STARFLOW-V™

CUSTOM SHORT / CUSTOM LONG (CS/CL)

TRILLIUM FLOW TECHNOLOGIES™

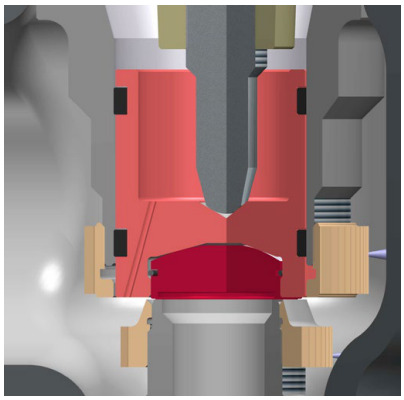
SAFETY VALVES DESIGNED FOR LP/MP ASME I STEAM BOILER APPLICATIONS AND MATCH COMPETITION

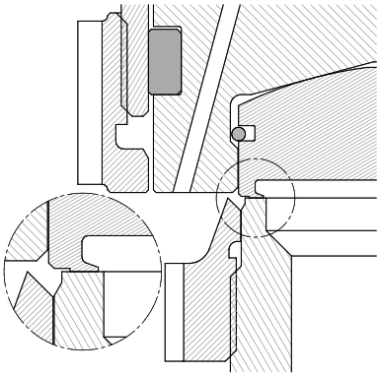
FULL NOZZLE DESIGN

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

ANTI-SEIZING DESIGN

The Starflow-V™ safety valves utilize special gliding rings named **Thermoglide™**. The Starflow-V™ is the first safety valve in the world to offer this technology. This unique feature virtually eliminates the "Hang-up" of guiding surfaces associated with comparable valves since this unique feature allows no metal contact between the disc-holder (piston) and the guide. A **Thermoglide™** design improves valve response times, TCO and boiler efficiency and is a tried-and-tested technology from our extensive experience in nuclear applications.





LEAK TIGHTNESS PERFORMANCE

Starflow-V™ CS/CL 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 the pressure and temperature, the better the tightness. **Starsdisc™** is constructed in Alloy 718, a high durability material providing a long lifespan.

CERTIFIED FULL & RESTRICTED LIFT DESIGN

Starflow-V™ CS/CL safety valves offer restricted lift of the seat to minimize steam loss, stabilize the valve operating cycle, and minimize chattering risks.

BLOWDOWN CHAMBER

Starflow-V™ CS/CL safety valves provide a dual adjusting ring to adjust the accumulation chamber volume and guarantee short and fast blowdown.

APPLICATIONS

Steam Boiler (Drum/SHI, SHO, RHI, RHO, Sootblower)
Utility or auxiliary steam applications

Inlet Sizes
1 1/4" to 8"

Inlet Ratings
ANSI Class 300 though 600
Flanged-end (B16.5)

Orifice Sizes
Ten sizes – [F] to [Q]

Set Pressure
Up to 1500 psig [103,4 barg]

Temperature Range
Up to 595°C [1100°F]

Materials
SA216 Gr. WCC
SA217 Gr. WC6

Design Standard
ASME BPVC section I & VIII

NB Certificate
44110 & 44121 (Res. Lift)

