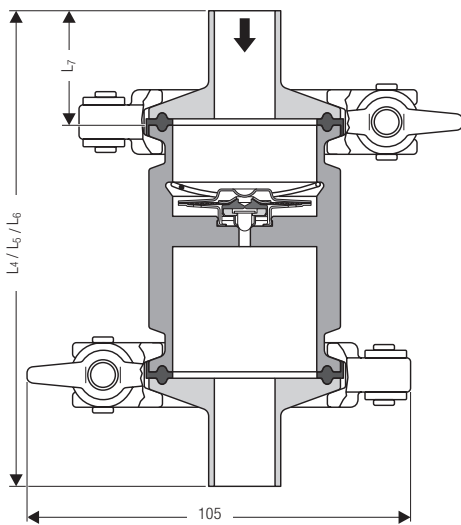
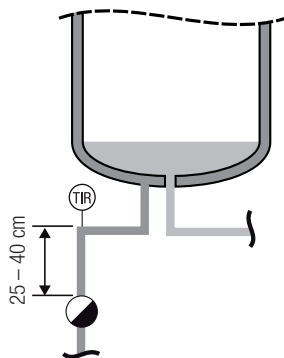


SMK 22-81, SMK 22-82 functional unit*)



SMK 22-81, SMK 22-82 cpl. with optional accessories*)



Distance between steam trap and temperature measuring point

Steam Traps STERIlIine®

SMK 22-81, SMK 22-82

Suitable for clamp connections to DIN 32676, for pipes to DIN 11866 (DIN 11850, ISO 1127, ASME-BPE) PN 10

Description

The thermostatic steam trap features minimum stagnant area and a corrosion-resistant membrane regulator unaffected by waterhammer. Used for discharging condensate and air-venting steam in sterile and aseptic applications.

The membrane regulator with rolling ball features a self-centering valve cone that can move freely, thereby ensuring steam-tight shut-off unaffected by dirt particles.

High response sensitivity thanks to small dimensions of the regulator (evaporation thermostat). Automatic air-venting and discharge of condensate without any banking-up within the whole pressure / temperature range. The opening temperature is approximately 5 K below the boiling point.

All parts in contact with the fluid are made of stainless steel and the body gasket is of PTFE (FPM) in accordance with the regulations specified by the Food and Drug Administration (FDA).

The surface roughness Ra of the wetted surfaces is $\leq 0.8 \mu\text{m}$, optional: $\leq 0.6 \mu\text{m}$.

The surface roughness Ra of all other surfaces is $\leq 1.2 \mu\text{m}$.

Pressure/Temperature Ratings

| | SMK 22-81, SMK 22-82 |
|--|----------------------|
| PMA (max. admissible service pressure) [bar]g | 10 |
| TMA (max. admissible service temperature) [°C] | 185 |
| Δ PMX [bar] | 6 |

Materials

| | SMK 22-81, SMK 22-82 |
|-------------------------------|------------------------------------|
| Body | 1.4404 |
| Body gasket | PTFE (with FPM core) ¹⁾ |
| Regulating membrane (capsule) | Hastelloy / 1.4571 |
| Spring | 1.4404 |
| Joint clamp | 1.4408 |
| Hexagon nut (optional) | 1.4571 |

¹⁾ complies with FDA requirements

End Connections / Optional Extra:

For the first installation of the SMK 22-81 and SMK 22-82 an accessory kit is available which consists of:

2 FDA-approved gaskets DIN 32676 -D40- PTFE (with FPM core)

2 Clamps

2 End connections for orbital welding for

- pipes to ISO 1127 (DN 8, 10, 15, 20, 25) or
- pipes to ASME BPE (½", ¾", 1")
- pipes to DIN 11850 (DN 15, 20, 25)

Different sizes of end connections for orbital welding available on request.

Dimensions / Weights

| Dimensions | | SMK 22-81, SMK 22-82 functional unit | SMK 22-81, SMK 22-82 with accessories |
|----------------|------|--------------------------------------|---------------------------------------|
| | | L1 | 35 |
| | L2 | 45 | |
| | L3 | 65 | |
| | L4 | | 96 |
| | L5 | | 106 |
| | L6 | | 126 |
| | L7 | | 30 |
| Approx. weight | [kg] | 0.25 (L1) | 1.1 (L4) |
| | | 0.32 (L2) | 1.15 (L5) |
| | | 0.45 (L3) | 1.3 (L6) |

Pipe dimensions for welded ends SMK 22-81, SMK 22-82

| Size | DN | 8 | 10 | 15 | 20 | 25 |
|-----------------------|-------|------------|------------|-------------|--------------|-------------|
| | | inch | ¾" | 3/8" | ½" | ¾" |
| EN ISO 1127, series 1 | d x s | 13.5 x 1.6 | 17.2 x 1.6 | 21.3 x 1.6 | 26.9 x 1.6 | 33.7 x 2.0 |
| DIN 11850, series 2 | d x s | | 13.0 x 1.5 | 19.0 x 1.5 | 23.0 x 1.5 | 29.0 x 1.5 |
| ASME BPE | d x s | | | 12.7 x 1.65 | 19.05 x 1.65 | 24.4 x 1.65 |

*) Shown: SMK 22-81

Steam Traps *STERIline*[®]
SMK 22-81, SMK 22-82
Suitable for clamp connections
to DIN 32676, for pipes to
DIN 11866 (DIN 11850, ISO 1127,
ASME-BPE)
PN 10

Capacity Chart

The chart shows the maximum capacities for hot and cold condensate.

