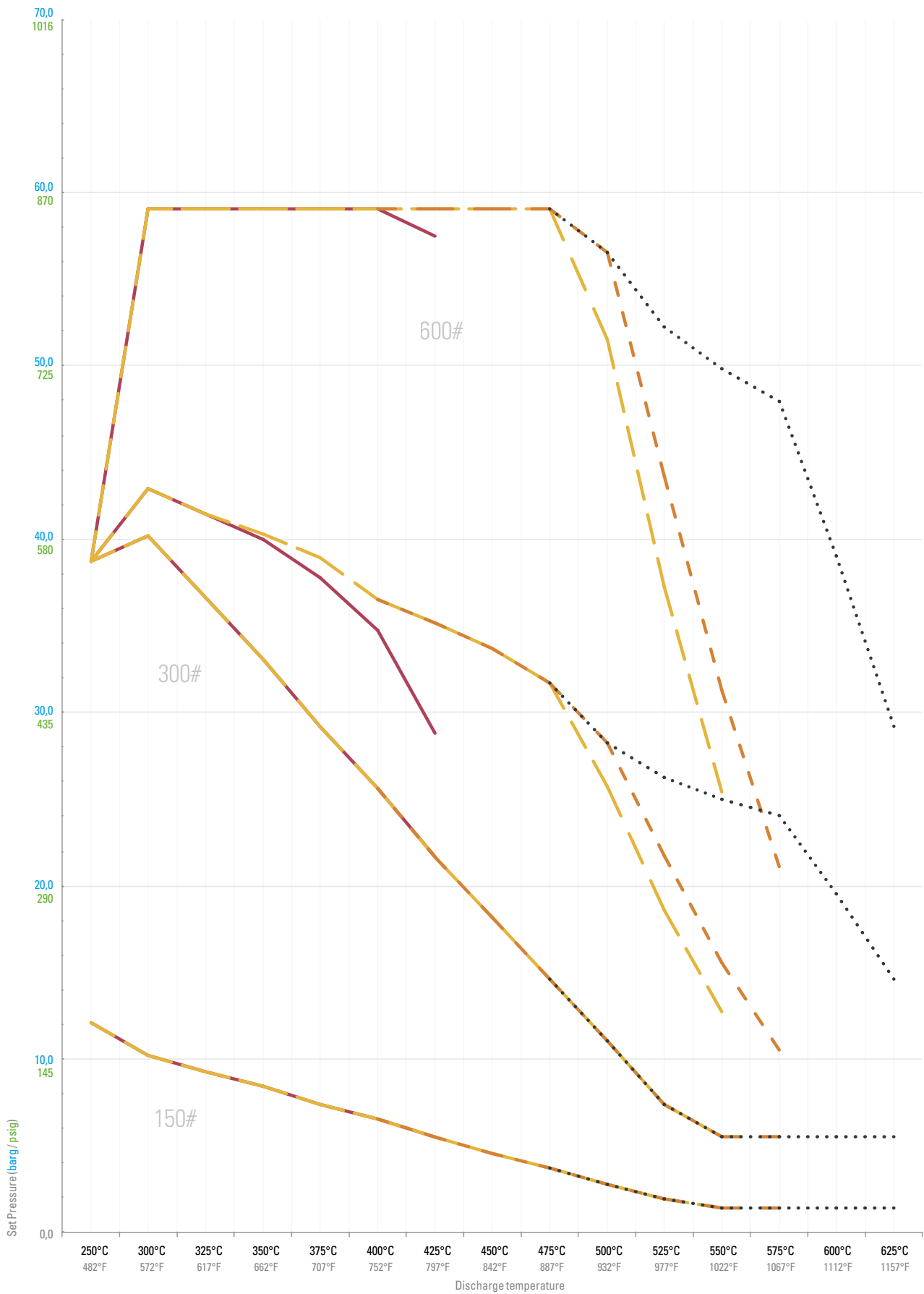
91,439 cm² / 14,173 in²

CODE	Max. SET PRESSURE															BODY MAT.
	barg / psig															
	482°F 250 °C	572°F 300 °C	617°F 325 °C	662°F 350 °C	707°F 375 °C	752°F 400 °C	797°F 425 °C	842°F 450 °C	887°F 475 °C	932°F 500 °C	977°F 525 °C	1022°F 550 °C	1067°F 575 °C	1112°F 600 °C	1157°F 625 °C	
PV68R1-30	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80									SA 216 gr. WC6
PV68R2-30 ⁽³⁾	38,7 561	40,2 583	36,6 532	33,1 480	29,2 423	25,6 371	21,7 314									
PV68R2-30-W	38,7 561	42,9 622	41,4 600	40,0 580	37,8 548	34,7 503	28,8 418									
PV68R3-30-W	38,7 561	59,1 857	59,1 857	59,1 857	59,1 857	59,1 857	57,5 834									
PV68R1-32	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					SA 217 gr. WC6
PV68R2-32 ⁽³⁾	38,7 561	40,2 583	36,6 532	33,1 480	29,2 423	25,6 371	21,7 314	18,1 263	14,6 211	11,0 160	7,4 107					
PV68R2-32-W	38,7 561	42,9 622	41,4 600	40,3 585	38,9 564	36,5 529	35,2 511	33,7 489	31,7 460	25,7 373	18,6 270	12,7 184				
PV68R3-32-W	38,7 561	59,1 857	59,1 857	59,1 857	59,1 857	59,1 857	59,1 857	59,1 857	59,1 857	51,5 747	37,2 540	25,4 368				
PV68R1-42						6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					SA 217 gr. WC9
PV68R2-42 ⁽³⁾						25,6 371	21,7 314	18,1 263	14,6 211	11,0 160	7,4 107					
PV68R2-42-W						36,5 529	35,2 511	33,7 489	31,7 460	28,2 409	21,8 315	15,6 226	10,5 152			
PV68R3-42-W						59,1 857	59,1 857	59,1 857	59,1 857	56,5 819	43,6 632	31,3 454	21,1 306			
PV68R1-52									3,7 54	2,8 41	1,9 27					SA 217 gr. C12A
PV68R2-52 ⁽³⁾									14,6 211	11,0 160	7,4 107					
PV68R2-52-W									31,7 460	28,2 409	26,2 380	25,0 363	24,0 348	19,5 283	14,6 212	
PV68R3-52-W									59,1 857	56,5 819	52,2 757	49,8 722	47,9 695	39,0 566	29,2 424	
PV68R1-16	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	1,9 27					SA 351 gr. CF8M
PV68R2-16	33,4 484	31,6 458	30,9 448	30,3 439	29,2 423	25,6 371	21,7 314	18,1 263	14,6 211	11,0 160	7,4 107					
PV68R2-16-W	33,4 484	31,6 458	30,9 448	30,3 439	29,9 434	29,4 426	29,1 422	28,8 418	28,7 416	28,2 409	26,2 380	25,0 363	24,0 348	19,9 289	15,8 229	
PV68R3-16	38,7 561	40,2 583	36,6 532	33,1 480	29,2 423	25,6 371	21,7 314	18,1 263	14,6 211	11,0 160	7,4 107					
PV68R3-16-W	38,687 561	59,06 857	59,06 857	59,06 857	59,06 857	58,9 854	58,3 846	57,7 837	57,3 831	56,5 819	52,2 757	49,8 722	47,9 695	39,8 577	31,6 458	

NOTE

- (1) N/A
- (2) N/A
- (3) (3) The max. set pressure is the same value for the next upper class 600# inlet rating (PV68R3), limited by the 150# outlet rating.

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



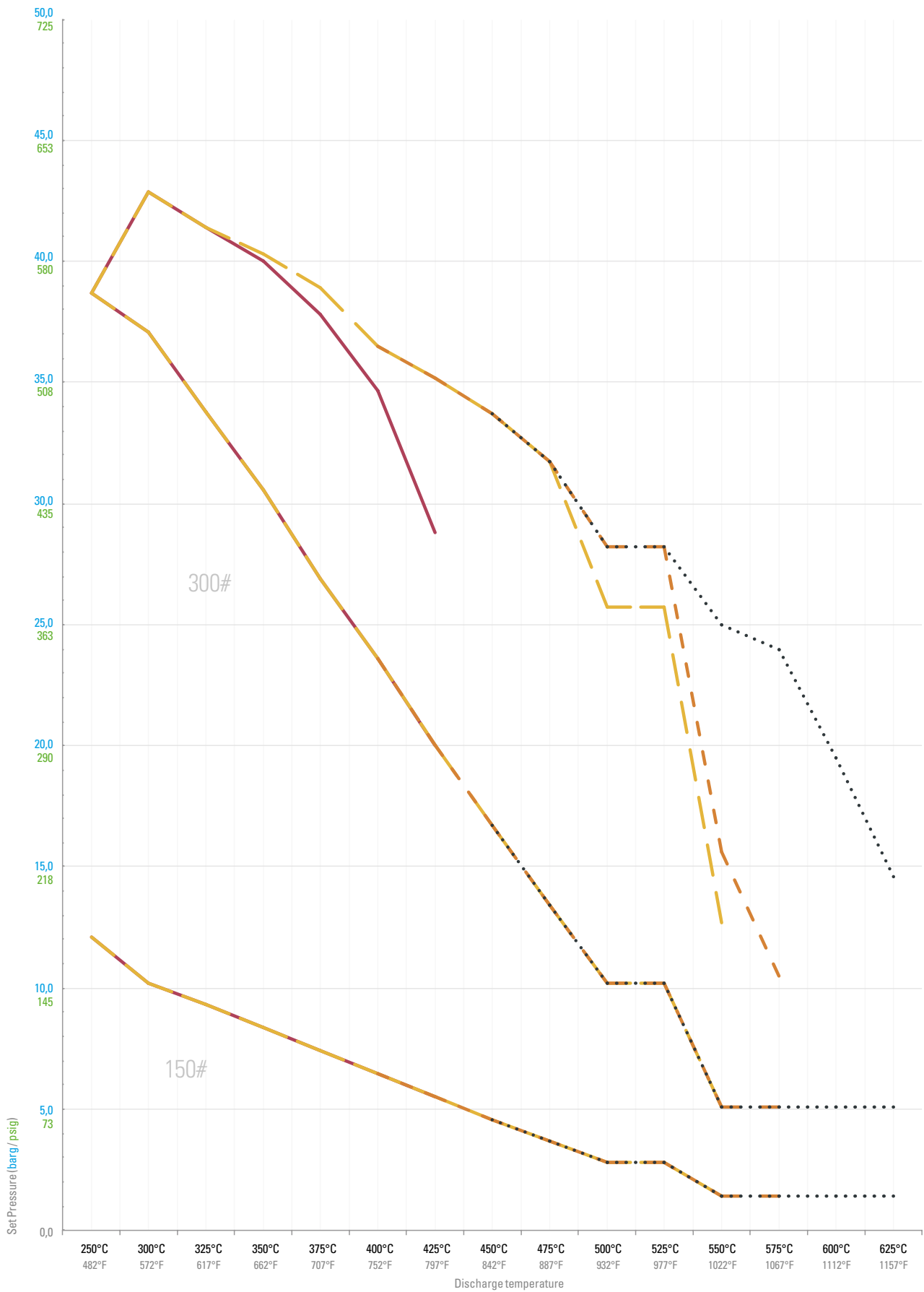
Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

Orifice: T

154,819 cm² / 23,997 in²

CODE	Max. SET PRESSURE															BODY MAT.
	barg / psig															
	482°F 250 °C	572°F 300 °C	617°F 325 °C	662°F 350 °C	707°F 375 °C	752°F 400 °C	797°F 425 °C	842°F 450 °C	887°F 475 °C	932°F 500 °C	977°F 525 °C	1022°F 550 °C	1067°F 575 °C	1112°F 600 °C	1157°F 625 °C	
PV89T1-30	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80									SA 216 gr. WC6
PV89T2-30	38,7 561	37,1 538	33,8 491	30,5 443	26,9 390	23,6 343	20,0 290									
PV89T2-30-W	38,7 561	42,9 622	41,4 600	40,0 580	37,8 548	34,7 503	28,8 418									SA 217 gr. WC6
PV89T1-32	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	2,8 41					
PV89T2-32	38,7 561	37,1 538	33,8 491	30,5 443	26,9 390	23,6 343	20,0 290	16,7 243	13,5 195	10,2 148	10,2 148					SA 217 gr. WC6
PV89T2-32-W	38,7 561	42,9 622	41,4 600	40,3 585	38,9 564	36,5 529	35,2 511	33,7 489	31,7 460	25,7 373	25,7 373	12,7 184				
PV89T1-42						6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	2,8 41					SA 217 gr. WC9
PV89T2-42						23,6 343	20,0 290	16,7 243	13,5 195	10,2 148	10,2 148					
PV89T2-42-W						36,5 529	35,2 511	33,7 489	31,7 460	28,2 409	28,2 409	15,6 226	10,5 152			
PV89T1-52								4,6 67	3,7 54	2,8 41	2,8 41					SA 217 gr. C12A
PV89T2-52								16,7 243	13,5 195	10,2 148	10,2 148					
PV89T2-52-W								33,7 489	31,7 460	28,2 409	28,2 409	25,0 363	24,0 348	19,5 283	14,6 212	
PV89T1-16	12,1 175	10,2 148	9,3 135	8,4 122	7,4 107	6,5 94	5,5 80	4,6 67	3,7 54	2,8 41	2,8 41					SA 351 gr. CF8M
PV89T2-16	33,4 484	31,6 458	30,9 448	30,3 439	26,9 390	23,6 343	20,0 290	16,7 243	13,5 195	10,2 148	10,2 148					
PV89T2-16-W	33,4 484	31,6 458	30,9 448	30,3 439	29,9 434	29,4 426	29,1 422	28,8 418	28,7 416	28,2 409	28,2 409	25,0 363	24,0 348	19,9 289	15,8 229	

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel



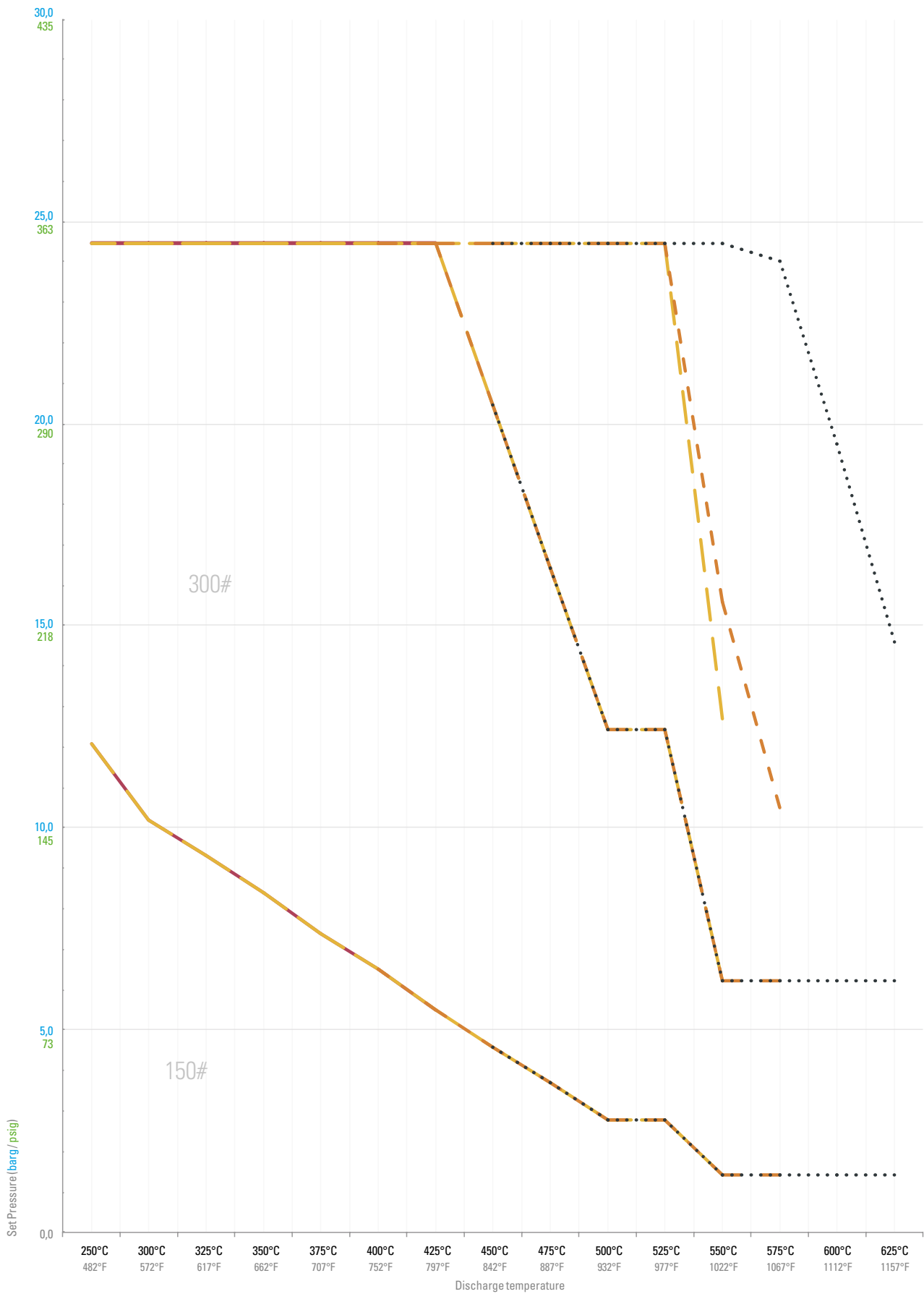
Set pressure limits (barg) for Starflow V flanged safety valves at designated temperature (°C)

Orifice: V

248,696 cm² / 38,548 in²

CODE	Max. SET PRESSURE barg / psig															BODY MAT.
	482°F	572°F	617°F	662°F	707°F	752°F	797°F	842°F	887°F	932°F	977°F	1022°F	1067°F	1112°F	1157°F	
	250 °C	300 °C	325 °C	350 °C	375 °C	400 °C	425 °C	450 °C	475 °C	500 °C	525 °C	550 °C	575 °C	600 °C	625 °C	
PV9BV1-30	12,1	10,2	9,3	8,4	7,4	6,5	5,5									
	175	148	135	122	107	94	80									
PV9BV2-30	24,5	24,5	24,5	24,5	24,5	24,5	24,4									
	355	355	355	355	355	355	355									
PV9BV2-30-W	24,5	24,5	24,5	24,5	24,5	24,5	24,5									
	355	355	355	355	355	355	355									
PV9BV1-32	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	2,8					
	175	148	135	122	107	94	80	67	54	41	41					
PV9BV2-32	24,5	24,5	24,5	24,5	24,5	24,5	24,4	20,4	16,4	12,4	12,4					
	355	355	355	355	355	355	355	297	239	180	180					
PV9BV2-32-W	24,5	24,5	24,5	24,5	24,5	24,5	24,5	24,5	24,5	24,5	24,5	12,7				
	355	355	355	355	355	355	355	355	355	355	355	184				
PV9BV1-42						6,5	5,5	4,6	3,7	2,8	2,8					
						94	80	67	54	41	41					
PV9BV2-42						24,5	24,4	20,4	16,4	12,4	12,4					
						355	355	297	239	180	180					
PV9BV2-42-W						24,5	24,5	24,5	24,5	24,5	24,5	15,6	10,5			
						355	355	355	355	355	355	226	152			
PV9BV1-52								4,6	3,7	2,8	2,8					
								67	54	41	41					
PV9BV2-52								20,4	16,4	12,4	12,4					
								297	239	180	180					
PV9BV2-52-W								24,5	24,5	24,5	24,5	24,5	24,0	19,5	14,6	
								355	355	355	355	355	348	283	212	
PV9BV1-16	12,1	10,2	9,3	8,4	7,4	6,5	5,5	4,6	3,7	2,8	2,8					
	175	148	135	122	107	94	80	67	54	41	41					
PV9BV2-16	24,5	24,5	24,5	24,5	24,5	24,5	24,4	20,4	16,4	12,4	12,4					
	355	355	355	355	355	355	355	297	239	180	180					
PV9BV2-16-W	24,5	24,5	24,5	24,5	24,5	24,5	24,5	24,5	24,5	24,5	24,5	24,5	24,0	19,9	15,8	
	355	355	355	355	355	355	355	355	355	355	355	355	348	289	229	

Extrapolation from saturated steam, ASME B16.34 inlet/outlet & spring limit for carbon steel





4. Capacity Chart

TABLE PG-68.7M (METRIC)

