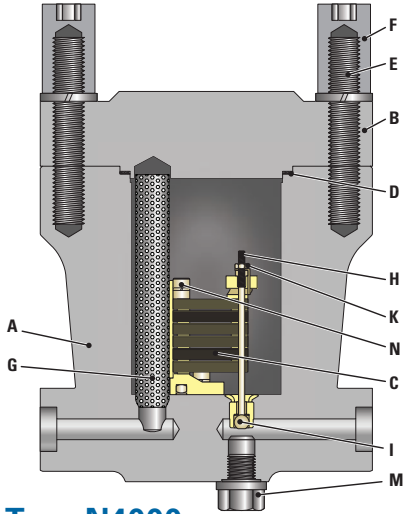


VELAN FORGED HP/HT N4000 STEAM TRAPS



Type N4000

STANDARD MATERIALS

PART	MATERIALS	
A	Body	Forged alloy steel F91
B	Cover	Same as body material
C	Bimetal element	Truflex GB-14
D	Cover gasket	S/S 321 spiral wound with graphite filler
E	Cover stud	Nickle chrome alloy
F	Cover nut	Nickle chrome alloy
G	Strainer	Stainless steel
H	Stem and ball	SS, ball valve 58Rc
I	Seat	SS hardfaced Stellite 6
J	Adjusting nut and locknut	Stainless steel
K	Test plug	Carbon steel or chrome moly. steel
L	Fixing screw and washer	Stainless steel

APPLICATIONS

Type N steam traps resolve all problems with high pressure steam trapping on superheated steam lines in thermal power plants or aboard ships. Over 1,100 U.S. Navy ships have used Velan steam traps.

- Steam main drainage
- Turbine drains
- Desuperheater
- High pressure processing
- General high pressure/temperature service

CONNECTIONS

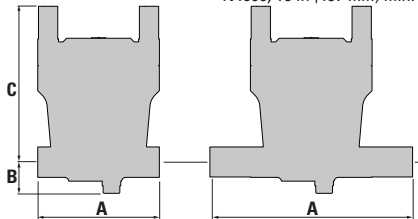
- Socketweld
- Buttweld

ENGINEERING DATA

PRESSURE RANGE psi/bar	PMO psi/bar	MATERIAL	MAX TEMP °F/°C	ORIFICE in/mm	MAX CAPACITY lb/hr/kg/hr
500-4000 (34.5-276)	4000 (276)	F91	1100 593	5/16 8	4,900 4,900

Maximum body design condition: ANSI/ASME Class 4500
 PMA = Maximum allowable pressure: 11250psi@100°F (776bar@38°C)
 TMA = Maximum allowable temperature: 1100°F (593°C)
 Maximum cold hydrostatic test pressure: 16875psi (1164bar)
 TMO = Maximum operating temperature = TMA
 PMO = Maximum operating pressure: (See Table)

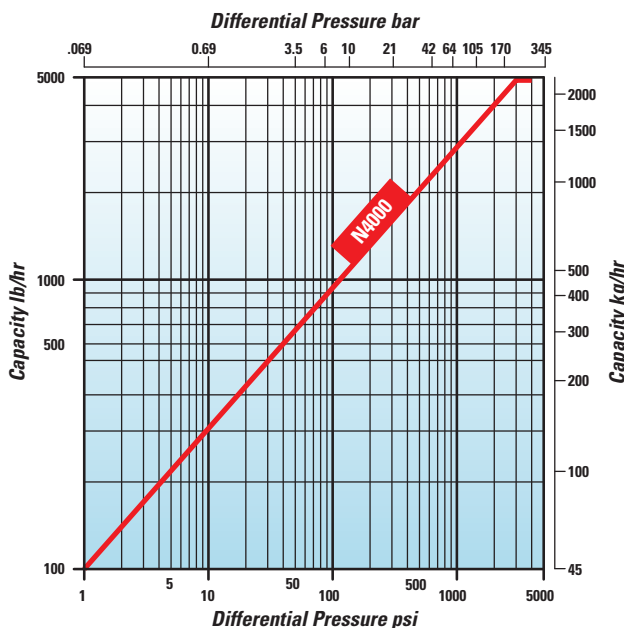
Clearance for Strainer Removal:
 N4000: 18 in (457 mm) min.



DIMENSIONS & WEIGHTS

SIZE in/mm	A FACE TO FACE		B CENTER TO BOTTOM	C CENTER TO TOP	WEIGHT lb/kg	
	SW	BW			SW	BW
1/2 15	10 254	16 406	2 5/8 67	14 356	120 55	125 57

CONDENSATE CAPACITY



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

SHELL PRESSURE/TEMP LIMIT

TEMPERATURE °F (°C)	PRESSURE Psi (bar)	TEMPERATURE °F (°C)	PRESSURE Psi (bar)
100 (38)	11,250 (775.5)	750 (399)	7,970 (549.5)
200 (93)	11,250 (775.5)	800 (427)	7,610 (524.5)
300 (149)	10,925 (753)	850 (454)	7,305 (503.5)
400 (204)	10,585 (730)	900 (482)	6,740 (465)
500 (260)	9,965 (687)	950 (510)	5,795 (399.5)
600 (315)	9,070 (625)	1000 (538)	5,450 (376)
650 (343)	8,825 (608.5)	1050 (565)	5,400 (372)
700 (371)	8,515 (587)	1100 (593)	4,525 (312)

Maximum cold water capacity x 3.5