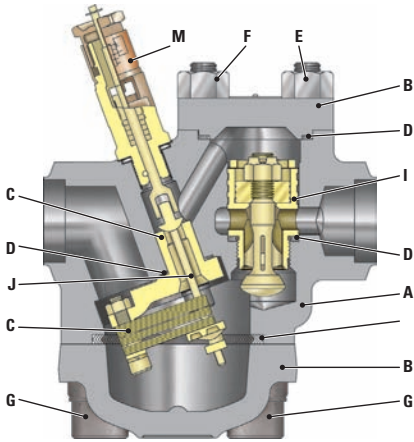


# VELAN HIGH CAPACITY PISTON OPERATED STEAM TRAP



## STANDARD MATERIALS

PART	MATERIALS	
A	Body	Forged carbon steel A105
B	Cover	Same as body material
C	Bimetal element	Truflex GB-14
D	Gasket	S/S 321 spiral wound with graphite filler
E	Cover stud	Chrome moly. Alloy B7
F	Cover nut	Carbon steel 2H
G	Cap screw	Chrome moly alloy
I	Piston cage unit	Stainless steel
J	Pilot valve	Stainless steel, ball 58Rc min.
M	Temp controller	Stainless steel

## APPLICATIONS

Reboilers, purifiers, vacuum pans, heat exchangers, evaporators, feed water heaters, digesters, desuperheaters, steam separators, flash tanks, large autoclaves, steam catapult service on U.S. Navy aircraft carriers and other large capacity applications.

## Type SPF0-7 (A105)

### ENGINEERING DATA

TYPE	PRESSURE RANGE (2) psi / bar	PMO psi / bar	MATERIAL	MAX TEMP °F/°C	ORIFICE in/mm	MAX CAPACITY lb/hr/kg/hr
SPF0	10-200 0.69-14	200 14	A105	850 <sup>(1)</sup> 454	7/8 22	17,000 7,727
SPF1	200-350 14-24	350 24				19,000 8,636
SPF2	350-600 24-42	600 42				22,000 10,000
SPF3	600-1500 42-103	1500 103				27,000 12,273

TYPE	PRESSURE RANGE (2) psi / bar	PMO psi / bar	MATERIAL	MAX TEMP °F/°C	ORIFICE in/mm	MAX CAPACITY lb/hr/kg/hr
SPF4	10-200 0.69-14	200 14	A105	850 <sup>(1)</sup> 454	1 3/8 35	38,000 17,272
SPF5	200-350 14-24	350 24				43,000 19,545
SPF6	350-600 24-42	600 42				49,000 22,272
SPF7	600-1500 42-103	1500 103				63,000 28,636

(1) Permissible, but not recommended for prolonged use above 800°F (427°C).

(2) Pressure range indicated in the above table is the preferred operating range, however the trap is functional from 10psi to its maximum operating pressure.

PMA: Maximum allowable pressure: 3000psi@100°F (207bar@38°C)

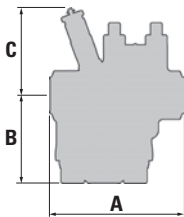
TMA: Maximum allowable temperature: 800°F (427°C)

Maximum cold hydrostatic test pressure: 4500psi (310bar)

TMO = Maximum operating temperature = TMA

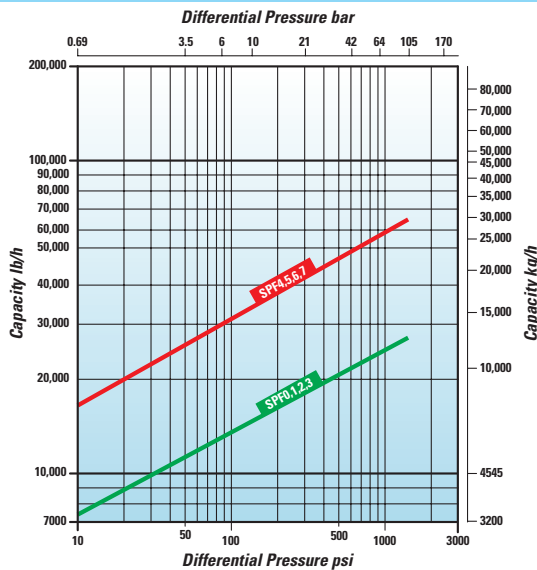
PMO: Maximum operating pressure: (see Table)

## DIMENSIONS & WEIGHTS



TYPE	SIZE in/mm		A FACE TO FACE							B CENTER TO BOTTOM	C CENTER TO TOP	WEIGHT lb/kg				
			SCR/SW	BW	FLANGED				SCR/SW			BW	FLANGED			
					200	350	600	1500					200	350	600	1500
SPF 0,1,2,3	1 25	1 1/2 40	7 3/4 197	13 3/4 349	10 3/4 273	11 279	11 279	12 3/4 324	4 7/8 124	5 3/16 132	35 16	39 18	48 22	53 24	56 25	64 29
SPF 4,5,6,7	1 1/2 40	2 50	8 3/4 222	14 3/4 375	12 305	12 305	12 305	14 1/4 362	5 1/8 130	5 1/2 140	50 23	55 25	67 30	69 31	81 37	100 45

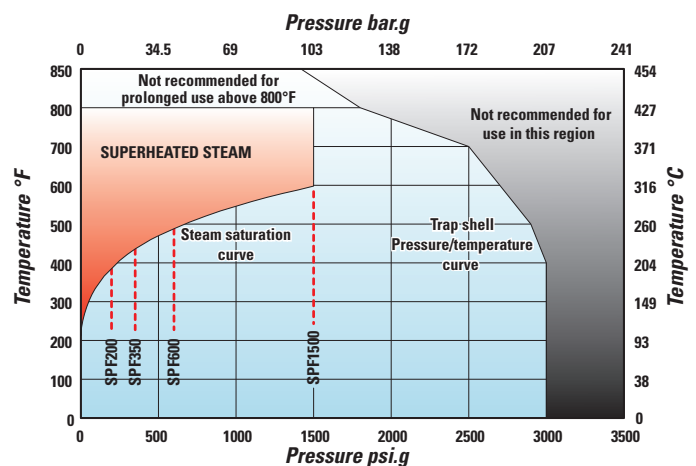
## CONDENSATE CAPACITY



Maximum cold water capacity x 3.5

The performance graph indicates the continuous discharge capacities of condensate per hour at various pressure differentials across the trap.

## PRESSURE / TEMPERATURE LIMITS



----- Pressure limit for trap type