Bara	°F	401	437	482	527	572	617	662	707	752	797	842	887	932	977	1022	1067	1112	1157
	°C	205	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600	625
5,0		0,991	0,968	0,942	0,919	0,896	0,876	0,857	0,839	0,823	0,807	0,792	0,778	0,765	0,752	0,740	0,728	0,717	0,706
7,5		0,995	0,972	0,946	0,922	0,899	0,878	0,859	0,841	0,824	0,808	0,793	0,779	0,766	0,753	0,740	0,729	0,717	0,707
10,0		0,985	0,973	0,950	0,925	0,902	0,880	0,861	0,843	0,825	0,809	0,794	0,780	0,766	0,753	0,741	0,729	0,718	0,707
12,5		0,981	0,976	0,954	0,928	0,905	0,883	0,863	0,844	0,827	0,810	0,795	0,781	0,767	0,754	0,741	0,729	0,718	0,707
15,0		1,000	1,000	0,957	0,932	0,907	0,885	0,865	0,846	0,828	0,812	0,796	0,782	0,768	0,755	0,742	0,730	0,718	0,708
17,5		1,000	1,000	0,959	0,935	0,910	0,887	0,866	0,847	0,829	0,813	0,797	0,782	0,769	0,756	0,743	0,731	0,719	0,708
20,0		1,000	1,000	0,960	0,939	0,913	0,889	0,868	0,849	0,831	0,814	0,798	0,784	0,769	0,756	0,744	0,731	0,720	0,708
22,5		1,000	1,000	0,963	0,943	0,916	0,892	0,870	0,850	0,832	0,815	0,799	0,785	0,770	0,757	0,744	0,732	0,720	0,709
25,0		1,000	1,000	1,000	0,946	0,919	0,894	0,872	0,852	0,834	0,816	0,800	0,785	0,771	0,757	0,744	0,732	0,720	0,710
27,5		1,000	1,000	1,000	0,948	0,922	0,897	0,874	0,854	0,835	0,817	0,801	0,786	0,772	0,758	0,745	0,733	0,721	0,710
30,0		1,000	1,000	1,000	0,949	0,925	0,899	0,876	0,855	0,837	0,819	0,802	0,787	0,772	0,759	0,746	0,733	0,722	0,710
32,5		1,000	1,000	1,000	0,951	0,929	0,902	0,879	0,857	0,838	0,820	0,803	0,788	0,773	0,759	0,746	0,734	0,722	0,711
35,0		1,000	1,000	1,000	0,953	0,933	0,905	0,881	0,859	0,840	0,822	0,804	0,789	0,774	0,760	0,747	0,734	0,722	0,711
37,5		1,000	1,000	1,000	0,956	0,936	0,908	0,883	0,861	0,841	0,823	0,806	0,790	0,775	0,761	0,748	0,735	0,723	0,711
40,0		1,000	1,000	1,000	0,959	0,940	0,910	0,885	0,863	0,842	0,824	0,807	0,791	0,776	0,762	0,748	0,735	0,723	0,712
42,5		1,000	1,000	1,000	0,961	0,943	0,913	0,887	0,864	0,844	0,825	0,808	0,792	0,776	0,762	0,749	0,736	0,724	0,713
45,0		1,000	1,000	1,000	1,000	0,944	0,917	0,890	0,866	0,845	0,826	0,809	0,793	0,777	0,763	0,749	0,737	0,725	0,713
47,5		1,000	1,000	1,000	1,000	0,946	0,919	0,892	0,868	0,847	0,828	0,810	0,793	0,778	0,764	0,750	0,737	0,725	0,713
50,0		1,000	1,000	1,000	1,000	0,947	0,922	0,894	0,870	0,848	0,829	0,811	0,794	0,779	0,765	0,751	0,738	0,725	0,714
52,5		1,000	1,000	1,000	1,000	0,949	0,926	0,897	0,872	0,850	0,830	0,812	0,795	0,780	0,765	0,752	0,738	0,726	0,714
55,0		1,000	1,000	1,000	1,000	0,952	0,930	0,899	0,874	0,851	0,831	0,813	0,797	0,780	0,766	0,752	0,739	0,727	0,714
57,5		1,000	1,000	1,000	1,000	0,954	0,933	0,902	0,876	0,853	0,833	0,815	0,798	0,782	0,767	0,753	0,739	0,727	0,715
60,0		1,000	1,000	1,000	1,000	0,957	0,937	0,904	0,878	0,855	0,834	0,816	0,798	0,783	0,768	0,753	0,740	0,727	0,716
62,5		1,000	1,000	1,000	1,000	0,960	0,940	0,907	0,880	0,856	0,836	0,817	0,799	0,783	0,768	0,754	0,740	0,728	0,716
65,0		1,000	1,000	1,000	1,000	0,964	0,944	0,910	0,882	0,859	0,837	0,818	0,801	0,784	0,769	0,754	0,741	0,729	0,716
67,5		1,000	1,000	1,000	1,000	0,966	0,946	0,913	0,885	0,860	0,839	0,819	0,802	0,785	0,769	0,755	0,742	0,729	0,717
70,0		1,000	1,000	1,000	1,000	1,000	0,947	0,916	0,887	0,862	0,840	0,820	0,802	0,786	0,770	0,756	0,742	0,729	0,717
72,5		1,000	1,000	1,000	1,000	1,000	0,949	0,919	0,889	0,863	0,842	0,822	0,803	0,787	0,771	0,756	0,743	0,730	0,717
75,0		1,000	1,000	1,000	1,000	1,000	0,951	0,922	0,891	0,865	0,843	0,823	0,805	0,788	0,772	0,757	0,744	0,730	0,718
77,5		1,000	1,000	1,000	1,000	1,000	0,953	0,925	0,893	0,867	0,844	0,824	0,806	0,788	0,772	0,758	0,744	0,731	0,719
80,0		1,000	1,000	1,000	1,000	1,000	0,955	0,928	0,896	0,869	0,846	0,825	0,806	0,789	0,773	0,758	0,744	0,732	0,719
82,5		1,000	1,000	1,000	1,000	1,000	0,957	0,932	0,898	0,871	0,847	0,827	0,807	0,790	0,774	0,759	0,745	0,732	0,719
85,0		1,000	1,000	1,000	1,000	1,000	0,960	0,935	0,901	0,873	0,849	0,828	0,809	0,791	0,775	0,760	0,746	0,732	0,720
87,5		1,000	1,000	1,000	1,000	1,000	0,963	0,939	0,903	0,875	0,850	0,829	0,810	0,792	0,776	0,760	0,746	0,733	0,721
90,0		1,000	1,000	1,000	1,000	1,000	0,966	0,943	0,906	0,877	0,852	0,830	0,811	0,793	0,776	0,761	0,747	0,734	0,721
92,5		1,000	1,000	1,000	1,000	1,000	0,970	0,947	0,909	0,879	0,853	0,832	0,812	0,794	0,777	0,762	0,747	0,734	0,721
95,0		1,000	1,000	1,000	1,000	1,000	0,973	0,950	0,911	0,881	0,855	0,833	0,813	0,795	0,778	0,763	0,748	0,734	0,722
97,5		1,000	1,000	1,000	1,000	1,000	0,977	0,954	0,914	0,883	0,857	0,834	0,814	0,796	0,779	0,763	0,749	0,735	0,722
100,0		1,000	1,000	1,000	1,000	1,000	0,981	0,957	0,917	0,885	0,859	0,836	0,815	0,797	0,780	0,764	0,749	0,735	0,722
102,5		1,000	1,000	1,000	1,000	1,000	0,984	0,959	0,920	0,887	0,860	0,837	0,816	0,798	0,780	0,764	0,750	0,736	0,723
105,0		1,000	1,000	1,000	1,000	1,000	1,000	0,961	0,923	0,889	0,862	0,838	0,817	0,799	0,781	0,765	0,750	0,737	0,723
107,5		1,000	1,000	1,000	1,000	1,000	1,000	0,962	0,925	0,891	0,863	0,839	0,818	0,799	0,782	0,766	0,751	0,737	0,724
110,0		1,000	1,000	1,000	1,000	1,000	1,000	0,963	0,928	0,893	0,865	0,840	0,819	0,800	0,782	0,766	0,751	0,737	0,724
112,5		1,000	1,000	1,000	1,000	1,000	1,000	0,964	0,930	0,893	0,865	0,840	0,819	0,799	0,781	0,765	0,750	0,736	0,723
115,0		1,000	1,000	1,000	1,000	1,000	1,000	0,964	0,931	0,894	0,865	0,840	0,818	0,798	0,780	0,764	0,749	0,735	0,722
117,5		1,000	1,000	1,000	1,000	1,000	1,000	0,965	0,932	0,894	0,865	0,839	0,817	0,797	0,780	0,763	0,748	0,734	0,721
120,0		1,000	1,000	1,000	1,000	1,000	1,000	0,966	0,933	0,894	0,864	0,839	0,817	0,797	0,779	0,762	0,747	0,733	0,719
122,5		1,000	1,000	1,000	1,000	1,000	1,000	0,967	0,935	0,895	0,864	0,839	0,816	0,796	0,778	0,761	0,746	0,732	0,718
125,0		1,000	1,000	1,000	1,000	1,000	1,000	0,967	0,936	0,896	0,864	0,838	0,816	0,796	0,777	0,760	0,745	0,731	0,717
127,5		1,000	1,000	1,000	1,000	1,000	1,000	0,968	0,937	0,896	0,864	0,838	0,815	0,795	0,776	0,759	0,744	0,729	0,716
130,0		1,000	1,000	1,000	1,000	1,000	1,000	0,969	0,939	0,896	0,864	0,837	0,814	0,794	0,775	0,758	0,743	0,728	0,715
132,5		1,000	1,000	1,000	1,000	1,000	1,000	0,971	0,940	0,897	0,864	0,837	0,813	0,792	0,774	0,757	0,741	0,727	0,713
135,0		1,000	1,000	1,000	1,000	1,000	1,000	0,972	0,942	0,897	0,863	0,837	0,813	0,792	0,773	0,756	0,740	0,725	0,712
140,0		1,000	1,000	1,000	1,000	1,000	1,000	0,976	0,946	0,897	0,863	0,835	0,811	0,790	0,771	0,753	0,737	0,723	0,709
142,5		1,000	1,000	1,000	1,000	1,000	1,000	0,978	0,947	0,898	0,862	0,834	0,810	0,789	0,770	0,752	0,736	0,721	0,707
145,0		1,000	1,000	1,000	1,000	1,000	1,000	0,948	0,948	0,898	0,862	0,833	0,809	0,787	0,768	0,751	0,734	0,720	0,706
147,5		1,000	1,000	1,000	1,000	1,000	1,000	0,948	0,948	0,898	0,862	0,832	0,808	0,786	0,767	0,749	0,733	0,719	0,704
150,0		1,000	1,000	1,000	1,000	1,000	1,000	0,948	0,948	0,899	0,861	0,832	0,807	0,785	0,766	0,748	0,732	0,717	0,703
152,5		1,000	1,000	1,000	1,000	1,000	1,000	0,947	0,947	0,899	0,861	0,831	0,806	0,784	0,764	0,746	0,730	0,716	0,702
155,0		1,000	1,000	1,000	1,000	1,000	1,000	0,947	0,947	0,899	0,861	0,830	0,804	0,782	0,763	0,745	0,728	0,714	0,700
157,5		1																	

Bara	°F	401	437	482	527	572	617	662	707	752	797	842	887	932	977	1022	1067	1112	1157
	°C	205	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600	625
167,5		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,944	0,900	0,857	0,825	0,797	0,774	0,754	0,736	0,719	0,704	0,690
170,0		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,944	0,900	0,856	0,823	0,796	0,773	0,752	0,734	0,717	0,702	0,688
172,5		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,944	0,900	0,855	0,822	0,794	0,771	0,750	0,732	0,715	0,700	0,686
175,0		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,944	0,900	0,854	0,820	0,792	0,769	0,748	0,730	0,713	0,698	0,684
177,5		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,944	0,900	0,853	0,819	0,791	0,767	0,746	0,728	0,711	0,696	0,681
180,0		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,944	0,901	0,852	0,817	0,789	0,765	0,744	0,725	0,709	0,694	0,679
182,5		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,945	0,901	0,851	0,815	0,787	0,763	0,742	0,723	0,706	0,691	0,677
185,0		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,945	0,901	0,850	0,814	0,785	0,761	0,739	0,720	0,704	0,689	0,674
187,5		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,945	0,901	0,849	0,812	0,783	0,758	0,737	0,718	0,701	0,686	0,671
190,0		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,946	0,901	0,847	0,810	0,781	0,756	0,734	0,715	0,698	0,683	0,669
192,5		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,948	0,901	0,846	0,808	0,778	0,753	0,732	0,713	0,696	0,681	0,666
195,0		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,950	0,900	0,844	0,806	0,776	0,750	0,729	0,710	0,693	0,677	0,663
197,5		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,952	0,899	0,842	0,803	0,773	0,748	0,726	0,707	0,690	0,674	0,660
200,0		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,952	0,899	0,840	0,801	0,770	0,745	0,723	0,704	0,687	0,671	0,657
202,5		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,952	0,899	0,839	0,798	0,767	0,742	0,720	0,701	0,683	0,668	0,654
205,0		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,952	0,899	0,837	0,795	0,764	0,738	0,717	0,697	0,680	0,665	0,651
207,5		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,952	0,898	0,834	0,792	0,761	0,735	0,713	0,694	0,677	0,661	0,647
210,0		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,952	0,896	0,832	0,790	0,758	0,732	0,710	0,691	0,673	0,658	0,643
212,5		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,952	0,894	0,829	0,786	0,754	0,728	0,706	0,686	0,669	0,654	0,640
215,0		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,952	0,892	0,826	0,783	0,750	0,724	0,702	0,682	0,665	0,650	0,636
217,5		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,952	0,891	0,823	0,779	0,746	0,720	0,698	0,679	0,661	0,646	0,631
220,0		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,952	0,887	0,820	0,776	0,743	0,716	0,694	0,674	0,657	0,641	0,627

TABLE PG-68.7 (USC)

PSIA	°C	204.4	232.2	260.0	287.8	315.6	343.3	371.1	398.9	426.7	454.4	482.2	510.0	537.8	565.6	593.3	621.1	648.9
	°F	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
50		0,987	0,957	0,930	0,905	0,882	0,861	0,841	0,823	0,805	0,789	0,774	0,759	0,745	0,732	0,719	0,708	0,696
75		0,988	0,960	0,933	0,907	0,884	0,863	0,842	0,824	0,806	0,790	0,775	0,760	0,746	0,733	0,720	0,708	0,697
100		0,988	0,963	0,935	0,909	0,885	0,864	0,843	0,825	0,807	0,790	0,775	0,760	0,746	0,733	0,720	0,708	0,697
125		0,986	0,967	0,938	0,911	0,887	0,865	0,845	0,826	0,808	0,791	0,776	0,761	0,747	0,733	0,721	0,709	0,697
150		0,984	0,970	0,940	0,913	0,888	0,866	0,846	0,826	0,808	0,792	0,776	0,761	0,747	0,733	0,721	0,709	0,697
175		0,982	0,974	0,943	0,915	0,890	0,868	0,847	0,827	0,809	0,793	0,777	0,762	0,748	0,734	0,721	0,709	0,698
200		0,979	0,977	0,945	0,917	0,892	0,869	0,848	0,828	0,810	0,793	0,777	0,762	0,748	0,734	0,721	0,709	0,698
225		1,000	0,975	0,948	0,919	0,894	0,870	0,849	0,829	0,811	0,794	0,778	0,763	0,749	0,735	0,722	0,710	0,698
250		1,000	0,972	0,951	0,921	0,895	0,871	0,850	0,830	0,812	0,794	0,778	0,763	0,749	0,735	0,722	0,710	0,698
275		1,000	0,970	0,954	0,924	0,897	0,873	0,851	0,831	0,813	0,795	0,779	0,764	0,750	0,736	0,723	0,710	0,699
300		1,000	0,968	0,957	0,926	0,898	0,874	0,852	0,832	0,813	0,796	0,780	0,764	0,750	0,736	0,723	0,710	0,699
325		1,000	0,968	0,960	0,928	0,900	0,876	0,853	0,833	0,814	0,797	0,781	0,765	0,750	0,736	0,723	0,711	0,699
350		1,000	0,968	0,963	0,930	0,902	0,877	0,854	0,834	0,815	0,797	0,781	0,765	0,750	0,736	0,723	0,711	0,699
375		1,000	0,990	0,963	0,933	0,904	0,879	0,856	0,835	0,816	0,798	0,782	0,766	0,751	0,737	0,724	0,712	0,700
400		1,000	1,000	0,963	0,935	0,906	0,880	0,857	0,836	0,816	0,798	0,782	0,766	0,751	0,737	0,724	0,712	0,700
425		1,000	1,000	0,962	0,938	0,908	0,882	0,858	0,837	0,817	0,799	0,783	0,767	0,752	0,738	0,725	0,712	0,700
450		1,000	1,000	0,961	0,940	0,909	0,883	0,859	0,838	0,818	0,800	0,783	0,767	0,752	0,738	0,725	0,712	0,700
475		1,000	1,000	0,961	0,943	0,912	0,885	0,861	0,839	0,819	0,801	0,784	0,768	0,753	0,739	0,725	0,713	0,701
500		1,000	1,000	0,961	0,946	0,914	0,886	0,862	0,840	0,820	0,801	0,784	0,768	0,753	0,739	0,725	0,713	0,701
525		1,000	1,000	0,962	0,949	0,916	0,888	0,863	0,841	0,821	0,802	0,785	0,769	0,754	0,740	0,726	0,713	0,701
550		1,000	1,000	0,962	0,952	0,918	0,889	0,864	0,842	0,822	0,803	0,785	0,769	0,754	0,740	0,726	0,713	0,701
575		1,000	1,000	0,963	0,955	0,920	0,891	0,866	0,843	0,823	0,804	0,786	0,770	0,755	0,740	0,727	0,714	0,702
600		1,000	1,000	0,964	0,958	0,922	0,892	0,867	0,844	0,823	0,804	0,787	0,770	0,755	0,740	0,727	0,714	0,702
625		1,000	1,000	0,966	0,958	0,925	0,894	0,868	0,845	0,824	0,805	0,788	0,771	0,756	0,741	0,728	0,715	0,702
650		1,000	1,000	0,968	0,958	0,927	0,896	0,869	0,846	0,825	0,806	0,788	0,771	0,756	0,741	0,728	0,715	0,702
675		1,000	1,000	0,984	0,958	0,929	0,898	0,871	0,847	0,826	0,807	0,789	0,772	0,757	0,742	0,728	0,715	0,703
700		1,000	1,000	1,000	0,958	0,931	0,899	0,872	0,848	0,827	0,807	0,789	0,772	0,757	0,742	0,728	0,715	0,703
725		1,000	1,000	1,000	0,958	0,934	0,901	0,874	0,849	0,828	0,808	0,790	0,773	0,758	0,743	0,729	0,716	0,703
750		1,000	1,000	1,000	0,958	0,936	0,903	0,875	0,850	0,828	0,809	0,790	0,774	0,758	0,743	0,729	0,716	0,703
775		1,000	1,000	1,000	0,959	0,939	0,905	0,877	0,851	0,829	0,810	0,791	0,774	0,759	0,744	0,730	0,716	0,704
800		1,000	1,000	1,000	0,960	0,942	0,906	0,878	0,852	0,830	0,810	0,792	0,774	0,759	0,744	0,730	0,716	0,704
825		1,000	1,000	1,000	0,961	0,945	0,908	0,879	0,854	0,831	0,811	0,793	0,774	0,760	0,744	0,730	0,717	0,704
850		1,000	1,000	1,000	0,962	0,947	0,910	0,880	0,855	0,832	0,812	0,793	0,773	0,760	0,744	0,730	0,717	0,704
875		1,000	1,000	1,000	0,964	0,950	0,912	0,882	0,856	0,833	0,813	0,794	0,775	0,760	0,745	0,731	0,718	0,705
900		1,000	1,000	1,000	0,965	0,953	0,914	0,883	0,857	0,834	0,813	0,794	0,777	0,760	0,745	0,731	0,718	0,705
925		1,000	1,000	1,000	0,967	0,956	0,916	0,885	0,859	0,835	0,814	0,795	0,778	0,761	0,746	0,732	0,718	0,705
950		1,000	1,000	1,000	0,969	0,958	0,918	0,886	0,860	0,836	0,815	0,796	0,778	0,761	0,746	0,732	0,718	0,705
975		1,000	1,000	1,000	0,972	0,959	0,921	0,888	0,861	0,837	0,816	0,797	0,779	0,762	0,747	0,732	0,719	0,706
1000		1,000	1,000	1,000	0,974	0,959	0,923	0,890	0,862	0,838	0,816	0,797	0,779	0,762	0,747	0,732	0,719	0,706
1025		1,000	1,000	1,000	0,987	0,960	0,925	0,892	0,863	0,839	0,817	0,798	0,780	0,763	0,748	0,733	0,719	0,706
1050		1,000	1,000	1,000	1,000	0,960	0,927	0,893	0,864	0,840	0,818	0,798	0,780	0,763	0,748	0,733	0,719	0,706
1075		1,000	1,000	1,000	1,000	0,961	0,929	0,895	0,866	0,841	0,819	0,799	0,781	0,764	0,749	0,734	0,720	0,707
1100		1,000	1,000	1,000	1,000	0,962	0,931	0,896	0,867	0,842	0,820	0,800	0,781	0,764	0,749	0,734	0,720	0,707
1125		1,000	1,000	1,000	1,000	0,963	0,934	0,898	0,869	0,843	0,821	0,801	0,782	0,765	0,749	0,735	0,721	0,708
1150		1,000	1,000	1,000	1,000	0,964	0,936	0,899	0,870	0,844	0,821	0,801	0,782	0,765	0,749	0,735	0,721	0,708
1175		1,000	1,000	1,000	1,000	0,965	0,939	0,901	0,871	0,845	0,822	0,802	0,783	0,766	0,750	0,735	0,721	0,708
1200		1,000	1,000	1,000	1,000	0,966	0,941	0,903	0,872	0,846	0,823	0,802	0,784	0,766	0,750	0,735	0,721	0,708
1225		1,000	1,000	1,000	1,000	0,968	0,944	0,905	0,874	0,847	0,824	0,803	0,785	0,767	0,751	0,736	0,722	0,709
1250		1,000	1,000	1,000	1,000	0,969	0,946	0,906	0,875	0,848	0,825	0,804	0,785	0,767	0,751	0,736	0,722	0,709
1275		1,000	1,000	1,000	1,000	0,971	0,949	0,908	0,877	0,849	0,826	0,805	0,784	0,768	0,752	0,737	0,723	0,709
1300		1,000	1,000	1,000	1,000	0,973	0,952	0,910	0,878	0,850	0,826	0,805	0,783	0,768	0,752	0,737	0,723	0,709
1325		1,000	1,000	1,000	1,000	0,975	0,955	0,912	0,879	0,851	0,827	0,806	0,785	0,769	0,753	0,737	0,723	0,710
1350		1,000	1,000	1,000	1,000	0,977	0,958	0,914	0,880	0,852	0,828	0,807	0,787	0,769	0,753	0,737	0,723	0,710
1375		1,000	1,000	1,000	1,000	0,980	0,961	0,916	0,882	0,853	0,829	0,808	0,788	0,770	0,754	0,738	0,724	0,710
1400		1,000	1,000	1,000	1,000	0,982	0,963	0,918	0,883	0,854	0,830	0,808	0,788	0,770	0,754	0,738	0,724	0,710
1425		1,000	1,000	1,000	1,000	0,985	0,966	0,920	0,885	0,856	0,831	0,809	0,789	0,771	0,754	0,739	0,724	0,711
1450		1,000	1,000	1,000	1,000	0,987	0,968	0,922	0,886	0,857	0,832	0,809	0,790	0,771	0,754	0,739	0,724	0,711
1475		1,000	1,000	1,000	1,000	0,990	0,969	0,924	0,888	0,858	0,833	0,810	0,791	0,772	0,755	0,740	0,725	0,711
1500		1,000	1,000	1,000	1,000	0,993	0,970	0,926	0,889	0,859	0,833	0,811	0,791	0,772	0,755	0,740	0,725	0,711
1525		1,000	1,000	1,000	1,000	0,997	0,971	0,928	0,891	0,860	0,834	0,812	0,792	0,773	0,756	0,740	0,726	0,712
1550		1,000	1,000	1,000	1,000	1,000	0,972	0,930	0,892	0,861	0,835	0,812	0,792	0,773	0,756	0,740	0,726	0,712
1575		1,000	1,000	1,000	1,000	1,000	0,973	0,932	0,893	0,862	0,836	0,813	0,792	0,774	0,756	0,740	0,726	0,712
1600		1,000	1,000	1,000	1,000	1,000	0,973	0,934	0,894	0,863	0,836	0,813	0,792	0,774	0,756	0,740	0,726	0,712
1625		1,000	1,000	1,000	1,000	1,000	0,973	0,935	0,895	0,863	0,836	0,813	0					

