

# SOPT-LH

## Steam Operated Pumping Trap - Low Head

### Description

SOPT-LH is a steam operated pumping trap with flanged connections. This innovative product is capable of working in trapping or pumping mode automatically, depending on the process conditions. The unit is operated by steam and is used to remove condensate from the process plant under all operating conditions including vacuum/stall.

### Size and Connection

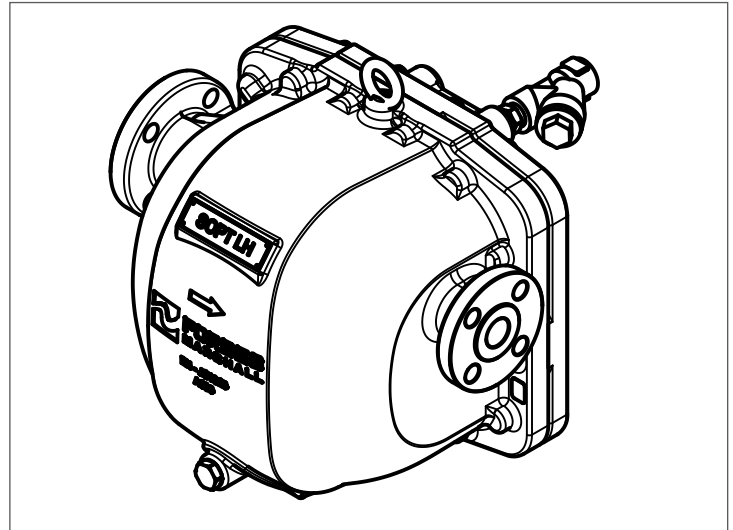
Model	Condensate inlet	Condensate outlet	Motive steam inlet	Steam Exhaust
SOPT-LH	40 NB (Class 150)	25 NB (Class 150)	15NB Screwed BSPT/NPT/BSP	15NB Screwed BSPT/NPT/BSP

### Limiting Conditions

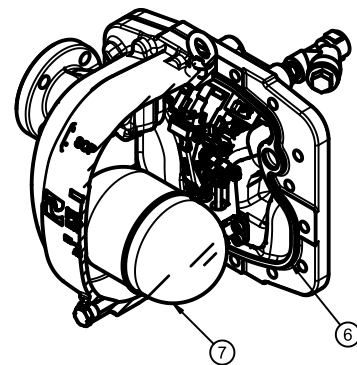
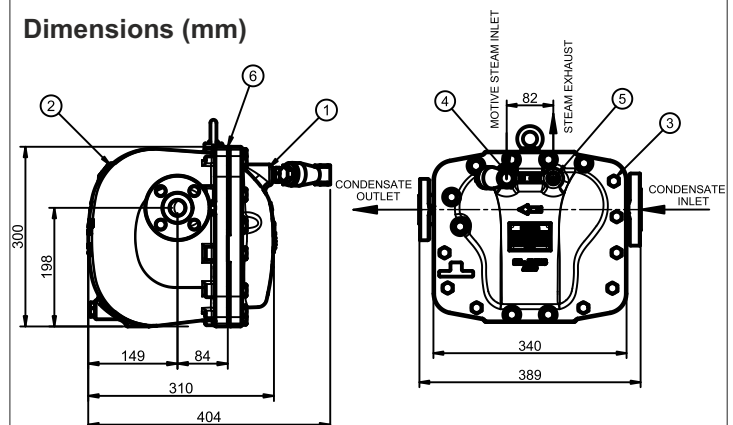
Sizes	40 NB X 25 NB
Body design Conditions	PN16
Max. Operating Pressure	14 bar g @198°C
Max. Operating Temperature	12.8 bar g @300°C
Min. Operating Temperature	-10°C
Discharge per cycle	4.6 Liters
Min. Required installation head from the base of SOPT-LH	200 mm
Max. Cold hydraulic test pressure	24 bar g
Max. Total Back Pressure	5 bar g

### Materials

Sr.No	Description	Material
1	SOPT-LH BASE	SG Iron ASTM A395 / EN-JS1025
2	SOPT-LH COVER	SG Iron ASTM A395 / EN-JS1025
3	HEX HEAD SCREW M12	ASTM A193 B7
4	15NB MOTIVE STEAM INLET (SCREWED)	SG Iron ASTM A395/ EN-JS1025
5	15NB STEAM EXHAUST (SCREWED)	SG Iron ASTM A395/ EN-JS1025
6	MAIN FLANGE GASKET	GRAPHITE
7	INTERNAL MECHANISM	STAINLESS STEEL



### Dimensions (mm)



Note : Approximate dry weight = 48 Kg

Pumping Capacity Chart (For Installation Head 500mm)		
Motive Pressure (bar g)	Total Back Pressure (bar g)	Capacity ( Kg/hr )
2	0.5	703
3	0.5	741
3	1	680
3	2	567
4	0.5	775
4	1	729
4	2	640
4	3	489
5	0.5	838
5	1	712
5	2	579
5	3	476
5	4	476
6	0.5	686
6	1	623
6	2	567
6	3	491
6	4	387
6	5	279
7	0.5	765
7	1	648
7	2	635
7	3	566
7	4	462
7	5	402
8	0.5	666
8	1	604
8	2	515
8	3	451
8	4	468
8	5	417
9	0.5	656
9	1	632
9	2	556
9	3	497
9	4	457
9	5	428
10	0.5	597
10	1	569
10	2	491
10	3	425
10	4	395
10	5	389
11	0.5	480
11	1	528
11	2	454
11	3	385
11	4	303
11	5	285
12	0.5	546
12	1	548
12	2	432
12	3	390
12	4	332
12	5	318
13	0.5	458
13	1	358
13	2	330
13	3	311
13	4	296
13	5	278
14	0.5	438
14	1	423
14	2	372
14	3	320
14	4	332
14	5	284

**Note**

Pumping capacities shown in above chart are for condensate temperature of 90° C  
 For higher back pressures & different filling heads contact Forbes Marshall.  
 Max trapping capacity at 14 bar g differential pressure is 4500 kg/hr.  
 For filling heads other than 500mm please contact Forbes Marshall.

**Trapping Capacity Chart:**  
 (For Installation Head 1100mm)

Differential Pressure (bar g)	Capacity (Kg/hr)
1	1593
2	2289
3	2551
4	2669
5	2795
6	2983
7	3220
8	3464
9	3682
10	3882
11	4152
12	4697

**How to specify**

Example: Steam Operated Pumping Trap Low Head  
 040SOPT-LH-QAN

**Available Spares**

Sr.No	Description	Part Code No.
1	Mechanism assembly kit	SPARE-040SOPT-LH-MKIT
2	Inlet valve seat assembly kit	SPARE-040SOPT-LH-IVKIT
3	Exhaust valve head assembly kit	SPARE-040SOPT-LH-EVKIT
4	Gasket kit	SPARE-040SOPT-LH-GKIT
5	Support bracket assembly kit	SPARE-040SOPT-LH-SBKIT
6	Trap seat assembly kit	SPARE-040SOPT-LH-TSKIT
7	Inlet check valve assembly kit	SPARE-040SOPT-LH-ICVKIT
8	Float assembly kit	SPARE-040SOPT-LH-FKIT

**How to order**

Always order spares by using the description given in column headed “ Available Spares” of User Manual for this product.



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Forbes Vyncke

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