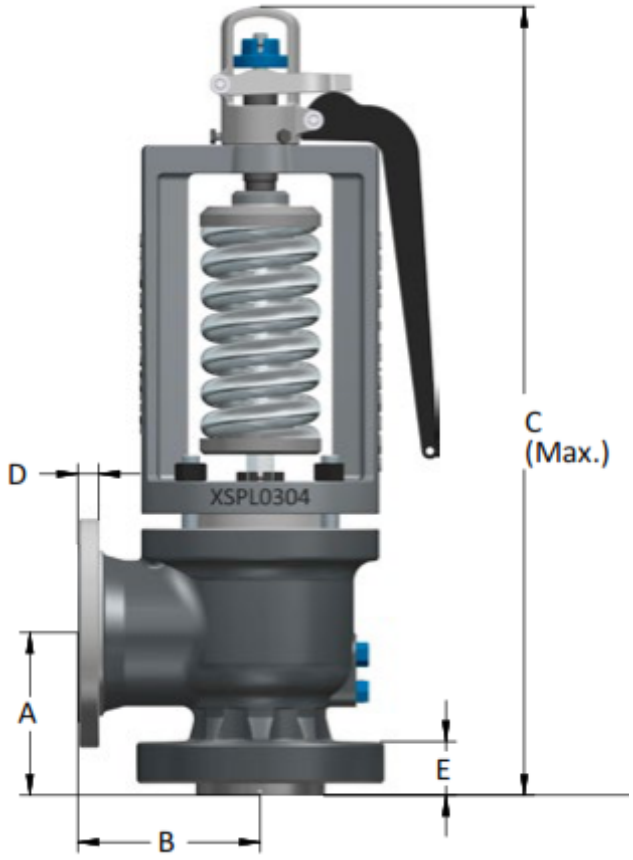
ASME UV ASME V

CONFIGURATIONS

USCS Unit
Flanged-end Valve

	INLET		OUTLET		DIMENSIONS [In]			
Model	Size (in)	Class	Size (in)	Outlet	A±0.06	B±0.06	C±0.06	E±0.06
[F] Orifice - Flow Area : 0,373 in²								
PVJ7F21CS	1,25	300	1,5	150	4 2/5	4 1/5	23	1 1/3
PVJ7F21CL					5	4 1/5	23 3/5	2
PVJ7F31CS		600			4 2/5	4 1/5	23	1 1/3
PVJ7F31CL					5	4 1/5	23 3/5	2
[G] Orifice - Flow Area : 0,589 in²								
PVJ7G21CS	1,25	300	1,5	150	4 2/5	4 1/5	23	1 1/3
PVJ7G21CL		300			5	4 1/5	23 5/8	2
PVJ7G31CS		600			4 2/5	4 1/5	23	1 1/3
PVJ7G31CL		600			5	4 1/5	23 5/8	2
[H] Orifice - Flow Area : 0,996 in²								
PV75H21CS	1,5	300	2,5	150	4 3/5	4 7/8	25 1/6	1 1/2
PV75H21CL		300			5 3/5	4 7/8	26 1/6	2 1/2
PV75H31CS		600			4 3/5	4 7/8	25 1/6	1 1/2
PV75H31CL		600			5 3/5	4 7/8	26 1/6	2 1/2
[J] Orifice - Flow Area : 1,457 in²								
PV75J21CS	1,5	300	2,5	150	4 3/4	4 7/8	25 1/2	1 2/3
PV75J21CL		300			5 3/4	4 7/8	26 1/2	2 2/3
PV75J31CS		600			4 3/4	4 7/8	25 1/2	1 2/3
PV75J31CL		600			5 3/4	4 7/8	26 1/2	2 2/3
[K] Orifice - Flow Area : 1,667 in²								
PV23K21CS	2	300	3	150	5 1/4	5 5/9	27 2/3	1 4/7
PV23K21CL		300			6 1/4	5 5/9	28 2/3	2 4/7
PV23K31CS		600			5 1/4	5 5/9	27 2/3	1 4/7
PV23K31CL		600			6 1/4	5 5/9	28 2/3	2 4/7
[L] Orifice - Flow Area : 2,758 in²								
PV54L21CS	2,5	300	4	150	6 1/8	6 5/9	33 1/2	1 3/4
PV54L21CL		300			7 1/2	6 5/9	34 5/6	3 1/8
PV54L31CS		600			6 1/8	6 1/3	33 1/2	1 3/4
PV54L31CL		600			7 1/2	6 1/3	34 5/6	3 1/8

	INLET		OUTLET		DIMENSIONS [In]			
Model	Size (in)	Class	Size (in)	Outlet	A±0.06	B±0.06	C±0.06	E±0.06
[M] Orifice - Flow Area : 3,983 in²								
PV34M21C	3	300	4	150	6 1/2	6 4/9	34	1 4/5
PV34M21C		300			6 1/2	6 4/9	34	1 4/5
PV34M31C		600			6 1/2	6 4/9	34	1 4/5
PV34M31C		600			6 1/2	6 4/9	34	1 4/5
[N] Orifice - Flow Area : 5,303 in²								
PV46N21CS	4	300	6	150	7 1/4	7 4/9	36 3/5	2
PV46N21CL		300			7 2/3	7 4/9	37	2 1/2
PV46N31C		600			7 2/3	7 4/9	37	2 1/2
PV46N31C		600			7 2/3	7 4/9	37	2 1/2
[P] Orifice - Flow Area : 7, 069 in²								
PV46P21CS	4	300	6	150	7 4/9	8 1/5	39	2 1/8
PV46P21CL		300			7 2/3	8 1/5	38 5/6	2 3/8
PV46P31C		600			7 2/3	8 1/5	39 1/5	2 3/8
PV46P31C		600			7 2/3	8 1/5	39 1/5	2 3/8
[Q] Orifice - Flow Area : 10,148 in²								
PV68Q21CS	6	300	8	150	9 7/8	9 3/8	48	2 3/5
PV68Q21CL		300			10 1/3	9 3/8	48 3/7	3
PV68Q31C		600			10 1/3	9 3/8	48 3/7	3
PV68Q31C		600			10 1/3	9 3/8	48 3/7	3



*C models have one version available for both CS/CL options.

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