PSIA	°C	204,4	232,2	260,0	287,8	315,6	343,3	371,1	398,9	426,7	454,4	482,2	510,0	537,8	565,6	593,3	621,1	648,9
	°F	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
1650		1,000	1,000	1,000	1,000	1,000	0,973	0,936	0,895	0,863	0,836	0,812	0,791	0,773	0,755	0,739	0,724	0,710
1675		1,000	1,000	1,000	1,000	1,000	0,973	0,937	0,895	0,863	0,836	0,812	0,791	0,772	0,755	0,739	0,724	0,710
1700		1,000	1,000	1,000	1,000	1,000	0,973	0,938	0,895	0,863	0,835	0,811	0,790	0,771	0,754	0,738	0,723	0,709
1725		1,000	1,000	1,000	1,000	1,000	0,974	0,939	0,896	0,863	0,835	0,811	0,790	0,771	0,753	0,737	0,722	0,708
1750		1,000	1,000	1,000	1,000	1,000	0,974	0,940	0,896	0,862	0,835	0,810	0,789	0,770	0,752	0,736	0,721	0,707
1775		1,000	1,000	1,000	1,000	1,000	0,975	0,941	0,897	0,862	0,835	0,810	0,789	0,769	0,752	0,736	0,721	0,706
1800		1,000	1,000	1,000	1,000	1,000	0,975	0,942	0,897	0,862	0,834	0,810	0,788	0,768	0,751	0,735	0,720	0,705
1825		1,000	1,000	1,000	1,000	1,000	0,976	0,943	0,897	0,862	0,834	0,810	0,788	0,768	0,750	0,734	0,719	0,705
1850		1,000	1,000	1,000	1,000	1,000	0,976	0,944	0,897	0,862	0,833	0,809	0,787	0,767	0,749	0,733	0,718	0,704
1875		1,000	1,000	1,000	1,000	1,000	0,977	0,945	0,898	0,862	0,833	0,808	0,786	0,767	0,749	0,732	0,717	0,703
1900		1,000	1,000	1,000	1,000	1,000	0,977	0,946	0,898	0,862	0,832	0,807	0,785	0,766	0,748	0,731	0,716	0,702
1925		1,000	1,000	1,000	1,000	1,000	0,978	0,948	0,898	0,862	0,832	0,807	0,785	0,765	0,747	0,730	0,715	0,701
1950		1,000	1,000	1,000	1,000	1,000	0,979	0,949	0,898	0,861	0,832	0,806	0,784	0,764	0,746	0,729	0,714	0,700
1975		1,000	1,000	1,000	1,000	1,000	0,981	0,951	0,898	0,862	0,833	0,806	0,784	0,766	0,746	0,729	0,713	0,699
2000		1,000	1,000	1,000	1,000	1,000	0,982	0,952	0,897	0,862	0,834	0,805	0,783	0,768	0,745	0,728	0,712	0,698
2025		1,000	1,000	1,000	1,000	1,000	0,984	0,953	0,898	0,861	0,832	0,805	0,782	0,765	0,744	0,727	0,711	0,697
2050		1,000	1,000	1,000	1,000	1,000	0,985	0,954	0,899	0,860	0,830	0,804	0,781	0,761	0,742	0,726	0,710	0,696
2075		1,000	1,000	1,000	1,000	1,000	0,987	0,955	0,900	0,860	0,829	0,803	0,780	0,760	0,741	0,725	0,709	0,695
2100		1,000	1,000	1,000	1,000	1,000	0,988	0,956	0,900	0,860	0,828	0,802	0,779	0,759	0,740	0,724	0,708	0,694
2125		1,000	1,000	1,000	1,000	1,000	1,000	0,956	0,900	0,860	0,828	0,802	0,779	0,758	0,739	0,723	0,707	0,693
2150		1,000	1,000	1,000	1,000	1,000	1,000	0,956	0,900	0,859	0,827	0,801	0,778	0,757	0,738	0,722	0,706	0,692
2175		1,000	1,000	1,000	1,000	1,000	1,000	0,956	0,901	0,859	0,827	0,800	0,777	0,756	0,737	0,721	0,705	0,691
2200		1,000	1,000	1,000	1,000	1,000	1,000	0,955	0,901	0,859	0,826	0,799	0,776	0,755	0,736	0,720	0,704	0,690
2225		1,000	1,000	1,000	1,000	1,000	1,000	0,955	0,901	0,859	0,826	0,798	0,775	0,754	0,735	0,719	0,703	0,689
2250		1,000	1,000	1,000	1,000	1,000	1,000	0,954	0,901	0,858	0,825	0,797	0,774	0,753	0,734	0,717	0,702	0,687
2275		1,000	1,000	1,000	1,000	1,000	1,000	0,954	0,901	0,858	0,824	0,796	0,773	0,752	0,733	0,716	0,701	0,686
2300		1,000	1,000	1,000	1,000	1,000	1,000	0,953	0,901	0,857	0,823	0,795	0,772	0,751	0,732	0,715	0,699	0,685
2325		1,000	1,000	1,000	1,000	1,000	1,000	0,953	0,902	0,857	0,823	0,795	0,771	0,750	0,731	0,714	0,698	0,684
2350		1,000	1,000	1,000	1,000	1,000	1,000	0,952	0,902	0,856	0,822	0,794	0,769	0,748	0,729	0,712	0,697	0,682
2375		1,000	1,000	1,000	1,000	1,000	1,000	0,952	0,902	0,856	0,821	0,793	0,768	0,747	0,728	0,711	0,696	0,681
2400		1,000	1,000	1,000	1,000	1,000	1,000	0,952	0,902	0,855	0,820	0,791	0,767	0,746	0,727	0,710	0,694	0,679
2425		1,000	1,000	1,000	1,000	1,000	1,000	0,952	0,902	0,855	0,819	0,790	0,766	0,745	0,726	0,709	0,693	0,678
2450		1,000	1,000	1,000	1,000	1,000	1,000	0,951	0,902	0,854	0,818	0,789	0,765	0,743	0,724	0,707	0,691	0,677
2475		1,000	1,000	1,000	1,000	1,000	1,000	0,951	0,902	0,853	0,817	0,788	0,764	0,742	0,723	0,706	0,690	0,676
2500		1,000	1,000	1,000	1,000	1,000	1,000	0,951	0,902	0,852	0,816	0,787	0,762	0,740	0,721	0,704	0,688	0,674
2525		1,000	1,000	1,000	1,000	1,000	1,000	0,951	0,902	0,852	0,815	0,786	0,761	0,739	0,720	0,703	0,687	0,673
2550		1,000	1,000	1,000	1,000	1,000	1,000	0,951	0,902	0,851	0,814	0,784	0,759	0,738	0,718	0,701	0,685	0,671
2575		1,000	1,000	1,000	1,000	1,000	1,000	0,951	0,903	0,850	0,813	0,783	0,758	0,737	0,717	0,700	0,684	0,668
2600		1,000	1,000	1,000	1,000	1,000	1,000	0,951	0,903	0,849	0,812	0,782	0,756	0,735	0,715	0,698	0,682	0,664
2625		1,000	1,000	1,000	1,000	1,000	1,000	0,952	0,903	0,849	0,811	0,781	0,755	0,733	0,714	0,697	0,681	0,664
2650		1,000	1,000	1,000	1,000	1,000	1,000	0,952	0,903	0,848	0,809	0,779	0,754	0,731	0,712	0,695	0,679	0,664
2675		1,000	1,000	1,000	1,000	1,000	1,000	0,952	0,903	0,847	0,808	0,778	0,752	0,730	0,710	0,693	0,677	0,663
2700		1,000	1,000	1,000	1,000	1,000	1,000	0,952	0,903	0,846	0,807	0,776	0,750	0,728	0,708	0,691	0,675	0,661
2725		1,000	1,000	1,000	1,000	1,000	1,000	0,953	0,903	0,845	0,806	0,775	0,749	0,726	0,707	0,689	0,673	0,659
2750		1,000	1,000	1,000	1,000	1,000	1,000	0,953	0,903	0,844	0,804	0,773	0,747	0,724	0,705	0,687	0,671	0,657
2775		1,000	1,000	1,000	1,000	1,000	1,000	0,955	0,903	0,843	0,803	0,771	0,745	0,723	0,703	0,686	0,670	0,655
2800		1,000	1,000	1,000	1,000	1,000	1,000	0,956	0,903	0,842	0,801	0,769	0,743	0,721	0,701	0,684	0,668	0,653
2825		1,000	1,000	1,000	1,000	1,000	1,000	0,958	0,903	0,841	0,800	0,768	0,741	0,719	0,699	0,682	0,666	0,651
2850		1,000	1,000	1,000	1,000	1,000	1,000	0,959	0,902	0,839	0,799	0,766	0,739	0,717	0,697	0,679	0,663	0,649
2875		1,000	1,000	1,000	1,000	1,000	1,000	0,961	0,902	0,838	0,797	0,764	0,737	0,715	0,695	0,677	0,661	0,647
2900		1,000	1,000	1,000	1,000	1,000	1,000	0,963	0,902	0,836	0,794	0,762	0,735	0,713	0,693	0,675	0,659	0,645
2925		1,000	1,000	1,000	1,000	1,000	1,000	0,982	0,902	0,835	0,792	0,760	0,733	0,711	0,691	0,673	0,657	0,643
2950		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,902	0,834	0,790	0,758	0,731	0,708	0,688	0,671	0,655	0,640
2975		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,902	0,833	0,788	0,756	0,729	0,706	0,686	0,669	0,653	0,638
3000		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,901	0,831	0,786	0,753	0,726	0,704	0,684	0,666	0,650	0,635
3025		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,900	0,829	0,784	0,751	0,724	0,702	0,682	0,664	0,648	0,633
3050		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,899	0,827	0,782	0,749	0,722	0,699	0,679	0,661	0,645	0,630
3075		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,898	0,825	0,780	0,747	0,719	0,696	0,676	0,659	0,643	0,628
3100		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,896	0,823	0,777	0,744	0,716	0,693	0,673	0,656	0,640	0,625
3125		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,895	0,821	0,775	0,741	0,714	0,691	0,671	0,653	0,637	0,623
3150		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,894	0,819	0,772	0,738	0,711	0,688	0,668	0,650	0,634	0,620
3175		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,892	0,817	0,770	0,736	0,708	0,685	0,665	0,647	0,631	0,617
3200		1,000	1,000	1,000	1,000	1,000	1,000	1,000	0,889	0,815	0,767	0,733	0,705	0,682	0,662	0,644	0,628	0,614

W = 51.5KAP for “P” less than or equal to 1580 psia
W = 51.5KAP x [0.1906P-1,000 / 0.2292P-1,061] for “P” greater than 1580 psia

K = 0,876
A = Orifice Area in sq.in
P = (1.03 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam.

Starflow-V is certified as a restricted lift valve. As per ASME, B&PVC, Section I PG-73.2.10 (e) and internal procedure, valves shall not have their lifts restricted to a value less than 55% of full rated lift, or 0.080 in. (2 mm).

Table with columns for Orifice Designation (Orifice Area [sq.in] and [sq.cm]), Set Pressure (barg and psig), and 16 orifice sizes (F-W). Rows list capacity values for each orifice size at various set pressures.

Section I Rating

pounds per hour saturated steam at 3% overpressure

W = 51.5KAP for "P" less than or equal to 1580 psia
W = 51.5KAP x [0.1906P-1,000 / 0.2292P-1,061] for "P" greater than 1580 psia

K = 0,876
A = Orifice Area in sq.in
P = (1.03 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam.

Starflow-V is certified as a restricted lift valve. As per ASME, B&PVC, Section I PG-73.2.10 (e) and internal procedure, valves shall not have their lifts restricted to a value less than 55% of full rated lift, or 0.080 in. (2 mm).

Orifice Designation		F	G	H	J	K	L	M	N	P	Q	R	T	V	W
Orifice Area	[sq.in]	0,37	0,59	0,10	1,46	1,67	2,76	3,98	5,30	7,07	10,15	14,17	24,00	38,55	55,44
	[sq.cm]	2,41	3,80	6,43	9,40	10,75	17,79	25,70	34,21	45,61	65,47	91,44	154,82	248,70	357,66
Set Pressure	[barg]														
	[psig]														
25,86	375	6747	10654	18016	26355	30153	49888	72046	95923	127867	183562	256368	434069	697274	1002788
26,20	380	6834	10791	18248	26693	30541	50529	72972	97155	129510	185919	259661	439644	706230	1015668
26,54	385	6920	10928	18479	27032	30928	51170	73897	98387	131152	188277	262954	445220	715186	1028549
26,89	390	7007	11065	18710	27370	31315	51810	74823	99619	132794	190635	266246	450795	724142	1041429
27,23	395	7094	11201	18942	27709	31703	52451	75748	100851	134437	192993	269539	456370	733098	1054309
27,58	400	7180	11338	19173	28047	32090	53092	76673	102084	136079	195350	272832	461946	742055	1067189
27,92	405	7267	11475	19405	28386	32477	53733	77599	103316	137722	197708	276125	467521	751011	1080070
28,27	410	7354	11612	19636	28724	32865	54373	78524	104548	139364	200066	279418	473096	759967	1092950
28,61	415	7440	11749	19867	29063	33252	55014	79450	105780	141006	202424	282711	478672	768923	1105830
28,96	420	7527	11886	20099	29402	33639	55655	80375	107012	142649	204781	286004	484247	777879	1118711
29,30	425	7614	12023	20330	29740	34027	56296	81300	108244	144291	207139	289297	489823	786835	1131591
29,65	430	7700	12159	20562	30079	34414	56937	82226	109476	145934	209497	292590	495398	795791	1144471
29,99	435	7787	12296	20793	30417	34801	57577	83151	110708	147576	211855	295883	500973	804747	1157352
30,34	440	7874	12433	21024	30756	35188	58218	84077	111940	149218	214213	299176	506549	813704	1170232
30,68	445	7960	12570	21256	31094	35576	58859	85002	113172	150861	216570	302469	512124	822660	1183112
31,03	450	8047	12707	21487	31433	35963	59500	85927	114404	152503	218928	305761	517700	831616	1195993
31,37	455	8134	12844	21719	31771	36350	60141	86853	115636	154146	221286	309054	523275	840572	1208873
31,72	460	8220	12980	21950	32110	36738	60781	87778	116869	155788	223644	312347	528850	849528	1221753
32,06	465	8307	13117	22181	32448	37125	61422	88704	118101	157430	226001	315640	534426	858484	1234633
32,41	470	8394	13254	22413	32787	37512	62063	89629	119333	159073	228359	318933	540001	867440	1247514
32,75	475	8480	13391	22644	33125	37900	62704	90554	120565	160715	230717	322226	545577	876397	1260394
33,09	480	8567	13528	22876	33464	38287	63344	91480	121797	162358	233075	325519	551152	885353	1273274
33,44	485	8654	13665	23107	33802	38674	63985	92405	123029	164000	235432	328812	556727	894309	1286155
33,78	490	8740	13802	23338	34141	39061	64626	93330	124261	165642	237790	332105	562303	903265	1299035
34,13	495	8827	13938	23570	34479	39449	65267	94256	125493	167285	240148	335398	567878	912221	1311915
34,47	500	8914	14075	23801	34818	39836	65908	95181	126725	168927	242506	338691	573454	921177	1324796
34,82	505	9000	14212	24033	35156	40223	66548	96107	127957	170569	244863	341983	579029	930133	1337676
35,16	510	9087	14349	24264	35495	40611	67189	97032	129189	172212	247221	345276	584604	939089	1350556
35,51	515	9174	14486	24496	35833	40998	67830	97957	130421	173854	249579	348569	590180	948046	1363436
35,85	520	9260	14623	24727	36172	41385	68471	98883	131654	175497	251937	351862	595755	957002	1376317
36,20	525	9347	14759	24958	36510	41773	69112	99808	132886	177139	254294	355155	601331	965958	1389197
36,54	530	9434	14896	25190	36849	42160	69752	100734	134118	178781	256652	358448	606906	974914	1402077
36,89	535	9520	15033	25421	37187	42547	70393	101659	135350	180424	259010	361741	612481	983870	1414958
37,23	540	9607	15170	25653	37526	42935	71034	102584	136582	182066	261368	365034	618057	992826	1427838
37,58	545	9693	15307	25884	37864	43322	71675	103510	137814	183709	263725	368327	623632	1001782	1440718
37,92	550	9780	15444	26115	38203	43709	72315	104435	139046	185351	266083	371620	629208	1010738	1453599
38,27	555	9867	15581	26347	38541	44096	72956	105361	140278	186993	268441	374913	634783	1019695	1466479
38,61	560	9953	15717	26578	38880	44484	73597	106286	141510	188636	270799	378206	640358	1028651	1479359
38,96	565	10040	15854	26810	39218	44871	74238	107211	142742	190278	273156	381498	645934	1037607	1492240
39,30	570	10127	15991	27041	39557	45258	74879	108137	143974	191921	275514	384791	651509	1046563	1505120
39,64	575	10213	16128	27272	39895	45646	75519	109062	145206	193563	277872	388084	657084	1055519	1518000
39,99	580	10300	16265	27504	40234	46033	76160	109988	146439	195205	280230	391377	662660	1064475	1530880
40,33	585	10387	16402	27735	40573	46420	76801	110913	147671	196848	282587	394670	668235	1073431	1543761
40,68	590	10473	16539	27967	40911	46808	77442	111838	148903	198490	284945	397963	673811	1082388	1556641
41,02	595	10560	16675	28198	41250	47195	78083	112764	150135	200133	287303	401256	679386	1091344	1569521
41,37	600	10647	16812	28429	41588	47582	78723	113689	151367	201775	289661	404549	684961	1100300	1582402
41,71	605	10733	16949	28661	41927	47970	79364	114615	152599	203417	292018	407842	690537	1109256	1595282
42,06	610	10820	17086	28892	42265	48357	80005	115540	153831	205060	294376	411135	696112	1118212	1608162
42,40	615	10907	17223	29124	42604	48744	80646	116465	155063	206702	296734	414428	701688	1127168	1621043
42,75	620	10993	17360	29355	42942	49131	81286	117391	156295	208344	299092	417720	707263	1136124	1633923
43,09	625	11080	17496	29586	43281	49519	81927	118316	157527	209987	301450	421013	712838	1145080	1646803
43,44	630	11167	17633	29818	43619	49906	82568	119242	158759	211629	303807	424306	718414	1154037	1659683
43,78	635	11253	17770	30049	43958	50293	83209	120167	159991	213272	306165	427599	723989	1162993	1672564
44,13	640	11340	17907	30281	44296	50681	83850	121092	161224	214914	308523	430892	729565	1171949	1685444
44,47	645	11427	18044	30512	44635	51068	84490	122018	162456	216556	310881	434185	735140	1180905	1698324

W = 51.5KAP for "P" less than or equal to 1580 psia
W = 51.5KAP x [0.1906P-1,000 / 0.2292P-1,061] for "P" greater than 1580 psia

K = 0,876
A = Orifice Area in sq.in
P = (1.03 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam.

Starflow-V is certified as a restricted lift valve. As per ASME, B&PVC, Section I PG-73.2.10 (e) and internal procedure, valves shall not have their lifts restricted to a value less than 55% of full rated lift, or 0.080 in. (2 mm).

Orifice Designation		F	G	H	J	K	L	M	N	P	Q	R	T	V	W
Orifice Area	[sq.in]	0,37	0,59	0,10	1,46	1,67	2,76	3,98	5,30	7,07	10,15	14,17	24,00	38,55	55,44
	[sq.cm]	2,41	3,80	6,43	9,40	10,75	17,79	25,70	34,21	45,61	65,47	91,44	154,82	248,70	357,66
Set Pressure															
	[barg]														
	[psig]														
44,82	650	11513	18181	30744	44973	51455	85131	122943	163688	218199	313238	437478	740715	1189861	1711205
45,16	655	11600	18318	30975	45312	51843	85772	123869	164920	219841	315596	440771	746291	1198817	1724085
45,51	660	11687	18454	31206	45650	52230	86413	124794	166152	221484	317954	444064	751866	1207773	1736965
45,85	665	11773	18591	31438	45989	52617	87054	125719	167384	223126	320312	447357	757442	1216729	1749846
46,19	670	11860	18728	31669	46327	53005	87694	126645	168616	224768	322669	450650	763017	1225686	1762726
46,54	675	11947	18865	31901	46666	53392	88335	127570	169848	226411	325027	453943	768592	1234642	1775606
46,88	680	12033	19002	32132	47004	53779	88976	128496	171080	228053	327385	457235	774168	1243598	1788487
47,23	685	12120	19139	32363	47343	54166	89617	129421	172312	229696	329743	460528	779743	1252554	1801367
47,57	690	12207	19275	32595	47681	54554	90257	130346	173544	231338	332100	463821	785319	1261510	1814247
47,92	695	12293	19412	32826	48020	54941	90898	131272	174776	232980	334458	467114	790894	1270466	1827127
48,26	700	12380	19549	33058	48358	55328	91539	132197	176009	234623	336816	470407	796469	1279422	1840008
48,61	705	12467	19686	33289	48697	55716	92180	133123	177241	236265	339174	473700	802045	1288379	1852888
48,95	710	12553	19823	33520	49035	56103	92821	134048	178473	237908	341531	476993	807620	1297335	1865768
49,30	715	12640	19960	33752	49374	56490	93461	134973	179705	239550	343889	480286	813195	1306291	1878649
49,64	720	12727	20097	33983	49712	56878	94102	135899	180937	241192	346247	483579	818771	1315247	1891529
49,99	725	12813	20233	34215	50051	57265	94743	136824	182169	242835	348605	486872	824346	1324203	1904409
50,33	730	12900	20370	34446	50389	57652	95384	137750	183401	244477	350962	490165	829922	1333159	1917290
50,68	735	12987	20507	34677	50728	58039	96025	138675	184633	246119	353320	493458	835497	1342115	1930170
51,02	740	13073	20644	34909	51066	58427	96665	139600	185865	247762	355678	496750	841072	1351071	1943050
51,37	745	13160	20781	35140	51405	58814	97306	140526	187097	249404	358036	500043	-	-	-
51,71	750	13247	20918	35372	51744	59201	97947	141451	188329	251047	360393	503336	-	-	-
52,06	755	13333	21054	35603	52082	59589	98588	142377	189561	252689	362751	506629	-	-	-
52,40	760	13420	21191	35835	52421	59976	99228	143302	190794	254331	365109	509922	-	-	-
52,74	765	13507	21328	36066	52759	60363	99869	144227	192026	255974	367467	513215	-	-	-
53,09	770	13593	21465	36297	53098	60751	100510	145153	193258	257616	369824	516508	-	-	-
53,43	775	13680	21602	36529	53436	61138	101151	146078	194490	259259	372182	519801	-	-	-
53,78	780	13767	21739	36760	53775	61525	101792	147004	195722	260901	374540	523094	-	-	-
54,12	785	13853	21876	36992	54113	61913	102432	147929	196954	262543	376898	526387	-	-	-
54,47	790	13940	22012	37223	54452	62300	103073	148854	198186	264186	379255	529680	-	-	-
54,81	795	14027	22149	37454	54790	62687	103714	149780	199418	265828	381613	532972	-	-	-
55,16	800	14113	22286	37686	55129	63074	104355	150705	200650	267471	383971	536265	-	-	-
55,50	805	14200	22423	37917	55467	63462	104996	151631	201882	269113	386329	539558	-	-	-
55,85	810	14287	22560	38149	55806	63849	105636	152556	203114	270755	388687	542851	-	-	-
56,19	815	14373	22697	38380	56144	64236	106277	153481	204346	272398	391044	546144	-	-	-
56,54	820	14460	22833	38611	56483	64624	106918	154407	205579	274040	393402	549437	-	-	-
56,88	825	14547	22970	38843	56821	65011	107559	155332	206811	275682	395760	552730	-	-	-
57,23	830	14633	23107	39074	57160	65398	108199	156258	208043	277325	398118	556023	-	-	-
57,57	835	14720	23244	39306	57498	65786	108840	157183	209275	278967	400475	559316	-	-	-
57,92	840	14807	23381	39537	57837	66173	109481	158108	210507	280610	402833	562609	-	-	-
58,26	845	14893	23518	39768	58175	66560	110122	159034	211739	282252	405191	565902	-	-	-
58,61	850	14980	23655	40000	58514	66948	110763	159959	212971	283894	407549	569195	-	-	-
58,95	855	15067	23791	40231	58852	67335	111403	160885	214203	285537	409906	572487	-	-	-
59,29	860	15153	23928	40463	59191	67722	112044	161810	215435	287179	412264	575780	-	-	-
59,64	865	15240	24065	40694	59529	68109	112685	162735	216667	288822	414622	579073	-	-	-
59,98	870	15327	24202	40925	59868	68497	113326	163661	217899	290464	416980	582366	-	-	-
60,33	875	15413	24339	41157	60206	68884	113967	164586	219131	292106	419337	585659	-	-	-
60,67	880	15500	24476	41388	60545	69271	114607	165512	220364	293749	421695	588952	-	-	-
61,02	885	15586	24612	41620	60883	69659	115248	166437	221596	295391	424053	592245	-	-	-
61,36	890	15673	24749	41851	61222	70046	115889	167362	222828	297034	426411	595538	-	-	-
61,71	895	15760	24886	42083	61560	70433	116530	168288	224060	298676	428768	598831	-	-	-
62,05	900	15846	25023	42314	61899	70821	117170	169213	225292	300318	431126	602124	-	-	-
62,40	905	15933	25160	42545	62237	71208	117811	170139	226524	301961	433484	605417	-	-	-
62,74	910	16020	25297	42777	62576	71595	118452	171064	227756	303603	435842	608709	-	-	-
63,09	915	16106	25434	43008	62915	71983	119093	171989	228988	305246	438199	612002	-	-	-
63,43	920	16193	25570	43240	63253	72370	119734	172915	230220	306888	440557	615295	-	-	-

Section I Rating

pounds per hour saturated steam at 3% overpressure

W = 51.5KAP for "P" less than or equal to 1580 psia
W = 51.5KAP x [0.1906P-1,000 / 0.2292P-1,061] for "P" greater than 1580 psia

K = 0,876
A = Orifice Area in sq.in
P = (1.03 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam.