SMK 22-81 Curve 1

This curve indicates the max. capacity of hot condensate that the steam trap can discharge with virtually no banking up.

SMK 22-81 Curve 2

This curve shows the max. capacity of cold condensate that the steam trap can discharge (20 °C at start-up).

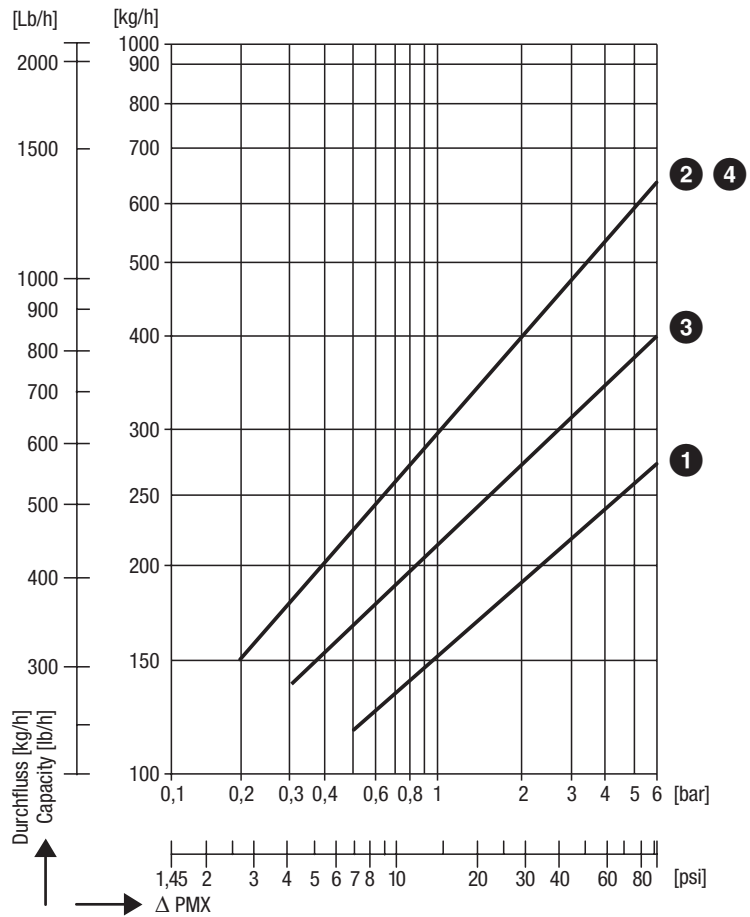
SMK 22-82 Curve 3

This curve indicates the max. capacity of hot condensate that the steam trap can discharge with virtually no banking up.

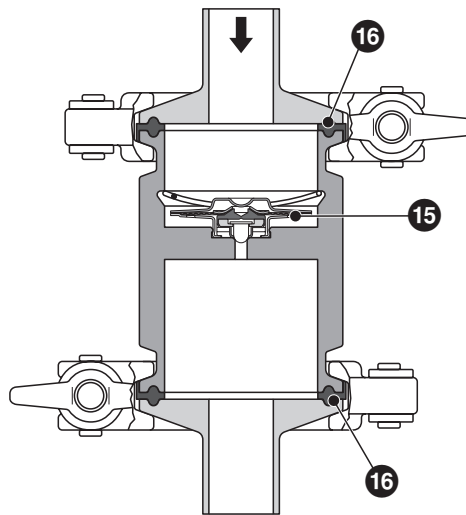
SMK 22-82 Curve 4

This curve shows the max. capacity of cold condensate that the steam trap can discharge (20 °C at start-up).

Capacity Chart for SMK 22-81, SMK 22-82



Spare Parts



When ordering please state:

Steam pressure, back pressure, condensate flowrate, design, type and size of end connections, details of application or type of steam consumer.

Available on request at extra cost:

Test certificates according to EN 10204/2.2 and -3.1. All inspection requirements have to be stated with the order. After supply of the equipment certification cannot be established. Charges and extent of the above mentioned certificates as well as the different tests confirmed therein are listed in our price list "Test and Inspection Charges for Standard Equipment".

For other tests and inspections than those listed above, please consult us.

Supply in accordance with our general terms of business.

| Item | Designation | Stock code |
|------|--|------------|
| 15 | Regulating membrane SMK 22-81 <i>STERIline</i> 1 | 379240 |
| 15 | Regulating membrane SMK 22-82 <i>STERIline</i> 2 | 379091 |
| 16 | 2 body gaskets SMK 22-81, SMK 22-82 | 379705 |

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