



**GESTRA® Thermostatic Steam Traps**  
**Rhombus line®**  
**MK 45-1 and MK 45-2**

International patents

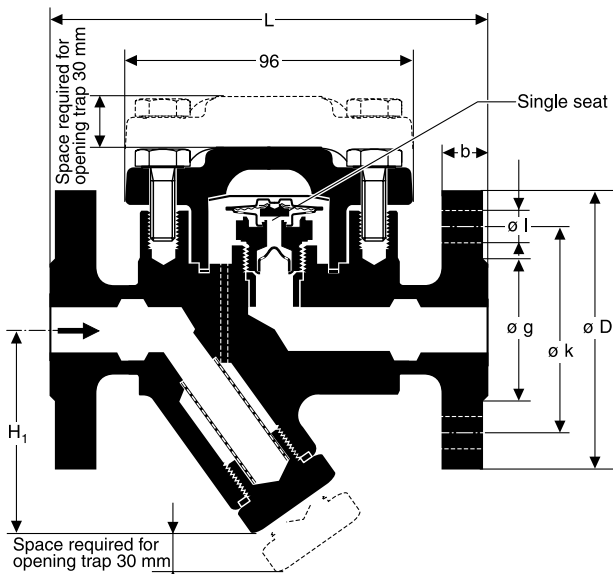


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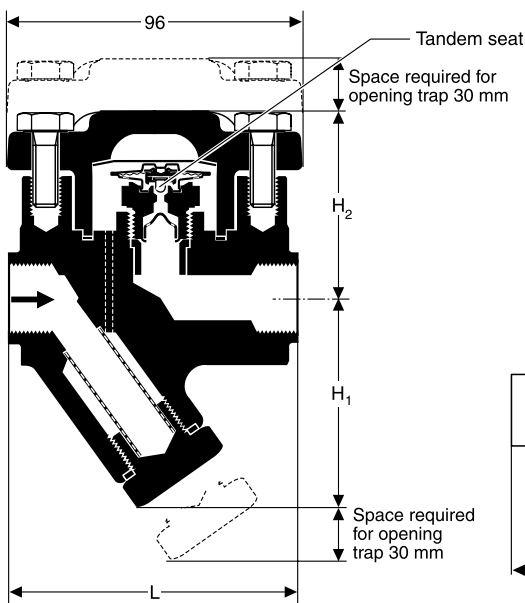
**Steam Traps**  
**PN 40**  
**DN 15, 20, 25**  
**1/2", 3/4", 1"**

**A1**

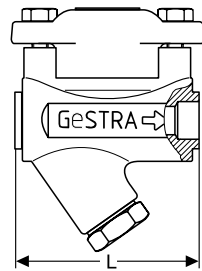
**MK 45-1 and MK 45-2**



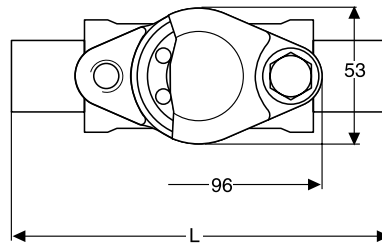
MK 45-2 with flanged ends (to DIN)



MK 45-1 with screwed sockets



MK 45-1, MK 45-2 with socket-weld ends



MK 45-1, MK 45-2 with butt-weld ends

Thermostatic steam trap with membrane regulator. Corrosion-resistant thermostatic capsule unaffected by waterhammer. Integral Y-type strainer and non-return valve. Asbestos-free cover gasket (graphite/CrNi). Installation in any position.

The traps with standard capsule "N" discharge the condensate with virtually no banking-up, the traps with special capsule "U" with an undercooling of approx. 30 K (degC).

**MK 45-1 with tandem seat**

In particular for low condensate flowrates. Optionally either with standard capsule "5 N 1" or undercooling capsule "5 U 1".

**MK 45-2 with single seat**

For larger condensate flowrates. Optionally either with standard capsule "5 N 2" or undercooling capsule "5 U 2".

**Pressure/Temperature Rating**  
**according to DIN 3548 PN 40 C 22.8**

Max. service pressure	bar g	32	22	20.3
	psig	465	320	294
Related temperature	°C	250	385	400
	°F	482	725	842
Max. differential pressure (inlet pressure minus outlet pressure)		22 bar (320 psig)		

Materials	DIN reference	ASTM equivalent
Body, cover	C 22.8 (1.0460)	A 105
Cover Screws	24 CrMo 5 (1.7258)	A 193 B 7
Thermo- static- Capsule	Hastelloy®	
Capsule	Stainless steel	
Other internals	Stainless steel	

**Connections**

Flanges: DIN, PN 40  
 BS 10, tables E, F, H and J  
 ANSI (BS 1560) classes 150 or 300  
 Screwed sockets: BSP or NPT (API)  
 Socket-weld ends  
 Butt-weld ends

Dimensions and Weight	End connections									
	Flanged to DIN			Screwed Socket-weld			Butt Weld			
Nominal sizes	mm	15	20	25	15	20	25	15	20	25
DN	in	1/2	3/4	1	1/2	3/4	1	1/2	3/4	1
Dimensions	L	150	150	160	95	95	95	200	200	200
	H1		70		70	70		70	70	70
	H2		62		62	62		62	62	62
Flanged measurement	D	95	105	115						
	b	16	18	18						
	k	65	75	85						
	g	45	58	68						
	l	14	14	14						
Number of bolts		4	4	4						
Approx. weight	kg	3.4	4.0	4.5	1.9	1.8	1.7	1.8	1.8	1.8

# A<sub>1</sub>

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PN 40  
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1/2", 3/4", 1"

MK 45-1 and MK 45-2



## Siebe Instrument & Valve Division

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A Siebe Group Company

### Capacity Charts

The charts show the maximum capacities for hot and cold condensate.