Starflow-V is certified as a restricted lift valve. As per ASME, B&PVC, Section I PG-73.2.10 (e) and internal procedure, valves shall not have their lifts restricted to a value less than 55% of full rated lift, or 0.080 in. (2 mm).

Orifice Designation		F	G	H	J	K	L	M	N	P	Q	R	T	V	W	
Orifice Area	[sq.in]	0,37	0,59	0,10	1,46	1,67	2,76	3,98	5,30	7,07	10,15	14,17	24,00	38,55	55,44	
	[sq.cm]	2,41	3,80	6,43	9,40	10,75	17,79	25,70	34,21	45,61	65,47	91,44	154,82	248,70	357,66	
Set Pressure																
	[barg]	[psig]														
63,78	925	16280	25707	43471	63592	72757	120374	173840	231452	308530	442915	618588	-	-	-	
64,12	930	16366	25844	43702	63930	73144	121015	174766	232684	310173	445273	621881	-	-	-	
64,47	935	16453	25981	43934	64269	73532	121656	175691	233916	311815	447630	625174	-	-	-	
64,81	940	16540	26118	44165	64607	73919	122297	176616	235149	313457	449988	628467	-	-	-	
65,16	945	16626	26255	44397	64946	74306	122938	177542	236381	315100	452346	631760	-	-	-	
65,50	950	16713	26391	44628	65284	74694	123578	178467	237613	316742	454704	635053	-	-	-	
65,84	955	16800	26528	44859	65623	75081	124219	179393	238845	318385	457061	638346	-	-	-	
66,19	960	16886	26665	45091	65961	75468	124860	180318	240077	320027	459419	641639	-	-	-	
66,53	965	16973	26802	45322	66300	75856	125501	181243	241309	321669	461777	644932	-	-	-	
66,88	970	17060	26939	45554	66638	76243	126141	182169	242541	323312	464135	648224	-	-	-	
67,22	975	17146	27076	45785	66977	76630	126782	183094	243773	324954	466493	651517	-	-	-	
67,57	980	17233	27213	46016	67315	77017	127423	184020	245005	326597	468850	654810	-	-	-	
67,91	985	17320	27349	46248	67654	77405	128064	184945	246237	328239	471208	658103	-	-	-	
68,26	990	17406	27486	46479	67992	77792	128705	185870	247469	329881	473566	661396	-	-	-	
68,60	995	17493	27623	46711	68331	78179	129345	186796	248701	331524	475924	664689	-	-	-	
68,95	1000	17580	27760	46942	68669	78567	129986	187721	249934	333166	478281	667982	-	-	-	
69,29	1005	17666	27897	47173	69008	78954	130627	188647	251166	334809	480639	671275	-	-	-	
69,64	1010	17753	28034	47405	69346	79341	131268	189572	252398	336451	482997	674568	-	-	-	
69,98	1015	17840	28170	47636	69685	79729	131909	190497	253630	338093	485355	677861	-	-	-	
70,33	1020	17926	28307	47868	70023	80116	132549	191423	254862	339736	487712	681154	-	-	-	
70,67	1025	18013	28444	48099	70362	80503	133190	192348	256094	341378	490070	684447	-	-	-	
71,02	1030	18100	28581	48331	70700	80891	133831	193274	257326	343021	492428	687739	-	-	-	
71,36	1035	18186	28718	48562	71039	81278	134472	194199	258558	344663	494786	691032	-	-	-	
71,71	1040	18273	28855	48793	71377	81665	135112	195124	259790	346305	497143	694325	-	-	-	
72,05	1045	18360	28992	49025	71716	82052	135753	196050	261022	347948	499501	697618	-	-	-	
72,39	1050	18446	29128	49256	72054	82440	136394	196975	262254	349590	501859	700911	-	-	-	
72,74	1055	18533	29265	49488	72393	82827	137035	197901	263486	351232	504217	704204	-	-	-	
73,08	1060	18620	29402	49719	72731	83214	137676	198826	264719	352875	506574	707497	-	-	-	
73,43	1065	18706	29539	49950	73070	83602	138316	199751	265951	354517	508932	710790	-	-	-	
73,77	1070	18793	29676	50182	73408	83989	138957	200677	267183	356160	511290	714083	-	-	-	
74,12	1075	18880	29813	50413	73747	84376	139598	201602	268415	357802	513648	717376	-	-	-	
74,46	1080	18966	29949	50645	74086	84764	140239	202528	269647	359444	516005	720669	-	-	-	
74,81	1085	19053	30086	50876	74424	85151	140880	203453	270879	361087	518363	723961	-	-	-	
75,15	1090	19140	30223	51107	74763	85538	141520	204378	272111	362729	520721	727254	-	-	-	
75,50	1095	19226	30360	51339	75101	85926	142161	205304	273343	364372	523079	730547	-	-	-	
75,84	1100	19313	30497	51570	75440	86313	142802	206229	274575	366014	525436	733840	-	-	-	
76,19	1105	19400	30634	51802	75778	86700	143443	207155	275807	367656	527794	737133	-	-	-	
76,53	1110	19486	30771	52033	76117	87087	144083	208080	277039	369299	530152	740426	-	-	-	
76,88	1115	19573	30907	52264	76455	87475	144724	209005	278271	370941	532510	743719	-	-	-	
77,22	1120	19660	31044	52496	76794	87862	145365	209931	279504	372584	534867	747012	-	-	-	
77,57	1125	19746	31181	52727	77132	88249	146006	210856	280736	374226	537225	750305	-	-	-	
77,91	1130	19833	31318	52959	77471	88637	146647	211782	281968	375868	539583	753598	-	-	-	
78,26	1135	19920	31455	53190	77809	89024	147287	212707	283200	377511	541941	756891	-	-	-	
78,60	1140	20006	31592	53421	78148	89411	147928	213632	284432	379153	544298	760184	-	-	-	
78,94	1145	20093	31728	53653	78486	89799	148569	214558	285664	380796	546656	763476	-	-	-	
79,29	1150	20180	31865	53884	78825	90186	149210	215483	286896	382438	549014	766769	-	-	-	
79,63	1155	20266	32002	54116	79163	90573	149851	216409	288128	384080	551372	770062	-	-	-	
79,98	1160	20353	32139	54347	79502	90960	150491	217334	289360	385723	553730	773355	-	-	-	
80,32	1165	20440	32276	54579	79840	91348	151132	218259	290592	387365	556087	776648	-	-	-	
80,67	1170	20526	32413	54810	80179	91735	151773	219185	291824	389007	558445	779941	-	-	-	
81,01	1175	20613	32550	55041	80517	92122	152414	220110	293056	390650	560803	783234	-	-	-	
81,36	1180	20700	32686	55273	80856	92510	153054	221036	294289	392292	563161	786527	-	-	-	
81,70	1185	20786	32823	55504	81194	92897	153695	221961	295521	393935	565518	789820	-	-	-	
82,05	1190	20873	32960	55736	81533	93284	154336	222886	296753	395577	567876	793113	-	-	-	
82,39	1195	20960	33097	55967	81871	93672	154977	223812	297985	397219	570234	796406	-	-	-	

W = 51.5KAP for "P" less than or equal to 1580 psia
W = 51.5KAP x [0.1906P-1,000 / 0.2292P-1,061] for "P" greater than 1580 psia

K = 0,876
A = Orifice Area in sq.in
P = (1.03 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam.

Starflow-V is certified as a restricted lift valve. As per ASME, B&PVC, Section I PG-73.2.10 (e) and internal procedure, valves shall not have their lifts restricted to a value less than 55% of full rated lift, or 0.080 in. (2 mm).

Orifice Designation		F	G	H	J	K	L	M	N	P	Q	R	T	V	W
Orifice Area	[sq.in]	0,37	0,59	0,10	1,46	1,67	2,76	3,98	5,30	7,07	10,15	14,17	24,00	38,55	55,44
	[sq.cm]	2,41	3,80	6,43	9,40	10,75	17,79	25,70	34,21	45,61	65,47	91,44	154,82	248,70	357,66
Set Pressure															
	[barg]														
	[psig]														
82,74	1200	21046	33234	56198	82210	94059	155618	224737	299217	398862	572592	799698	-	-	-
83,08	1205	21133	33371	56430	82548	94446	156258	225663	300449	400504	574949	802991	-	-	-
83,43	1210	21220	33507	56661	82887	94834	156899	226588	301681	402147	577307	806284	-	-	-
83,77	1215	21306	33644	56893	83225	95221	157540	227513	302913	403789	579665	809577	-	-	-
84,12	1220	21393	33781	57124	83564	95608	158181	228439	304145	405431	582023	812870	-	-	-
84,46	1225	21479	33918	57355	83902	95995	158822	229364	305377	407074	584380	816163	-	-	-
84,81	1230	21566	34055	57587	84241	96383	159462	230290	306609	408716	586738	819456	-	-	-
85,15	1235	21653	34192	57818	84579	96770	160103	231215	307841	410359	589096	822749	-	-	-
85,49	1240	21739	34329	58050	84918	97157	160744	232140	309074	412001	591454	826042	-	-	-
85,84	1245	21826	34465	58281	85257	97545	161385	233066	310306	413643	593811	829335	-	-	-
86,18	1250	21913	34602	58512	85595	97932	162025	233991	311538	415286	596169	832628	-	-	-
86,53	1255	21999	34739	58744	85934	98319	162666	234916	312770	416928	598527	835921	-	-	-
86,87	1260	22086	34876	58975	86272	98707	163307	235842	314002	418571	600885	839213	-	-	-
87,22	1265	22173	35013	59207	86611	99094	163948	236767	315234	420213	603242	842506	-	-	-
87,56	1270	22259	35150	59438	86949	99481	164589	237693	316466	421855	605600	845799	-	-	-
87,91	1275	22346	35286	59669	87288	99869	165229	238618	317698	423498	607958	849092	-	-	-
88,25	1280	22433	35423	59901	87626	100256	165870	239543	318930	425140	610316	852385	-	-	-
88,60	1285	22519	35560	60132	87965	100643	166511	240469	320162	426782	612673	855678	-	-	-
88,94	1290	22606	35697	60364	88303	101030	167152	241394	321394	428425	615031	858971	-	-	-
89,29	1295	22693	35834	60595	88642	101418	167793	242320	322626	430067	617389	862264	-	-	-
89,63	1300	22779	35971	60827	88980	101805	168433	243245	323859	431710	619747	865557	-	-	-
89,98	1305	22866	36108	61058	89319	102192	169074	244170	325091	433352	622104	868850	-	-	-
90,32	1310	22953	36244	61289	89657	102580	169715	245096	326323	434994	624462	872143	-	-	-
90,67	1315	23039	36381	61521	89996	102967	170356	246021	327555	436637	626820	875435	-	-	-
91,01	1320	23126	36518	61752	90334	103354	170996	246947	328787	438279	629178	878728	-	-	-
91,36	1325	23213	36655	61984	90673	103742	171637	247872	330019	439922	631535	882021	-	-	-
91,70	1330	23299	36792	62215	91011	104129	172278	248797	331251	441564	633893	885314	-	-	-
92,05	1335	23386	36929	62446	91350	104516	172919	249723	332483	443206	636251	888607	-	-	-
92,39	1340	23473	37065	62678	91688	104904	173560	250648	333715	444849	638609	891900	-	-	-
92,73	1345	23559	37202	62909	92027	105291	174200	251574	334947	446491	640967	895193	-	-	-
93,08	1350	23646	37339	63141	92365	105678	174841	252499	336179	448134	643324	898486	-	-	-
93,42	1355	23733	37476	63372	92704	106065	175482	253424	337411	449776	645682	901779	-	-	-
93,77	1360	23819	37613	63603	93042	106453	176123	254350	338644	451418	648040	905072	-	-	-
94,11	1365	23906	37750	63835	93381	106840	176764	255275	339876	453061	650398	908365	-	-	-
94,46	1370	23993	37887	64066	93719	107227	177404	256201	341108	454703	652755	911658	-	-	-
94,80	1375	24079	38023	64298	94058	107615	178045	257126	342340	456346	655113	914950	-	-	-
95,15	1380	24166	38160	64529	94396	108002	178686	258051	343572	457988	657471	918243	-	-	-
95,49	1385	24253	38297	64760	94735	108389	179327	258977	344804	459630	659829	921536	-	-	-
95,84	1390	24339	38434	64992	95073	108777	179967	259902	346036	461273	662186	924829	-	-	-
96,18	1395	24426	38571	65223	95412	109164	180608	260828	347268	462915	664544	928122	-	-	-
96,53	1400	24513	38708	65455	95750	109551	181249	261753	348500	464557	666902	931415	-	-	-
96,87	1405	24599	38844	65686	96089	109938	181890	262678	349732	466200	669260	934708	-	-	-
97,22	1410	24686	38981	65918	96428	110326	182531	263604	350964	467842	671617	938001	-	-	-
97,56	1415	24773	39118	66149	96766	110713	183171	264529	352196	469485	673975	941294	-	-	-
97,91	1420	24859	39255	66380	97105	111100	183812	265455	353429	471127	676333	944587	-	-	-
98,25	1425	24946	39392	66612	97443	111488	184453	266380	354661	472769	678691	947880	-	-	-
98,60	1430	25033	39529	66843	97782	111875	185094	267305	355893	474412	681048	951173	-	-	-
98,94	1435	25119	39666	67075	98120	112262	185735	268231	357125	476054	683406	954465	-	-	-
99,28	1440	25206	39802	67306	98459	112650	186375	269156	358357	477697	685764	957758	-	-	-
99,63	1445	25293	39939	67537	98797	113037	187016	270082	359589	479339	688122	961051	-	-	-
99,97	1450	25379	40076	67769	99136	113424	187657	271007	360821	480981	690479	964344	-	-	-
100,32	1455	25466	40213	68000	99474	113812	188298	271932	362053	482624	692837	967637	-	-	-
100,66	1460	25553	40350	68232	99813	114199	188938	272858	363285	484266	695195	970930	-	-	-
101,01	1465	25639	40487	68463	100151	114586	189579	273783	364517	485909	697553	974223	-	-	-
101,35	1470	25726	40623	68694	100490	114973	190220	274709	365749	487551	699910	977516	-	-	-

Section I Rating

pounds per hour saturated steam at 3% overpressure

W = 51.5KAP for "P" less than or equal to 1580 psia
W = 51.5KAP x [0.1906P-1,000 / 0.2292P-1,061] for "P" greater than 1580 psia

K = 0,876
A = Orifice Area in sq.in
P = (1.03 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam.

Starflow-V is certified as a restricted lift valve. As per ASME, B&PVC, Section I PG-73.2.10 (e) and internal procedure, valves shall not have their lifts restricted to a value less than 55% of full rated lift, or 0.080 in. (2 mm).

Orifice Designation		F	G	H	J	K	L	M	N	P	Q	R	T	V	W	
Orifice Area	[sq.in]	0,37	0,59	0,10	1,46	1,67	2,76	3,98	5,30	7,07	10,15	14,17	24,00	38,55	55,44	
	[sq.cm]	2,41	3,80	6,43	9,40	10,75	17,79	25,70	34,21	45,61	65,47	91,44	154,82	248,70	357,66	
Set Pressure																
	[barg]	[psig]														
101,70	1475	25813	40760	68926	100828	115361	190861	275634	366981	489193	702268	980809	-	-	-	
102,04	1480	25899	40897	69157	101167	115748	191502	276559	368214	490836	704626	984102	-	-	-	
102,39	1485	25986	41034	69389	101505	116135	192142	277485	369446	492478	706984	987395	-	-	-	
102,73	1490	26073	41171	69620	101844	116523	192783	278410	370678	494120	709341	990687	-	-	-	
103,08	1495	26159	41308	69851	102182	116910	193424	279336	371910	495763	-	-	-	-	-	
103,42	1500	26246	41445	70083	102521	117297	194065	280261	373142	497405	-	-	-	-	-	
103,77	1505	26333	41581	70314	102859	117685	194706	281186	374374	499048	-	-	-	-	-	
104,11	1510	26419	41718	70546	103198	118072	195346	282112	375606	500690	-	-	-	-	-	
104,46	1515	26506	41855	70777	103536	118459	195987	283037	376838	502332	-	-	-	-	-	
104,80	1520	26593	41992	71008	103875	118847	196628	283963	378070	503975	-	-	-	-	-	
105,15	1525	26687	42141	71260	104243	119268	197325	284969	379410	505761	-	-	-	-	-	
105,49	1530	26781	42290	71512	104612	119689	198022	285976	380751	507549	-	-	-	-	-	
105,83	1535	26876	42439	71764	104980	120111	198720	286985	382094	509338	-	-	-	-	-	
106,18	1540	26970	42588	72016	105349	120534	199419	287994	383437	511129	-	-	-	-	-	
106,52	1545	27065	42737	72269	105719	120956	200118	289003	384782	512921	-	-	-	-	-	
106,87	1550	27159	42887	72522	106088	121379	200818	290014	386127	514715	-	-	-	-	-	
107,21	1555	27254	43036	72775	106458	121803	201519	291026	387474	516510	-	-	-	-	-	
107,56	1560	27349	43186	73028	106829	122226	202220	292038	388822	518307	-	-	-	-	-	
107,90	1565	27444	43336	73281	107199	122650	202921	293051	390170	520105	-	-	-	-	-	
108,25	1570	27539	43486	73535	107570	123075	203623	294065	391520	521904	-	-	-	-	-	
108,59	1575	27634	43636	73788	107942	123499	204326	295080	392872	523705	-	-	-	-	-	
108,94	1580	27729	43786	74042	108313	123924	205029	296095	394224	525508	-	-	-	-	-	
109,28	1585	27824	43936	74297	108685	124350	205733	297112	395577	527312	-	-	-	-	-	
109,63	1590	27919	44087	74551	109057	124776	206437	298129	396932	529118	-	-	-	-	-	
109,97	1595	28015	44237	74806	109430	125202	207142	299147	398287	530925	-	-	-	-	-	
110,32	1600	28110	44388	75060	109802	125628	207848	300166	399644	532733	-	-	-	-	-	
110,66	1605	28206	44539	75316	110175	126055	208554	301186	401002	534543	-	-	-	-	-	
111,01	1610	28301	44690	75571	110549	126482	209261	302207	402361	536355	-	-	-	-	-	
111,35	1615	28397	44841	75826	110923	126910	209969	303229	403722	538169	-	-	-	-	-	
111,70	1620	28493	44992	76082	111297	127338	210677	304251	405083	539983	-	-	-	-	-	
112,04	1625	28588	45144	76338	111671	127766	211385	305275	406446	541800	-	-	-	-	-	
112,38	1630	28684	45295	76594	112046	128195	212095	306299	407809	543618	-	-	-	-	-	
112,73	1635	28780	45447	76850	112421	128624	212805	307325	409175	545437	-	-	-	-	-	
113,07	1640	28876	45598	77107	112796	129054	213515	308351	410541	547259	-	-	-	-	-	
113,42	1645	28973	45750	77364	113172	129483	214226	309378	411908	549081	-	-	-	-	-	
113,76	1650	29069	45902	77621	113548	129914	214938	310406	413277	550906	-	-	-	-	-	
114,11	1655	29165	46054	77878	113924	130344	215651	311435	414647	552732	-	-	-	-	-	
114,45	1660	29262	46207	78136	114301	130775	216364	312464	416018	554560	-	-	-	-	-	
114,80	1665	29358	46359	78393	114678	131207	217077	313495	417390	556389	-	-	-	-	-	
115,14	1670	29455	46512	78651	115055	131638	217792	314527	418764	558220	-	-	-	-	-	
115,49	1675	29552	46664	78910	115433	132071	218507	315559	420138	560052	-	-	-	-	-	
115,83	1680	29648	46817	79168	115811	132503	219222	316593	421514	561887	-	-	-	-	-	
116,18	1685	29745	46970	79427	116190	132936	219939	317627	422892	563723	-	-	-	-	-	
116,52	1690	29842	47123	79686	116568	133370	220656	318663	424270	565560	-	-	-	-	-	
116,87	1695	29939	47277	79945	116947	133803	221373	319699	425650	567400	-	-	-	-	-	
117,21	1700	30036	47430	80204	117327	134237	222092	320736	427031	569241	-	-	-	-	-	
117,56	1705	30134	47584	80464	117707	134672	222811	321775	428414	571083	-	-	-	-	-	
117,90	1710	30231	47737	80724	118087	135107	223530	322814	429797	572928	-	-	-	-	-	
118,25	1715	30328	47891	80984	118467	135542	224251	323854	431182	574774	-	-	-	-	-	
118,59	1720	30426	48045	81244	118848	135978	224972	324895	432569	576622	-	-	-	-	-	
118,93	1725	30523	48199	81505	119230	136414	225693	325938	433956	578472	-	-	-	-	-	
119,28	1730	30621	48353	81766	119611	136851	226416	326981	435345	580323	-	-	-	-	-	
119,62	1735	30719	48508	82027	119993	137288	227139	328025	436735	582177	-	-	-	-	-	
119,97	1740	30817	48662	82288	120375	137725	227862	329070	438127	584032	-	-	-	-	-	
120,31	1745	30915	48817	82550	120758	138163	228587	330116	439520	585888	-	-	-	-	-	

W = 51.5KAP for "P" less than or equal to 1580 psia
W = 51.5KAP x [0.1906P-1,000 / 0.2292P-1,061] for "P" greater than 1580 psia

K = 0,876
A = Orifice Area in sq.in
P = (1.03 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam.

Starflow-V is certified as a restricted lift valve. As per ASME, B&PVC, Section I PG-73.2.10 (e) and internal procedure, valves shall not have their lifts restricted to a value less than 55% of full rated lift, or 0.080 in. (2 mm).

