



### Features of the MK series

- Very sensitive response characteristic
- Function is not impaired by high back pressure
- Automatic air-venting (trap can be used for thermal air-venting in steam systems)
- Installation in any position (horizontal and vertical lines)
- High hot-water capacities even with low differential pressures
- With tandem seat (double sealing) for low condensate flowrates
- Built-in non-return valve
- Stainless steel internals (corrugated membrane of Hastelloy)
- Design "U" with undercooling capsule: utilization of a certain amount of sensible heat by banking-up of condensate, decreasing the amount of flash steam
- Optional extra: Integrated condensate monitoring for MK 45 (temperature or steam loss)

### Specification

Type	Design/Application
MK 45-1 MK 35/31 <sup>1)</sup>	<b>With tandem seat (double sealing)</b> For low condensate flowrates, steam-tracing, steam-line drainage, air-venting
MK 45-2 MK 35/32 <sup>1)</sup>	<b>With single seat</b> For medium condensate flowrates, steam-tracing, drainage of heat exchangers, air-venting
MK 25/2 <sup>1)</sup> MK 25/2 S <sup>1)</sup> MK 35/2 S <sup>1)</sup> MK 35/2 S3 <sup>1)</sup>	<b>With single seat</b> For large condensate flowrates, drainage of heat exchangers
MK 36/51 <sup>1)</sup> MK 36/52 <sup>1)</sup>	<b>With tandem seat (double sealing) – with flat gasket</b> For small/large condensate flowrates, steam tracing, steam-line drainage, venting and vacuum-breaking. Also suitable for food, biological and pharmaceutical applications.
MK 45 A-1 MK 45 A-2	For small and large condensate flowrates; steam-tracing, steam-line drainage, air-venting

<sup>1)</sup> Can also be used for vacuum breaking (aerating).

### Air Venting

#### Steam Trap for Thermostatic Air-Venting with Membrane Regulator

The thermostatic steam traps with membrane regulators of the MK series can also be used for air-venting.

#### Application

Thermostatic steam trap for automatic air-venting and discharge of non-condensable gases and steam/air mixtures from steam lines and heat exchangers.

A special type of membrane might be required.

### Pressure/Temperature Ratings <sup>\*</sup>)

Type	PN	$\Delta$ PMX [bar]	Material		Max. Pressure/Temp. Rating	
			EN	ASTM	PMA / TMA	PMA / TMA
MK 35/31	PN 25	21	P 250 GH <sup>1)</sup>	A 105 <sup>1)</sup>	18.6 bar / 225 °C	14.4 bar / 400 °C
MK 35/32	PN 25	21	P 250 GH <sup>1)</sup>	A 105 <sup>1)</sup>	18.6 bar / 225 °C	14.4 bar / 400 °C
MK 45-1	PN 40	22	P 250 GH <sup>1)</sup>	A 105 <sup>1)</sup>	28.4 bar / 250 °C	23.1 bar / 400 °C
MK 45-2	PN 40	22	P 250 GH <sup>1)</sup>	A 105 <sup>1)</sup>	28.4 bar / 250 °C	23.1 bar / 400 °C
MK 35/2 S DN 25	PN 40	22	P 250 GH	A 105 <sup>3)</sup>	28.4 bar / 250 °C	23.1 bar / 400 °C
MK 35/2 S3 DN 25	PN 40	22	P 250 GH	A 105 <sup>3)</sup>	28.4 bar / 250 °C	23.1 bar / 400 °C
MK 25/2 DN 40/50	PN 40	22	P 250 GH	A 105 <sup>3)</sup>	28.4 bar / 250 °C	23.1 bar / 400 °C
MK 25/2 S DN 40/50	PN 40	22	P 250 GH <sup>2)</sup>	A 105 <sup>3)</sup>	28.4 bar / 250 °C	23.1 bar / 400 °C
MK 36/51, MK 36/52	–	32	1.4301 <sup>4)</sup>	A 182 F304	32 bar / 240 °C	32 bar / 240 °C
MK 45 A-1	PN 40	22	1.4404 <sup>1)</sup>	A 182 F316L <sup>1)</sup>	29.3 bar / 200 °C	24 bar / 400 °C
MK 45 A-2	PN 40	22	1.4404 <sup>1)</sup>	A 182 F316L <sup>1)</sup>	29.3 bar / 200 °C	24 bar / 400 °C

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

<sup>2)</sup> MK 25/2 S DN 40/50: cover made of cast steel GS-C 25 (ASTM nearest equivalent: A 216 Gr. WCB)

<sup>3)</sup> Physical and chemical properties comply with EN grade. ASTM nearest equivalent grade is stated for guidance only.

<sup>4)</sup> EN nearest equivalent grade is stated for guidance only.

<sup>\*</sup>) For more information see data sheet.

