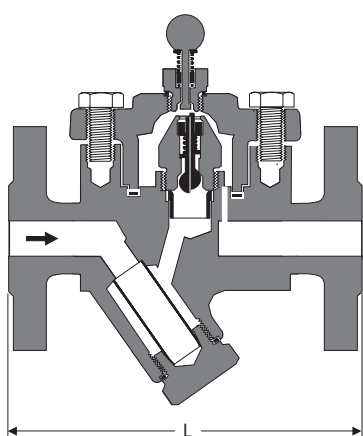
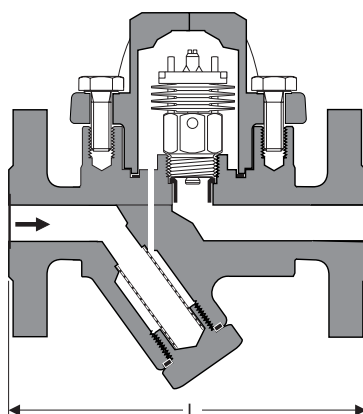




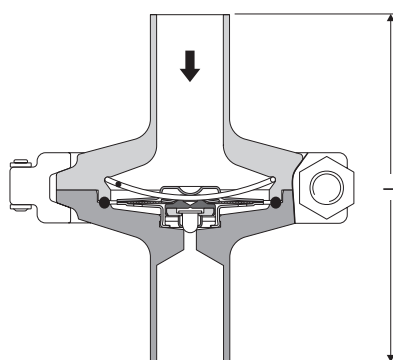
AK 45, DN 15, 20, 25

**RHOMBUSline®**

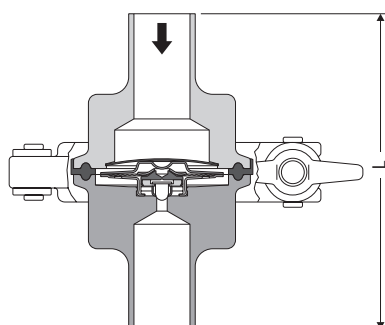


UBK 46, DN 15, 20, 25

**RHOMBUSline®**



SMK 22, DN 15



SMK 22-51

## Application

| Type                                               |                                                                                                                                                                                                                                |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>AK 45</b><br><b>RHOMBUSline®</b>                | Condensate drain valve for discharging condensate from steam systems during start-up and draining residual condensate at shut-down, with integral Y-type strainer and hand purging knob. Factory-set closing pressure 0.8 bar. |
| <b>UBK 46</b><br><b>RHOMBUSline®</b>               | Steam trap with adjustable condensate discharge temperature, thereby suppressing the formation of flash steam. With Y-type strainer.                                                                                           |
| <b>SMK 22, SMK 22-51</b><br><b>STAINLESS STEEL</b> | Steam trap for SIP applications.                                                                                                                                                                                               |
| <b>MK 20</b>                                       | Steam trap for low-pressure steam-heating installations.                                                                                                                                                                       |
| <b>TK 23, TK 24</b>                                | Steam trap with thermostatic pilot control using thermostatic capsules for the discharge of very large condensate flowrates with relatively continuous condensate formation.                                                   |
| <b>GK 11<sup>1)</sup></b>                          | Thermodynamic steam trap with stage nozzle for the discharge of very large condensate flowrates. With integral Vaposcope (sightglass) for optimum trap adjustment.                                                             |