Orifice Designation		F	G	H	J	K	L	M	N	P	Q	R	T	V	W	
Orifice Area	[sq.in]	0,37	0,59	0,10	1,46	1,67	2,76	3,98	5,30	7,07	10,15	14,17	24,00	38,55	55,44	
	[sq.cm]	2,41	3,80	6,43	9,40	10,75	17,79	25,70	34,21	45,61	65,47	91,44	154,82	248,70	357,66	
Set Pressure																
	[barg]	[psig]														
120,66	1750	31013	48972	82812	121141	138602	229312	331164	440914	587747	-	-	-	-	-	
121,00	1755	31111	49127	83074	121525	139040	230038	332212	442310	589607	-	-	-	-	-	
121,35	1760	31209	49282	83336	121908	139479	230764	333261	443707	591470	-	-	-	-	-	
121,69	1765	31308	49437	83599	122293	139919	231492	334311	445105	593334	-	-	-	-	-	
122,04	1770	31406	49593	83862	122677	140359	232220	335363	446505	595200	-	-	-	-	-	
122,38	1775	31505	49749	84125	123062	140799	232948	336415	447906	597067	-	-	-	-	-	
122,73	1780	31603	49904	84388	123448	141240	233678	337469	449309	598937	-	-	-	-	-	
123,07	1785	31702	50060	84652	123833	141682	234408	338523	450712	600808	-	-	-	-	-	
123,42	1790	31801	50216	84916	124219	142123	235139	339579	452118	602682	-	-	-	-	-	
123,76	1795	31900	50373	85180	124606	142566	235870	340635	453525	604557	-	-	-	-	-	
124,11	1800	31999	50529	85445	124993	143008	236603	341693	454933	606434	-	-	-	-	-	
124,45	1805	32098	50686	85709	125380	143451	237336	342752	456342	608313	-	-	-	-	-	
124,80	1810	32197	50842	85974	125768	143895	238070	343811	457753	610194	-	-	-	-	-	
125,14	1815	32297	50999	86240	126156	144339	238804	344872	459166	612077	-	-	-	-	-	
125,48	1820	32396	51156	86505	126544	144783	239540	345934	460580	613962	-	-	-	-	-	
125,83	1825	32496	51313	86771	126933	145228	240276	346997	461995	615849	-	-	-	-	-	
126,17	1830	32595	51471	87037	127323	145674	241013	348062	463412	617737	-	-	-	-	-	
126,52	1835	32695	51628	87304	127712	146120	241751	349127	464831	619628	-	-	-	-	-	
126,86	1840	32795	51786	87570	128102	146566	242489	350193	466251	621521	-	-	-	-	-	
127,21	1845	32895	51944	87837	128493	147013	243228	351261	467672	623416	-	-	-	-	-	
127,55	1850	32995	52102	88105	128884	147460	243968	352330	469095	625312	-	-	-	-	-	
127,90	1855	33095	52260	88372	129275	147908	244709	353400	470519	627211	-	-	-	-	-	
128,24	1860	33195	52419	88640	129667	148356	245451	354471	471945	629112	-	-	-	-	-	
128,59	1865	33296	52577	88908	130059	148805	246193	355543	473373	631015	-	-	-	-	-	
128,93	1870	33396	52736	89176	130452	149254	246936	356616	474802	632920	-	-	-	-	-	
129,28	1875	33497	52895	89445	130845	149704	247680	357691	476232	634827	-	-	-	-	-	
129,62	1880	33598	53054	89714	131238	150154	248425	358766	477664	636736	-	-	-	-	-	
129,97	1885	33699	53213	89983	131632	150605	249171	359843	479098	638647	-	-	-	-	-	
130,31	1890	33800	53372	90253	132027	151056	249917	360921	480533	640560	-	-	-	-	-	
130,66	1895	33901	53532	90523	132421	151508	250665	362000	481970	642476	-	-	-	-	-	
131,00	1900	34002	53692	90793	132817	151960	251413	363081	483409	644393	-	-	-	-	-	
131,35	1905	34103	53852	91063	133212	152412	252162	364162	484849	646313	-	-	-	-	-	
131,69	1910	34204	54012	91334	133608	152866	252911	365245	486291	648235	-	-	-	-	-	
132,03	1915	34306	54172	91605	134005	153319	253662	366329	487734	650158	-	-	-	-	-	
132,38	1920	34408	54333	91877	134402	153774	254414	367415	489179	652085	-	-	-	-	-	
132,72	1925	34509	54493	92148	134799	154228	255166	368501	490625	654013	-	-	-	-	-	
133,07	1930	34611	54654	92420	135197	154684	255919	369589	492074	655944	-	-	-	-	-	
133,41	1935	34713	54815	92693	135596	155139	256673	370678	493524	657876	-	-	-	-	-	
133,76	1940	34815	54976	92965	135994	155596	257428	371768	494975	659811	-	-	-	-	-	
134,10	1945	34918	55138	93238	136394	156052	258184	372860	496428	661749	-	-	-	-	-	
134,45	1950	35020	55300	93512	136794	156510	258941	373952	497883	663688	-	-	-	-	-	
134,79	1955	35122	55461	93785	137194	156968	259698	375046	499340	665630	-	-	-	-	-	
135,14	1960	35225	55623	94059	137594	157426	260457	376142	500798	667574	-	-	-	-	-	
135,48	1965	35328	55785	94333	137996	157885	261216	377239	502259	669520	-	-	-	-	-	
135,83	1970	35430	55948	94608	138397	158345	261976	378337	503720	671469	-	-	-	-	-	
136,17	1975	35533	56110	94883	138799	158805	262738	379436	505184	673420	-	-	-	-	-	
136,52	1980	35636	56273	95158	139202	159265	263500	380536	506649	675373	-	-	-	-	-	
136,86	1985	35740	56436	95434	139605	159727	264263	381638	508117	677329	-	-	-	-	-	
137,21	1990	35843	56599	95709	140009	160188	265027	382742	509585	679287	-	-	-	-	-	
137,55	1995	35946	56763	95986	140413	160651	265792	383846	511056	681248	-	-	-	-	-	
137,90	2000	36050	56926	96262	140817	161114	266557	384952	512529	683210	-	-	-	-	-	
138,24	2005	36154	57090	96539	141222	161577	267324	386059	514003	685176	-	-	-	-	-	
138,58	2010	36258	57254	96816	141628	162041	268092	387168	515479	687143	-	-	-	-	-	
138,93	2015	36361	57418	97094	142034	162506	268861	388278	516957	689113	-	-	-	-	-	
139,27	2020	36466	57582	97372	142441	162971	269630	389390	518437	691086	-	-	-	-	-	

Section I Rating

pounds per hour saturated steam at 3% overpressure

W = 51.5KAP for "P" less than or equal to 1580 psia
W = 51.5KAP x [0.1906P-1,000 / 0.2292P-1,061] for "P" greater than 1580 psia

K = 0,876
A = Orifice Area in sq.in
P = (1.03 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam.

Starflow-V is certified as a restricted lift valve. As per ASME, B&PVC, Section I PG-73.2.10 (e) and internal procedure, valves shall not have their lifts restricted to a value less than 55% of full rated lift, or 0.080 in. (2 mm).

Orifice Designation		F	G	H	J	K	L	M	N	P	Q	R	T	V	W
Orifice Area	[sq.in]	0,37	0,59	0,10	1,46	1,67	2,76	3,98	5,30	7,07	10,15	14,17	24,00	38,55	55,44
	[sq.cm]	2,41	3,80	6,43	9,40	10,75	17,79	25,70	34,21	45,61	65,47	91,44	154,82	248,70	357,66
Set Pressure															
[barg]	[psig]														
139,62	2025	36570	57747	97650	142848	163437	270401	390503	519918	693061	-	-	-	-	-
139,96	2030	36674	57912	97929	143255	163903	271172	391617	521402	695039	-	-	-	-	-
140,31	2035	36779	58077	98208	143663	164370	271945	392732	522887	697019	-	-	-	-	-
140,65	2040	36883	58242	98487	144072	164837	272718	393849	524375	699001	-	-	-	-	-
141,00	2045	36988	58407	98767	144481	165305	273493	394968	525864	700986	-	-	-	-	-
141,34	2050	37093	58573	99047	144891	165774	274268	396088	527355	702974	-	-	-	-	-
141,69	2055	37198	58739	99327	145301	166244	275045	397209	528848	704964	-	-	-	-	-
142,03	2060	37303	58905	99608	145712	166713	275822	398332	530343	706957	-	-	-	-	-
142,38	2065	37408	59071	99889	146123	167184	276601	399456	531840	708952	-	-	-	-	-
142,72	2070	37514	59237	100171	146535	167655	277380	400582	533339	710950	-	-	-	-	-
143,07	2075	37619	59404	100453	146947	168127	278161	401709	534839	712951	-	-	-	-	-
143,41	2080	37725	59571	100735	147360	168599	278942	402838	536342	714954	-	-	-	-	-
143,76	2085	37831	59738	101017	147774	169072	279725	403968	537847	716960	-	-	-	-	-
144,10	2090	37937	59906	101300	148188	169546	280509	405100	539354	718969	-	-	-	-	-
144,45	2095	38043	60073	101584	148602	170020	281293	406233	540863	720980	-	-	-	-	-
144,79	2100	38149	60241	101868	149017	170495	282079	407368	542373	722994	-	-	-	-	-
145,13	2105	38256	60409	102152	149433	170971	282866	408505	543886	725011	-	-	-	-	-
145,48	2110	38362	60577	102436	149849	171447	283654	409642	545401	727030	-	-	-	-	-
145,82	2115	38469	60746	102721	150266	171924	284443	410782	546918	729053	-	-	-	-	-
146,17	2120	38576	60915	103007	150683	172402	285233	411923	548438	731078	-	-	-	-	-
146,51	2125	38683	61083	103292	151101	172880	286024	413065	549959	733106	-	-	-	-	-
146,86	2130	38790	61253	103578	151520	173359	286816	414210	551482	735136	-	-	-	-	-
147,20	2135	38897	61422	103865	151939	173838	287610	415355	553008	737170	-	-	-	-	-
147,55	2140	39005	61592	104152	152359	174318	288404	416503	554535	739206	-	-	-	-	-
147,89	2145	39112	61762	104439	152779	174799	289200	417652	556065	741245	-	-	-	-	-
148,24	2150	39220	61932	104727	153200	175281	289997	418802	557597	743287	-	-	-	-	-
148,58	2155	39328	62102	105015	153621	175763	290795	419955	559131	745332	-	-	-	-	-
148,93	2160	39436	62273	105304	154043	176246	291594	421109	560667	747380	-	-	-	-	-
149,27	2165	39544	62444	105593	154466	176730	292394	422264	562206	749431	-	-	-	-	-
149,62	2170	39653	62615	105882	154889	177214	293195	423421	563747	751485	-	-	-	-	-
149,96	2175	39761	62786	106172	155313	177699	293998	424580	565290	753542	-	-	-	-	-
150,31	2180	39870	62958	106462	155738	178185	294801	425741	566835	755602	-	-	-	-	-
150,65	2185	39979	63130	106753	156163	178671	295606	426903	568382	757665	-	-	-	-	-
151,00	2190	40088	63302	107044	156589	179158	296412	428067	569932	759731	-	-	-	-	-
151,34	2195	40197	63474	107335	157015	179646	297219	429233	571484	761800	-	-	-	-	-
151,68	2200	40306	63647	107627	157442	180135	298028	430400	573039	763872	-	-	-	-	-
152,03	2205	40416	63820	107920	157870	180624	298837	431570	574596	765947	-	-	-	-	-
152,37	2210	40525	63993	108212	158299	181114	299648	432741	576155	768025	-	-	-	-	-
152,72	2215	40635	64166	108506	158728	181605	300460	433913	577716	770107	-	-	-	-	-
153,06	2220	40745	64340	108799	159157	182097	301274	435088	579280	772191	-	-	-	-	-
153,41	2225	40855	64514	109093	159588	182589	302088	436264	580846	774279	-	-	-	-	-
153,75	2230	40966	64688	109388	160019	183082	302904	437443	582415	776370	-	-	-	-	-
154,10	2235	41076	64863	109683	160450	183576	303721	438623	583986	778464	-	-	-	-	-
154,44	2240	41187	65038	109979	160882	184071	304539	439804	585559	780562	-	-	-	-	-
154,79	2245	41298	65213	110275	161315	184566	305359	440988	587135	782662	-	-	-	-	-
155,13	2250	41409	65388	110571	161749	185062	306180	442174	588714	784766	-	-	-	-	-

W = 51.5KAP for "P" less than or equal to 1580 psia
W = 51.5KAP x [0.1906P-1,000 / 0.2292P-1,061] for "P" greater than 1580 psia

K = 0,876
A = Orifice Area in sq.in
P = (1.10 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam.

Starflow-V is certified as a restricted lift valve. As per ASME, B&PVC, Section I PG-73.2.10 (e) and internal procedure, valves shall not have their lifts restricted to a value less than 55% of full rated lift, or 0.080 in. (2 mm).

Orifice Designation		F	G	H	J	K	L	M	N	P	Q	R	T	V	W
Orifice Area	[sq.in]	0,37	0,59	0,10	1,46	1,67	2,76	3,98	5,30	7,07	10,15	14,17	24,00	38,55	55,44
	[sq.cm]	2,41	3,80	6,43	9,40	10,75	17,79	25,70	34,21	45,61	65,47	91,44	154,82	248,70	357,66
Set Pressure															
	[barg]														
	[psig]														
6,89	100	2098	3314	5603	8197	9378	15516	22407	29833	39768	57090	79733	135000	216860	311878
7,24	105	2191	3460	5850	8558	9792	16200	23396	31149	41522	59608	83250	140955	226425	325634
7,58	110	2283	3606	6097	8920	10205	16884	24384	32465	43276	62126	86767	146909	235990	339390
7,93	115	2376	3752	6345	9281	10619	17569	25372	33781	45030	64644	90283	152863	245554	353145
8,27	120	2469	3898	6592	9643	11033	18253	26360	35096	46784	67162	93800	158818	255119	366901
8,62	125	2561	4044	6839	10004	11446	18937	27349	36412	48538	69680	97317	164772	264684	380657
8,96	130	2654	4190	7086	10366	11860	19622	28337	37728	50292	72198	100833	170726	274249	394412
9,31	135	2746	4337	7333	10727	12273	20306	29325	39044	52046	74716	104350	176680	283814	408168
9,65	140	2839	4483	7580	11089	12687	20990	30314	40360	53800	77234	107867	182635	293378	421924
10,00	145	2931	4629	7827	11450	13101	21675	31302	41676	55554	79752	111384	188589	302943	435679
10,34	150	3024	4775	8075	11812	13514	22359	32290	42991	57308	82270	114900	194543	312508	449435
10,69	155	3116	4921	8322	12173	13928	23043	33278	44307	59062	84788	118417	200498	322073	463191
11,03	160	3209	5067	8569	12535	14342	23728	34267	45623	60816	87306	121934	206452	331638	476946
11,38	165	3302	5213	8816	12896	14755	24412	35255	46939	62570	89824	125450	212406	341202	490702
11,72	170	3394	5360	9063	13258	15169	25096	36243	48255	64324	92342	128967	218361	350767	504458
12,07	175	3487	5506	9310	13619	15582	25781	37232	49570	66078	94860	132484	224315	360332	518213
12,41	180	3579	5652	9557	13981	15996	26465	38220	50886	67832	97378	136001	230269	369897	531969
12,76	185	3672	5798	9804	14343	16410	27149	39208	52202	69586	99896	139517	236223	379462	545725
13,10	190	3764	5944	10052	14704	16823	27834	40196	53518	71340	102414	143034	242178	389026	559480
13,44	195	3857	6090	10299	15066	17237	28518	41185	54834	73094	104932	146551	248132	398591	573236
13,79	200	3949	6236	10546	15427	17651	29202	42173	56150	74848	107450	150067	254086	408156	586992
14,13	205	4042	6383	10793	15789	18064	29887	43161	57465	76602	109968	153584	260041	417721	600747
14,48	210	4135	6529	11040	16150	18478	30571	44150	58781	78356	112486	157101	265995	427286	614503
14,82	215	4227	6675	11287	16512	18892	31255	45138	60097	80110	115004	160617	271949	436850	628259
15,17	220	4320	6821	11534	16873	19305	31940	46126	61413	81864	117522	164134	277904	446415	642014
15,51	225	4412	6967	11782	17235	19719	32624	47114	62729	83618	120040	167651	283858	455980	655770
15,86	230	4505	7113	12029	17596	20132	33308	48103	64044	85372	122558	171168	289812	465545	669526
16,20	235	4597	7260	12276	17958	20546	33993	49091	65360	87126	125076	174684	295766	475110	683281
16,55	240	4690	7406	12523	18319	20960	34677	50079	66676	88880	127594	178201	301721	484674	697037
16,89	245	4782	7552	12770	18681	21373	35361	51068	67992	90634	130112	181718	307675	494239	710793
17,24	250	4875	7698	13017	19042	21787	36046	52056	69308	92388	132630	185234	313629	503804	724548
17,58	255	4967	7844	13264	19404	22201	36730	53044	70624	94142	135148	188751	319584	513369	738304
17,93	260	5060	7990	13512	19765	22614	37414	54033	71939	95896	137666	192268	325538	522934	752060
18,27	265	5153	8136	13759	20127	23028	38099	55021	73255	97651	140184	195785	331492	532498	765815
18,62	270	5245	8283	14006	20488	23441	38783	56009	74571	99405	142702	199301	337447	542063	779571
18,96	275	5338	8429	14253	20850	23855	39467	56997	75887	101159	145220	202818	343401	551628	793327
19,31	280	5430	8575	14500	21211	24269	40152	57986	77203	102913	147738	206335	349355	561193	807082
19,65	285	5523	8721	14747	21573	24682	40836	58974	78518	104667	150255	209851	355310	570758	820838
19,99	290	5615	8867	14994	21934	25096	41520	59962	79834	106421	152773	213368	361264	580322	834594
20,34	295	5708	9013	15241	22296	25510	42205	60951	81150	108175	155291	216885	367218	589887	848349
20,68	300	5800	9159	15489	22658	25923	42889	61939	82466	109929	157809	220401	373172	599452	862105
21,03	305	5893	9306	15736	23019	26337	43573	62927	83782	111683	160327	223918	379127	609017	875861
21,37	310	5986	9452	15983	23381	26750	44258	63915	85098	113437	162845	227435	385081	618582	889616
21,72	315	6078	9598	16230	23742	27164	44942	64904	86413	115191	165363	230952	391035	628146	903372
22,06	320	6171	9744	16477	24104	27578	45626	65892	87729	116945	167881	234468	396990	637711	917128
22,41	325	6263	9890	16724	24465	27991	46311	66880	89045	118699	170399	237985	402944	647276	930883
22,75	330	6356	10036	16971	24827	28405	46995	67869	90361	120453	172917	241502	408898	656841	944639
23,10	335	6448	10182	17219	25188	28819	47679	68857	91677	122207	175435	245018	414853	666406	958395
23,44	340	6541	10329	17466	25550	29232	48364	69845	92992	123961	177953	248535	420807	675970	972150
23,79	345	6633	10475	17713	25911	29646	49048	70833	94308	125715	180471	252052	426761	685535	985906
24,13	350	6726	10621	17960	26273	30059	49732	71822	95624	127469	182989	255568	432715	695100	999662
24,48	355	6819	10767	18207	26634	30473	50417	72810	96940	129223	185507	259085	438670	704665	1013417
24,82	360	6911	10913	18454	26996	30887	51101	73798	98256	130977	188025	262602	444624	714230	1027173
25,17	365	7004	11059	18701	27357	31300	51785	74787	99571	132731	190543	266119	450578	723794	1040929
25,51	370	7096	11205	18948	27719	31714	52470	75775	100887	134485	193061	269635	456533	733359	1054684

Section VIII Rating

pounds per hour saturated steam at 10% overpressure

W = 51.5KAP for “P” less than or equal to 1580 psia
W = 51.5KAP x [0.1906P-1,000 / 0.2292P-1,061] for “P” greater than 1580 psia

K = 0,876
A = Orifice Area in sq.in
P = (1.03 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam.

Starflow-V is certified as a restricted lift valve. As per ASME, B&PVC, Section I PG-73.2.10 (e) and internal procedure, valves shall not have their lifts restricted to a value less than 55% of full rated lift, or 0.080 in. (2 mm).

Orifice Designation	Orifice Area	Set Pressure													
		F	G	H	J	K	L	M	N	P	Q	R	T	V	W
		[sq.in]	[sq.in]	[sq.in]	[sq.in]	[sq.in]	[sq.in]	[sq.in]	[sq.in]	[sq.in]	[sq.in]	[sq.in]	[sq.in]	[sq.in]	[sq.in]
		0,37	0,59	0,10	1,46	1,67	2,76	3,98	5,30	7,07	10,15	14,17	24,00	38,55	55,44
		2,41	3,80	6,43	9,40	10,75	17,79	25,70	34,21	45,61	65,47	91,44	154,82	248,70	357,66
		[barg]	[psig]												
25,86	375	7189	11352	19196	28080	32128	53154	76763	102203	136239	195579	273152	462487	742924	1068440
26,20	380	7281	11498	19443	28442	32541	53838	77751	103519	137993	198097	276669	468441	752489	1082196
26,54	385	7374	11644	19690	28803	32955	54523	78740	104835	139747	200615	280185	474396	762054	1095951
26,89	390	7466	11790	19937	29165	33368	55207	79728	106151	141501	203133	283702	480350	771618	1109707
27,23	395	7559	11936	20184	29526	33782	55891	80716	107466	143255	205651	287219	486304	781183	1123463
27,58	400	7651	12082	20431	29888	34196	56576	81705	108782	145009	208169	290736	492259	790748	1137218
27,92	405	7744	12229	20678	30249	34609	57260	82693	110098	146763	210687	294252	498213	800313	1150974
28,27	410	7837	12375	20926	30611	35023	57944	83681	111414	148517	213205	297769	504167	809878	1164730
28,61	415	7929	12521	21173	30972	35437	58629	84669	112730	150271	215723	301286	510121	819442	1178485
28,96	420	8022	12667	21420	31334	35850	59313	85658	114045	152025	218241	304802	516076	829007	1192241
29,30	425	8114	12813	21667	31696	36264	59997	86646	115361	153779	220759	308319	522030	838572	1205997
29,65	430	8207	12959	21914	32057	36677	60682	87634	116677	155533	223277	311836	527984	848137	1219752
29,99	435	8299	13105	22161	32419	37091	61366	88623	117993	157287	225795	315352	533939	857702	1233508
30,34	440	8392	13252	22408	32780	37505	62050	89611	119309	159041	228313	318869	539893	867266	1247264
30,68	445	8484	13398	22655	33142	37918	62735	90599	120625	160795	230831	322386	545847	876831	1261019
31,03	450	8577	13544	22903	33503	38332	63419	91588	121940	162549	233349	325903	551802	886396	1274775
31,37	455	8670	13690	23150	33865	38746	64103	92576	123256	164303	235867	329419	557756	895961	1288531
31,72	460	8762	13836	23397	34226	39159	64788	93564	124572	166057	238385	332936	563710	905526	1302286
32,06	465	8855	13982	23644	34588	39573	65472	94552	125888	167811	240903	336453	569664	915090	1316042
32,41	470	8947	14128	23891	34949	39987	66156	95541	127204	169565	243421	339969	575619	924655	1329798
32,75	475	9040	14275	24138	35311	40400	66841	96529	128519	171319	245939	343486	581573	934220	1343553
33,09	480	9132	14421	24385	35672	40814	67525	97517	129835	173073	248457	347003	587527	943785	1357309
33,44	485	9225	14567	24633	36034	41227	68209	98506	131151	174827	250975	350519	593482	953350	1371065
33,78	490	9317	14713	24880	36395	41641	68894	99494	132467	176581	253493	354036	599436	962914	1384820
34,13	495	9410	14859	25127	36757	42055	69578	100482	133783	178335	256011	357553	605390	972479	1398576
34,47	500	9503	15005	25374	37118	42468	70262	101470	135099	180089	258529	361070	611345	982044	1412332
34,82	505	9595	15151	25621	37480	42882	70947	102459	136414	181843	261047	364586	617299	991609	1426087
35,16	510	9688	15298	25868	37841	43296	71631	103447	137730	183597	263565	368103	623253	1001174	1439843
35,51	515	9780	15444	26115	38203	43709	72315	104435	139046	185351	266083	371620	629208	1010738	1453599
35,85	520	9873	15590	26363	38564	44123	73000	105424	140362	187105	268601	375136	635162	1020303	1467354
36,20	525	9965	15736	26610	38926	44536	73684	106412	141678	188859	271119	378653	641116	1029868	1481110
36,54	530	10058	15882	26857	39287	44950	74368	107400	142993	190613	273637	382170	647070	1039433	1494866
36,89	535	10150	16028	27104	39649	45364	75053	108388	144309	192367	276155	385687	653025	1048998	1508621
37,23	540	10243	16174	27351	40011	45777	75737	109377	145625	194121	278673	389203	658979	1058562	1522377
37,58	545	10335	16321	27598	40372	46191	76421	110365	146941	195875	281191	392720	664933	1068127	1536133
37,92	550	10428	16467	27845	40734	46605	77106	111353	148257	197629	283709	396237	670888	1077692	1549888
38,27	555	10521	16613	28092	41095	47018	77790	112342	149573	199383	286227	399753	676842	1087257	1563644
38,61	560	10613	16759	28340	41457	47432	78474	113330	150888	201137	288745	403270	682796	1096822	1577400
38,96	565	10706	16905	28587	41818	47845	79159	114318	152204	202891	291263	406787	688751	1106386	1591155
39,30	570	10798	17051	28834	42180	48259	79843	115306	153520	204645	293781	410303	694705	1115951	1604911
39,64	575	10891	17197	29081	42541	48673	80527	116295	154836	206399	296299	413820	700659	1125516	1618667
39,99	580	10983	17344	29328	42903	49086	81212	117283	156152	208153	298817	417337	706613	1135081	1632422
40,33	585	11076	17490	29575	43264	49500	81896	118271	157467	209907	301335	420854	712568	1144646	1646178
40,68	590	11168	17636	29822	43626	49914	82580	119260	158783	211661	303853	424370	718522	1154210	1659934
41,02	595	11261	17782	30070	43987	50327	83265	120248	160099	213415	306371	427887	724476	1163775	1673689
41,37	600	11354	17928	30317	44349	50741	83949	121236	161415	215169	308889	431404	730431	1173340	1687445
41,71	605	11446	18074	30564	44710	51154	84633	122224	162731	216923	311407	434920	736385	1182905	1701201
42,06	610	11539	18221	30811	45072	51568	85318	123213	164047	218677	313925	438437	742339	1192470	1714956
42,40	615	11631	18367	31058	45433	51982	86002	124201	165362	220431	316443	441954	748294	1202034	1728712
42,75	620	11724	18513	31305	45795	52395	86686	125189	166678	222185	318961	445470	754248	1211599	1742468
43,09	625	11816	18659	31552	46156	52809	87371	126178	167994	223939	321479	448987	760202	1221164	1756223
43,44	630	11909	18805	31799	46518	53223	88055	127166	169310	225693	323997	452504	766156	1230729	1769979
43,78	635	12001	18951	32047	46879	53636	88739	128154	170626	227447	326515	456021	772111	1240294	1783735
44,13	640	12094	19097	32294	47241	54050	89424	129143	171941	229201	329033	459537	778065	1249858	1797490
44,47	645	12186	19244	32541	47602	54463	90108	130131	173257	230955	331551	463054	784019	1259423	1811246

W = 51.5KAP for "P" less than or equal to 1580 psia
W = 51.5KAP x [0.1906P-1,000 / 0.2292P-1,061] for "P" greater than 1580 psia

K = 0,876
A = Orifice Area in sq.in
P = (1.10 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam.