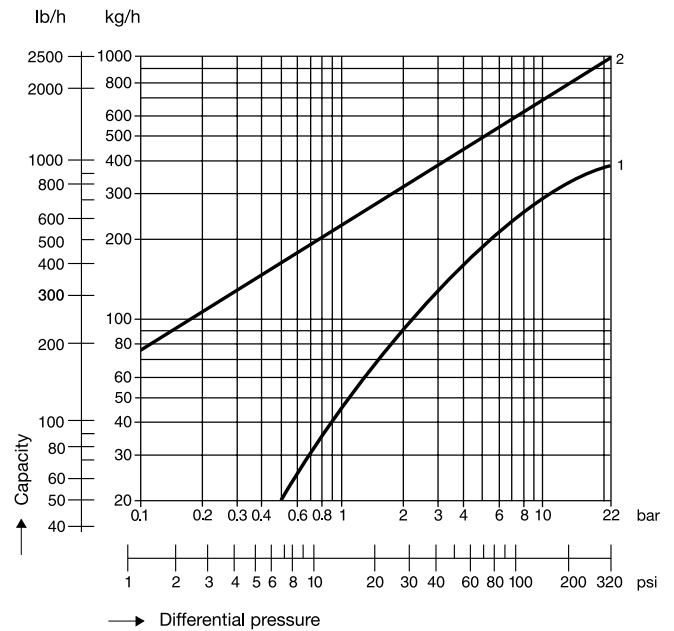
#### Curve 1

Curve 1 indicates the max. capacity of hot condensate that the traps with 5 N... capsule can discharge at a condensate temperature of approx. 10 K (degC) below saturation temperature (virtually no banking-up), and the traps with 5 U... (undercooling) capsule when the condensate is approx. 30 K (degC) below the saturated steam temperature.

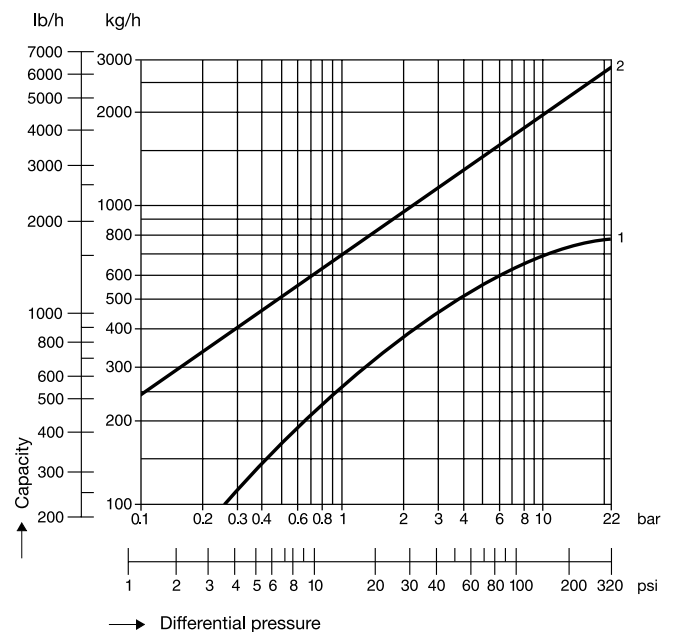
#### Curve 2

Curve 2 shows the max. capacity of cold condensate that the traps can discharge (condensate temperature 20 °C).

### Capacity Chart for MK 45-1



### Capacity Chart for MK 45-2



### When ordering please state:

Steam pressure, back pressure, quantity of condensate to be discharged, type, size, connections, mounting position of the trap, and details of application.

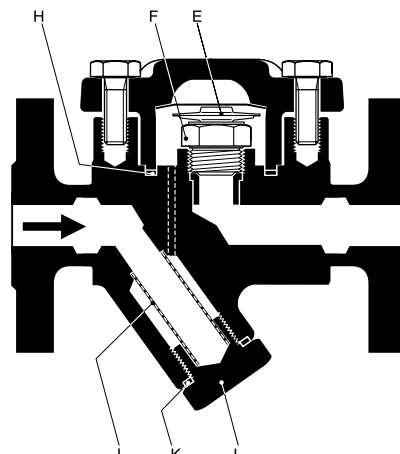
The following test certificates can be issued on request, at extra cost:

In accordance with EN 10204 – 2.2 and -3.1B. All inspection requirements have to be stated with the order. After supply of the equipment certificates can no longer 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.

Technical modifications reserved.



### Standard Spare Parts

Item No.	Designation	Order No.	
		MK 45-1	MK 45-2
E,F,H	Membrane regulator complete	5N1	375109
		5U1	375111
		5N2	375110
		5U2	375112
J,K,L	Strainer, complete	375113	375113
E*)	Thermostatic capsule MK 45-1	5N1	085585
		5U1	086138
	Thermostatic capsule MK 45-2	5N2	096530
		5U2	096535
H*)	Cover gasket (min. purchasing quantity: 50 items)	375022	375022
K*)	Strainer gasket (min. purchasing quantity: 50 items)	013322	013322

\*) Parts subject to wear