<sup>1)</sup> DN 50 mm: GK 21

## Pressure/Temperature Ratings \*)

| Type                                    | PN               | $\Delta$ PMX<br>[bar] | Material               |                             | Max. Pressure/Temperature Rating |                   |
|-----------------------------------------|------------------|-----------------------|------------------------|-----------------------------|----------------------------------|-------------------|
|                                         |                  |                       | EN                     | ASTM                        | PMA / TMA                        | PMA / TMA         |
| <b>AK 45</b>                            | 40               |                       | P 250 GH <sup>1)</sup> | A 105 <sup>1)</sup>         | 28.4 bar / 250 °C                | 23.1 bar / 400 °C |
| <b>UBK 46</b>                           | 40               | 32                    | P 250 GH <sup>1)</sup> | A 105 <sup>1)</sup>         | 28.4 bar / 250 °C                | 23.1 bar / 400 °C |
| <b>SMK 22</b><br><b>STAINLESS STEEL</b> | 10               | 6                     | 1.4435                 | —                           | 10 bar / 185 °C                  | —                 |
| <b>SMK 22-51</b>                        | 10               | 6                     | 1.4404                 | —                           | 10 bar / 185 °C                  | —                 |
| <b>MK 20</b>                            | 6                | 4,5                   | EN-JM 1030             | —                           | 4.5 bar / 250 °C                 | 3.6 bar / 300 °C  |
| <b>TK 23</b>                            | 16               | 1 – 10                | EN-JL 1040             | A 126 Cl.B <sup>2)</sup>    | 16 bar / 120 °C                  | 9.6 bar / 300 °C  |
| <b>TK 24</b>                            | 25               | 1 – 14                | GP 240 GH              | A 216 Gr. WCB <sup>2)</sup> | 22.6 bar / 120 °C                | 14.4 bar / 400 °C |
| <b>GK 11</b>                            | 16 <sup>3)</sup> | 6                     | EN-JL 1040             | A 126 Cl.B <sup>2)</sup>    | 16 bar <sup>3)</sup> / 120 °C    | 9.6 bar / 300 °C  |

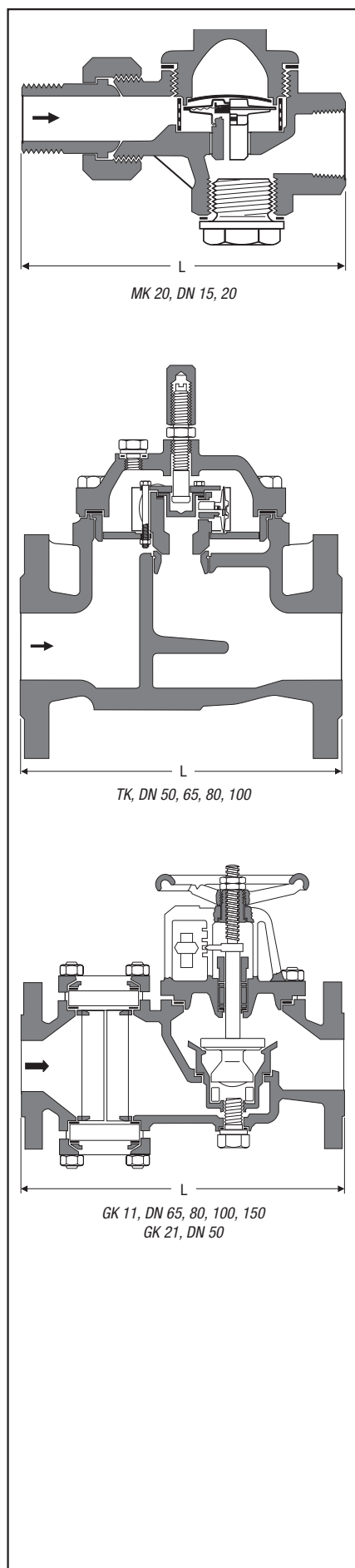
<sup>1)</sup> Material complies with EN and ASTM requirements.

<sup>2)</sup> ASTM nearest equivalent grade is stated for guidance only.

Physical and chemical properties comply with EN grade.

<sup>3)</sup> GK 11, DN 150 mm = PN 10

\*) For more information see data sheet.