Starflow-V is certified as a restricted lift valve. As per ASME, B&PVC, Section I PG-73.2.10 (e) and internal procedure, valves shall not have their lifts restricted to a value less than 55% of full rated lift, or 0.080 in. (2 mm).

Orifice Designation		F	G	H	J	K	L	M	N	P	Q	R	T	V	W
Orifice Area [sq.in]		0,37	0,59	0,10	1,46	1,67	2,76	3,98	5,30	7,07	10,15	14,17	24,00	38,55	55,44
Orifice Area [sq.cm]		2,41	3,80	6,43	9,40	10,75	17,79	25,70	34,21	45,61	65,47	91,44	154,82	248,70	357,66
Set Pressure [barg]															
Set Pressure [psig]															
44,82	650	12279	19390	32788	47964	54877	90792	131119	174573	232709	334069	466571	789974	1268988	1825002
45,16	655	12372	19536	33035	48326	55291	91477	132107	175889	234463	336587	470087	795928	1278553	1838757
45,51	660	12464	19682	33282	48687	55704	92161	133096	177205	236217	339105	473604	801882	1288118	1852513
45,85	665	12557	19828	33529	49049	56118	92845	134084	178521	237971	341623	477121	807837	1297682	1866269
46,19	670	12649	19974	33777	49410	56532	93530	135072	179836	239725	344141	480638	813791	1307247	1880024
46,54	675	12742	20120	34024	49772	56945	94214	136061	181152	241479	346659	484154	819745	1316812	1893780
46,88	680	12834	20267	34271	50133	57359	94898	137049	182468	243233	349177	487671	825700	1326377	1907536
47,23	685	12927	20413	34518	50495	57773	95583	138037	183784	244987	351695	491188	831654	1335942	1921291
47,57	690	13019	20559	34765	50856	58186	96267	139025	185100	246741	354213	494704	837608	1345506	1935047
47,92	695	13112	20705	35012	51218	58600	96952	140014	186415	248495	356731	498221	843562	1355071	1948803
48,26	700	13205	20851	35259	51579	59013	97636	141002	187731	250249	359249	501738	849517	1364636	1962558
48,61	705	13297	20997	35506	51941	59427	98320	141990	189047	252003	361767	505254	855471	1374201	1976314
48,95	710	13390	21143	35754	52302	59841	99005	142979	190363	253757	364285	508771	861425	1383766	1990070
49,30	715	13482	21290	36001	52664	60254	99689	143967	191679	255511	366803	512288	867380	1393330	2003825
49,64	720	13575	21436	36248	53025	60668	100373	144955	192995	257265	369321	515805	873334	1402895	2017581
49,99	725	13667	21582	36495	53387	61082	101058	145943	194310	259019	371839	519321	879288	1412460	2031337
50,33	730	13760	21728	36742	53748	61495	101742	146932	195626	260773	374357	522838	885243	1422025	2045092
50,68	735	13852	21874	36989	54110	61909	102426	147920	196942	262527	376875	526355	891197	1431590	2058848
51,02	740	13945	22020	37236	54471	62322	103111	148908	198258	264281	379393	529871	897151	1441154	2072604
51,37	745	14038	22166	37484	54833	62736	103795	149897	199574	266035	381911	533388	-	-	-
51,71	750	14130	22313	37731	55194	63150	104479	150885	200889	267789	384429	536905	-	-	-
52,06	755	14223	22459	37978	55556	63563	105164	151873	202205	269543	386947	540421	-	-	-
52,40	760	14315	22605	38225	55917	63977	105848	152861	203521	271297	389465	543938	-	-	-
52,74	765	14408	22751	38472	56279	64391	106532	153850	204837	273051	391983	547455	-	-	-
53,09	770	14500	22897	38719	56640	64804	107217	154838	206153	274805	394501	550972	-	-	-
53,43	775	14593	23043	38966	57002	65218	107901	155826	207469	276560	397019	554488	-	-	-
53,78	780	14685	23190	39214	57364	65631	108585	156815	208784	278314	399537	558005	-	-	-
54,12	785	14778	23336	39461	57725	66045	109270	157803	210100	280068	402055	561522	-	-	-
54,47	790	14870	23482	39708	58087	66459	109954	158791	211416	281822	404573	565038	-	-	-
54,81	795	14963	23628	39955	58448	66872	110638	159780	212732	283576	407091	568555	-	-	-
55,16	800	15056	23774	40202	58810	67286	111323	160768	214048	285330	409609	572072	-	-	-
55,50	805	15148	23920	40449	59171	67700	112007	161756	215363	287084	412127	575589	-	-	-
55,85	810	15241	24066	40696	59533	68113	112691	162744	216679	288838	414645	579105	-	-	-
56,19	815	15333	24213	40943	59894	68527	113376	163733	217995	290592	417163	582622	-	-	-
56,54	820	15426	24359	41191	60256	68940	114060	164721	219311	292346	419681	586139	-	-	-
56,88	825	15518	24505	41438	60617	69354	114744	165709	220627	294100	422199	589655	-	-	-
57,23	830	15611	24651	41685	60979	69768	115429	166698	221943	295854	424717	593172	-	-	-
57,57	835	15703	24797	41932	61340	70181	116113	167686	223258	297608	427235	596689	-	-	-
57,92	840	15796	24943	42179	61702	70595	116797	168674	224574	299362	429753	600205	-	-	-
58,26	845	15889	25089	42426	62063	71009	117482	169662	225890	301116	432271	603722	-	-	-
58,61	850	15981	25236	42673	62425	71422	118166	170651	227206	302870	434789	607239	-	-	-
58,95	855	16074	25382	42921	62786	71836	118850	171639	228522	304624	437307	610756	-	-	-
59,29	860	16166	25528	43168	63148	72249	119535	172627	229837	306378	439825	614272	-	-	-
59,64	865	16259	25674	43415	63509	72663	120219	173616	231153	308132	442343	617789	-	-	-
59,98	870	16351	25820	43662	63871	73077	120903	174604	232469	309886	444861	621306	-	-	-
60,33	875	16444	25966	43909	64232	73490	121588	175592	233785	311640	447379	624822	-	-	-
60,67	880	16536	26112	44156	64594	73904	122272	176580	235101	313394	449897	628339	-	-	-
61,02	885	16629	26259	44403	64955	74318	122956	177569	236417	315148	452415	631856	-	-	-
61,36	890	16722	26405	44650	65317	74731	123641	178557	237732	316902	454933	635372	-	-	-
61,71	895	16814	26551	44898	65679	75145	124325	179545	239048	318656	457451	638889	-	-	-
62,05	900	16907	26697	45145	66040	75559	125009	180534	240364	320410	459969	642406	-	-	-
62,40	905	16999	26843	45392	66402	75972	125694	181522	241680	322164	462487	645923	-	-	-
62,74	910	17092	26989	45639	66763	76386	126378	182510	242996	323918	465005	649439	-	-	-
63,09	915	17184	27135	45886	67125	76799	127062	183498	244311	325672	467523	652956	-	-	-
63,43	920	17277	27282	46133	67486	77213	127747	184487	245627	327426	470041	656473	-	-	-

Section VIII Rating

pounds per hour saturated steam at 10% overpressure

W = 51.5KAP for “P” less than or equal to 1580 psia
W = 51.5KAP x [0.1906P-1,000 / 0.2292P-1,061] for “P” greater than 1580 psia

K = 0,876
A = Orifice Area in sq.in
P = (1.03 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam.

Starflow-V is certified as a restricted lift valve. As per ASME, B&PVC, Section I PG-73.2.10 (e) and internal procedure, valves shall not have their lifts restricted to a value less than 55% of full rated lift, or 0.080 in. (2 mm).

Orifice Designation		F	G	H	J	K	L	M	N	P	Q	R	T	V	W
Orifice Area	[sq.in]	0,37	0,59	0,10	1,46	1,67	2,76	3,98	5,30	7,07	10,15	14,17	24,00	38,55	55,44
	[sq.cm]	2,41	3,80	6,43	9,40	10,75	17,79	25,70	34,21	45,61	65,47	91,44	154,82	248,70	357,66
Set Pressure															
	[barg]														
	[psig]														
63,78	925	17369	27428	46380	67848	77627	128431	185475	246943	329180	472559	659989	-	-	-
64,12	930	17462	27574	46628	68209	78040	129115	186463	248259	330934	475077	663506	-	-	-
64,47	935	17554	27720	46875	68571	78454	129800	187452	249575	332688	477595	667023	-	-	-
64,81	940	17647	27866	47122	68932	78868	130484	188440	250891	334442	480113	670540	-	-	-
65,16	945	17740	28012	47369	69294	79281	131168	189428	252206	336196	482631	674056	-	-	-
65,50	950	17832	28159	47616	69655	79695	131853	190416	253522	337950	485149	677573	-	-	-
65,84	955	17925	28305	47863	70017	80108	132537	191405	254838	339704	487667	681090	-	-	-
66,19	960	18017	28451	48110	70378	80522	133221	192393	256154	341458	490185	684606	-	-	-
66,53	965	18110	28597	48357	70740	80936	133906	193381	257470	343212	492703	688123	-	-	-
66,88	970	18202	28743	48605	71101	81349	134590	194370	258785	344966	495221	691640	-	-	-
67,22	975	18295	28889	48852	71463	81763	135274	195358	260101	346720	497739	695156	-	-	-
67,57	980	18387	29035	49099	71824	82177	135959	196346	261417	348474	500256	698673	-	-	-
67,91	985	18480	29182	49346	72186	82590	136643	197335	262733	350228	502774	702190	-	-	-
68,26	990	18573	29328	49593	72547	83004	137327	198323	264049	351982	505292	705707	-	-	-
68,60	995	18665	29474	49840	72909	83417	138012	199311	265364	353736	507810	709223	-	-	-
68,95	1000	18758	29620	50087	73270	83831	138696	200299	266680	355490	510328	712740	-	-	-
69,29	1005	18850	29766	50335	73632	84245	139380	201288	267996	357244	512846	716257	-	-	-
69,64	1010	18943	29912	50582	73993	84658	140065	202276	269312	358998	515364	719773	-	-	-
69,98	1015	19035	30058	50829	74355	85072	140749	203264	270628	360752	517882	723290	-	-	-
70,33	1020	19128	30205	51076	74717	85486	141433	204253	271944	362506	520400	726807	-	-	-
70,67	1025	19220	30351	51323	75078	85899	142118	205241	273259	364260	522918	730324	-	-	-
71,02	1030	19313	30497	51570	75440	86313	142802	206229	274575	366014	525436	733840	-	-	-
71,36	1035	19405	30643	51817	75801	86726	143486	207217	275891	367768	527954	737357	-	-	-
71,71	1040	19498	30789	52064	76163	87140	144171	208206	277207	369522	530472	740874	-	-	-
72,05	1045	19591	30935	52312	76524	87554	144855	209194	278523	371276	532990	744390	-	-	-
72,39	1050	19683	31081	52559	76886	87967	145539	210182	279838	373030	535508	747907	-	-	-
72,74	1055	19776	31228	52806	77247	88381	146224	211171	281154	374784	538026	751424	-	-	-
73,08	1060	19868	31374	53053	77609	88795	146908	212159	282470	376538	540544	754940	-	-	-
73,43	1065	19961	31520	53300	77970	89208	147592	213147	283786	378292	543062	758457	-	-	-
73,77	1070	20053	31666	53547	78332	89622	148277	214135	285102	380046	545580	761974	-	-	-
74,12	1075	20146	31812	53794	78693	90035	148961	215124	286418	381800	548098	765491	-	-	-
74,46	1080	20238	31958	54042	79055	90449	149645	216112	287733	383554	550616	769007	-	-	-
74,81	1085	20331	32104	54289	79416	90863	150330	217100	289049	385308	553134	772524	-	-	-
75,15	1090	20424	32251	54536	79778	91276	151014	218089	290365	387062	555652	776041	-	-	-
75,50	1095	20516	32397	54783	80139	91690	151698	219077	291681	388816	558170	779557	-	-	-
75,84	1100	20609	32543	55030	80501	92104	152383	220065	292997	390570	560688	783074	-	-	-
76,19	1105	20701	32689	55277	80862	92517	153067	221053	294312	392324	563206	786591	-	-	-
76,53	1110	20794	32835	55524	81224	92931	153751	222042	295628	394078	565724	790107	-	-	-
76,88	1115	20886	32981	55772	81585	93344	154436	223030	296944	395832	568242	793624	-	-	-
77,22	1120	20979	33127	56019	81947	93758	155120	224018	298260	397586	570760	797141	-	-	-
77,57	1125	21071	33274	56266	82308	94172	155804	225007	299576	399340	573278	800658	-	-	-
77,91	1130	21164	33420	56513	82670	94585	156489	225995	300892	401094	575796	804174	-	-	-
78,26	1135	21257	33566	56760	83032	94999	157173	226983	302207	402848	578314	807691	-	-	-
78,60	1140	21349	33712	57007	83393	95413	157857	227972	303523	404602	580832	811208	-	-	-
78,94	1145	21442	33858	57254	83755	95826	158542	228960	304839	406356	583350	814724	-	-	-
79,29	1150	21534	34004	57501	84116	96240	159226	229948	306155	408110	585868	818241	-	-	-
79,63	1155	21627	34151	57749	84478	96654	159910	230936	307471	409864	588386	821758	-	-	-
79,98	1160	21719	34297	57996	84839	97067	160595	231925	308786	411618	590904	825275	-	-	-
80,32	1165	21812	34443	58243	85201	97481	161279	232913	310102	413372	593422	828791	-	-	-
80,67	1170	21904	34589	58490	85562	97894	161963	233901	311418	415126	595940	832308	-	-	-
81,01	1175	21997	34735	58737	85924	98308	162648	234890	312734	416880	598458	835825	-	-	-
81,36	1180	22089	34881	58984	86285	98722	163332	235878	314050	418634	600976	839341	-	-	-
81,70	1185	22182	35027	59231	86647	99135	164016	236866	315366	420388	603494	842858	-	-	-
82,05	1190	22275	35174	59479	87008	99549	164701	237854	316681	422142	606012	846375	-	-	-
82,39	1195	22367	35320	59726	87370	99963	165385	238843	317997	423896	608530	849891	-	-	-

W = 51.5KAP for “P” less than or equal to 1580 psia
W = 51.5KAP x [0.1906P-1,000 / 0.2292P-1,061] for “P” greater than 1580 psia

K = 0,876
A = Orifice Area in sq.in
P = (1.10 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam.

Starflow-V is certified as a restricted lift valve. As per ASME, B&PVC, Section I PG-73.2.10 (e) and internal procedure, valves shall not have their lifts restricted to a value less than 55% of full rated lift, or 0.080 in. (2 mm).

Orifice Designation		F	G	H	J	K	L	M	N	P	Q	R	T	V	W
Orifice Area [sq.in] [sq.cm]		0,37	0,59	0,10	1,46	1,67	2,76	3,98	5,30	7,07	10,15	14,17	24,00	38,55	55,44
		2,41	3,80	6,43	9,40	10,75	17,79	25,70	34,21	45,61	65,47	91,44	154,82	248,70	357,66
Set Pressure [barg]	[psig]														
82,74	1200	22460	35466	59973	87731	100376	166069	239831	319313	425650	611048	853408	-	-	-
83,08	1205	22552	35612	60220	88093	100790	166754	240819	320629	427404	613566	856925	-	-	-
83,43	1210	22645	35758	60467	88454	101203	167438	241808	321945	429158	616084	860442	-	-	-
83,77	1215	22737	35904	60714	88816	101617	168122	242796	323260	430912	618602	863958	-	-	-
84,12	1220	22830	36050	60961	89177	102031	168807	243784	324576	432666	621120	867475	-	-	-
84,46	1225	22922	36197	61208	89539	102444	169491	244772	325892	434420	623638	870992	-	-	-
84,81	1230	23015	36343	61456	89900	102858	170175	245761	327208	436174	626156	874508	-	-	-
85,15	1235	23108	36489	61703	90262	103272	170860	246749	328524	437928	628674	878025	-	-	-
85,49	1240	23200	36635	61950	90623	103685	171544	247737	329840	439682	631192	881542	-	-	-
85,84	1245	23293	36781	62197	90985	104099	172228	248726	331155	441436	633710	885058	-	-	-
86,18	1250	23385	36927	62444	91347	104512	172913	249714	332471	443190	636228	888575	-	-	-
86,53	1255	23478	37073	62691	91708	104926	173597	250702	333787	444944	638746	892092	-	-	-
86,87	1260	23570	37220	62938	92070	105340	174281	251690	335103	446698	641264	895609	-	-	-
87,22	1265	23663	37366	63186	92431	105753	174966	252679	336419	448452	643782	899125	-	-	-
87,56	1270	23755	37512	63433	92793	106167	175650	253667	337734	450206	646300	902642	-	-	-
87,91	1275	23848	37658	63680	93154	106581	176334	254655	339050	451960	648818	906159	-	-	-
88,25	1280	23941	37804	63927	93516	106994	177019	255644	340366	453714	651336	909675	-	-	-
88,60	1285	24033	37950	64174	93877	107408	177703	256632	341682	455468	653854	913192	-	-	-
88,94	1290	24126	38096	64421	94239	107821	178387	257620	342998	457223	656372	916709	-	-	-
89,29	1295	24218	38243	64668	94600	108235	179072	258608	344314	458977	658890	920226	-	-	-
89,63	1300	24311	38389	64915	94962	108649	179756	259597	345629	460731	661408	923742	-	-	-
89,98	1305	24403	38535	65163	95323	109062	180440	260585	346945	462485	663926	927259	-	-	-
90,32	1310	24496	38681	65410	95685	109476	181125	261573	348261	464239	666444	930776	-	-	-
90,67	1315	24588	38827	65657	96046	109890	181809	262562	349577	465993	668962	934292	-	-	-
91,01	1320	24681	38973	65904	96408	110303	182493	263550	350893	467747	671480	937809	-	-	-
91,36	1325	24773	39120	66151	96769	110717	183178	264538	352208	469501	673998	941326	-	-	-
91,70	1330	24866	39266	66398	97131	111130	183862	265527	353524	471255	676516	944842	-	-	-
92,05	1335	24959	39412	66645	97492	111544	184546	266515	354840	473009	679034	948359	-	-	-
92,39	1340	25051	39558	66893	97854	111958	185231	267503	356156	474763	681552	951876	-	-	-
92,73	1345	25144	39704	67140	98215	112371	185915	268491	357472	476517	684070	955393	-	-	-
93,08	1350	25236	39850	67387	98577	112785	186599	269480	358788	478271	686588	958909	-	-	-
93,42	1355	25329	39996	67634	98938	113199	187284	270468	360103	480025	689106	962426	-	-	-
93,77	1360	25421	40143	67881	99300	113612	187968	271456	361419	481779	691624	965943	-	-	-
94,11	1365	25514	40289	68128	99661	114026	188652	272445	362735	483533	694142	969459	-	-	-
94,46	1370	25606	40435	68375	100023	114440	189337	273433	364051	485287	696660	972976	-	-	-
94,80	1375	25699	40581	68623	100385	114853	190021	274421	365367	487041	699178	976493	-	-	-
95,15	1380	25792	40727	68870	100746	115267	190705	275409	366682	488795	701696	980009	-	-	-
95,49	1385	25884	40873	69117	101108	115680	191390	276398	367998	490549	704214	983526	-	-	-
95,84	1390	25977	41019	69364	101469	116094	192074	277386	369314	492303	706732	987043	-	-	-
96,18	1395	26069	41166	69611	101831	116508	192758	278374	370630	494057	709250	990560	-	-	-
96,53	1400	26162	41312	69858	102192	116921	193443	279363	371946	495811	711768	994076	-	-	-
96,87	1405	26254	41458	70105	102554	117335	194127	280351	373262	497565	714286	997593	-	-	-
97,22	1410	26347	41604	70352	102915	117749	194811	281339	374577	499319	716804	1001110	-	-	-
97,56	1415	26439	41750	70600	103277	118162	195496	282327	375893	501073	719322	1004626	-	-	-
97,91	1420	26532	41896	70847	103638	118576	196180	283316	377209	502827	721840	1008143	-	-	-
98,25	1425	26627	42043	71094	104001	119000	196885	284304	378524	504581	724358	1011660	-	-	-
98,60	1430	26728	42206	71340	104404	119452	197629	285409	379996	506345	727173	1015592	-	-	-
98,94	1435	26829	42365	71639	104798	119902	198375	286485	381429	508109	729915	1019422	-	-	-
99,28	1440	26930	42524	71909	105192	120353	199121	287562	382863	510364	732660	1023255	-	-	-
99,63	1445	27031	42684	72178	105586	120804	199867	288641	384299	512277	735407	1027091	-	-	-
99,97	1450	27132	42843	72448	105981	121256	200614	289720	385735	514192	738156	1030930	-	-	-
100,32	1455	27233	43003	72718	106376	121708	201362	290800	387173	516109	740907	1034773	-	-	-
100,66	1460	27334	43163	72988	106771	122160	202111	291881	388612	518027	743661	1038620	-	-	-
101,01	1465	27435	43323	73259	107167	122613	202860	292962	390053	519948	746418	1042469	-	-	-
101,35	1470	27537	43483	73530	107563	123066	203610	294045	391494	521869	749177	1046323	-	-	-

Section VIII Rating

pounds per hour saturated steam at 10% overpressure

W = 51.5KAP for "P" less than or equal to 1580 psia
W = 51.5KAP x [0.1906P-1,000 / 0.2292P-1,061] for "P" greater than 1580 psia

K = 0,876
A = Orifice Area in sq.in
P = (1.03 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam.

Starflow-V is certified as a restricted lift valve. As per ASME, B&PVC, Section I PG-73.2.10 (e) and internal procedure, valves shall not have their lifts restricted to a value less than 55% of full rated lift, or 0.080 in. (2 mm).

Orifice Designation		F	G	H	J	K	L	M	N	P	Q	R	T	V	W	
Orifice Area	[sq.in]	0,37	0,59	0,10	1,46	1,67	2,76	3,98	5,30	7,07	10,15	14,17	24,00	38,55	55,44	
	[sq.cm]	2,41	3,80	6,43	9,40	10,75	17,79	25,70	34,21	45,61	65,47	91,44	154,82	248,70	357,66	
Set Pressure																
	[barg]	[psig]														
101,70	1475	27638	43643	73801	107960	123520	204360	295129	392937	523793	751938	1050179	-	-	-	
102,04	1480	27740	43804	74072	108356	123974	205111	296214	394381	525718	754702	1054039	-	-	-	
102,39	1485	27841	43964	74344	108754	124428	205863	297299	395827	527645	757468	1057902	-	-	-	
102,73	1490	27943	44125	74615	109151	124883	206615	298386	397274	529574	760237	1061769	-	-	-	
103,08	1495	28045	44286	74887	109549	125338	207369	299474	398722	531504	-	-	-	-	-	
103,42	1500	28147	44447	75159	109947	125794	208122	300562	400171	533436	-	-	-	-	-	
103,77	1505	28249	44608	75432	110346	126250	208877	301652	401622	535370	-	-	-	-	-	
104,11	1510	28351	44769	75705	110745	126707	209632	302743	403074	537306	-	-	-	-	-	
104,46	1515	28453	44931	75978	111144	127163	210388	303834	404528	539243	-	-	-	-	-	
104,80	1520	28556	45092	76251	111544	127621	211145	304927	405982	541182	-	-	-	-	-	
105,15	1525	28658	45254	76524	111944	128078	211902	306021	407439	543123	-	-	-	-	-	
105,49	1530	28761	45416	76798	112344	128537	212660	307115	408896	545066	-	-	-	-	-	
105,83	1535	28863	45578	77072	112745	128995	213419	308211	410355	547011	-	-	-	-	-	
106,18	1540	28966	45740	77346	113146	129454	214178	309308	411815	548957	-	-	-	-	-	
106,52	1545	29069	45902	77621	113548	129914	214938	310406	413277	550906	-	-	-	-	-	
106,87	1550	29172	46065	77896	113950	130374	215699	311505	414740	552856	-	-	-	-	-	
107,21	1555	29275	46227	78171	114352	130834	216461	312604	416204	554808	-	-	-	-	-	
107,56	1560	29378	46390	78446	114755	131295	217223	313705	417670	556762	-	-	-	-	-	
107,90	1565	29481	46553	78722	115158	131756	217986	314807	419137	558718	-	-	-	-	-	
108,25	1570	29584	46716	78997	115562	132218	218750	315910	420606	560676	-	-	-	-	-	
108,59	1575	29688	46880	79274	115965	132680	219514	317015	422076	562635	-	-	-	-	-	
108,94	1580	29791	47043	79550	116370	133142	220280	318120	423547	564597	-	-	-	-	-	
109,28	1585	29895	47207	79827	116774	133605	221046	319226	425020	566560	-	-	-	-	-	
109,63	1590	29999	47370	80103	117179	134069	221813	320333	426495	568526	-	-	-	-	-	
109,97	1595	30102	47534	80381	117585	134533	222580	321442	427971	570493	-	-	-	-	-	
110,32	1600	30206	47698	80658	117991	134997	223349	322552	429448	572462	-	-	-	-	-	
110,66	1605	30310	47863	80936	118397	135462	224118	323662	430927	574433	-	-	-	-	-	
111,01	1610	30414	48027	81214	118804	135927	224888	324774	432407	576407	-	-	-	-	-	
111,35	1615	30519	48192	81492	119211	136393	225658	325887	433889	578382	-	-	-	-	-	
111,70	1620	30623	48356	81771	119619	136859	226430	327001	435372	580359	-	-	-	-	-	
112,04	1625	30727	48521	82050	120026	137326	227202	328116	436857	582339	-	-	-	-	-	
112,38	1630	30832	48686	82329	120435	137793	227975	329233	438343	584320	-	-	-	-	-	
112,73	1635	30937	48852	82608	120844	138261	228749	330350	439831	586303	-	-	-	-	-	
113,07	1640	31041	49017	82888	121253	138729	229523	331469	441320	588289	-	-	-	-	-	
113,42	1645	31146	49183	83168	121663	139198	230299	332589	442811	590276	-	-	-	-	-	
113,76	1650	31251	49348	83448	122073	139667	231075	333710	444304	592266	-	-	-	-	-	
114,11	1655	31356	49514	83729	122483	140137	231852	334832	445798	594257	-	-	-	-	-	
114,45	1660	31462	49681	84010	122894	140607	232630	335955	447294	596251	-	-	-	-	-	
114,80	1665	31567	49847	84291	123305	141078	233409	337080	448791	598247	-	-	-	-	-	
115,14	1670	31672	50013	84573	123717	141549	234188	338206	450290	600245	-	-	-	-	-	
115,49	1675	31778	50180	84854	124129	142020	234968	339333	451790	602245	-	-	-	-	-	
115,83	1680	31883	50347	85137	124542	142493	235750	340461	453292	604247	-	-	-	-	-	
116,18	1685	31989	50514	85419	124955	142965	236532	341590	454796	606252	-	-	-	-	-	
116,52	1690	32095	50681	85702	125369	143438	237315	342721	456301	608258	-	-	-	-	-	
116,87	1695	32201	50848	85985	125783	143912	238098	343853	457808	610267	-	-	-	-	-	
117,21	1700	32307	51016	86268	126197	144386	238883	344986	459317	612278	-	-	-	-	-	
117,56	1705	32413	51184	86552	126612	144861	239668	346120	460827	614291	-	-	-	-	-	
117,90	1710	32520	51352	86836	127028	145336	240455	347256	462339	616307	-	-	-	-	-	
118,25	1715	32626	51520	87120	127444	145812	241242	348393	463853	618325	-	-	-	-	-	
118,59	1720	32733	51688	87405	127860	146289	242030	349531	465368	620345	-	-	-	-	-	
118,93	1725	32840	51857	87690	128277	146766	242819	350670	466885	622367	-	-	-	-	-	
119,28	1730	32946	52025	87975	128694	147243	243609	351811	468404	624391	-	-	-	-	-	
119,62	1735	33053	52194	88260	129112	147721	244400	352953	469924	626418	-	-	-	-	-	
119,97	1740	33160	52363	88546	129530	148199	245191	354096	471447	628447	-	-	-	-	-	
120,31	1745	33268	52532	88832	129949	148678	245984	355241	472971	630479	-	-	-	-	-	

W = 51.5KAP for "P" less than or equal to 1580 psia
W = 51.5KAP x [0.1906P-1,000 / 0.2292P-1,061] for "P" greater than 1580 psia

K = 0,876
A = Orifice Area in sq.in
P = (1.10 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam.

Starflow-V is certified as a restricted lift valve. As per ASME, B&PVC, Section I PG-73.2.10 (e) and internal procedure, valves shall not have their lifts restricted to a value less than 55% of full rated lift, or 0.080 in. (2 mm).

Orifice Designation		F	G	H	J	K	L	M	N	P	Q	R	T	V	W	
Orifice Area	[sq.in]	0,37	0,59	0,10	1,46	1,67	2,76	3,98	5,30	7,07	10,15	14,17	24,00	38,55	55,44	
	[sq.cm]	2,41	3,80	6,43	9,40	10,75	17,79	25,70	34,21	45,61	65,47	91,44	154,82	248,70	357,66	
Set Pressure																
	[barg]	[psig]														
120,66	1750	33375	52702	89119	130368	149158	246777	356387	474496	632513	-	-	-	-	-	
121,00	1755	33482	52872	89406	130788	149638	247572	357534	476024	634549	-	-	-	-	-	
121,35	1760	33590	53041	89693	131208	150119	248367	358683	477553	636587	-	-	-	-	-	
121,69	1765	33698	53212	89981	131628	150600	249164	359833	479084	638628	-	-	-	-	-	
122,04	1770	33805	53382	90269	132050	151082	249961	360984	480617	640672	-	-	-	-	-	
122,38	1775	33913	53552	90557	132471	151565	250759	362137	482152	642717	-	-	-	-	-	
122,73	1780	34021	53723	90845	132893	152048	251558	363291	483688	644766	-	-	-	-	-	
123,07	1785	34130	53894	91134	133316	152531	252358	364446	485227	646816	-	-	-	-	-	
123,42	1790	34238	54065	91424	133739	153015	253159	365603	486767	648869	-	-	-	-	-	
123,76	1795	34346	54236	91713	134163	153500	253961	366761	488309	650925	-	-	-	-	-	
124,11	1800	34455	54408	92003	134587	153985	254764	367921	489853	652983	-	-	-	-	-	
124,45	1805	34564	54579	92294	135012	154471	255568	369082	491399	655044	-	-	-	-	-	
124,80	1810	34673	54751	92584	135437	154958	256373	370244	492946	657107	-	-	-	-	-	
125,14	1815	34782	54923	92875	135863	155445	257179	371408	494496	659172	-	-	-	-	-	
125,48	1820	34891	55096	93167	136289	155933	257986	372573	496047	661241	-	-	-	-	-	
125,83	1825	35000	55268	93458	136716	156421	258794	373740	497601	663311	-	-	-	-	-	
126,17	1830	35109	55441	93751	137143	156910	259603	374908	499156	665385	-	-	-	-	-	
126,52	1835	35219	55614	94043	137571	157399	260413	376078	500713	667461	-	-	-	-	-	
126,86	1840	35329	55787	94336	138000	157890	261224	377249	502273	669539	-	-	-	-	-	
127,21	1845	35438	55960	94629	138428	158380	262036	378422	503834	671620	-	-	-	-	-	
127,55	1850	35548	56134	94923	138858	158872	262849	379596	505397	673704	-	-	-	-	-	
127,90	1855	35659	56308	95217	139288	159364	263663	380772	506963	675791	-	-	-	-	-	
128,24	1860	35769	56482	95511	139719	159857	264478	381949	508530	677880	-	-	-	-	-	
128,59	1865	35879	56656	95806	140150	160350	265294	383128	510099	679972	-	-	-	-	-	
128,93	1870	35990	56831	96101	140582	160844	266111	384308	511671	682067	-	-	-	-	-	
129,28	1875	36100	57006	96397	141014	161338	266929	385490	513244	684164	-	-	-	-	-	
129,62	1880	36211	57181	96692	141447	161834	267749	386673	514820	686264	-	-	-	-	-	
129,97	1885	36322	57356	96989	141880	162330	268569	387858	516397	688367	-	-	-	-	-	
130,31	1890	36433	57531	97285	142314	162826	269391	389044	517977	690473	-	-	-	-	-	
130,66	1895	36544	57707	97583	142749	163323	270214	390232	519559	692581	-	-	-	-	-	
131,00	1900	36656	57883	97880	143184	163821	271037	391422	521143	694693	-	-	-	-	-	
131,35	1905	36767	58059	98178	143620	164320	271862	392613	522729	696807	-	-	-	-	-	
131,69	1910	36879	58235	98476	144056	164819	272688	393806	524317	698924	-	-	-	-	-	
132,03	1915	36991	58412	98775	144493	165319	273515	395001	525907	701044	-	-	-	-	-	
132,38	1920	37103	58589	99074	144931	165820	274344	396197	527500	703167	-	-	-	-	-	
132,72	1925	37215	58766	99374	145369	166321	275173	397395	529094	705293	-	-	-	-	-	
133,07	1930	37328	58943	99674	145808	166823	276004	398594	530691	707422	-	-	-	-	-	
133,41	1935	37440	59121	99974	146247	167326	276835	399795	532291	709553	-	-	-	-	-	
133,76	1940	37553	59299	100275	146687	167829	277668	400998	533892	711688	-	-	-	-	-	
134,10	1945	37665	59477	100576	147128	168333	278502	402202	535496	713826	-	-	-	-	-	
134,45	1950	37778	59655	100877	147569	168838	279337	403409	537102	715967	-	-	-	-	-	
134,79	1955	37892	59834	101180	148011	169344	280174	404616	538710	718110	-	-	-	-	-	
135,14	1960	38005	60013	101482	148453	169850	281011	405826	540320	720257	-	-	-	-	-	
135,48	1965	38118	60192	101785	148896	170357	281850	407038	541933	722407	-	-	-	-	-	
135,83	1970	38232	60371	102088	149340	170865	282690	408251	543548	724560	-	-	-	-	-	
136,17	1975	38346	60551	102392	149784	171373	283532	409466	545166	726717	-	-	-	-	-	
136,52	1980	38460	60731	102696	150229	171882	284374	410682	546786	728876	-	-	-	-	-	
136,86	1985	38574	60911	103001	150675	172392	285218	411901	548408	731038	-	-	-	-	-	
137,21	1990	38688	61092	103306	151122	172903	286063	413121	550033	733204	-	-	-	-	-	
137,55	1995	38802	61272	103612	151569	173414	286909	414343	551660	735373	-	-	-	-	-	
137,90	2000	38917	61453	103918	152016	173927	287756	415567	553289	737545	-	-	-	-	-	
138,24	2005	39032	61635	104224	152465	174440	288605	416793	554921	739721	-	-	-	-	-	
138,58	2010	39147	61816	104531	152914	174953	289455	418020	556556	741899	-	-	-	-	-	
138,93	2015	39262	61998	104839	153363	175468	290306	419250	558193	744081	-	-	-	-	-	
139,27	2020	39377	62180	105147	153814	175983	291159	420481	559832	746267	-	-	-	-	-	

Section VIII Rating

pounds per hour saturated steam at 10% overpressure

W = 51.5KAP for "P" less than or equal to 1580 psia
W = 51.5KAP x [0.1906P-1,000 / 0.2292P-1,061] for "P" greater than 1580 psia

K = 0,876
A = Orifice Area in sq.in
P = (1.03 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam.

Starflow-V is certified as a restricted lift valve. As per ASME, B&PVC, Section I PG-73.2.10 (e) and internal procedure, valves shall not have their lifts restricted to a value less than 55% of full rated lift, or 0.080 in. (2 mm).

Orifice Designation		F	G	H	J	K	L	M	N	P	Q	R	T	V	W
Orifice Area	[sq.in]	0,37	0,59	0,10	1,46	1,67	2,76	3,98	5,30	7,07	10,15	14,17	24,00	38,55	55,44
	[sq.cm]	2,41	3,80	6,43	9,40	10,75	17,79	25,70	34,21	45,61	65,47	91,44	154,82	248,70	357,66
Set Pressure															
[barg]	[psig]														
139,62	2025	39493	62362	105455	154265	176499	292013	421714	561474	748455	-	-	-	-	-
139,96	2030	39608	62545	105764	154717	177016	292868	422949	563118	750647	-	-	-	-	-
140,31	2035	39724	62728	106073	155169	177534	293725	424186	564765	752843	-	-	-	-	-
140,65	2040	39840	62911	106383	155623	178053	294583	425425	566415	755042	-	-	-	-	-
141,00	2045	39956	63095	106693	156076	178572	295442	426666	568067	757244	-	-	-	-	-
141,34	2050	40073	63279	107004	156531	179092	296302	427909	569722	759450	-	-	-	-	-
141,69	2055	40189	63463	107315	156986	179613	297164	429154	571379	761659	-	-	-	-	-
142,03	2060	40306	63647	107627	157442	180135	298028	430400	573039	763872	-	-	-	-	-
142,38	2065	40423	63832	107939	157899	180658	298892	431649	574701	766088	-	-	-	-	-
142,72	2070	40540	64017	108252	158357	181181	299759	432900	576367	768308	-	-	-	-	-
143,07	2075	40658	64202	108565	158815	181705	300626	434153	578035	770531	-	-	-	-	-
143,41	2080	40775	64387	108879	159274	182231	301495	435408	579705	772758	-	-	-	-	-
143,76	2085	40893	64573	109194	159734	182757	302365	436665	581379	774989	-	-	-	-	-
144,10	2090	41011	64759	109508	160194	183284	303237	437924	583055	777224	-	-	-	-	-
144,45	2095	41129	64946	109824	160656	183811	304110	439185	584734	779462	-	-	-	-	-
144,79	2100	41247	65133	110140	161118	184340	304985	440448	586416	781703	-	-	-	-	-
145,13	2105	41366	65320	110456	161581	184870	305861	441713	588100	783949	-	-	-	-	-
145,48	2110	41484	65507	110773	162044	185400	306739	442980	589788	786198	-	-	-	-	-
145,82	2115	41603	65695	111090	162509	185931	307618	444250	591478	788451	-	-	-	-	-
146,17	2120	41722	65883	111408	162974	186464	308498	445522	593171	790708	-	-	-	-	-
146,51	2125	41841	66071	111727	163440	186997	309380	446795	594867	792969	-	-	-	-	-
146,86	2130	41961	66260	112046	163907	187531	310264	448071	596566	795234	-	-	-	-	-
147,20	2135	42081	66449	112366	164374	188066	311149	449350	598268	797503	-	-	-	-	-
147,55	2140	42201	66638	112686	164843	188602	312036	450630	599973	799775	-	-	-	-	-
147,89	2145	42321	66828	113007	165312	189139	312924	451913	601681	802052	-	-	-	-	-
148,24	2150	42441	67018	113328	165782	189676	313814	453198	603391	804332	-	-	-	-	-
148,58	2155	42562	67209	113650	166253	190215	314705	454485	605105	806617	-	-	-	-	-
148,93	2160	42682	67399	113972	166724	190755	315598	455775	606822	808905	-	-	-	-	-
149,27	2165	42803	67590	114295	167197	191295	316492	457066	608542	811198	-	-	-	-	-
149,62	2170	42925	67782	114619	167670	191837	317388	458360	610265	813495	-	-	-	-	-
149,96	2175	43046	67973	114943	168145	192380	318286	459657	611991	815796	-	-	-	-	-
150,31	2180	43168	68165	115268	168620	192923	319186	460956	613720	818101	-	-	-	-	-
150,65	2185	43289	68358	115593	169096	193468	320087	462257	615453	820410	-	-	-	-	-
151,00	2190	43412	68551	115919	169573	194013	320989	463561	617188	822724	-	-	-	-	-
151,34	2195	43534	68744	116246	170050	194560	321894	464867	618927	825042	-	-	-	-	-
151,68	2200	43656	68937	116573	170529	195108	322800	466175	620669	827364	-	-	-	-	-
152,03	2205	43779	69131	116901	171009	195656	323707	467486	622415	829691	-	-	-	-	-
152,37	2210	43902	69325	117229	171489	196206	324617	468799	624163	832022	-	-	-	-	-
152,72	2215	44025	69520	117558	171970	196757	325528	470115	625915	834357	-	-	-	-	-
153,06	2220	44149	69715	117888	172453	197308	326441	471433	627670	836697	-	-	-	-	-
153,41	2225	44272	69910	118218	172936	197861	327355	472754	629429	839041	-	-	-	-	-
153,75	2230	44396	70106	118549	173420	198415	328272	474078	631191	841390	-	-	-	-	-
154,10	2235	44521	70302	118881	173905	198970	329190	475404	632956	843743	-	-	-	-	-
154,44	2240	44645	70498	119213	174391	199526	330110	476732	634725	846101	-	-	-	-	-
154,79	2245	44770	70695	119546	174878	200083	331031	478063	636497	848463	-	-	-	-	-
155,13	2250	44895	70892	119879	175366	200641	331955	479397	638273	850830	-	-	-	-	-



5. Reaction Force

The following formula is based on API 520 Part II, considering a critical steady state flow of a compressible fluid that discharges to the atmosphere through an elbow and a vertical discharge pipe. The reaction force (F) includes the effects of both momentum and static pressure; thus, for any gas, vapor, or steam.