### Available End Connections and Overall Lengths

| Type                                | Connection         | Overall length (L) in mm |               |               |             |             |                 |             |              |              |
|-------------------------------------|--------------------|--------------------------|---------------|---------------|-------------|-------------|-----------------|-------------|--------------|--------------|
|                                     |                    | DN 10<br>3/8"            | DN 15<br>1/2" | DN 20<br>3/4" | DN 25<br>1" | DN 50<br>2" | DN 65<br>2 1/2" | DN 80<br>3" | DN 100<br>4" | DN 150<br>6" |
| <b>AK 45</b>                        | Flanged EN PN 40   | —                        | 150           | 150           | 160         | —           | —               | —           | —            | —            |
|                                     | Flanged ASME 150   | —                        | 150           | 150           | 160         | —           | —               | —           | —            | —            |
|                                     | Flanged ASME 300   | —                        | 150           | 150           | 160         | —           | —               | —           | —            | —            |
|                                     | Screwed sockets    | —                        | 95            | 95            | 95          | —           | —               | —           | —            | —            |
| <b>UBK 46</b>                       | Flanged EN PN 40   | —                        | 150           | 150           | 160         | —           | —               | —           | —            | —            |
|                                     | Flanged ASME 150   | —                        | 150           | 150           | 160         | —           | —               | —           | —            | —            |
|                                     | Flanged ASME 300   | —                        | 150           | 150           | 160         | —           | —               | —           | —            | —            |
|                                     | Screwed sockets    | —                        | 95            | 95            | 95          | —           | —               | —           | —            | —            |
|                                     | Socket-weld (SW)   | —                        | 95            | 95            | 95          | —           | —               | —           | —            | —            |
| <b>SMK 22</b><br>STAINLESS STEEL    | Butt-weld (BW)     | 83                       | 83            | 83            | 83          | —           | —               | —           | —            | —            |
| <b>SMK 22-51</b><br>STAINLESS STEEL | Butt-weld (BW)     | 90                       | 90            | 90            | 90          | —           | —               | —           | —            | —            |
| <b>MK 20<sup>1)</sup></b>           | Male/female thread | —                        | 120           | 125           | —           | —           | —               | —           | —            | —            |
| <b>TK 23</b>                        | Flanged EN PN 16   | —                        | —             | —             | —           | 230         | 290             | 310         | 350          | —            |
| <b>TK 24</b>                        | Flanged EN PN 25   | —                        | —             | —             | —           | 230         | 290             | 310         | 350          | —            |
| <b>GK 11<sup>2)</sup></b>           | Flanged EN PN 16   | —                        | —             | —             | —           | 320         | 420             | 420         | 620          | 900          |

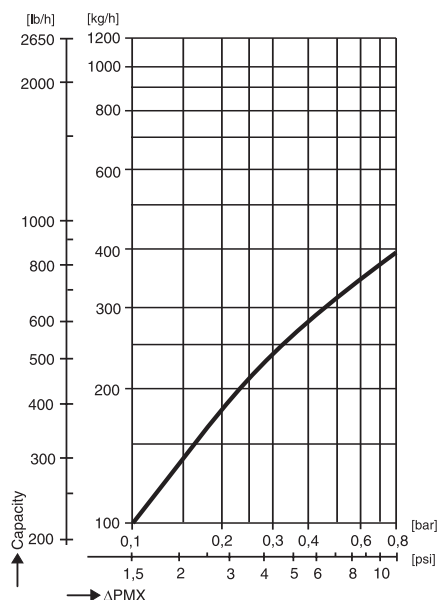
<sup>1)</sup> Straight-through or angle design (see representation)

<sup>2)</sup> DN 50 mm: GK 21

## Capacity Charts

The charts show the maximum hot condensate capacities. (Exception: AK 45 – cold water capacity.)

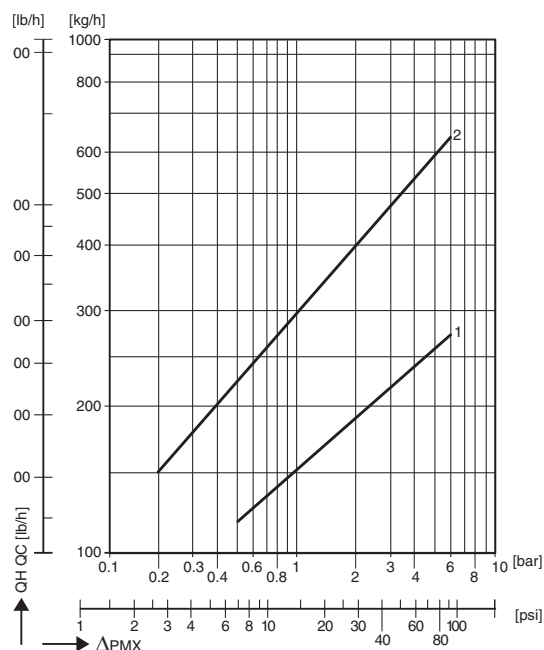
### AK 45 Cold Water capacity



### UBK 46

| Service pressure                                      | (bar)  | 1   | 2   | 4   | 8   | 12   | 16   | 20   | 26   | 32   |
|-------------------------------------------------------|--------|-----|-----|-----|-----|------|------|------|------|------|
| Opening temperature at factory setting                | (°C)   | 72  | 74  | 78  | 85  | 89   | 93   | 97   | 103  | 109  |
| Capacity at 10 K below opening temperature            | (kg/h) | 94  | 113 | 136 | 164 | 184  | 198  | 211  | 226  | 239  |
| Cold-condensate capacity at 20 °C (Start-up capacity) | (kg/h) | 267 | 390 | 570 | 832 | 1039 | 1215 | 1373 | 1584 | 1774 |

### SMK 22, SMK 22-51



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

#### Curve 1

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

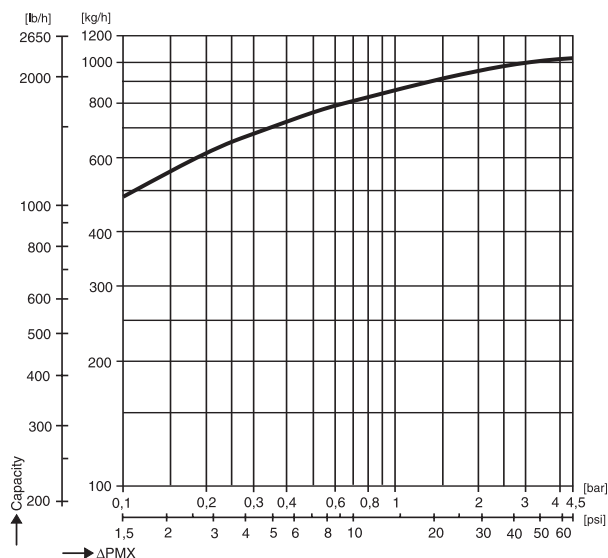
#### Curve 2

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

## Capacity Charts

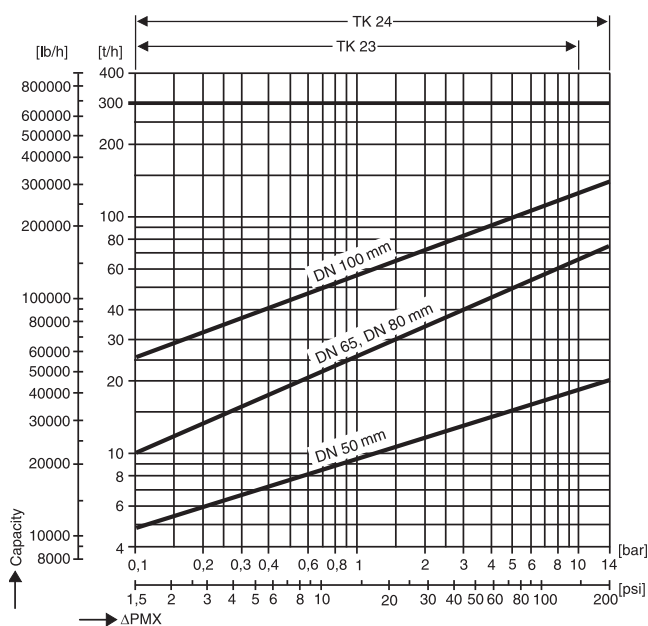
The charts show the maximum hot condensate capacities.

### MK 20



### TK 23, TK 24

For differential pressures  
< 1 bar  
use capsule "OH2"  
(max. service pressure  
5 bar).



### GK 11, GK 21