The below formula is for METRIC units where capacity of saturated steam at 3% overpressure has been considered

$$FR=129W\sqrt{kT/(k+1)M}+0,1(AP)$$

Orifice Designation		F		G	H	J		K		L	
Orifice Area [inlet]	[sq.in]	0,37	0,37	0,59	0,10	1,46	1,46	1,67	1,67	2,76	2,76
	[sq.cm]	2,41	2,41	3,80	6,43	9,40	9,40	10,75	10,75	17,79	17,79
Orifice Area [outlet]	[sq.in]	2" [DN50]	3" [DN80]	3" [DN80]	3" [DN80]	3" [DN80]	4" [DN100]	4" [DN100]	6" [DN150]	4" [DN100]	6" [DN150]
	[sq.cm]	3,04	7,79	7,79	7,79	7,79	12,17	12,17	27,39	12,17	27,39
Set Pressure											
[barg]	[psig]										
6,89	100	13	13	21	35	71	52	59	59	154	98
10,34	150	25	19	31	70	128	97	123	87	261	152
13,79	200	40	26	42	109	186	154	189	115	370	261
17,24	250	55	32	65	149	243	212	255	146	479	370
20,68	300	70	38	89	188	302	270	322	212	589	480
24,13	350	85	50	112	228	360	328	388	279	700	590
27,58	400	100	65	136	268	418	387	455	346	810	701
31,03	450	115	80	159	308	477	445	522	413	927	812
34,47	500	130	95	183	349	536	504	590	480	1033	923
37,92	550	145	111	207	389	595	563	657	548	1144	1035
41,37	600	160	126	231	429	654	622	725	615	1256	1147
44,82	650	175	141	255	470	713	682	792	683	1368	1259
48,26	700	190	156	279	510	773	741	860	751	1481	1371
51,71	750	205	171	303	551	832	801	929	819	1594	1484
55,16	800	221	187	327	592	892	860	997	887	1706	1597
58,61	850	236	202	351	633	951	920	1065	956	1819	1710
62,05	900	251	217	375	674	1011	980	1134	1024	1933	1823
65,50	950	267	233	400	715	1071	1040	1202	1093	2046	1937
68,95	1000	282	248	424	756	1131	1100	1271	1161	2160	2051
72,39	1050	297	263	448	797	1191	1160	1340	1230	2274	2164
75,84	1100	313	279	473	838	1252	1220	1409	1299	2388	2278
79,29	1150	328	294	497	879	1312	1280	1478	1368	2502	2392
82,74	1200	344	310	521	920	1372	1341	1547	1437	2616	2507
86,18	1250	359	325	546	962	1433	1401	1616	1506	2730	2621
89,63	1300	375	341	570	1003	1493	1462	1685	1576	2845	2736
93,08	1350	390	356	595	1044	1554	1522	1754	1645	2960	2850
96,53	1400	406	372	619	1086	1614	1583	1824	1714	3075	2965
99,97	1450	421	387	644	1127	1675	1643	1893	1783	3189	3079
103,42	1500	437	403	668	1169	1736	1704	1963	1853	3305	3195
106,87	1550	453	419	694	1212	1798	1767	2034	1925	3422	3313
110,32	1600	469	435	719	1255	1862	1830	2107	1997	3543	3433
113,76	1650	485	451	745	1299	1925	1894	2180	2070	3663	3554
117,21	1700	502	468	771	1342	1990	1958	2253	2144	3785	3675
120,66	1750	518	484	797	1386	2054	2023	2327	2217	3907	3797
124,11	1800	535	501	823	1431	2119	2087	2401	2291	4029	3920
127,55	1850	552	517	850	1475	2184	2153	2475	2366	4153	4043
131,00	1900	568	534	876	1520	2250	2218	2550	2441	4277	4167
134,45	1950	585	551	903	1565	2316	2284	2626	2517	4402	4292
137,90	2000	602	568	930	1611	2382	2351	2702	2593	4528	4418
141,34	2050	619	585	957	1656	2449	2417	2778	2669	4654	4545
144,79	2100	637	603	984	1702	2516	2485	2856	2746	4782	4672
148,24	2150	654	620	1011	1749	2584	2553	2933	2824	4910	4801
151,68	2200	672	637	1039	1796	2653	2621	3011	2902	5040	4930
155,13	2250	689	655	1067	1843	2721	2690	3090	2981	5170	5061

Orifice Designation		M	N	P	Q	R		T	V
Orifice Area [inlet]	[sq.in]	3,98	5,30	7,07	10,15	14,17	14,17	24,00	38,55
	[sq.cm]	25,70	34,21	45,61	65,47	91,44	91,44	154,82	248,70
Orifice Area [outlet]	[sq.in]	6" [DN150]	6" [DN150]	6" [DN150]	8" [DN200]	8" [DN200]	10" [DN250]	10" [DN250]	14" [DN350]
	[sq.cm]	27,39	27,39	27,39	48,69	48,69	76,09	76,09	149,13
Set Pressure									
[barg]	[psig]								
6,89	100	151	267	421	537	889	692	1550	2297
10,34	150	307	474	698	934	1443	1246	2489	3805
13,79	200	464	683	976	1334	2002	1805	3436	5325
17,24	250	622	893	1256	1736	2563	2366	4386	6852
20,68	300	781	1104	1538	2140	3128	2931	5342	8388
24,13	350	940	1317	1821	2546	3695	3498	6302	9929
27,58	400	1100	1529	2104	2954	4264	4067	7265	11477
31,03	450	1260	1743	2389	3362	4834	4637	8230	13027
34,47	500	1421	1957	2674	3772	5406	5209	9199	14584
37,92	550	1582	2172	2960	4183	5980	5783	10171	16145
41,37	600	1744	2387	3247	4595	6556	6359	11146	17710
44,82	650	1906	2602	3535	5007	7132	6935	12121	19277
48,26	700	2068	2819	3823	5421	7710	7513	13099	20849
51,71	750	2231	3035	4112	5835	8289	8092	-	-
55,16	800	2394	3253	4401	6251	8869	8672	-	-
58,61	850	2557	3470	4691	6667	9449	9253	-	-
62,05	900	2721	3688	4981	7083	10032	9835	-	-
65,50	950	2885	3906	5272	7501	10615	10418	-	-
68,95	1000	3049	4124	5563	7919	11199	11002	-	-
72,39	1050	3213	4343	5855	8338	11783	11586	-	-
75,84	1100	3378	4562	6147	8757	12369	12172	-	-
79,29	1150	3542	4782	6440	9177	12956	12759	-	-
82,74	1200	3708	5001	6733	9598	13543	13346	-	-
86,18	1250	3873	5221	7026	10018	14131	13934	-	-
89,63	1300	4038	5442	7319	10440	14720	14523	-	-
93,08	1350	4204	5662	7613	10862	15309	15112	-	-
96,53	1400	4370	5883	7908	11285	15900	15703	-	-
99,97	1450	4534	6102	8200	11704	16485	16288	-	-
103,42	1500	4702	6325	8497	-	-	-	-	-
106,87	1550	4872	6552	8799	-	-	-	-	-
110,32	1600	5046	6783	9107	-	-	-	-	-
113,76	1650	5220	7015	9417	-	-	-	-	-
117,21	1700	5395	7248	9728	-	-	-	-	-
120,66	1750	5571	7483	10041	-	-	-	-	-
124,11	1800	5749	7719	10355	-	-	-	-	-
127,55	1850	5927	7956	10671	-	-	-	-	-
131,00	1900	6106	8195	10989	-	-	-	-	-
134,45	1950	6286	8435	11310	-	-	-	-	-
137,90	2000	6468	8677	11632	-	-	-	-	-
141,34	2050	6651	8920	11956	-	-	-	-	-
144,79	2100	6835	9165	12283	-	-	-	-	-
148,24	2150	7021	9412	12613	-	-	-	-	-
151,68	2200	7208	9662	12945	-	-	-	-	-
155,13	2250	7396	9912	13279	-	-	-	-	-

The following formula is based on API 520 Part II, considering a critical steady state flow of a compressible fluid that discharges to the atmosphere through an elbow and a vertical discharge pipe. The reaction force (F) includes the effects of both momentum and static pressure; thus, for any gas, vapor, or steam.

The below formula is for USC units where capacity of saturated steam at 3% overpressure has been considered

$$F = \frac{W}{366} \sqrt{\frac{kT}{(k+1)M}} + (AP)$$

Orifice Designation		F		G	H	J		K		L	
Orifice Area [inlet]	[sq.in]	0,37	0,37	0,59	0,10	1,46	1,46	1,67	1,67	2,76	2,76
	[sq.cm]	2,41	2,41	3,80	6,43	9,40	9,40	10,75	10,75	17,79	17,79
Orifice Area [outlet]	[sq.in]	2" [DN50]	3" [DN80]	3" [DN80]	3" [DN80]	3" [DN80]	4" [DN100]	4" [DN100]	6" [DN150]	4" [DN100]	6" [DN150]
	[sq.cm]	3,04	7,79	7,79	7,79	7,79	12,17	12,17	27,39	12,17	27,39
Set Pressure											
[barg]	[psig]										
6,89	100	30	30	47	80	162	117	134	134	348	221
10,34	150	58	44	69	159	291	221	281	196	591	349
13,79	200	91	58	96	248	420	350	429	259	836	593
17,24	250	124	72	148	337	550	480	577	335	1082	839
20,68	300	158	87	201	426	681	611	727	484	1329	1087
24,13	350	191	115	254	516	812	742	877	634	1578	1335
27,58	400	225	149	307	606	943	874	1027	785	1827	1584
31,03	450	259	183	361	696	1075	1006	1178	936	2077	1834
34,47	500	292	217	414	786	1208	1138	1330	1087	2328	2085
37,92	550	327	251	468	877	1341	1271	1482	1239	2579	2336
41,37	600	361	285	522	968	1474	1404	1634	1392	2831	2588
44,82	650	395	319	576	1059	1607	1537	1787	1544	3083	2841
48,26	700	429	353	630	1151	1741	1671	1940	1697	3337	3094
51,71	750	463	388	684	1242	1875	1805	2093	1851	3590	3348
55,16	800	498	422	738	1334	2009	1939	2247	2004	3844	3602
58,61	850	532	456	793	1426	2144	2074	2401	2158	4099	3856
62,05	900	567	491	847	1518	2278	2208	2555	2312	4354	4111
65,50	950	601	525	902	1610	2413	2343	2709	2467	4609	4367
68,95	1000	636	560	956	1703	2549	2479	2864	2621	4865	4623
72,39	1050	670	595	1011	1795	2684	2614	3019	2776	5121	4879
75,84	1100	705	629	1066	1888	2819	2749	3174	2931	5378	5135
79,29	1150	740	664	1121	1981	2955	2885	3329	3086	5635	5392
82,74	1200	775	699	1176	2074	3091	3021	3485	3242	5892	5650
86,18	1250	809	734	1231	2167	3227	3157	3640	3397	6150	5907
89,63	1300	844	769	1286	2260	3363	3293	3796	3553	6408	6165
93,08	1350	879	804	1341	2353	3500	3430	3952	3710	6666	6423
96,53	1400	914	838	1396	2447	3636	3567	4109	3866	6925	6682
99,97	1450	949	873	1451	2539	3772	3702	4264	4021	7181	6938
103,42	1500	984	909	1507	2633	3910	3840	4421	4179	7442	7200
106,87	1550	1020	944	1563	2729	4050	3980	4582	4339	7708	7465
110,32	1600	1057	981	1621	2827	4193	4123	4746	4503	7978	7736
113,76	1650	1093	1018	1679	2925	4337	4267	4910	4667	8250	8007
117,21	1700	1130	1055	1737	3024	4481	4411	5075	4832	8523	8281
120,66	1750	1168	1092	1796	3123	4626	4556	5241	4998	8798	8555
124,11	1800	1205	1129	1855	3223	4772	4702	5408	5165	9074	8832
127,55	1850	1243	1167	1914	3323	4919	4849	5576	5333	9352	9109
131,00	1900	1280	1205	1974	3424	5067	4997	5745	5502	9632	9389
134,45	1950	1318	1243	2034	3526	5215	5145	5915	5672	9913	9670
137,90	2000	1357	1281	2095	3628	5365	5295	6086	5843	10196	9954
141,34	2050	1395	1319	2156	3731	5515	5445	6258	6015	10481	10238
144,79	2100	1434	1358	2217	3835	5667	5597	6432	6189	10768	10525
148,24	2150	1473	1397	2279	3939	5820	5750	6607	6364	11058	10815
151,68	2200	1513	1437	2341	4044	5974	5904	6783	6540	11349	11107
155,13	2250	1552	1477	2404	4150	6129	6059	6960	6718	11643	11400

Orifice Designation		M	N	P	Q	R		T	V
Orifice Area [inlet]	[sq.in]	3,98	5,30	7,07	10,15	14,17	14,17	24,00	38,55
	[sq.cm]	25,70	34,21	45,61	65,47	91,44	91,44	154,82	248,70
		6" [DN150]	6" [DN150]	6" [DN150]	8" [DN200]	8" [DN200]	10" [DN250]	10" [DN250]	14" [DN350]
Orifice Area [outlet]	[sq.in]	27,39	27,39	27,39	48,69	48,69	76,09	76,09	149,13
	[sq.cm]	176,71	176,71	176,71	314,16	314,16	490,87	490,87	962,11
Set Pressure									
[barg]	[psig]								
6,89	100	347	606	954	1220	2012	1575	3508	5206
10,34	150	698	1074	1577	2114	3260	2823	5622	8601
13,79	200	1051	1544	2204	3015	4518	4081	7752	12023
17,24	250	1406	2017	2834	3919	5782	5345	9891	15459
20,68	300	1763	2493	3468	4829	7053	6616	12043	18916
24,13	350	2122	2970	4105	5743	8329	7892	14204	22388
27,58	400	2482	3449	4744	6660	9610	9173	16373	25871
31,03	450	2843	3930	5384	7579	10893	10456	18545	29362
34,47	500	3205	4412	6026	8502	12182	11745	20727	32867
37,92	550	3568	4895	6671	9427	13474	13037	22915	36381
41,37	600	3932	5380	7317	10355	14770	14333	25109	39904
44,82	650	4296	5865	7964	11283	16066	15629	27304	43431
48,26	700	4662	6352	8613	12215	17367	16930	29507	46970
51,71	750	5028	6840	9263	13148	18671	18234	-	-
55,16	800	5396	7329	9915	14083	19977	19541	-	-
58,61	850	5763	7818	10566	15019	21284	20847	-	-
62,05	900	6131	8308	11220	15958	22595	22158	-	-
65,50	950	6500	8799	11875	16898	23908	23471	-	-
68,95	1000	6870	9291	12531	17840	25223	24787	-	-
72,39	1050	7239	9783	13187	18781	26539	26102	-	-
75,84	1100	7610	10277	13845	19726	27858	27421	-	-
79,29	1150	7981	10771	14504	20671	29178	28742	-	-
82,74	1200	8353	11266	15163	21618	30501	30064	-	-
86,18	1250	8725	11761	15823	22565	31823	31386	-	-
89,63	1300	9097	12257	16484	23515	33149	32712	-	-
93,08	1350	9470	12754	17146	24465	34477	34040	-	-
96,53	1400	9844	13251	17809	25417	35806	35369	-	-
99,97	1450	10214	13744	18467	26360	37124	36687	-	-
103,42	1500	10591	14246	19136	-	-	-	-	-
106,87	1550	10975	14757	19816	-	-	-	-	-
110,32	1600	11366	15277	20510	-	-	-	-	-
113,76	1650	11758	15799	21206	-	-	-	-	-
117,21	1700	12153	16325	21907	-	-	-	-	-
120,66	1750	12549	16853	22611	-	-	-	-	-
124,11	1800	12949	17385	23319	-	-	-	-	-
127,55	1850	13349	17918	24031	-	-	-	-	-
131,00	1900	13753	18456	24747	-	-	-	-	-
134,45	1950	14160	18997	25469	-	-	-	-	-
137,90	2000	14569	19541	26195	-	-	-	-	-
141,34	2050	14980	20089	26924	-	-	-	-	-
144,79	2100	15395	20641	27661	-	-	-	-	-
148,24	2150	15812	21198	28402	-	-	-	-	-
151,68	2200	16234	21759	29150	-	-	-	-	-
155,13	2250	16658	22323	29903	-	-	-	-	-

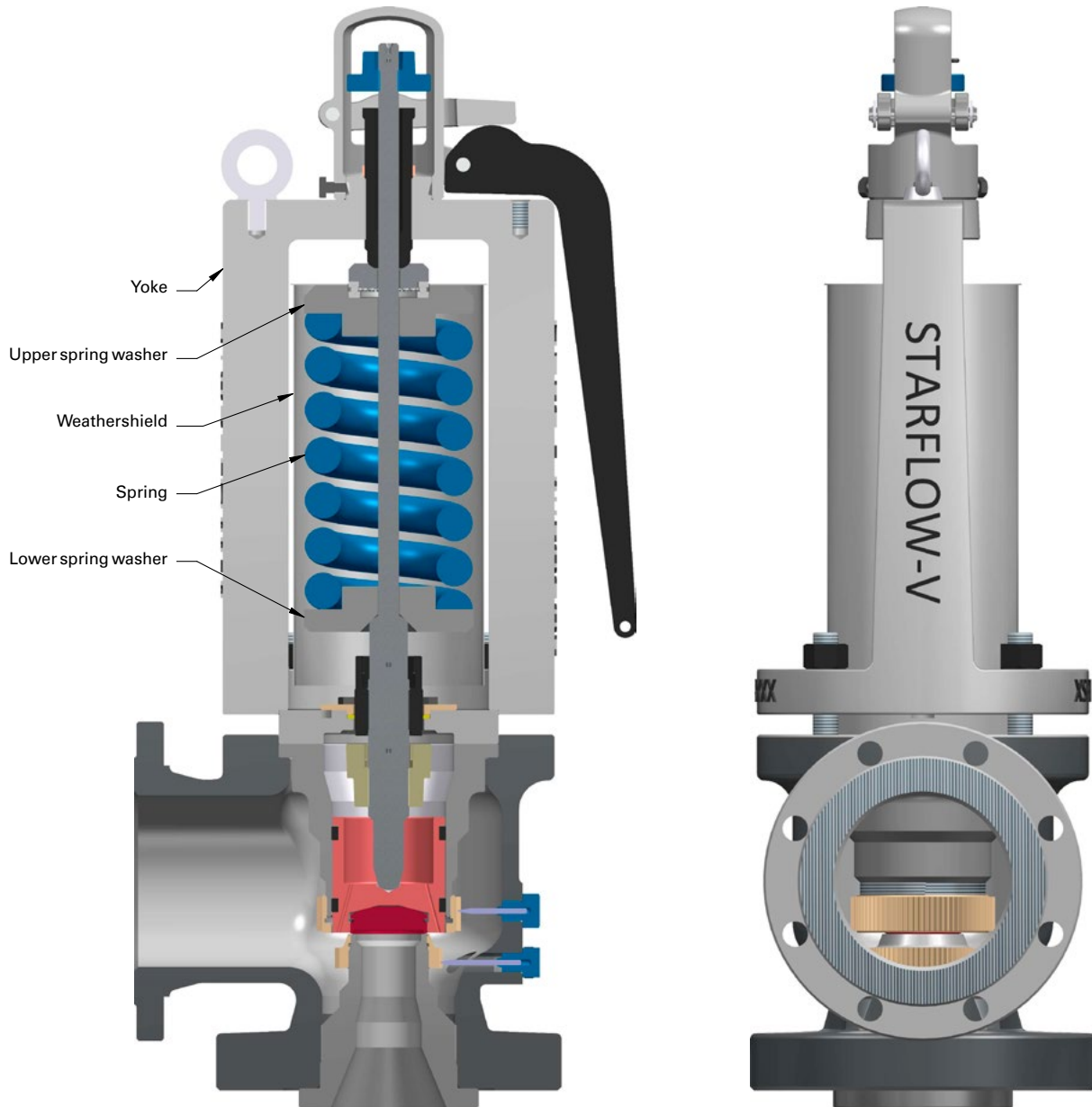


6. Option

Options: Weather shield

Trillium Flow Technologies France supplies weather shield as an option. This equipment is designed to protect against relative humidity.

The spring being still vented to atmosphere, there won't be any modification on the set pressure point.



Options : Controlled Safety Pressure Relief System (CSPRS)

Trillium Flow Technologies France supplies CSPRS, a normally open pneumatic actuator, to assist in start-up and shutdown venting, damping rapid pressure transients.

Sarasin's CSPRS operates not only as a power actuated PRV, protecting superheater safety devices against damage from frequent operation, but also as a self-actuated safety valve that will open not over the set point.

System can be retrofitted in situ without machining or welding.





7. Identification

CODIFICATION



PV : Starflow-V™ :

Full nozzle safety valve
Dual Adjusting Ring
Stardisc™
Thermoglide™ rings

Inlet x Outlet :

2 : 2" (DN50)
3 : 3" (DN80)
4 : 4" (DN100)
5 : 2.5" (DN65)
6 : 6" (DN150)
7 : 1.5" (DN40)
8 : 8" (DN200)
9 : 10" (DN250)

Orifice Designation :

Available with V stamp:
F-G-H-J-K-L-M-N-P-Q-R-T-V-W

Valve Rating (ASME) :

1 : 150#
2 : 300#
3 : 600#
4 : 900#
5 : 1500#
6 : 2500#

Material of Construction (body) :

30 : SA 216 Grade WCC
32 : SA 217 Grade WC6
42 : SA 217 Grade WC9
52 : SA 217 Grade C12A
16 : SA 351 Grade CF8M
Z : Other

Flange Type :

A : ASME B16.5 and EN 1759-1
P : EN 1092.1 (whatever possible size
to drill on the inlet flange)
Z : Other

Flange Finish Type (inlet) :

M : RF Smooth finish
J : Ring Tool Joint
E2 : Small male face
E1 : Large male face
E : Male face
F2 : Small female face
F1 : Large female face
F : Female face
C2 : Small tongue face
C1 : Large tongue face
C : Tongue face
D2 : Small groove face
D1 : Large groove face
D : Groove face
Z : Other flange finish
(including outlet)

Option :

A : No option
Q : Non-copper content
R : Restricted Lift
S : Weathershield
T : V stamp
U : UV stamp
V : Test Gag
V1 : Spring compression nut
W : Outlet flange 300#
Z : Special
Z1 : Government Ring

Interchangeability :

1

IDENTIFICATION NAME PLATE

EN ISO 4126-1 Ex II 2G&D		 	 <small>TRILLIUM FLOW TECHNOLOGIES™ Rue Jean-Baptiste GRISON 62880 VENDIN LE VIEIL, FRANCE</small>	MADE IN FRANCE	DIMENSION ORIFICE SIZE AND ORIFICE: 3" 900# - K - 6" 300#	LEVEE LIFT: 9.3 mm	ANNEE YEAR: 2020
MODELE MODEL: PV36K4-52-A-M/STV-1		RESSORT SPRING: 2STK83222		SURPRESSION OVERPRESSURE: 3%	SECT. PASSAGE FLOW AREA: 1075 mm²		
P. DEB. OUVERTURE SET PRESSURE: 870.2 psig		PRESSION REGLAGE COLD DIFF. TEST PRES.: 870.2 psig		N° SERIE SERIAL N°: 303005070001	REPERE TAG: 5SGF-SV-1087		
CONTREPRESSION BACK PRESSURE: 0 psig		TEMP. DECHARGE RELIEVING TEMP.: 1067°F		T. mini °C: -29 / 575 T. MAXI °C:	DEBIT CERTIF. CERT. CAPACITY: 50704.1 lb/hr		
MATIERE MATERIAL: SA217 Gr. C12A							

The data shown on the identification plate should be referenced with all requests for work, or for the supply of spare parts.

The identification plate bears the following information:

- Serial number (also stamped on the edge of the outlet flange)
- Safety valve type (model number)
- Inlet dimension - pressure class (rating)
- Outlet dimension - pressure class (rating)
- Orifice
- Set pressure with units
- Backpressure with units
- Cold Differential Test Pressure (CDTP) with units
- Relieving temperature with units
- Minimum and maximum design temperature in Degree Celsius
- Body material
- Flow area with units
- Lift value with units
- Overpressure value in pourcentage.
- Spring identification number

SEALING





Pressure Relief Valve expertise

Trillium has extensive experience in valve services. Trillium technicians are qualified in either valve assembly, calibration or troubleshooting. We are able to address Trillium's own product ranges for all fluid applications (oil, gas, steam generation, cryogenics).

This team is fully supported by highly skilled product and applications experts who are able to resolve any valve operational issues.

Trillium's service teams are able to overhaul or repair any Sara-sin-RSBD[®] Pressure Relief Valve, either in our own workshops or at customer specified premises Trillium also have access to a network of global service partner workshops.

We can also offer supervision throughout the commissioning and start-up processes of the installation of valves.

Testing Capability

In addition to regular liquid and gas test benches for factory acceptance and hydrostatic testing, Trillium Flow Technologies has invested in specialist cryogenic and steam test benches.



50 valves
per day



10 inspections
per day



-196°C
to 300°C

Steam test bench

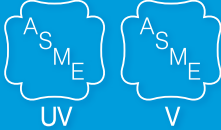









Type	Saturated
Capacity	2 x 1700L
Min. / Max. inlet sizes	1/2" through 8"
Max. Allowable Working Pressure	100 bar
temperature range	Up to 300°C
Applicable standard	ASME PTC 25
Design standard	PED 2014/68/UE



Starsteam[®] – Back Pressure Test

CERTIFICATES AND APPROVALS

Our manufacturing facilities and product lines are accredited and certified in accordance with:

ASME B&PV Codes		SELO TS	
PED 2014/68/UE		EAC TR CU 010/012/032	
ATEX 94/9/EC		TSSA	
ISO 9001/14001 ISO/TS 29001		Korea Gas Safety Corporation Certificate	
ISO 45001		Type approvals Lloyd's & BV	 BUREAU VERITAS



Trillium Flow Technologies France SAS

Rue JB Grison, Z.I du Bois Rigault, 62880 Vendin Le Vieil FRANCE
T: +33 (0) 3 21 79 54 50
F: +33 (0) 3 21 28 62 00
E: sales.sarasinrsbd@trilliumflow.com

[TRILLIUMFLOW.COM](https://trilliumflow.com)